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VOL. XXX.

NUMBER 16

FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

APRIL 20,

1911.



"THE FIRST FOAL OF THE SEASON" AND A RIGHT GOOD SORT

It is on such stock as this that one can depend for an eager market, paying profitable prices. While some light horses, (we might mention those at the Sorg sale as noted editorially in Farm and Dairy last week), sell for fabulous prices and prove that the rich men still remain admirers of horses in spite of the automobile, we farmers can bank on good paying prices for heavy draught stock. The lighter ones are uncertainties; let those who will, raise them. It is to our interest to raise for market the heavy draught sort. An 1860-lb. imported Clyde mare and her day-old filly foal is shown above. The mare was a champion in Scotland and was brought over some few years ago by J. D. Eadie, of Russel Co., Ont.

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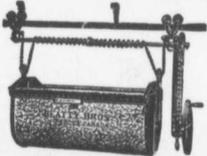
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Timely Notes About Mares

Many mares have been permitted to enjoy the range of the farm during moderate grain rations. Now it will they will aid in putting in and caring for the crops of the season. The changes incident to properly preparing these mares for the farm work requires no little amount of thought and discretion. With the opening of spring comes the rush of preparing the ground and planting the crops. There are numerous new conditions to be encountered at this point which, if not properly adjusted to the present state of the mares, will quickly lead to disaster.

First, the mare is short of work and does not have the time to have her physical condition gradually hardened for the task expected. She is too frequently overdone in the first few days over which she is compelled to travel in the hands of the hired hand or boy of the farm or even the owner, she is not given the fair treatment her condition demands.

SPRING DISEASES

The changeable weather of the spring months brings with it diseases of the air passages, and animals that are soft on account of being short of work suffer most. These months are favorable for the dissemination of infectious diseases such as influenza and strangles, says the Stallion and Jack News, so that actual sickness may have to be reckoned with. In the re-adjustment of the system to spring which makes the animal less resistant to disease. The onset of spring is very sudden some seasons, leaving the animal handicapped with its heavy winter coat. Later when the same coat is shed, the biting winds bring great discomfort.

In the new order of things comes the grain problem of the rations. The most of these mares have only been accustomed to a very moderate amount of grain during the winter and the beginning of the work season means that there must be an increase in this part of the ration. The mistake is usually made in increasing the amount of grain too rapidly and as there is a general tendency to go off the feed on account of the fatigue from work, the rapid increase in grain allowance serves to derange digestion and precipitate acute attacks of indigestion or loss of appetite for several days.

BE MODERATE IN ALL THINGS

The better plan is to be moderate in all things; be moderate with the feed, and above all moderate with the feed until the mare has become accustomed to the change in conditions.

The period of abortion is now largely past and such as new occur occasionally on the farms can usually be traced to some mistreatment of the mare. Strains due to heavy pulling or slippery footing, kicks and blows from other animals and errors in diet inducing colics from indigestion will be the chief causes of abortion from now on.

It is too early in most sections to permit mares to foal in open fields and a dry, warm, roomy well ventilated box stall should be provided. This stall should have a most thorough cleaning. All manure and old litter should be removed and permit the air and sunlight if possible to have access to its floor. Give its walls a coating of thin whitewash to which you have added two ounces of creolin to each gallon used. Sprinkle chloride of lime on the floor. Be thorough in this matter of cleaning up, for you cannot too afford to take any chance of having your mare or colt infected at foaling time with germs that mean death.

The filthy, germ-laden foaling place is the starting point of much trouble. Do not think for a moment just because these germs are not large enough to be seen by the naked eye they are not there. Some of the smallest things are the most powerful in their particular action and effect.

Use the cleanest, brightest straw on the place for bedding and see that the stall is given a careful cleaning each morning of its soiled bedding.

One should ever be on the alert as the time for foaling approaches, and be quick to apprehend the needs of the mare. While it is not advisable to enforce hard work upon her at this time, neither should her exercise be discontinued. If not used about the farm at light labor, she should have access to the pastures or roomy lots on pleasant days.

EARLY ATTENTION OF FOALS

When the foal arrives, the immediate things that should engage the owner's attention are the condition of the hoofs and the prevention of infection of the navel. Careful injections of warm water to which a little soap or glycerine has been added per rectum is usually all that is required for the relief of the following the inactive bowel of the newborn foal, and only the gentle means above outlined are safe in the hands of the average layman. These little fellows will not withstand much grief. If they get the first milk from the mare the Lowels are usually moved without difficulty.

To prevent the infection of organisms that produce scill, the agent employed should be of a disinfecting and drying nature.

A five per cent. solution of the tincture of iodine applied to the navel once a day with a swab destroys the germs and dries up the cord. Inasmuch as the infection causing the disease takes place as a rule within the first 24 hours, it is not safe to delay this preventive treatment.

Items of Interest

The annual meeting of the Canadian National Record Board will be held at the Prince George Hotel, Toronto, on Tuesday, April 25th, at 10.30 a.m.

Thirty acres of land have been leased in Essex County for \$300 for one season. This is probably the record rental for land for farm purposes in Canada. The land will be put into tobacco, and even at this high figure with a good season should well repay the lessee. Lately leases running up to \$20 an acre for 25 acres of land in Essex have been quite common.

An application has been made by the Ottawa Dairy Company and a number of other dairy companies, including companies in Montreal, asking that the Railway Commission order railroads to handle milk and baggage cars. Milk is now handled as baggage by railroads, but cream is considered as express. The milkmen want cream placed on the same footing as milk, which will effect a material reduction in rates of transportation. This important application is to be heard by the Railway Commission at its traffic sitting on the 18th of April.

Red Fife spring wheat, the variety that has made Manitoba and Saskatchewan famous the world over as producers of No. 1 hard wheat, can be grown satisfactorily in New Ontario. Farm and Dairy has received a sample of Red Fife wheat grown near Englehart by Mr. Wm. Schell. This wheat was sown on the 5th of April and was harvested on the 8th of August. Mr. Schell, who formerly resided near Woodstock, Ont., is very enthusiastic over the wheat growing possibilities of the new country in which he now resides.

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Vol. XXX.

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THE LABOR PROBLEM--VALUABLE SUGGESTIONS BY A HIRED MAN

Every employer of farm labor will find this article exceedingly interesting. Points we often overlook are enlarged upon and they set forth why a hired man is apt to be discontented. Some thought given to the factors herein discussed will enable you to get better satisfaction from your hired man this season. The writer of this article is an upright, hard-working young man, well known to the editors of Farm and Dairy at the request of whom this special article was written.—Editor.

THE Labor Problem! How much we hear about it nowadays—from the employers' point of view. So far as the papers are concerned the laboring man is about as "mum" on the subject, important as it is to him, as the farmers used to be on the tariff. The farmer has now awakened, and is making himself heard on tariff matters to good effect. It is time we laboring men were awakening also. From my experience as a hired man I wish to give Farm and Dairy readers a few of my ideas on the labor problem, which should help farmers to better understand the labor problem they must solve.

Many are the theories advanced why labor is continually forsaking the country districts for the city. We are told that the ordinary hired man objects to country life, that the farmer cannot pay wages the employer in the city is enabled to offer, that the allurements of city life as portrayed in the newspapers, and the get-rich-quick schemes, which are talked of in every rural community, make the hum-drum existence of the farm unbearable to the average young man. In many cases, the scarcity of labor is blamed on the general "cussedness" of the hired man.

OLD COUNTRY LABORERS

Finally, when unable to get a man when he wants one, some farmer with a little more ability to write or talk than his fellows will carry his case to the reporter of the local newspaper, or to some farm journal to which he is a subscriber. A howl is raised about the great scarcity of laborers on Canadian farms and the Government is urged to bring out Old Country men to make up this deficiency. That this policy has been successful is proven by the fact that the Government insists that anyone whose passage to Canada is assisted by charitable institutions must go to work on the farms of the country.

Men who are for ever kicking about the scarcity of labor seem to ignore the fact that probably in their own neighborhood are farmers who never have any trouble to get all the help they need; that while the Government is luring out men to assist in working their farms, there are lots of men just as good in our towns and cities who would be willing to work on the farms did they find conditions congenial. Such being the case, the farmer who finds that he cannot possibly get help should put himself in the hired man's place for a while. Did he do so with an open mind, he would soon find out where the trouble lay, and the labor problem to a large extent would be solved by improving the conditions under which the man lives and works.

VIEWPOINTS IN CONTRAST

We hear much about the long hours of labor

on the farm, but to my mind the lack of employment the year round is the factor that militates most strongly against establishing a good class of working men in the country. Most farmers with whom I have come in contact plan their work so that the heaviest part of it comes in the summer and the luxury of a hired man is then indulged in. Instead of being regarded as a profit maker for his employer he is in most cases regarded as an extra expense, and his services are dispensed with as soon as possible. The city employer, I have found, looks on labor as a source of revenue. The work the employee does not only yields to him a living but a profit to his employer as well. Does not the farmer make a profit out of labor as well? If he does not, there is something wrong with his management.

Farm work must be planned so as to give the hired man employment the year round. No in-

His Favorite Paper

Editor, Farm and Dairy,—Please don't stop my paper, as I expect to go to town soon and sign for it in the Echo Office. I think a great deal of Farm and Dairy and will stop two other papers so as to have more time to read Farm and Dairy.—William Squire, Essex Co., Ont.

telligent man would be satisfied to work for his board for five or six months each year. In many of our best farming sections, however, if the hired man would stay in the country during the winter months, he must either take a very low flat rate for his wages or work for his board with little or no pay for perhaps six months. The man who is content to do this has very little ambition, and the chances are he will be a very unsatisfactory employee.

FEW FARMERS HAVE STEADY WORK

Of all my employers, and they have been numerous, only one of them had work for me in winter. This was not due to lack of appreciation of my work, for all expressed the desire to have me next season, if I was available. Most of them were willing to keep me for my board and a very small wage for the winter. Had I not desired to become thoroughly familiar with all farming operations, so as to become well qualified to run a farm of my own, I would have left the country for the city sooner than I did.

The second factor of importance, and which is almost as powerful as the first in driving hired men from the farms, is that the average farmer fails to realize that the hired man is a social animal and has the same desires for society as has his employer. This factor is provided in

most city establishments where many men work together. On the farm, however, in most cases, there is just one man. If he would have society at all, he must either be made one of the family or tramp into town after a hard day's work, which few of us wish to do.

In too many cases, even while the hired man eats with the family and is apparently one of them, he is treated as an inferior being and made to feel at all times that he is most decidedly a nuisance. Many a time have I wished that I ate in the kitchen instead of in the dining-room with the family where the talk was all over my head, where I was supposed to keep perfectly quiet, as befitted and inferior. Can you blame anyone for leaving the farm when treated in this manner? When only one man is to be kept on the farm, the farmer must realize how lonely that man is apt to be and treat him accordingly.

ATTITUDE TOWARDS MARRIED MEN

So long as the farmer maintains the attitude which he now does towards the hired man who is married and has a family, he must depend as he now does on transitory labor, which he knows is apt to be unsatisfactory. Many a hired man who has worked in the country all his life and been perfectly satisfied with conditions there finds that if he wishes to get married he must leave the country.

The hired man is only human, and his ideal is along the same lines as that of his employer, a home of his own. But the married man is not wanted in the country. If he is taken at all he must have no family and his wife must work in his employer's kitchen. This factor explains why in a great number of cases apparently satisfied and contented employees suddenly decide to seek employment in the nearby town. When the farmer contrives not only to give work the year round, but when the young man so desires, to give him a chance to get married and live in a home of his own, the labor problem will be in a good way for a complete solution.

SMALLER POINTS

The two foregoing points I regard as the main ones. The smaller ones, such as wages and hours of labor, are the ones that we hear most about because they are the ones that are easiest appreciated. The hired man does not need to be a very deep thinker at all to chafe under the conditions on the farm when he must accept a low wage, or what he considers a low wage, and work from daylight until dark.

While the man working in town gets what looks like a larger wage, I have found after working in both places that the man on the farm will be able to save just as much in a year as will the man in the city. A good man should be worth to his employer \$25 a month the year round with board and washing. This salary compared with the \$2 a day which he would get in the city used to look small to me, but I was forgetting the other expenses which the city employee has and which I have since found from experience are large. The man who is good enough to earn \$300 in the country would be worth \$600 in the city. He would have 52 weeks' board to pay at \$3.50 (poor board at that, and often costing more), or \$182, and his washing would come

Alfalfa—What Grey Farmers Think of it

Geo. Marsh, Peterboro Co., Ont.

Alfalfa has been grown for years in my home county, Grey, (Ont.) but owing to lack of knowledge of its great value as a feed and also to the fact that the science of inoculation was only until recently very little known, many of our farmers were not successful at first with alfalfa and for this reason the increase in acreage has been slow until the last four or five years. Since our experiment stations have taken up the matter and information has been available on the proper methods of inoculation, and also the great value of alfalfa as a soil renovator, food for live stock, and also as a pasture plant, the increase in popularity of alfalfa in Grey county has been very rapid. Last week I took a trip up to my home farm. I shall this week give Farm and Dairy readers the benefit of the information I gathered in regard to alfalfa in that district.

GROWING ALFALFA FOR 30 YEARS

Mr. John Stark, has grown alfalfa for more than 30 years, and has a number of fields that have been sown for 25 or 30 years. He commenced sowing the crop on his stiff, red clay hills, which were hard to work and very uncertain in crop production in ordinary years. On such soils, which were almost worthless for cultivation, he has produced profitable crops of alfalfa.

Mr. Sam McKnight, a well-known stock breeder of Epping, pins his faith to alfalfa hay and corn ensilage. He grows about 30 acres of corn for his silos and also has about the same acreage in alfalfa. He purposes doubling his alfalfa acreage this spring.

At Thornbury, C. Parkinson, breeder of pure bred Shorthorn, attribute a large measure of his success to this wonderful forage plant. They commenced growing alfalfa in a small way some years ago and now have 25 acres, which acreage he will greatly increase this spring.

\$50 PER ACRE FROM SEED

John Geddes has grown alfalfa for years, both on poor lake shore gravel and also on hard clay hills, which were almost impossible to cultivate and has had good success on both types of soil. Last year he obtained \$300 for the seed from six acres of land after the field had produced a heavy first crop of hay.

A. Barkley, on an adjoining farm, obtained \$100 for his seed from a three-acre field, also after having had a heavy crop of hay. These two men, as well as the majority of farmers in this district, are sowing large acreages of alfalfa, as they realize the crop has passed the experimental stage and it can be sown with the same certainty of producing a crop as timothy and clover or other farm crops.

LARGE ACREAGES GROWN

Jos. Alexander sowed six acres of alfalfa last year and will sow another field this spring. Geo. Penrose put in eight acres, which is coming through the winter in good shape and will increase his acreage by 10 or 12 acres this spring. J. Perry also sowed seven acres and this spring will sow more. On my own farm I have seeded 50 acres; I am planning to sow as much more this spring. These men I have mentioned are all on adjoining farms, and as it is probable many other farmers over the entire county are sowing nearly as much, these figures will give an idea of the large proportion of the land in Grey county that is being put in to alfalfa.

Owing to the prevalence of sweet clover and also to the number of small plots of alfalfa, which have been scattered over the county for years, very little inoculation appears to be necessary, but the most careful farmers are either using the prepared culture from the Guelph College or are sowing soil from an old alfalfa field at the rate of 200 pounds per acre.

Very little difference appears to be seen in the crops with reference to the method of sowing. Success has been obtained with alfalfa when sown with all crops, at all times of the year, and also when sown alone. Probably the most popular method in my home district is to work the land thoroughly in the spring and sow it with a light crop of barley, or oats, although the majority of the farmers take the full crop of grain and find it just as easy to get a stand of alfalfa, as they would a stand of timothy and clover. As a rule 20 lbs. of seed per acre have given the best results.

A number of farmers have had good results by sowing alfalfa on fall wheat in the spring and harrowing it in with a light harrow. On my own farm I sowed 12 acres with wheat last fall. I believe that this is one of the most convenient and easiest methods of growing alfalfa. My wheat was sown early, about the second week in August. The alfalfa made a good growth and the fall wheat has seemed to protect it so that the alfalfa is coming through without leaving. Last week this alfalfa was very much greener than the old stands sown earlier in the season with barley or oats. This method of sowing is as yet but an experiment with me and I should not recommend Farm and Dairy readers as yet to practise this method of sowing except it be experimentally.

PAY HIGH PRICES FOR ALFALFA HAY

In Grey county the value of alfalfa as a feed is thoroughly understood; the townspeople even



A Labor Saving, Satisfactory Way of Getting Through with Farming

Many of our farmers have found out that this can do a maximum day's work and do it with a minimum expenditure for manual labor. How much more "fit" this man will be after a day's work than if he had walked all day.—Photo on John Sokel's farm, Huron County, Ont.

are enquiring for it for feeding both their horses and cows and are satisfied to pay from \$2 to \$4 a ton more for it than for good timothy and red clover. But even at these enhanced prices there is very little alfalfa hay being sold as the farmers know its value and as yet have no surplus for sale.

Although in this section here under review, of late years success has been attained in growing alfalfa without inoculation, it was not so at first; many farmers at first lost their seed and in other cases patchy fields were the result of lack of inoculation. With the present high price of seed it is certainly a misquid policy to risk the value of the seed and the use of the land for the want of a few bags of inoculated soil, or a few cents spent in buying the culture from Guelph. I strongly advise everyone, purposing the sowing of alfalfa seed, to inoculate his soil thoroughly, as we have yet to find the man who sowed 20 lbs. of good alfalfa seed on soil rich and dry enough to grow good red clover, or ordinary farm crops and who has sowed it together with 200 lbs. of inoculated soil from an old alfalfa field, who has had a failure with alfalfa.

It is thought by some orchardists that Bordeaux mixture will cure plant diseases. It does not cure. It prevents. For insects, we spray with; for fungous diseases, we spray to prevent.

Preventive Treatment for Navel Disease

Death commonly results amongst new-born foals on account of navel-ill, a disease caused by filth germs entering the fresh navel. The disease, while it is incurable, is preventable, and every precaution should be observed to prevent it.

The preventative treatment consists in thorough disinfection of the stall before and after foaling, and the application of a disinfectant to the navel. A five per cent. solution of carbolic acid is perhaps as good as any disinfectant for this purpose, and it is one usually on hand at any farmhouse.

If the navel cord breaks naturally it will be as well; but if it must be cut, tie it above with a string dipped in disinfectant. Make the cut fairly close to the belly in order that the string may be left no longer than is necessary to prevent bleeding.

Apply the carbolic disinfectant at once, and repeat the disinfection twice daily until the cord dries and falls away, leaving a well healed, normal navel. Another good disinfectant for this purpose is a solution of two drams of powdered corrosive sublimate and two drams of solution or tincture of chloride of iron. This is a poisonous solution and should be plainly labelled and kept out of reach of children.

No one need get discouraged on account of loss from navel-ill. The disease can easily be avoided by careful attention to these precautionary measures, which should invariably be

taken. The disease is more likely to occur in early foals than in those dropped at pasture, because there is more filth and more germs about the stable. As insurance against trouble every foal's navel should be treated.

Water For Heavy Producing Cows

An important consideration in record making in winter time, or any time for that matter, is to heat the water for the cows until the chill is taken off it. On the ordinary farm this may effectively be done by placing one or two pails of boiling water into the trough, sufficient to warm the water therein so as to be most palatable. Cows will drink water treated in this way as they never will cold water.

It means work to thus heat water, but it pays. It is cheaper than buying feed and the extra milk pays for it. Many of our American breeders, we are told, recognize the importance of this latter point and have tank heaters by means of which they warm the water in their tanks before it is placed before the cattle.

It is difficult enough to build up a good dairy herd when correct principles of breeding are followed such as keeping records and using pure bred sires. If we do not follow such principles we will never get a good herd.—J. F. Singleton, Kingston, Ont.

Galt Shingles

The Roof that Protects

"Galt" Galvanized Steel Shingles protect your home from Fire, Lightning and storm.

They last three times as long as wood shingles. The fire protection alone is worth their whole cost.



Example—If there was a fire in your neighborhood on a windy day after a prolonged dry spell and the air was filled with burning fragments of wood which were blowing towards your roof, what kind of a roof would you rather have then, a "Galt" Galvanized Steel Shingle roof on which you could safely build a fire or a "Galt" Shingle roof which every shingle is like a magnet which is ready to burn?

You cannot bank on the carelessness of your neighbors but a "Galt" Shingle roof prevents your neighbors from becoming your own.

See for our booklet "Roofing Economy" 13 cents for our booklet.

GALT METAL CO., Limited, GALT, Ont.
Watch for the advertisement with the idea from Galt.

FARM MANAGEMENT

How to Test Soil for Lime

Success in alfalfa culture is dependent to a large extent upon lime, which is acid or may not contain. It is generally conceded that most soils in Ontario contain the requisite amount of lime for the successful growth of alfalfa. It is certain, however, that alfalfa will not do well on a soil that is acid or sour, and often on very sandy soils, unless they are first treated with lime.

A simple test for lime, which is well known, is that of litmus paper, which when brought in contact with moist soil will turn blue if that soil is alkaline, or it will remain red or change to red if the soil is acid. It is presumed in this case that the alkalinity in the soil is due to lime.

A more efficient test for lime and also a more efficient test for iron is as follows: Take a few shovelfuls of soil from different parts of the field or orchard, and dry, pulverize and mix them thoroughly together. Take a few ounces of this powder and reduce to ashes on an iron shovel over a fire.

Put these ashes when cool into a glass tumbler and mix them with as much water as it will take to cover them. Stir this with a glass rod or wooden stick, but not with anything metallic. To this paste add one ounce of hydrochloric acid, which is commonly sold as muriatic acid or spirits of salts, the mixture being stirred all the time. If a fairly brisk effervescence takes place, it may be taken for granted that the soil contains a fair percentage of lime, but if little or no effervescence takes place the soil contains little or no lime.

If there is not lime enough in the soil, it must be acid; therefore it is probably more positive than the litmus test, which amounts to little more than a sample of the laboratory when they are far more positive than they are when samples of field soil are involved. Note—Professor Harcourt, of the Chemistry Department of the O.A.C., states that as a rule our soils are not needing very much lime, but in some cases they do, and as time goes on they will require more of it.—Editor.

How the Alfalfa Crop Pays

Editor, Farm and Dairy.—My father, John G. Weese, has raised alfalfa for three years. He takes his second crop for seed. Last year he had one good load for seed and from this he threshed six loads. He sold four bushels of the seed and it brought him \$48 cash.

We find alfalfa has a success for feeding. My father two years ago seeded four acres and put on 30 lbs. of alkali and red clover and only 15 lbs. of alfalfa. The other clovers died and he had a fair crop of alfalfa. Last year, he seeded down eight acres to alfalfa, which looks like last fall. He intends this year to seed down eight acres more.

Since father has grown his own seed he has saved only 15 pounds to the acre. He has four tons of alfalfa hay to feed and calculates to feed it to milk cows after the first of April. Later on you may hear from me again as to the result.—Hugh J. Weese, Prince Edward Co., Ont.

Note.—Those who are seedling alfalfa for the first time are advised to sow not less than 20 lbs. of alfalfa seed to the acre. Out in the western alfalfa growing states, where the crop is a specialty, they sow much more seed to the acre than we recommend. A good stand, however, may be secured with 20 lbs. to the acre. Any

saying that one might make in sowing less than 20 lbs. per acre, would be greatly off-set by the poorer stand and consequent poorer yield. Sow 20 lbs. at least until you have satisfied yourself that a less amount will give a satisfactory stand on your land.—Editor.

Queries re Alfalfa for Seed

I have five acres of alfalfa from which I cut two crops and secure a load of alfalfa hay last year. I would like to handle it and if it would for the next year, or will it weaken the roots to take a crop for seed.—D.O. Elgin Co., Ont.

The second crop is ordinarily the crop that in Ontario is saved for seed, and some farmers are beginning to consider that they should save seed from the first cutting. This matter will be fully dealt with in due time by Mr. Marsh in his special series of articles now running in Farm and Dairy.

Taking a crop of seed from an alfalfa field should not injure the stand any more than it injures apple trees to have a crop of apples and their seeds harvested from them. Alfalfa is a perennial and is not comparable to the biennial red clover, which after it has produced a crop of seed, has fulfilled its mission, and of course dies out.

Cultivation for Alfalfa

A Minnesota farmer on asking how he might thicken a stand of alfalfa has been given the following information from a recognized western authority: In the alfalfa districts or in those localities where alfalfa is extensively grown and where the climate and soil conditions are favorable to alfalfa, the usual practice in thickening a stand is to go over it with a spring-tooth harrow in the fall. The seed that has been sown therein for the purpose of increasing the thickness of the stand.

If the fields are large, little harrow will be done in the spring. The tooth is very generally used in the spring over the soil about the alfalfa roots. We have used the spring-tooth for this purpose in alfalfa fields and obtained very satisfactory results. In one instance we went over the field with a spring-tooth harrow three times. When we were through, there was not much alfalfa in evidence; but within a few days it began to show up very nicely, and the yield that season was enormous.

Red Clover for All Seeding Crops

Would it be profitable to seed down red clover with oats to plow under in the fall, the land to be used for wheat and to be seeded down in regular rotation?

The great rank and file of our farmers are timid about sowing clover to be plowed down the first fall. Soil chemists tell us, however, that the practice is a profitable one since the clover leaves valuable nitrogen in the soil in an amount much in excess of the value of the seed even if the cover be plowed under the first fall. That this contention of the chemists is correct is perhaps best attested by the fact that many of our more progressive farmers sow red clover seed on all of their seedling, even though it is to be plowed the following fall.

The clover, aside from the fertilizing value of the roots, will frequently more than pay for the seed in the pasture crop. It will also improve the roots improve the mechanical condition of the soil. We would advise that whenever red clover seed is reasonable in price to invariably seed it with all grain crops. The direct returns will much more than justify the expenditures even for very high priced seed.

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You can roll more ground with the "Bissell"

The "Bissell" three drum land roller has no dirt-catching centre bearing. Its large, polished roller bearing, one-half inch in diameter, are at the ends of the roller and fully protected against the dust-thrower the "Bissell" runs across. All neck weights is removed by projecting the seat out from the frame and providing a draw bracket for low hitch. Because the three drums of the "Bissell" turn counter and easier than two drum rollers of the same width and because it is lighter draft, you can roll more ground per hour with the "Bissell". A test on your land alongside other rollers will demonstrate the great superiority of the "Bissell" Land Roller. We welcome such a test. Just write Dept. E and say you want to make one, or write for booklet describing our 6, 8, 9, 12 ft. lengths. If you would like a Green Seeder Attachment for the "Bissell" we can supply that, too. And remember it isn't the genuine "Bissell" unless the name "Bissell" is stamped on the roller.



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FLORA, - ONT.

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DAN PATCH 1:55
and **MINOR HEIR 1:58**
(SIZE 12x28 INCHES)

AS LIKELY AS IF YOU SAW THEM ON THE TRACK WITHED TO BEARERS OWN

WRITE IN ON THE BACK OF THIS PICTURE

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REPS. ALFA, 10-10-11
and proved its value in the case of one of our young Stock Food. I have used it this summer and require me to tell you that your Poultrey Food is excellent, that feeding your Poultrey Food doubles the quantity of eggs. In fact, I would be glad to let you see my production and see the great fruit health.—Walter G. Galt, A.L.S. B. Ont.

PROVED ITS UNVALUABLE WORTH.

SEE OUR DEALERS, or WRITE US with regard to our **FREE TRIAL OFFER**

The Feed

The Feeders' use of our unsweetened alfalfa is a boon, or send all questions to our attention.

Alfalfa

Last week on Farm and Dairy we met Mr. A. M. Co., Ont., who B. G. Woods, of I. been growing alfalfa Woods buys calves them over winter without grain of his horses on all both, always by Mr. Woods also.

Save Frost Crops

We urge you to of using single-furrows where the plow, more even long, to do the soil with the "Crown"

But why walk because it isn't your extra weight expense of that riding? Why no Gang and break Just do a little prove that the itself in one season expense it will like your figures booklet 84¢ the "Crown" G \$15 per Ga

46



in Fur Frost &

The Feeders' Corner

The Feeders' Corner is for the use of our subscribers. Any interested are invited to ask questions, or send items of interest. All questions will receive prompt attention.

Alfalfa Fattens Colts

Last week one of the editors of Farm and Dairy wrote on the train met Mr. A. M. Woods, of Durham Co., Ont., who told of his brother, B. G. Woods, of Victoria Co., who has been growing alfalfa for years. Mr. Woods buys calves and colts and keeps them over winter on alfalfa hay, without grain of any kind. He works his horses on alfalfa hay, with almost no grain at all, and his stock, we learn, always have nice sleek coats. Mr. Woods also carries his breeding

sows over winter without grain, they being fed on alfalfa hay.

Mr. A. M. Woods, about March last year, bought a colt from his brother. This animal had received no grain, and was fat. Its new owner fed it chop and hay, but could not keep it up in condition, and the colt went out on grass thinner than when it was bought from its first owner, who fed it alfalfa hay alone.

Don't Feed too Much Ensilage

The amount of ensilage that one should feed varies with the individual cows. It is suggested that as a Lasis for a ration for heavy producing and record m-king cows 25 lbs. be given, along with 40 lbs. of roots a day. There are a lot of people feeding too much ensilage. To do so is a big mistake. We should not feed too much ensilage before the cows freshen or immediately afterwards, and we

should gradually increase it at a slow rate until the limit is reached.

What hay the cows will eat may be given. This will likely not exceed 10 lbs. a day. The cows are to be watered at least twice a day.

Cull Holsteins

"Some of the farmers in our section have been disappointed with the results they have obtained from Holstein cows," said Mr. T. B. Brown, of Fleetwood, recently to an editor of Farm and Dairy. "Ours is not a dairy section, but some of our farmers, after reading Farm and Dairy, concluded that they could make more money in dairying, and apparently they got the opinion that any kind of a Holstein cow was sure to give good results. Some of them attended some auction sales held by a dealer, and bought animals for which they paid pretty good prices, but in

the end were disappointed.

"I have tried to explain to them that it often happens at such sales that the animals sold are nothing but the cull stock from different herds, that the breeders had been willing to dispose of to the dealers, and that the dealers were working off on the farmers. My opinion is that farmers will do better to attend auction sales held by some well known breeders, who can give the records and breeding of their stock for several generations. In this way they will know just what they are buying. I told some of my neighbors that they had better spend \$250 for a good Holstein cow bred in the right way than to buy two or three animals at a dealer's auction, where they can find out very little about what they are buying. There are culls among Holsteins as well as among other breeds of animals, and farmers should therefore exercise care in what they are buying."

**Saves Time, Labor and Expense
Frost and Wood
Crown Gang Plow**

We urge you to do your plowing this season with the "Crown" Gang Plow instead of using single-furrow walking plows—or riding plows. The "Crown" turns two furrows where the ordinary walking plow turns one. It turns the furrows faster, cleaner, more evenly, too. You walk twice as far, and take more than twice as long, to do the same amount of work with a single-furrow plow as you can do with the "Crown" Gang.

But why walk at all? Why not use a riding plow, you say? Simply because it isn't good business to do so. When you use a riding plow you hitch on one more horse than the single-furrow plow needs. The extra horse is not to do the work faster. It is needed to pull your extra weight around the field. Now, can you afford the expense of that extra horse merely to enjoy the luxury of riding? Why not use the extra horse on the "Crown" Gang and break twice as much ground?

Just do a little figuring for yourself and you'll prove that the "Crown" Gang will pay for itself in one season in the time, labor and expense it will save you. If you would like your figures verified, send for booklet 846 which shows how the "Crown" Gang will save you \$15 per week.

46



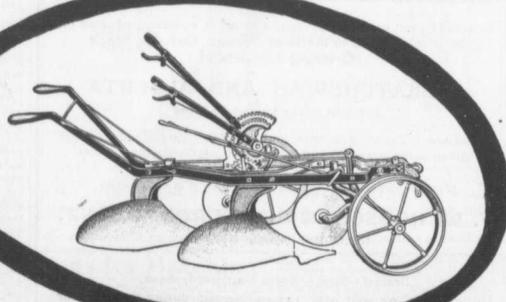
There is a difference in gang plows same as in hired men. You are liable to get hold of a mighty poor-working gang plow, just as you are to get hold of a hired man who barely earns his salt. It pays to take precautions.

We can give you a big list of progressive farmers who swear by the "Crown" Gang—who say it is the surest, steadiest, fastest-working plow they have ever seen or used. The "Crown" is not, like so many others, an old "failure" which has been rebuilt or remodelled. The "Crown" is a plow on which we spent a good long time, and no little cash, to perfect. It was not placed on the market until it had been tested many months under various soil conditions in different sections of the Dominion. We knew the "Crown" was a "success" before we made a single sale, and it has made a record we are proud of.

It's the perfect shape of the mouldboards that makes the "Crown" Gang turn the sod so easily and produce such clean-cut, beautifully even furrows. It's because they are made of soft-centre crucible steel and highly polished that they scour so quickly. The wheels are guaranteed dust-proof, too. And they have roller bearings—which lightens the work for the horses.

Once you set the plow you need not touch the easy-working, conveniently-located levers again. The "Crown" Gang will stay right down to its work and withstand the hard strains of plowing heavy land. The "Crown" is so sturdily built that it will triumph where an ordinary plow will fail you. So just make up your mind you'll own a Frost & Wood "Crown" Gang Plow this season. You can purchase both sod and stubble Bottoms for the same frame. You can have either Straight or Rolling Coulters or Skimmers.

**Turns
Two Clean,
Even Furrows
in Same Time Single-
Furrow Plow Cuts One.**



Frost & Wood Company, Limited, Smith's Falls, Canada

Vanco

Line Sulphur Solution

contains more sulphur in solution than any other kind—has no sediment—sprays easily, and does not clog the nozzle.

The best spray that money can buy for Scale, Scab, Mildew and all other Fungus Growths and Parasites.



Specific Gravity steadied on every barrel guaranteeing quality. Get a copy of our book on spraying. Sent free to YOU.

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During 1910 we sold over 133,400 acres; during the past four years we have sold over 400,000.

HORTICULTURE

Notes on Lime-Sulphur

A. P. McVannell, B.S.A., Prince Edward Co., Ont.

Home-made concentrated lime-sulphur may be used as a substitute for commercial lime-sulphur, but is only about two-thirds as strong as a rule. The following is a good formula for making it: Sulphur (a fine grade), 100 lbs.; fresh lime stone high in percentage of calcium (preferably Beachville lime), 50 lbs.; water, 40 gals. Put the water in the boiling outfit and heat to near boiling, add the lime; when slaked add the sulphur, having first worked it through a screen to break the lumps; boil vigorously for one hour with frequent stirrings, then add the original 40 gallons; strain through a screen of about 20 meshes to the inch. Make enough for the season's work and store in good barrels, covering well to keep out air. Pouring off of any kind over surfaces to depth of an inch will serve the same purpose.

For spring use, dilute each gallon with water to about seven gallons; for summer use on foliage or fruit dilute to about 25 gallons.

The most reliable way to determine the proper amount of dilution for the home-made or commercial wash is to use a hydrometer with specific gravity readings. Put the hydrometer in the clear liquid when it is cool and the sediment has settled. Note the reading. Suppose it is 1.240 sp. gr. The

strength required for use before the luds burst is 1.030 sp. gr. or slightly stronger. To determine how much to dilute 1.240 to get 1.030 divide the first three figures to the right of the 1 by 30, that is 240 divided by 30 equals 8. This means that each gallon of a mixture of the strength of 1.240 should be diluted with water to eight gallons to get a strength of 1.030 sp. gr., or the proper spring strength. For summer use the strength should be about 1.009 sp. gr. To get this divide the three figures to the right of the 1 by 9; that is 240 divided by 9 equals 26.3. Thus we see that each gallon of the strength of 1.240 sp. gr. should be diluted with water to 26.3 or 27 gallons for summer use.

How to Raise "Jumbo" Squash

Mrs. Fred A. Hodson, Simcoe Co., Ont.

The raising of a "Jumbo" squash is more instructive than one might imagine, and to watch its evolution from a tiny white seed to a mon-



Can You Beat This?

To grow a "jumbo" squash such as the one illustrated requires extra care. But what a satisfaction it is to have the large-corn at the county fair! Read the article on this page by Mrs. Fred Hodson of Grey Co., Ont. In our own this squash was grown. You may grow one just as good.

strous yellow ball (you can almost see this vegetable grow) is to say the least, interesting. When a field is covered with squash, peeping slyly or boldly they see fit from 'neath their covering of great green leaves, the sight is beautiful.

The squash illustrated on this page is the offspring of a 285 lb. specimen grown by our English gardener two years ago, and though lacking perfection in shape is one of the largest ever grown in Canada. Its weight, 302 lbs., is, of course, above the average, though a half acre field produced last year over two tons of squash, none of which weighed less than 100 pounds. We grew them for our own use only, as we keep several cows, and this vegetable furnishes them a splendid food as well as being an excellent milk producer.

Living as we do in Northern Ontario, we wait until after May 24th before planting the seed. Up to the middle of June or until all danger of frost is over we cover the young plants at night. From six to 10 seeds are put in each hill, and the hills should be eight feet apart. When

the sprouts appear pluck all weaklings and leave standing only two of the strongest. On this depends the success of your venture. You must have good, strong vines to produce big squash.

It is a fallacy to think that feeding milk or sugar and water is a necessity to the cultivation of many root squashes. The most successful specimens of this vegetable I ever saw were some on which this "old" seed may be planted in hot houses or even in boxes and placed in a sunny window, early in April, if desired, and transplanted when weather conditions permit.

Best Varieties of Beans

Please give me a list of desirable varieties of beans for using, green and ripening—C. H. S. Hastings Co., Ont.

I would recommend the following varieties of beans as being most desirable: For picking pods—Green Keeney's Runners; wax pod, Keeney's Runners; For ripened product—Pierce's Improved Tree, White Wonder—A. H. MacLennan, B.S.A., O.A.C., Guelph.

Some Large Orders.—Some idea of the progress that is being taken in Lambton Co., Ont., agricultural land and the interest that is being taken in fruit growing is evidenced from the fact that A. N. Valloumburg, of the little town of Forest, has taken orders recently for 30,000 fruit trees. These were mainly peach trees, through they include apple, plum, and quince trees—Lambton County can grow fruit and is already producing it in quantity.

CORN THAT WILL GROW
Compton's Early Hand Sifted. An early variety and large yielder of fodder and grain. Write for prices.
W. B. ROBERTS, — SPARTA, ONT.

P. E. ISLAND SEED OATS
The best in the world. Farmers sowing our selected, separated seed oats will make more by extra yield than will pay for seed twice over. All seed prepared by special Power Brush Clipper Separator. Only the large, plump, vital grain, put up in new three-bushel bags, sufficient for one acre, offered. White-Banner, Ligo, Sensation, Big Four, Jewel, Waver, Black Beauty (Black). Refer by permission, Agricultural Department, Charlottetown and Fort Maritime Dominion Seed Inspectors.
JOS. READ & CO., Ltd., Sumner-st., P.E.I.



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DEALER EVERYWHERE SELL RENNIE'S SEED
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CORN THAT WILL GROW
Canadian-grown seed corn. Your money back if not satisfied.
J. O. DUKE, - RUTHVEN, ONTARIO

POULTRY

Poultry Keeping

Orch
Hanning K. Hill
In an orchard of 60 poultries; but article I mean has only one branch of the which I have had two, ten houses, a space, in each of 200 hens. These are orchard, above the hens have from any kind of the whole are fed by the "ch" a dry mash, made ground oats and parts, and about grade seed corn, and buckwheat are scattered in a straw. Four quarts of corn and the same quantity of clover hay, at hens, is the ration for large turkeys, at given each day.

Golden W

The world's most profitable and great lay egg \$1.50 up. We have breeding pens. Ten every one a winner. Get them, the greatest of the eggs. 15 for \$1.00. GLENORA STOCK F

EGGS FOR
WHITE ORPINGTON
best quality
bred stock, especially
\$2 per 15
WALTER PETERS
661 Reel

FOR SALE AND W

TWO CENTS A WORD

PURE BRED FOWLS
in return for new year Farm and Dairy. Subscribers will bring back standard tools. Manager, Farm and Ont.

WYANDOTTES GOLD
White stock and egg \$1.00 per 15, white pingtons, Black M. bred standard tool. Harry T. Lush, 182

WHITE WYANDOT
For heavy egg production. Eggs \$1.00 per 15. Eggs—Thos. E.

EGGS FROM IMPOR
Brown Leghorns; price \$1.00 per 15. Ont.

FOR SALE—Eggs, Single Comb Reds, \$1.50 per 15. Brown Leghorns, choice Single Comb, \$1.00 per 15. Manager, Farm and Ont.

EGGS FOR HATCHING
Single and Rose Comb. Gold, Golden Leaned, \$2.00 per 15. 5 Corn Leghorns, \$1.00 per 15. winter layers. Sell Victoria Poultry Y Manager.

BUFF ORPINGTONS, creils, Pullets and Egg reasonable.—James J. Ont.

FOR SALE—A Pearl-bator and brooder new. A bargain if \$5. Omnesse.

FOR SALE—A few new Wyandotte Cocks Peter Daily & Sons Ont.

GREATEST LAYERS
Runner Ducks; 20 Niagara-on-the-Lake EGGS—Single comb, B winter layers; \$1.00 per 15. Indian Run- ing Indian Run- ing Indian Run-

POULTRY YARD

Poultry Keeping in Relation to Orcharding

Manning K. Ellis, King's Co., N.S. In an orchard condition seem ideal for poultry; and by poultry in this article I mean hens, for they are the only branch of the poultry tribe with which I have had experience. I have two hen-houses, 45 by 15 feet floor space, in each of which I keep 150 to 200 hens. These houses are in a 15 acre orchard, about 20 rods apart. The hens have free range, no yards of any kind the whole year round. They are fed by the "hopper" system with a dry mash, made of bran, middlings, ground oats and corn meal equal parts, and about a half part of high grade leaf scraper, cracked corn, oats and buckwheat are fed in the winter, scattered in a straw litter on the floor. Four quarts of corn in the morning, and the same quantity of oats or buckwheat at night, for each 100 hens, is the ration allowed. About four large turnips to each 100 hens are given each day, out in two and

Golden Wyandottes

The world's most beautiful fowl. Large, heavy and great layers. Choice cockerels \$1.50 up. We have one of Canada's best breeding pens. Ten grand large pullets with one a winner, mated with Golden Gleam, the greatest Golden cock in Canada. Eggs 15 for \$2.50 for \$5.00. GLENORO STOCK FARM, RODNEY, ONT.

EGGS FOR SALE.

WHITE ORPINGTONS combine size with best laying qualities. Eggs from pure bred stock, especially good winter layers. \$2.50 per 15. WALTER PETERS, - PETERBORO, ONT. 81 Reid Street.

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TWO CENTS A WORD CASH WITH ORDER

PURE BRED POWLS GIVEN AWAY FREE in return for new yearly subscriptions to Farm and Dairy. A club of four new subscribers will bring you a pair of pure bred standard fowls. Write Wrentham, Manager, Farm and Dairy, Peterboro, Ont.

WYANDOTTES GOLDEN SILVER LACED- white stock and eggs for sale. Laced \$3.00 per 15, white \$1.50. Buff Black Orpingtons, Black Minorcas from choice ones \$1.50. Satisfaction guaranteed. Harry T. Lush, 182 Dublin St., Peterboro, Ont.

WHITE WYANDOTTES exclusively bred for heavy egg production and standard quality. Eggs \$1.00 per 15. Satisfaction guaranteed.—Thos. F. Pirie Banner, Ont.

EGGS FROM IMPORTED Single Comb Brown Leghorns; good winter layers; \$1.00 per 15. W. C. Shearer, Bright, Ont.

FOR SALE—EGGS, Single Comb Rhode Island Red, \$1.50 per 15. Single Comb Brown Leghorns, \$1.25 per 15. Also the new Single Comb Rhode Island Red. Gekeler—H. Mannell, Springfield, Ont.

EGGS FOR HATCHING—From hardy stock. Single and Rose Comb, E. I. Reds, Silver Laced, Golden Laced, White Wyandottes, \$2.00 per 15. S. Comb White and Brown Leghorns, \$1.00 per 15; \$5.00 per 100. 75 per cent. fertility guaranteed. Good heavy winter layers. Send on your order.—Mamora Poultry Yards, W. H. Leal, Manager.

BUFF ORPINGTONS, PURE BRED COCKERELS, Pullets and Eggs for sale. Prices reasonable.—James McGregor, Caledonia, Ont.

FOR SALE—A Peerless Hot Water Incubator and brooder, 200 eggs, almost new. A bargain if sold at once. Box 35, Omemee.

FOR SALE—A few nice Rich Golden Laced Wyandotte Cockerels, \$3.00 each.—Peter Daly & Sons, Box 25, Seaford, Ont.

GREATEST LAYERS ON EARTH—Indian Niagara Ducks; 25¢ egg strain.—Howe, Niagara-on-the-Lake.

EGGS—Single comb, Rhode Island Red; winter layers; \$1.00 per 15. Grand laying Indian Runner ducks, 10 each.—John Rainard, Glanworth, Ont.

stuck on a nail just high enough for more feed, this ration is gradually better than all the time. In the spring as the hens roam far from the feed, the ranges satisfy themselves, this ration is gradually cut down. First one feed of hard grain is taken away. Later in the summer on the dry mash is given, and in September, when the buckwheat is getting ripe in the orchard crop, no extra feed is given, and until about November 1st, they pick their shells will bring.

I have found this system of feeding does not suit old hens, and the last two years have killed the laying stock each summer, going into the houses in the fall with a new lot of pullets. If the ration is properly balanced, I do not think you can get a pullet to eat too much, and when one is hurt by over-feeding 99 are stunted by not getting enough.

PLAN OF HOUSES

The south side of each house is about equal parts glass and cotton, and except in the coldest weather, the cotton windows are out or partly out all the time. The great difficulty is to keep the house dry, but with a straw loft, cotton windows, and changing the litter every 10 days to two weeks there need be no trouble on this account. The droppings are collected each week and spread in the orchard some distance from the house, as the trees near the house receive all the fertilizer they need. The land should be ploughed spring and fall, besides the regular cultivation of the orchard, that the manure may be absorbed, for in keeping a large number of hens in one flock the land will become contaminated and poisonous to the fowls if you are not particular in this respect.

Fifty hens will furnish all the fertilizer an acre orchard requires. So if the poultry will pay for the feed, one problem in orcharding is solved, and artificial manures can be left to the other fellow. To show that the fowls will pay for their feed, here follows my last year's showing: Cash for eggs from Nov. 1st, 1909, to Nov. 1st, 1910, \$246 70
Cash for fowls sold 178 03
Cash for chickens sold 85 00
Pullets on hand 100 00
Poultry and eggs used in the house 50 00

Cash paid for feed \$960 00 \$654 73
Poultry on hand, Nov. 1st, 1909 130 00 390 00
Net profit \$264 73

INDIRECT RETURNS. No credit is given for the manure, which may be fairly put against the care. Now, as to the indirect profits. Two and a half acres of orchard near one house is now out 21 years; 100 trees in the orchard. This has had no fertilizer, except from the hen house, for five years. In 1907 the apples sold for \$50, in 1908 for \$60, in 1909 \$608, and this year (1910) there was a scattering crop. These trees are as vigorous and healthy a condition as any orchardist could ask for, and give promise of abundant returns in the future. Buckwheat has been sown every year in July as a cover crop, the hens getting their living from it the latter part of the summer. Quite a large quantity of straw has been used in this house as scratching litter, and this has greatly added to the amount of humus in the orchard.

Strange ideas are held by those that have had no experience of the amount of work required to care for a flock of poultry, but having had the same conditions I have written of here, 200 hens can be cared for with half as much labor as four cows, and the returns will be greater.—N. S. Annual Report.

Spring Cleaning Notes

Could anything be more disgusting than the average henery at this season of the year? Many heneries are not cleaned from fall until spring, and then from spring to fall again. Disease germs, and lice are given every opportunity to play havoc with the flocks. This is particularly true in the warm summer months, as during the winter the temperature is too low for bacterial and insect growth to be particularly troublesome. Through cleansing of the hen house and the liberal use of whitewash would be time well spent. During the summer, if possible, the hen house should be whitewashed two or three times and cleaned every few days.

The present is a good time to get out the colony houses and chicken coops. A good application of whitewash here would be advantageous as well. Thorough cleanliness and whitewash are excellent preventatives of lice—the greatest enemies of young chickens.

Eggs for Hatching

C. E. Brown, University of Minnesota. The eggs for hatching should be as fresh as possible, and incubator eggs especially should not be over 10 days old for best results. In cold weather they should be gathered quite often during the day to prevent their becoming chilled. They should be kept in a temperature of not over 70 degrees nor below 40 degrees. Eggs kept in a temperature of over 70 degrees will spoil rapidly, in fact they will commence to incubate.

Some operators recommend turning the eggs every day while saving them for hatching, and others think it quite unnecessary. We believe that with eggs 10 days or two weeks old before setting, it is best to turn them regularly twice a day.

Investigations carried on by the United States Department of Agriculture as to the relative merits of drawn versus undrawn poultry for storage show that undrawn poultry decompose more slowly than does poultry that has been wholly or partly evaporated, and that full drawn poultry completed evaporated with head and feet removed decompose most rapidly.

Hillcrest Poultry Farm
STANDARD WHITE LEGHORNS

I made \$5.33 per bird by selling eggs wholesale in 1910. 100 eggs at \$15, ought to hatch you 75 chicks. From these you raise 35 pullets to the laying age. With average care and average experience these birds will net \$2.50 each. This will give you in one year a net profit of \$72.50, and you still have the birds, which are worth more than \$1 each. My Breeding Hens for the season of 1911 are part of a flock of 402 pullets which in January, February and March made a new record for a flock this size by laying 23,532 eggs. The Cockerels heading the Breeding Pens are from trap-nested hens with individual records in their pullet years of 200 eggs and over. Eggs for Hatching—March and April, \$15; May, \$12.50; June, \$10 per 100.

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You can succeed with the first hatch in a Hamilton Incubator. Our directions are simple and accurate. You cannot go wrong. And the Hamilton will hatch every fertile egg, because its systems of ventilating, heating and regulating are absolutely perfect.



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The Hamilton Incubator Co., Ltd., HAMILTON, ONTARIO.

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Rose Comb Brown Leghorns, \$1.50 per 15; Single Comb Black Minorcas, \$2.00 per 15; Silver Grey Dorkings, \$2 per 15.
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Mammoth Bronze Turkeys, \$2.40 per 4; \$3.50 per 9; Embden Geese, \$2.75 per 7; Golden Ducks, \$1.50 per 7; \$2.00 per 10.

A Prolific Sow.—Mr. Wesley Hounsell, of Butterworth is a very prolific breeder now that less than a year ago gave birth to 12 healthy pigs, last autumn 17 more, and a few days ago

20. Forty-nine pigs in less than a year from one sow seems almost incredible, but Mr. Hounsell has the proof of his assertions and is raising some of the last lot by hand.

BIG REDUCTION IN SCALES

Drummond's Cut-in-Half Price is a Spring Special to Dairy Farmers. ORDER NOW!

We have bought cheap for cash 1,000 Chatillon's Improved Spring Balance Milk Scales (which are recommended by the Dominion Government), in addition to Household Scales, which we are willing to sell to every reader of this paper at a saving of 50c on the dollar.

With these Milk Scales you can tell exactly what profit you are getting from each cow, or if you are keeping any cow at a loss. You can't afford to be without a Chatillon Scale.

Every scale bears the Government stamp, certifying accuracy. The Milk Scales are made in two different sizes, the Household Scales in three sizes.

50 lb. Circular Spring Balance Milk Scale marked in decimals, and always sold at \$2.00. Our special price (add 25c for postage)..... \$1.50

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"THIS IS THE ROOFING THAT NEEDS NO PAINTING"

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For further information, booklet, samples etc., address nearest office.

Creonoid Lice Destroyer and Cow Spray

Cows give more milk if sprayed with Creonoid to keep away the flies which irritate them restlessly. The poultry output will be increased if the hen house is made obnoxious to insect pests by distribution with Creonoid.

Entries for Dairy Farms Contest

Evidence of the interest that is being taken already in the dairy farm competition that is to be held throughout Ontario and part of Quebec this year by Farm and Dairy, is already beginning to reach us. The first letter came from a farmer who took part in the competition held two years ago. He is thinking of entering his farm, located in Peel County, again this year.

Shortly afterwards a letter was received from Mr. Alfred Hutchinson, of Wellington County, asking for particulars and expressing a desire to enter. A letter from Fred V. Woodley, Boston, Ont., Norfolk County, asked for entry forms so that he could enter his farm. Neither of the last two parties took part in the competition held two years ago.

A letter has also been received from Mr. H. C. Sparling, Managing Director of the Empire Cream Separator Co., Toronto, Ont., which contributed \$200 towards the funds of the last competition, indicating their willingness to contribute again toward the funds of this year's contest. This is the first firm to write to that effect. Were it not for such generous contributions as these firms are making, a committee of management would not feel safe to arrange for the holding of a competition.

Reports of the contest have evidently reached Georgia as the Central Georgia Railway Company, of Savannah, Ga., has written for full particulars, presumably with the intention of holding a somewhat similar competition in that state.

Select Seed Carefully

Geo. H. Clark, Seed Commissioner, Ottawa

The available supply of seed corn is better than last year, though not as good as most farmers desire. Little difficulty will be experienced with the flint varieties; but even of these farmers should procure their supply of seed, if possible on the ear, and carefully examine and discard any ears containing kernels with discolored embryo. Even greater care should be taken with dent corns. Injury to seed corn is usually from heavy frosts occurring during the early winter months, before the corn has become thoroughly dried. When the corn is allowed to stand in the shock until late in the autumn, some of the ears become quite moist from autumn rains and may be injured at any time thereafter by 10 degrees of frost or less.

Seed merchants as a rule prefer to handle their seed corn shelled, because in the ear it is bulky and all defects even in first class corn, are clearly evident in the unshelled seed. Most farmers who grow corn for ensilage, but who are not corn experts, are unable to detect poor quality or find fault with seed corn that has been shelled and cleaned from the nubbins in the corn crib after the best ears have been selected for sale on the ear.

A Question of Power

Can I run an engine to cut wood with steam from the same boiler that is used to heat the house? The answer depends upon the pressure to run the engine? Does it require water hotter than boiling for steam heating a house?—J. E. S., Thunder Bay Dist., Ont.

It would be impossible to use the same boiler for the two purposes you have mentioned. The pressure of 60 lbs., which would be necessary to run the engine, would be at least 15 times as great as would be needed for heating a house. A pressure of four or five pounds being sufficient for this use. In fact all houses of ordinary size can be heated by a pressure of two pounds, which means very little hotter than boiling water.

A Sanitary Milk Pail

Editor, Farm and Dairy.—Many of the defects in all dairy products are due to bacteria. Milk is taken from the cow originally to be pure. The first point, therefore, in producing clean milk is a clean cow in a clean stable. The style of milk pail used, however, has a great influence on the number of bacteria that find their way into the milk before it leaves the stable.

A desirable and undesirable type of milk pail is shown in the diagram herewith. A very desirable type is shown to the left of the illustration. The top being partly closed in greatly reduces the chances of bacteria-laden dust, hairs, etc., finding their way into the pail, while the rounded joints make the pail easy to clean.



The second type of pail shown is the one most commonly used. Dirt and dust have every chance to get into the milk and the sharp corners under the pails are unusually well cared for, will be harbingers of dirt and bacteria. Make a close inspection of your milk pails after reading this article, and if your minute inspection does not influence your appetite for milk, then you are likely one of the cleanly, progressive dairymen. Any tinsmith can make a pail of the desirable type here shown. It would be a good thing if pails only of this type were used.—"Instructor."

A Breed Study in Sheep

I have taken a number of sheep on shares; five I got from one man and four from another. They are of different breeding. The first lot has wool very white, and they are light look sheep. They are very active. Their wool seems to tangle up. The second lot is very different. They are heavy chunky sheep and slow to move and have dark brown noses and legs. Their wool seems coarser and is more of a brown color and is all by layers. The wool comes down on their faces below the eyes. Would you kindly tell me through the Columns of Farm and Dairy which breed is the first lot and which breed is the second lot?—A.L.B., Essex Co., Ont.

In all probability the sheep mentioned first in your inquiry are of Leicester breeding. The second lot are likely Oxforddowns, although they may be Shropshires. One would need to see the sheep or have a more complete description of their characteristics definitely as to what breed they were.

160 ACRES OF LAND

FOR THE SETTLER

Large areas of rich agricultural lands, convenient to railways, are now available for settlement in Northern Ontario.

The soil is rich and productive and covered with valuable timber.

For full information regarding homestead regulations, and special colonization rates to settlers, write

The Director of Colonization

Department of Agriculture,

TORONTO

Renew your subscription now.

RECIPROCI- TY ANENT RECIPROCI- TY

A Farmer Opposes Reciprocity

Editor, Farm and Dairy.—It is rather surprising to read in Farm and Dairy, to which as a weekly agricultural paper we are accustomed to look for impartial opinions, such biased arguments in favor of reciprocity. Listen to the conversations on the streets, in the markets, the country stores, and blacksmith shops, and you will need no further assurance that you are not voicing the sentiments of the majority.

The most apt comparison I have seen is that which compares the reciprocity terms offered us by the Americans to the Trojan horse. Everybody knows the story of the strategy resorted to by the Greeks to enter their city, and to take the city of Troy. They built an enormous horse, in which were concealed numerous warriors, and presented it to the enemy. The unsuspecting Trojans took the "gift" into the city, and in the night were attacked by the concealed soldiers, and Troy fell. It is just such a bargain we are being offered now, and to those who remember what our neighbors have been to us in the past the old Trojan proverb holds good: "I fear the Greeks, even bearing gifts!"

As it affects the farmer, the advantage which would accrue to the farmer under the proposed measure—our exceptional horse market in the West would be practically surrendered to the Americans. Our hog market would be ruined, as anybody can see who compares the average yearly market reports of Chicago and Montreal. We hardly appreciate the privilege of being allowed to send our wheat into a country which has already a considerable surplus of that commodity to export. The consignments of Chicago eggs which even exceed the existing tariff conditions slumped the Montreal market the other day, is a striking illustration of the future of that industry under the proposed change. Small wonder the vegetable growers are up in arms at the prospect, to say nothing of the Niagara fruit growers, who see ruin staring them in the face, because when they went to ask justice from their country their Premier told them they were "too late."

There are many other aspects of the case to be considered. The audacity of two men, unsupported by the mandate of the people, and without even consulting the 280 odd members of the House, taking upon themselves to draw up a trade compact which surrenders all our natural resources, is unparalleled.

A crushing blow anybody can see that a measure which deals such a crushing blow to our manufacturers cannot help injuring the man who feeds the manufacturer and his thousands of employees. Our friend, Mr. Drury, objects to contributing to the making of Canadian millionaires. The American magnates will undoubtedly appreciate Mr. Drury's preference and his efforts on their behalf. If we are placed under the sway of the American combines—the Chicago beef trust of unenvyable reputation, for instance—he will have ample opportunity to appreciate his blessings.

It is almost unanimously conceded that the proposed measure would be almost fatal to Imperial preference. That the Premier of this country should support, nay, inaugurate, such a measure seems incredible. But when we remember the man who in an unguarded moment exposed his hand and called Lord Dunsdonald a "for-

eigner" and a "stranger," his attitude is more easily explained.

LOSS OF NATIONAL SELF-RESPECT I fail to see the pecuniary advantages this measure would bring us; but were we to derive mercenary benefits unlimited it would be a poor return for the loss of our self-respect. Mr. E. B. Higgs says: "The history of the rise and fall of the Empires of the past furnishes us with too many sad evidences that the nation whose policy is swayed first and last by trade considerations is running its train into a broken bridge." In a letter written on the same subject in 1887, Col. Fred Dennison says: "I fail to see why we should throw in our lot with a people who produce more bank thieves and embezzlers than any other people on the globe; a people who care so little for the sanctity of the marriage vow, that 100 divorces have been granted in one city in a day. To do so would be national suicide. The appeals in favor of commercial union are all addressed to the pocket, and you gentlemen who advise it talk as if my countrymen would sell everything, dear to them for money. Believe me you entirely misunderstand my people."

Col. Dennison's words may be aptly applied to the present situation, and his faith in his fellow-countrymen would be borne out by the action of Mr. German and the other self-sacrificing men who see this is a time for party considerations to weigh in the same balance with national issues. And in this they have the bulk of patriotic Canadians at their backs.—Yours truly, R. E. BIRDSALL.

Peterboro Co., Ont.

Note.—In the foregoing letter Mr. Birdsall has given a strong presentation of the arguments of the opponents of reciprocity. As most of these arguments have been already answered in Farm and Dairy, no extensive refutation is here needed. That the great majority of farmers are in favor of the agreement is proven conclusively by the resolutions passed almost unanimously by all the important farmers' organizations of both eastern and western Canada. We must also disagree with Mr. Birdsall when he claims that by the agreement we will lose our national and imperial status. If a loss of such self-respect follows on larger trade we must have lost a lot of it in the last few years. In 1907 our total trade with Great Britain was \$98,985,000, and with the United States \$96,740,000. In 1910 our total trade with Great Britain had increased to \$234,819,000, but with the United States the increase was to \$324,792,000. At the same time, in spite of the great volume of our trade with the United States, there has been a steady growth in Canadian and Imperial sentiment. The question of our trade relations is an economic question purely, and it will add to the prosperity of our farmers the proposed reciprocity agreement should receive the support of all intelligent citizens.

Mr. Birdsall does not see the pecuniary advantages to follow reciprocity. A comparison of market quotations should convince anyone of the advantages of free entry to the United States markets. Cheese, which sold in Canada last year at an average price of 10½ cents, averaged 14½ cents in the United States. Barley will bring at least 30 cents more under reciprocity. Already the price has gone up 10 cents under the influence of the prospects of free entry to the United States markets. Beans are 25 to 45 cents higher in the United States than in Canada. What a boon a free entry to United States markets would be to the bean growers of Southwestern Ontario, who even

now, handicapped by the tariff, sell their beans in the United States. Peas are 20 cents higher. Potatoes seldom go below Canadian prices, and quite frequently are 100 per cent higher. The potato market of the New England States would mean the regeneration of agriculture in many sections of the Maritime provinces. To compare prices of hogs on Montreal and Chicago markets is obviously unfair. As well might we compare prices on Toronto and Montreal markets and then condemn Ontario farmers and then condemn Ontario farmers for not shipping to the latter market. The difference comes in freight rates. The only true comparison is between hog prices on such

(Concluded on page 20)

Books on Alfalfa

The Book of Alfalfa by Coburn, Price \$2.00

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Worth their weight in Gold. Hand-somely bound, large books. You ought to have one or both of them.

BOOK DEPT. FARM & DAIRY PETERBORO, ONTARIO

GALVES RAISE THEM WITHOUT MILK Booklet Free Steels, Briggs Seed Co., Ltd., Toronto, Ont.

IF YOU HAVE 50 LOADS OF HAY Louden Machinery Co. GUELPH, ONT. This summer would it pay you to handle them in the old fashioned way with a Louden Junior Sling Car with Centre Trip Slings would enable you to mow them away in one third or less time. Think of the saving of time and labor. We make a full line of Hay Tools, Barn Door Hangers, Litter Carriers, Stalls, etc. Write for our catalogue.

INVESTIGATION OF ALL SEPARATORS IHC SUPERIORITY IHC Cream Harvesters You cannot afford to buy any separator without comparing it with others. You should not take chances. The closer you investigate all separators, the more you will see that IHC is superior. You will then know how much closer the IHC skims, how much longer it lasts, how much easier it is to clean, and how much easier it is to turn. There are no weak spots in an IHC Cream Harvester. IHC Cream Harvesters are the only separators with dust-proof and milk-proof gears, which are at the same time easily accessible. The frame of an IHC Cream Harvester is entirely protected from wear by phosphor bronze bushings. The IHC has large shafts, bushings, and bearings; it has a perfect oiling system; the flexible top-bearing of IHC Service Bureau The Bureau is a clearing house of agricultural data. It aims to learn the best ways of doing things on the farm, and then distributes the information. Your individual experience may help others. Send your problems to the IHC Service Bureau. IHC Cream Harvesters always run steady—without vibration. IHC Cream Harvesters are equipped with a patented dirt-arrester which removes the finest particles of dirt from the milk before the milk is separated. The crank is at the right height for easy turning, and the tank is at an easy height to fill. The IHC local dealer will be glad to point out the above features and many others. Made in two styles—Dairy and Bluebell—in four sizes. Write direct catalogue, or nearest branch house. CANADIAN BRANCHES—International Harvester Company of America at Brandon, Calgary, Edmonton, Hamilton, Lethbridge, London, Montreal, North Bay, Ottawa, Regina, Toronto, St. John, Vancouver, Winnipeg, Yorkton. International Harvester Company of America Chicago (Incorporated) U.S.A.

FARM AND DAIRY

AND RURAL HOME

Published by The Rural Publishing Company, Limited.



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2. SUBSCRIPTION PRICE, \$1.00 a year, strictly in advance. Great Britain, \$1.30 a year. For all other parts, except Canada and Great Britain, add 50c for postage. A year's subscription free for a club of two new subscribers.

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6. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles.

CIRCULATION STATEMENT
The paid subscriptions to Farm and Dairy exceed 4,500. The actual circulation of each issue, including the copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 9,000 to 11,000 copies. All subscriptions are accepted at less than the full subscription rates. The mailing lists do not contain any dead circulation.

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

OUR PROTECTIVE POLICY

We want the readers of Farm and Dairy to feel that they can deal with our advertisers with the assurance of our advertisers' reliability. We try to admit to our columns only the most reliable advertisers. Should any advertiser have caused to be dissatisfied with the treatment he receives from any of our advertisers, we will investigate the circumstances fully. Should we find reason to believe that any of our advertisers is unreliable, even to the slightest degree we will discontinue immediately the advertising of that advertiser. Should the circumstances warrant, we will expose them through the columns of the paper. We will not protect our readers, but our reputable advertisers as well. In order to be entitled to the benefits of our Protective Policy, you need only to include in all letters to advertisers, and in our advertisement in Farm and Dairy. Complaints must be made to Farm and Dairy within one week from the date of any unsatisfactory transaction, with proofs thereof, and within one month from the date that the advertisement appears, in order to take advantage of the guarantee. We do not undertake to adjust trifling differences between readers and responsible advertisers.

FARM AND DAIRY

PETERBORO, ONT.

ALFALFA

As a soil enricher, and as a substitute, alfalfa of all farm crops stands out pre-eminently and alone. As a yielder of abundant nitrogen or protein-rich fodder, alfalfa is peer of all farm fodder crops. Alfalfa is a crop we all may grow. It is a crop we should grow. It is a crop we cannot afford not to grow.

For years Farm and Dairy has laid before its readers the experience of well known practical and successful farmers who have grown this crop to their marked advantage. In recent issues we have published a great fund of most valuable and practical information in regard to alfalfa. We trust you have appreciated this information and will profit as you should from it.

There is nothing to gain in putting off for years to come the matter of growing alfalfa. This spring is the time to start, if you have never before sown alfalfa, and then in years to come you will not have occasion to

look back with regret at what will then appear to have been your seeming stupidity in not taking advantage of the opportunity, which now alfalfa places before you.

Not a man can we find, who has grown alfalfa according to the approved practice of later years, as has been set forth in the special series of articles by Mr. Marsh, but is satisfied with alfalfa and wishes he had more. The probabilities are that on your farm you can grow alfalfa, and if you do not grow it, you are losing much that otherwise would be yours. Will you longer continue to suffer this loss? We trust not. Grow alfalfa this year. Here's wishing you success with this, one of the greatest of crops!

HOG PRICES AND RECIPROcity

What effect will reciprocity with the United States have on the price of hogs? Advocates of reciprocity, and these include the majority of Canadian farmers, tell us that the price for our hogs will be advanced \$1.00 to 75 cents. Those who oppose reciprocity are no less emphatic in telling us that Canadian farmers may as well make up their minds to give up the business of raising hogs altogether if the reciprocity agreement is adopted. Figures that, while authentic, are nevertheless misleading, are given to prove that the average price of hogs in the United States for some years past has been lower than in Canada. Comparisons of quotations from 1906 to 1910 on Chicago and Montreal markets, showing much higher values on the latter, have received wide publicity. These quotations, while they look very convincing, are unfair from two points of view; it is not fair to compare Chicago quotations with those of Montreal, and the higher quality of Canadian hogs is not taken into consideration.

Hogs were quoted last week on the Chicago market at \$6.25 to \$6.65 a cwt. for the best quality; on the buffalo market, \$6.90 to \$7.00; Toronto, \$6.15 to \$6.50; and on the Montreal market \$7.00 to \$7.20. It will be seen from these quotations that even last week the Montreal market is above that of Chicago. It is also above that of Toronto. The difference comes in freight rates. The only fair comparison is a comparison of points similarly located in the two countries. Such a comparison would be that between Toronto and Buffalo. The average price of hogs in Buffalo rules from 60 cents to \$1 higher than in Toronto, and this comparison can be taken as a fair criterion of hog values in the two countries.

A study of market quotations of any of the principal live stock markets of the United States will show a very wide variation in prices for different classification of hogs. Over 50 per cent. of the hogs marketed there could not find a market at all in Canada. Our packers are much more particular as to quality than are United States packers. It is very easy, therefore, to take an average of prices for all classes of hogs in the United States, good and bad alike,

and show prices lower than those that rule in Canada for best bacon hogs. The only true comparison would be to take quotations for the grade of hogs known as "Yorkers," with our bacon hogs. Even comparing these classes Canadians still have an advantage as hogs of the quality of those marketed in Canada are almost unknown to the south of the line.

In spite of the juggling of figures practised by opponents of reciprocity, we farmers can rest assured that reciprocity will mean higher prices for our hogs. On account of the high class bacon that can be made from Canadian sides our hogs will top the market in competition with the United States short, fat hogs.

CHEAP AND EFFICIENT ROADS

In a country as thinly settled as are many parts of Canada, it is not readily possible to finance the construction of first class roads everywhere costing \$1,000 to \$2,000 a mile. Our efforts in this direction must be directed to the main highways. It is possible, however, at very nominal expense to convert our ordinary earth roads into fairly good highways by the use of tile drains and the King split log drag.

In many sections, in Ontario particularly, we are coming to realize that tile drains under the road are equally as valuable as tile drains under wet fields. Two lines of tiles laid three feet deep under the shoulder of the road and the trench filled in with gravel makes a dry road at all seasons, if the surface is kept slightly rounded by the constant use of the split log drag. Gravel used in filling in these trenches over the tiles will be as effective as ten times as much gravel spread on the road without the tiles.

The tiled and dragged road is giving good satisfaction where it has been tried. It is worthy of a trial in all the rural sections of Canada where good road making material is scarce. When laying plans for road work we should not forget to take into consideration the benefit of the tile drain.

USE SCALES IN CREAM TESTING

It is universally acknowledged by dairy authorities in all countries that cream of various degrees of richness and sweetness varies considerably in weight, bulk for bulk, and that a correct test of the butter making value of cream (since the Balcock test is based on weight) cannot be obtained where the pipette (volumetric measure) is used. The use of scales in taking cream samples for the Balcock test is made compulsory by law in all of the leading states of the American Union. Here in Canada the province of Alberta has made the use of scales compulsory.

We dairymen in Ontario have always been proud of the reputation that we have enjoyed as a dairy country. We have come to be considered and to consider ourselves, as in the very forefront of progress along dairy lines. In the testing of cream, however, while in recent years many have come to use the scales, too many

of our creamery men are still holding to antiquated methods. United States dairy authorities have expressed surprise that we in Ontario should countenance the inaccurate and out-of-date pipette.

There can be no question as to which is preferable, scales or pipette. The use of the pipette puts a premium on thin cream, adds to the expense of butter making and is unjust to those patrons who do send a good, rich grade of cream. The responsibility rests on our Government to make the use of scales compulsory; but our creamery men all ought to be progressive enough to adopt the scales, the only accurate method of measuring samples of cream for the Balcock test. We ought to disamis for ever the inaccurate and out-of-date method of taking samples of cream with the pipette.

"PROTECTION GONE TO SEED"

So long as protection fostered the growth of industrial establishments, we farmers were content to bear the burden of protection necessarily imposed upon us. Now that it has the effect of crowding out industries, limiting production, inflating prices, and fostering the operations of combines and mergers, the day of high protection must pass.

In a study of the causes of high prices and their effect upon the country, Mr. J. J. Harpell, in a work entitled "Canadian National Economy" quotes from the Monetary Times the statement that in 1909, 52 large manufacturing companies were merged into 10 with an aggregate capital of \$195,000,000, and he makes a remarkable comparison between the number of factories in several lines in 1891 and in 1906. Thus the number of boot and shoe factories declined from 5,398 to 138; of carpet factories from 557 to 5; carriages and wagons, 3,386 to 368; agricultural implements, 221 to 88; furniture, 1,286 to 181.

This tendency to centralization is perhaps inevitable, but it clearly has a bearing on the question of protective tariffs, which clearly are not in the interests of the masses—the farmers and consumers generally—but rather are for the classes.

Large amounts of money are turned away every year by Farm and Dairy because the management refuses to accept patent medicine, liquor, and other advertisements.

Questionable of a questionable nature. Advertising use. This is done so that our subscribers may have the same confidence that we have in Farm and Dairy advertisers. This is in harmony with our Protective Policy as published every week on the editorial page.

Dairying has a great civilizing, softening influence upon mankind. Next to fruit raising it is the most refining of all branches of farming. Some may even place it ahead of fruit growing in that respect. Anyhow, peaches and cream make too delightful a combination for us to argue as to which is of greater influence upon the happiness of man.

FARMER

A son of a pioneer
Queen's bush,
Pen Co., Ont.,
at 87 years, Mr.
thor P.O., Ont.



J. J. Morrison

on the farm in the seventies and reaching manhood on the farm to his brother, he graduated Business College, a position on the weekly journal, identified with a stirring concern, capacities of stock mechanic and farmer for years. This was days and thus after culture was new. Morrison's reach upon the farm, in close observation was always with brilliant but short. When the Farm formed, Mr. Morrison organized one of the original works in East and both of which were Morrison selected Wellington was one of the best of that organization.

Upon the Assing with the Gr. service in committee the annual December he succeeded for his electoral delegates on the Ottawa.

When the last was in session in appeared before assessor of his evidence regarding tendency of our leave the farm.

TRUSTEE
While organization received Mr. Morrison's support education, the public school appealed to his the unsettled matters in 1905, lightenment in was formed in several it was made possible to attend the C. Association and of educational progress active interest in was created and for the education to follow industry coming a live education. Through these problems affecting brought into form Ontario Education thus find their moment of Education rural trustees had

FARMERS' RIGHTS

A son of a pioneer of 1845 in the Queen's bush, Peel township, Wellington Co., Ont., and who is still robust at 57 years, Mr. J. Morrison, Arthur P.O., Ont., the subject of this sketch was born on the homestead that has been so long in the family and where he still resides. Mr. Morrison is the Secretary of the Dominion Grange of Canada to which office he was appointed at the annual meeting in Toronto last December.



J. J. Morrison

His early industrial life was spent in aiding his father on the farm in those trying times of the seventies and early eighties. After reaching manhood, leaving his place on the farm to be filled by a younger brother, he graduated from a Toronto Business College, after which he took a position on the staff of a Toronto weekly journal. Later he became identified with a wholesale manufacturing concern, acting in the various capacities of stock keeper, travelling mechanic and foreman for over a dozen years. This was during the Patron days and thus an opportunity for active affiliation with organized agriculture was never within Mr. Morrison's reach until after he returned to the farm, in 1900, although his close observation and his sympathy was always with the farmers in their brilliant but short career.

When the Farmers' Association was formed, Mr. Morrison was at the first organization meeting and became one of the original members. He set to work immediately to organize branches in East and West Wellington, both of which were successful. Mr. Morrison acted as secretary of the West Wellington branch, which perhaps was one of the strongest branches of that organization in Ontario.

BECOMES A GRANGER

Upon the Association amalgamating with the Grange, Mr. Morrison became a Granger, and gave active service in committee work, always attending the annual meetings. Last December he succeeded in arranging for his electoral district to send four delegates on the tariff deputation to Ottawa.

When the last Tariff Commission was in session in Guelph Mr. Morrison appeared before that body, and as assessor of his township gave good evidence regarding the increasing tendency of our rural population to leave the farm.

TRUSTEE ASSOCIATIONS

While organized agriculture has received Mr. Morrison's earnest support, educational opportunity for the toiling masses, that never get beyond the public school course, has always appealed to his sympathy. During the unsettled times in educational matters in 1906, as a means of entertainment Trustees Associations were formed in several places by him. This was made possible for rural trustees to attend the Ontario Educational Association and join in the discussion of educational problems. As a result active interest in existing conditions was created and a better opportunity for the education of those who intend to follow industrial pursuits is becoming a live educational issue. Through these trustee associations, problems affecting rural education are brought into form, placed before the Ontario Educational Association, and thus find their way to the Department of Education. By active action rural trustees have acquired a place

in the Advisory Council of Education, Mr. Morrison being at present their representative on that board.

An earnest, capable advocate of farmers' rights is Mr. Morrison, and he is doing effective work for the cause of organized agriculture in his capacity of secretary of the Dominion Grange.

Breed Susceptibility

A circular of practical information in regard to bovine tuberculosis, written by Dean H. L. Russel and Prof. E. G. Hastings of the University of Wisconsin, presents over 60 questions gleaned from the enquiries received at the College, is of great educational value to stockmen. Brief answers based upon the best scientific knowledge of tuberculosis, the tuberculin test and best methods of controlling tuberculosis in a diseased herd are given. The following questions and answers are from this circular:

What is tuberculosis? A transmissible disease caused by a specific kind of bacteria. The organisms leave the body of the diseased animal in various ways and enter the body of a second, healthy animal.

What animals have tuberculosis? All warm blooded and some cold blooded animals. In the northern portion of this country it is the most important disease of cattle. Of the domestic animals, cattle, hogs and fowls are most often affected; sheep, horses, dogs and cats, but rarely. Most of the wild animals in captivity die of tuberculosis.

BREED SUSCEPTIBILITY

Is one breed of cattle more susceptible to tuberculosis than another? Cattle of any breed, beef or dairy, acquire tuberculosis easily and quickly, when once brought in contact with diseased animals giving off tubercle bacilli. The reasons why more dairy than beef cattle have been found to be affected is because of the much greater interchange, the longer period for which they are retained, and the closer confinement to which they are subjected.

What per cent. of domestic animals have tuberculosis? It varies widely in different countries and in different parts of the same country. From July, 1908, to July, 1909, over 90,000 animals largely milk cows, were examined for tuberculosis in Wisconsin and about five per cent. were found to be diseased.

TUBERCULIN TEST

What is the tuberculin test? If a tuberculous cow has a small quantity of tuberculin introduced beneath the skin, a temporary fever will result, which can be detected by taking the temperature of the animal; a healthy animal shows no fever.

Does the use of tuberculin injure animals? Tuberculin has no ill effect whatever on healthy animals, and no harmful effect on tuberculous animals. It does not, in the amounts used in testing, have any effect on the progress of the disease in the animal, nor can it in any way produce the disease. With many of our best herds it has been used regularly for 10 to 15 years with absolutely no injurious effects. The statements that the test causes abortion or other ailments are without foundation.

How can a diseased herd be freed from tuberculosis? Test the whole herd. Remove all reacting animals. Retest all suspicious animals in three months, and the entire herd again in one year and annually thereafter. Disinfect the stable.

How can a herd be kept free from tuberculosis? Test annually or at least every two years, and retest all suspicious cases in three months. Test every animal introduced into the herd at the time of purchase, and again in three months. Use a farm separator or feed only skim milk and whey that have been heated.



A POPPED QUESTION

Will you buy a

De Laval Cream Separator

or do with a poor imitation?

Why do practically all competing Machines imitate, if not infringe, the De Laval Patent?

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Get one new subscriber to this, Your Favorite Home Paper, at our exceedingly low subscription of only \$1.00 a year, and A **SPLENDID FOUNTAIN PEN LIKE THIS ONE.**



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Talk about our **Special Features** and the extras, **Magazine Numbers, Illustrated Supplements, Special Articles, the Prize Farms' Competition, and the Practical Dollars-and-Cents value**—and lots of it—that Farm and Dairy Gives.

Grasp this Opportunity! Allow the Boys and Girls to win some of the Farm and Dairy Premiums, which many others are getting and which are proving so satisfactory to them.

FARM AND DAIRY

PETERBORO, ONT.

95 AND UPWARD



AMERICAN SEPARATOR

SENT ON TRIAL, FULLY GUARANTEED. A new, well made, efficient separator, made of heavy light cream, with all the best features of the American Separator. The best separator on the market, easily cleaned. Whichever you like or need, we will send you one free of charge. Address: AMERICAN SEPARATOR CO., BAINBRIDGE, N. Y. CREAM SEPARATORS ARE FREE OF DUTY.

SYNOPSIS OF CANADIAN NORTH-WEST LAND REGULATIONS

Any person who is the sole head of a family, or any male who is 21 years old may homestead a quarter section of available Dominion land in Manitoba, Saskatchewan or Alberta. In Manitoba, Saskatchewan or Alberta, the applicant must appear in person at the Dominion Lands Agency, or sub-Agency, or District Agency, or proxy may be made at any mother, son, daughter, or father, or intending homesteader.

Duties—Six months residence upon each section of the land in each of three years. A homesteader may live within one mile of his homestead on a farm of at least 32 acres solely owned and occupied by him or by his father, mother, son, daughter, brother or sister.

In certain districts, a homesteader in good standing may preempt a quarter section alongside his homestead. Price \$10 homestead or pre-emption six months before the date of entry into the land required to earn homestead patent) and not less than fifty acres extra.

A homesteader who has exhausted his pre-emption right and cannot obtain a pre-emption may enter for a purchased homestead. **Duties**—Must reside six months in each of three years, cultivate fifty acres and erect a house worth \$300.

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

Creamery Department

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

Scales Compulsory in Idaho

Editor, Farm and Dairy.—In the state of Idaho in paying for cream cooperative creameries make an allowance of all expenses, which are deducted and the balance is divided by actual number of pounds of butter received. Some of the centralizers in our territory are paying on a basis of one cent below the actual price for which their butter sells.

We have a law compelling all samples to be weighed on scales, and the use of the pipette is not permitted. We also have a law making it an offence to misread the Babcock test. Prof. J. H. Francon, University of Idaho.

Canadian Butter at Glasgow

Jas. A. Findlay, Cargo Inspector, Glasgow, Scotland.

The shipments of Canadian butter are yearly decreasing, and this year only 1,250 boxes with 13 addressed packages comprised the total arrivals at Glasgow as compared with 3,469 boxes last year. The price of Canadian produce was too high for profitable importation. Of the 1,250 boxes, 585 were sacked and 671 unsacked; all shipments were carried in refrigerators, the bulk at a temperature round 20 degrees or lower. Very prompt delivery was taken, 910 boxes being lifted the day of discharge, 96 the day after, 220 the second day, and 18 boxes the third day. The boxes were carefully handled and discharged in good order.

When the condition on arrival was satisfactory, as likewise the quality, some

parcels being very choice in body, texture and flavor. Others, however, were decidedly weaker in these respects. Buyers here favor pasteurized cream. The best New Zealand and Australian is made from pasteurized cream, and the former this season had been of outstanding quality.

Canada's contribution to the butter market of Glasgow is now so small, and it is so long out of the market, that it attracts less attention than formerly, and at the present rate of annual decrease will soon, like the egg trade, have disappeared.

Excessive Express Charges

Editor, Farm and Dairy.—The express charges on empty boxes that hitherto were returned free means a tax on my creamery business alone.



A Prosperous British Columbia Creamery

Owing to the high priced labor, dairying in British Columbia will be going ahead it should. There are however, several well equipped creameries in the province. The one illustrated is located at Chilliwack in the New Westminster District.

When the Commission sits on the express rates, they sit on a creamery men with a heavier tax than ever. I understand also that express companies are paying a very large dividend.

When the Commission attempts to regulate the rates of express companies the express companies have representatives there to uphold their side of the question, while we creamery men have no one to represent us. There is very little profit in creameries to-day. Creamery production is not considered of much value in financial circles, and I would be pleased if Farm and Dairy and the directors of the E. O. D. A., combined with the W. O. D. A. would take this matter up with the Commission.—Wm. Newman, Victoria Co., Ont.

Features of Dairying in Alberta

C. L. Marker, Dairy Commissioner for Alberta

Among the outstanding features of the dairy situation in Alberta for the coming season will be continued effort in the direction of further improving the quality of the creamery butter production through the extension of the plan of grading and quality basis payments of cream furnished by the patrons. This was started last year by the government creameries operating under government supervision continue that work which resulted last season in the gain of 15 per cent. on butter grading "First" over the previous season but several of the more progressive individual creameries will adopt a similar course.

We believe that a fair grading system and a payment of a premium for quality will do more for the improvement of the butter output of our creameries than any amount of purely moral suasion that we may present from the platform and even through the press.

Another feature will be the improvement brought about by the application of the provisions of the Dairy-

men's Act as amended by the recent session of the Legislature. This Act is built on the principle of the square deal to all concerned and should go far towards establishing general confidence in, and give the patrons a better understanding of the principles of the creamery parties, and we find that the interested parties and we find that the best patrons are those who take an intelligent interest in the business of the creamery that they patronize.

Cream should be delivered often than once a week. Unless you do this you are not furnishing a brand of cream that will make a first-class flavor even though it may be unclean flavor even though it may be sweet. Cream ages very rapidly. Considerable education along these lines is needed very much, and we, as mak-

ers, must aim to get more in touch with our patrons.—J. A. Farrell, Dauphin District, Man.

FOR SALE

Second Hand Separator, capacity 600 lbs. In perfect condition, used only three months. Owner deceased. Cost \$90. The first cash offer of \$40 takes the machine. Apply Box A1

FARM AND DAIRY, PETERBORO, ONT.

WANTED

Assistant Buttermaker at once. State experience and salary.

Renfrew Creamery Co., Ltd. RENFREW, ONT.

FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD CASH WITH ORDER

LIVE MAN OR WOMAN wanted for work at home paying \$2.00 or \$3.00 per day with opportunity to advance. Spare time can be used. Work not difficult and requires no experience. Winston, United, Spadina Ave., Toronto, Ont.

FOR SALE—Iron Pipes, Pulleys, Belts, Rails, Chain Wire Fencing, Iron Posts, etc., all sizes, very cheap. Send for list. Write what you want. The Imperial Works, Ltd., 25 Toronto Street, Toronto, Ont.

WANTED—First-class cheese and butter maker to take charge of Keene cheese and butter factory. May list. Apply Peter Drummmond, Keene, Ont.

FARM TO RENT—Township of St. Vincent, near Meaford, 250 acres under cultivation, 200 acres range for cattle. Farm, Rent, \$400 per annum.—J.W.G. Whitney & Son, 25 Toronto Street, Toronto.

ESSEX-GROWN White-rod Dent Seed Corn \$1.00 per bushel. Correspondence solicit. Cos. J. Totten, North Ridge, Ont.

ASSISTANT BUTTERMAKER—Wanted position in creamery in Ontario or Quebec.—W. J. Weatherill, Bethany, Ont.

HARDWOOD ASHES—Best fertilizer in use. George Stevens, Peterboro, Ont.

POTATOES—Empire State; registered seed; 3 years selection; \$1.50 bush. Emmer, the son, Mount Forest, Ont.

Cheese

Makers are invited to send contributions to this department, to ask questions of matters relating to cheese making, and to suggest subjects for discussion. Address letters to the Cheese Department.

Cheese Makers

When it comes to the United States, a Peterborough, Ontario, Dairy, recently, with both feet, has been selling at a world-wide cheese in quality to that of the cheese is sold at four, and five cents.

On inquiry enter into contact with the United States. Results. You do not know the United States cheese industry until you get out a good order. You must be able to know of many ways in which you can get the best of the cheese in the afternoon means a poor cheese prices it altogether too low, and the States markets and give the competitors.

"I have an American recipe for Hogan. 'I buy butter and have as many a market, and I live for life. This end of my loved United Kingdom for know that the other side runs higher. The packers' unions, even, but when down bog prices are not slow. If reciprocity gets a big benefit all

Geo. H. Barr, Ottawa

We can make cheese if you like. Why do you have little trouble in the milk way. Just quickly and cheaply and no gas in milk that a heavy cost and poured through in millions of pounds rapidly and stirring the milk more readily. chances of the milk multiply.

To get the very best of the milk, you can't draw. When on the cover and the morning's is possible to avoid milk should be while the morning found without in my farm milk that travel in the best case it was produced

FOR SALE

BUTTER MAKER and whole plant. Waterloo St. L.

DON'T RUN A COWS BOARDING HOUSE

But keep them at a profit,

An Ideal Green Feed SILO

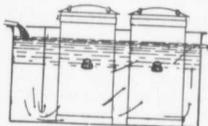
makes the difference. It will double your income and halve your expense. Will pay you One Hundred per cent interest on the investment every year of its use. Built from lamp-glass treated with specially prepared preservative.

Manufactured in all sizes, and shipped complete. Free Catalogue on application.

The oldest company in Canada building Silos.

Canadian Dairy Supply Co., Limited
Montreal, Canada

Steel Tanks For Cooling Milk



THE ONLY way to make sure that your milk will not sour—the only way to make certain it will reach the factory in first-class condition—is to cool it down to at least 50 degrees immediately after milking. To enable you to do this readily, we have made a steel water tank after Prof. Bax's drawings. It works perfectly, and the warm water is forced out so you don't have to keep cooling it at the top. Heavily cleaned. Made in three different sizes. Write for booklet.

Butter Whey Tanks

If you make butter from whey you will need one of our BUTTER WHEY TANKS to hold the whey until it has been run through the separator. These are made of galvanized steel in four standard sizes, or can be made any size to order. If interested, write for booklet.

The Steel Trough Co., Ltd., - Tweed, Ont.

Agents Wanted. Good Proposition to Hustlers.

Cheese Department

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

Cheese Maker Talks Reciprocity

"When it comes to reciprocity with the United States," said Mr. J. J. Hogan, a Peterboro Co. Ont., cheese-maker, to an editor of Farm and Dairy recently, "I am right in for it with both feet. We Canadians have been selling at low prices in Great Britain in competition with the whole world—cheese that is much superior in quality to anything that is marketed in the United States, where cheese is sold at prices running three, four, and five cents higher."

"On quality alone our cheese can enter into competition with that of the United States without fear of the result. You do not catch a United States cheesemaker staying in his factory until late at night in order to get out a good cheese. No sir! Their work must be done up in good time. I know of many makers on the other side who plan to have all the cheese in the press by two or three o'clock in the afternoon. This, of course, means a poor quality of cheese. Cheese prices in Canada have been altogether too low this last year or so, and free entry into the United States markets would increase prices and give the cheese industry a new impetus."

"I have an additional reason for desiring reciprocity," continued Mr. Hogan. "I buy the whey at my factory and feed pigs. Some years I have as many as 200 or 300 pigs put to market, and I know just what free entry for live hogs would mean for this end of my business. I have followed United States and Canadian hog markets for some years, and I know that the average price on the other side runs from 60 cents to \$1 higher. The American best trusts, packers' unions, etc., may be a great evil, but when it comes to keeping down hog prices our Canadian packers can show them a thing or two. If reciprocity goes through it will be a big benefit all round."

The Care of Milk

Geo. H. Barr, Chief Dairy Division, Ottawa, Ont.

We can make more cheese and better cheese if we take proper care of milk. Why don't we do it? It is a little trouble if gone about in the right way. Just cool the milk down quickly and cover it immediately. Dipping is not necessary. There is no gas in milk that is just drawn from a healthy cow. When milk is dipped and poured through the air, it takes in millions of bacteria, which multiply rapidly and develop bad flavors. Stirring the milk in cold water cools it more readily and reduces the chances of the bacteria in the milk to multiply.

To get the very best milk put the empty can in the water tank and add each cow's milk directly as it is drawn. When through milking, put on the cover and leave it. Never mix the morning's and night's milk if it is possible to avoid it. The evening milk should be cooled to 60 degrees, while the morning's milk can be delivered without cooling. I generally found in my factory work that the milk that travelled farthest arrived in the best condition. This was because it was properly cooled.

Peterboro Cheese Makers Meet

Many interesting and instructive addresses marked the annual meeting of the Peterboro Cheese Makers' Association held in Peterboro on Wednesday, April 12th. As usual the attendance was disappointing. In the territory covered by the Association there are at least 50 or 60 makers, and of these not one-fifth were present. Instructors Ward and Cameron, Mr. L. A. Zufelt of Kingston, and H. C. Duff of Norwood, were the principal speakers. The president, R. A. Oakley, of Norwood, occupied the chair.

The election of officers resulted as follows: Pres., J. P. Flood, Ennismore; Vice-Pres., E. Stephen, S. Dummer; Secretary, A. L. Address. Instructor Ward laid particular stress on the importance of cheese makers carrying on educational work among their patrons. "Eighty per cent. of all our troubles with cheese are traceable to the farmer," said Mr. Ward. "It is evident where any great improvement in our cheese in the future must come from." During the coming season instructor Ward intends to spend as much time as possible among the producers, three days at each factory, if possible. Clean milk means more money. An instance was cited of a firm of buyers who had offered to pay a premium of one cent a lb. on cheese looked after in the most up-to-date manner from the time the milk was drawn from the cow.

Cheese from the Peterboro section has the reputation of being second to none in Ontario. Instructor Cameron cautioned the makers present not to rest too much on their laurels or one of the other sections who are going ahead of them. The decreasing of the loss in whey and valuable advice on the care of starter, and the handling of curds, was given by Mr. Cameron. The appointment of outside officials to do the testing at creameries and cheese factories was strongly advocated by Mr. C. A. Gillespie, of Peterboro, who believed that the makers themselves would be willing to cooperate in hiring a man to do this work.

The problems confronting both butter and cheese makers were dealt with by L. A. Zufelt of Kingston Dairy School. That the greater part of the improvement of dairying in the future must come through the cheese maker, was Mr. Zufelt's opinion. It is impossible for the instructors to visit all producers. The cheese maker, however, should know his patrons and keep up such sympathetic intercourse with them, that he would then be willing to take advice on the care of milk or cream. "Give me," said Mr. Zufelt, the poorest factory in this section, and by buying a good maker in it, one with lots of backbone, he will soon be making good cheese and getting good milk."

"We cannot supply the demand for first-class butter makers," said this speaker. "This shows the development of the creamery business." It is not advisable to increase the output of cheese to a much greater extent as we already supply 75 per cent. of the imports to Great Britain. There is, however, still a large opening for our butter and by shipping a good quality and by giving steady shipments at all times, the scales probably could be worked up in the Old Country. On the question of scales vs. pipette in the creamery, Mr. Zufelt said that in his mind, there was no question but that the scales furnished the proper method of testing cream. The incorporation of moisture in butter and the securing of a good body and texture, were also dealt with. A fuller report of this address will be given in a later issue of Farm and Dairy.

Prospects are bright for a larger make of cheese than usual. Cows are in good condition and feed is plentiful. —John Knox, Victoria Co.

SHARPLES
Dairy Tubular Cream Separators
Are The World's Best.
They Are Rapidly Replacing All Others

Sharples Tubular Cream Separators produce twice the skimming force, skim faster and twice as clean as others. Repeatedly pay for themselves by saving cream all others lose. Farmers who know this prefer to buy Tubulars rather than take any other as a gift. They know others soon lose the price of a Tubular and keep right on losing.

Farmers, all over the world, who have other separators are rapidly discarding them for Tubulars. They figure, as you will figure, that it is cheaper to throw other machines away and buy a Tubular at once than to keep on using other machines that lose the price of a Tubular time after time.

No disks or other contrivances in Sharples Dairy Tubulars. Built on a later and better principle than others. Only known construction that overcomes the many parts and disadvantages of others. Patented. Cannot be imitated. In world-wide use many years. Wear a lifetime. Guaranteed forever by oldest separatory concern on this continent. Manufacture of Tubulars is one of Canada's leading industries.

You can own and use a Tubular for less than any other. Buy one Tubular for life. Let "peddlers" and other cheap machines alone for they last on the average about one year. Our local representative will show you a Tubular inside and out. If you don't know him, ask us his name. Write for catalog No. 363

THE SHARPLES SEPARATOR CO.,
 Toronto, Ont., Winnipeg, Man.



30 yrs

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is free for the asking. You really should see and consult this book before ordering your spring and summer garb. We are leaders in the art.

EVERYTHING PREPAID TO YOUR DOOR

We are pioneers in preparing all merchandise in Canada, thus bringing all our customers, from the Atlantic to the Pacific, in touch with the headquarters of fashion at a uniform price. You can shop with us just as easily as a Montreal lady—without any penalty in the way of delivery.

We guarantee satisfaction or refund your money plus return charges. We cannot think of any other way of being more fair.

We are going to dress and equip every lady in Canada who appreciates high class work at a minimum of cost entrusted to us this season.

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FOR SALE AND WANT COLUMN
 BITTER MAKER WANTED.—Creamery runs whole year.—W. B. Donham, 46 Waterloo St., London, Ont. Phone 2092.



THE greatest homage we can pay to truth is to use it.—Emerson.

The Road to Providence

(Copyrighted)

MARIA THOMPSON DAVIESS

(Continued from last week.)

SYNOPSIS OF "THE ROAD TO PROVIDENCE."

Mrs. Mayberry, a country physician's widow, has taken into her home Elinora Wingate, a famous singer, who has mysteriously lost her voice. Mrs. Mayberry is much loved throughout the countryside. Her son, Tom, is a rising doctor in the city, but among his neighbors there is a humorous preference for "Mother Mayberry's remedies." Miss Wingate becomes happier than she has been at any time since the loss of her voice. Mother Mayberry takes into her home Martin Luther Hathaway, the little son of a poor missionary. Miss Wingate disce desire it to be able to restore her power to sing. Dr. Mayberry is told by Mrs. Hathaway one occasion that she is so happy, it does not matter if she should never sing again; and upon hearing this Dr. Mayberry tells her that all she should need is to be able to sing. Dr. Mayberry is told by Mrs. Hathaway that she should never sing again; and upon hearing this Dr. Mayberry tells her that all she should need is to be able to sing. Dr. Mayberry is told by Mrs. Hathaway that she should never sing again; and upon hearing this Dr. Mayberry tells her that all she should need is to be able to sing.

"THE baskets and the tubs of roses are in the milk house, and I will arrange them at the last minute so they won't wilt," answered Miss Wingate with enthusiasm that matched Mother Mayberry's. "Do you suppose there is anything I can do to help anybody anywhere? I never was so excited before."

"I don't believe they is a loose end to tie up on the Road, child. Even Bettie herself have finished for the day and have come over to set a quiet hour with Mis' Bostick. Clothes is all laid out on beds, and cold lunch snacks put on kitchen tables. They ain't to be a dinner cooked on the Road this day 'cept what 'Liza and Cindy are a-stewing up for the Deacon and Mis' Bostick. Looks like everything is on greased wheels, and—here comes the child running, and now! I do hope they haven't nothing flew the track."

"Mother Mayberry, please ma'am, tell me what to do about Mis' Tutt!" Eliza exclaimed with anxiety, spread all over her little face, which was given a comic cast by a row of red flannel rags around her head over which were rolled prospective curls.

"She says she won't go to the wedding 'cause it's prayer meeting night, and it were a sin to put off the Lord's meeting 'till to-morrow night. I didn't know she were a-going to do this way! I got out her dress for her yesterday. The Squire is so mad he says tell Doctor Tom to come do something for him quick, and not to bring no hot water 'telle neither!"

"Dearie me," said Mother Mayberry with mild exasperation in her voice. "You run along, 'Liza, and don't you worry with Mis' Tutt. I'll come down there tereckly and see if I can't kinder persuade her some. Go around there and give that message to Doctor Tom yourself. I don't take no stock in such doctoring 'as he does to the Squire these days."

"Isn't it too bad for Mrs. Tutt to feel that way and miss the wedding?" asked Miss Wingate with a trace of the same exasperation in her voice that had sounded in Mother Mayberry's tones.

"It are that," answered Mother regretfully. "Looks like religion oughter be taken as a cooling draft to the soul and not stuck on life like a fly buster. But I think we can kinder fix Mis' Tutt some. And that reminds me, I want you to undertake a job of using a little persuading on Tom Mayberry for me. He have got the most lovely long tail coat, gray



A Dairy Farmer's Home in Far-Famed Oxford County

Mr. and Mrs. Robert Lockhart and son may be seen to the left in the foreground of the illustration. The cow is milked on this farm and the system of dairymaking practiced account for the general prosperity here as elsewhere throughout Oxford County, Ont.

briches, gray vest and high silk hat a-going to wear his blue Sunday clothes same as usual, when I asked him careless like about it this morning. I'm fair dying to behold him just once in them good clothes he wears out in the big world and thinks Providence people will make fun of him to see, but I wouldn't ask him outright to put 'em on for me, not for nothing."

"Do you know, Mrs. Mayberry, you really—really flirt with the Doctor!" laughed Miss Wingate as she rubbed her delicate little nose against Mother Mayberry's shoulder with Teether Pipe's exact nozzling zest.

"Well, it's a affair that have been a-going on since the first time I laid eyes on 'Uvly, and they ain't nothing ever a-going to stop it 'lessen his wife objects," answered Mother May-

berry as she glanced down quizzically at the face against her shoulder. "She's sure to—adore it," answered Miss Wingate, and he says he answered the singer lady as she buried her head in Mother's tie so only the rosy back of her neck showed.

"Yes, I think she will understand," answered the Doctor's mother with a sweet note in her rich voice as she bestowed a little hug on the slender body pressed close to hers. "You see, child, the tie twist a woman and see, when a man-child ain't like any other on earth, and I feel it must hold between Mary and her Son in Heaven. I felt it pull close like steel when mine weren't fifteen minutes old, and it won't die when I do neither. And that Tom Mayberry are so serious that a-flirting with him gets him sorter on his hind side and works to a finish. Can't you try to help me out about that coat and the silk hat?"

"Yes," answered Miss Wingate with a dimpling smile. "I'll try. I'll ask him what I shall wear and then maybe—maybe—" "That's the very idea, honey-bird!" exclaimed Mother Mayberry delightedly. "Tell him you are a-going out on your best bib and tucker and it'll start the notion in him to keep you company. If a woman can just make a man believe his vanity are proper pride, he will grace like the trick horse in a circus. Now 's'pose you kinder saunter round careless like to—"

"Mis' Mayberry," came in a doleful voice from the wall near the porch, and Mrs. Peavey's mournful face appeared, framed in the lilac bushes. "I've just been reading the Tuesday Bolivar 'Herald,' and Bettie Pratt's own first husband's sister-in-law's child died last week out in California, where she moved when she married the second time. I hate to tell Bettie, and have the wedding stopped, but I feel it are my duty not to let her pay no disrespect to her Turner children by having a wedding with some of they law-kin in trouble."

"Well, Heav' Ann, I don't believe I'd tell her, for as had as that would

them foreign poultry wasn't no good, with which she disappeared behind the top stone of the wall.

"Poor Spangles!" she carried them expected a now longer than could be for it," said Mother Mayberry as the singer lady gave vent to the giggles had been suppressing for a good many minutes. "Now, run on, you Tom for me, while I go to try to get some liniment on Mis' Tutt's corn time soon, will you?"

And yet in accordance with directions, after a few minutes spent before Mother Mayberry's old-fashioned mirror in tucking three very perfect red musk buds in one belt of her white linen gown; the singer lady descended upon the unwitting victim in the north wing and began the machinations against to promise, Doctor Mayberry unfortunately showed extravagant signs of delight at the sight of the enemy, for it was almost the first voluntary visit she had ever paid him, and thus he gave her the advantage she stood with. "You aren't busy, are you?" she asked, as she glanced around the book lined room and into the laboratory. "This is only a semi-professional consultation, and you'll stay just a few minutes?" and the lift of her dark lashes from her eyes was most effectively unfair. As she spoke she settled herself in his chair, while he leaned against the table, looking down upon her with a very shy delight in his gray eyes and a very decided color in his tan cheeks.

"I never can you tell," he answered. "I'll prescribe for you from a hurried consultation. It always takes several hours for me to locate anything, I'm very slow, you know."

"Why, I rather thought you treated your patients with—very little time spent in consultation," a remark which she, herself, knew to be a dastardly manoeuvre. "You attended to Squire Tutt's trouble in a very few minutes, it seems," she hastened to add, as she glanced at the flask that lay on the corner of the table.

"The Squire's trouble is chronic and simply calls for refilling prescriptions," he laughed, his generosity giving over the retort that was his due. "I somehow think this matter of time will prove obscure and will call for time."

"It's a wedding dress I want you to prescribe for me," she hazarded a bit too hurriedly, for before she could catch up with her own words he had flashed her an answer.

"That depends!" was the victim's most skilful parry. "Would you wear a white embroidery and lace of a rose pattern? A rose hat and parasol go with the white, but the white is perfectly delicious. You haven't seen either one, so I want you to choose by guess. Only the slightest rose signal in the hat or parasol that she had been picked by the quick trust. She had taken one of the damask buds from her belt and was daintily nibbling at the folded leaves. Over it, her eyes dared him to follow up his advantage.

"I don't know—I'll have to think about it," he answered her, weakly capitulating, but still on guard. "If I choose not to for those who will wear the other? Soon?" he bargained for his forbearance.

"Whenever you want me to if you'd like to see it," she answered with what he ought to have known was dangerous meekness. "What are you going to wear?" she asked, putting the direct question with disarming boldness.

"Blue serge Sunday-go-to-meetings," he answered carelessly, as if it were a matter to be dismissed with the statement. "Let's see—say them over again—white with the white parasol, rose hat, how did they go?"

(To be continued)

Helping th

To remove bluish become discolored one hour in warm water of which add of kerosene oil, then in this water, rinsed as white as at first.

To remove in white goods may be removed by soaking hours in a weak of lime.

To take out soiled white goods beset the spots with a mon starch and coat thickly and lay in discolored the second white goods may be removed by soaking hours in a weak of lime.

To take out ink be easily removed and furniture by the spots with vinegar until all of course the soap applied the quickest out, but this method.

Hanging clothes dried on a windy more easily as the dry evaporating so much trouble w hot day. But wher has to be me thinks less kindly o no trouble in dryi



Helping the Laundress

To remove bluing.—When garments become discolored with bluing soak one hour in warm water, to each gallon of which add two tablespoonfuls of kerosene oil, then boil for an hour in this water, rinse and they will be as white as at first.

To remove mildew.—Mildew on white goods become scorched, cover the spots with a paste made of common starch and cold water, spread on thickly and lay in the sun. If badly discolored the second application may be necessary, wash with soap and warm water and the spots will entirely disappear.

To take out ink stains.—Ink may be easily removed from carpets, floors, and furniture by simply scrubbing the spots with vinegar. If spilled upon any garment, rub the fabric in the vinegar until all trace of it is gone. Of course the sooner the vinegar is applied the quicker the ink will come out, but this is a never-failing method.

Hanging clothes in wind.—Clothes dried on a windy day always iron more easily as there are none of the tiny exasperating wrinkles that give so much trouble when dried on a still hot day. But when the frayed corners have to be mended the housewife thinks less kindly of the wind. I find no trouble in drying clothes even in

a hard wind if they are fastened to the line properly. Put on in the usual way; then place the corners of the garment together, lift to the line in about the centre of the piece, and pin securely. The air can circulate freely through it, and it dries as well as if hanging loose, while the corners cannot whip about.

To clean a skirt.—A light wool skirt that had been dry cleaned several times was finally cleaned in the following manner: A good soda was made from soft water and ivory soap, quite soapy too. The skirt was soaked in this water and rubbed between the hands (not on a washboard) and no soap put directly on the goods, no matter how dirty. It took three rinsings in soapy water and one in clear to get the old cleaning fluid out of the goods. Then the garment was squeezed out (not wrung) and hung where it would dry quickly. When nearly dry it was pressed carefully, and looked almost as good as new.



The New Women's Building

The New Women's Building is not the only evidence that the Canadian National Exhibition is this year giving special attention to women's and children's work. The women's and children's section of the prize list is now being distributed, and it shows an extended classification covering all classes of work by women and children. There is a special class for domestic science and another for household arts, while the boys and

girls can compete either in separate classes or against each other in general competition. The wider scope thus given to this class of work and the additional advantages for displaying it promise to make it a distinctive feature of this year's exhibition.



Suggestions

"Vinegar and brown paper" is still a good remedy for a bruise. Keep the paper, or the cloth, wet, and both swelling and discoloration will be less.

Half the benefit from a liniment is from the rubbing. Therefore run *now*, and gently. Do not injure the skin.

Potatoes when cooked in their skins should have a small piece cut from one end, in order to allow the steam to escape in cooking.

To prevent the hardening of salt, mix with it a small quantity of corn starch.

Use the potato ricer for cheese that is to be sprinkled on macaroni, which is a much easier method than grating.

If things go wrong in the household, and the bread is heavy, do not make it heavier by fretting and finding fault. Cheerful and encouraging words will make digestion easier.

To keep turnips from becoming spongy, cut off the tops well into the turnip, then pack them in barrels with sand enough to fill all the vacant places between them. Put the barrel in a cool, dark place, but not cool enough to freeze the turnips.

**CAPABLE
OLD COUNTRY
DOMESTICS**

Carefully selected, arriving every Monday. Apply now, The Guild, 71 Drummond St., Montreal, or 14 Grenville St., Toronto.



There is no need to place the cover of the CONNER BALL BEARING WASHER all dripping wet on the kitchen floor, because it is hinged and when open the water drips back into the machine.

No post in the centre of the tub to tear the clothes and take up the room.

Made of Cypress Lumber, and built to last a life time. Easy to work. Runs on Ball Bearings and will wash anything from handkerchiefs to blankets.

Why should you drudge on in the same old way, when you can do it in half the time and with half the labor by using a Connor Ball Bearing Washer.

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Add water to milk—
You weaken the milk.
Add soft wheat to flour—
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Cheapens it too.
Soft wheat costs less—worth less.
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Your bread is less nutritious, sustaining, economical.
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Use Manitoba flour—Manitoba hard wheat flour.
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Strengthen your food values.
Use FIVE ROSES.

Five Roses Flour

Not Bleached  Not Blended

The Upward Look

The Great Within

No. 4

"What man may desire to become, that he can become, and the art of directing and impressing the subconscious is the secret."

"To remove fear and worry, impress the subconscious, as frequently as possible, with the deep feeling of faith, gratitude and mental sunshine. To live constantly in the spirit of gratitude is not only to remove worry, but the cause of worry. To be grateful for the good that is now coming into life is to open the way for the coming of greater good."

The foregoing quotations have been taken from one of the books dealing with the attainment of success in life to which reference has previously been made. The book is called: "The Great Within" and the author is one of the most popular of this class of writers.

Like most books of this character, "The Great Within" contains much helpful advice, it teaches truths of vast importance, the very truths enunciated by Christ Himself, but it breaks down at the same point where most of these books fail. It leads its readers to believe that they may attain the greatest good in life by their own

unaided efforts, it holds out material rather than spiritual success as the object they should strive for and it practically leaves out of consideration the fact that "we wrestle not against flesh and blood, but against principalities, against powers, against the rulers of the darkness of this world, against spiritual wickedness in high places." (Ephesians 6, 12) and it fails to make it clear that the only way in which we can overcome these great forces is by means of a still greater power, the power of God.

When we leave God out of consideration it becomes practically impossible to put into practice the advice contained in "The Great Within." In the first place what is "The Great Within"? The author fails to tell us beyond explaining that it is the subconscious self. Christ, however, when dealing with the same truth many centuries before, did not leave us in darkness. He said, "The kingdom of God is within you." (St. Luke 17, 21). Thus we know that "The Great Within" is really "the kingdom of God." Furthermore Christ told us that we were to seek the kingdom of God and His righteousness first after which all needful things would be added unto us. (St. Matthew 6, 33). Thus Christ made it clear that our supreme duty is first to strive to purify our thoughts and our lives. By doing this we will establish the kingdom of God within us. (thereby developing the "Great Within") and we will prepare our-

selves to receive the material blessings which under certain other conditions we may then expect to follow.

The author of the "Great Within" does right to tell us to drive out fear by impressing the "sub-conscious" with a deep feeling of faith, gratitude and mental sunshine. But he neglects to tell us how to do this. To be grateful we must be gratefully grateful. We must be grateful to some person or some being who we recognize as the author of our good fortune. In this again the bible does not leave us in ignorance as do most of the popular writers. In it we read, "Every good gift and every perfect gift is from above, and cometh down from the Father of lights" (James 1, 17) and "A man can receive nothing except it be given him from heaven." (St. John 3, 27). Thus we know that we are to be grateful to God for the good gifts, he is constantly showing us. For this reason we are told, "Rejoice in the Lord always: and again I say, Rejoice. . . . The Lord is at hand." (Philippians 4, 4, 5.) and we are told "in everything by prayer and supplication with thanksgiving let your requests be made known unto God." (Philippians 4, 6.)

Thus we are told that we should be grateful and thankful to God. The manner in which we can show our gratitude is by praying with thanksgiving. In this way we will do what the author of "The Great Within" advises. "I will impress the subconscious with a deep feeling of faith, gratitude and mental sunshine, and thus we will remove 'worry' and 'open the way for the coming of greater good' into our life. We cannot find any clearer, simpler directions for the attainment of true success anywhere than are contained in God's word. There only will we find the complete guidance that we need.—I. H. N.

THE COOK'S CORNER

Recipes for publications are requested. Inquiries regarding cooking, recipes, etc., gladly answered upon request, to the Household Editor, Farm and Dairy, Peterboro, Ont.

DELICATE CAKE

Half cup of butter, one of sugar, one of flour, one-half of corn-starch, one-half of milk, one teaspoon of Cook's Friend baking powder, four eggs, whites alone.

CREAM CAKE

One pint of good cream, two tablespoons of flour, one-half cup white-sugar, whites of two eggs well beaten; bake in flat tins and frost with soft frosting.

FRIED CAKES

One cup of sugar, two eggs, half a cup of shortening, one teaspoon of soda, one cup of sour milk, one tin of raisins; have your lard very hot, in which place a peeled potato to keep lard from burning, and drop in your cakes; they will come to the top of lard when light; fry a dark brown; when taken out sprinkle sugar over them.

LEMON PIE

The juice and grated rind of one lemon, one cup of water, one tablespoon corn starch, one cup sugar, one egg, and a piece of butter the size of a small egg; boil the water; wet the corn starch with a little cold water, and stir it in; when it boils up pour it on the sugar and butter; after it cools add the egg and lemon. Bake with upper and under crust.

CHICKEN SALAD

Two chickens, chopped coarse; eight heads of celery, three eggs, one pint vinegar, one tablespoon flour, one tablespoon sugar, rub the yolks of the eggs to a fine powder, then add the salt, mustard, and oil, mixing well to-

gether; then add the cream, and after that the vinegar and raw egg.

CORN STARCH CAKE

One cup butter, three cups sugar beaten to a cream, then add in the following order: two scant cups flour, whites of eight eggs, three teaspoons of Cook's Friend baking powder mixed with flour, and lastly, one and one-half cups of corn starch mixed smooth in one cup of milk; flavour as you please; bake in an ordinary flat tin pan, and cut in diamonds when cold.

Never slice apples for making pies; quarter them and remove cores.

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There is something in oats which creates spirit and energy. No other grain can bring results like them. Everyone knows what oats do for horses. They have the same effect on man.

An extract of oats is employed as a tonic. A diet of oats multiplies one's vitality. That's why energetic men—men of vim and spirit—are said to "feed their oats."

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These grains have the maximum of richness and energy. They are also the most delicious. To eat Quaker Oats once a day for a month will show to the limit what tonic effects, what bubbling vitality one can get from oatmeal. One never knows what good oat food is, what it can do, until he tries Quaker Oats.

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has the largest opening of any washing machine. Practically the whole top opens up because the wringer attachment is on the side. No other washer washes clothes so quickly—so well—so easily. Tub made of Red Cypress—will last a lifetime. In every respect, the "Champion" is the champion of all washing machines.

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GIRLS' WHITE LAWN DRESS OR BLUE Dotted Muslin Dress, two to eight. Sold by Standard Garment Co., London, Ont.

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753 Design for



545 Design for upper belt and for the lower yards of braided



542 A Design for Case Cover

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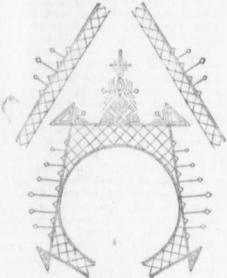
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Embroidery Designs

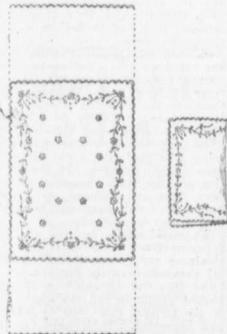
Designs illustrated in this column will be furnished for 10 cents each. Readers desiring any special pattern will confer a favor by writing Household Editor, asking for same. They will be published as soon as possible after request is received.



753 Design for Beading or Embroidering a Blouse or Gown.



545 Design for Braided Belts. For the upper belt three and one half yards and for the lower belt two and one half yards of braid will be needed.



542 A Design for Embroidering a Card Case Cover having Scalloped Edges.

CARE IN ORDERING PATTERNS

Be sure and state size, also number of buttons. Do not send illustrations of patterns. Order by number and size only.

SPECIAL SPRING FASHIONS

Realizing the great interest that our readers take in the new spring styles, we shall only give additional space to the pattern department of Farm and Dairy for this week. Look over the illustrations in the fashion department and send your orders early. If you do not see the style illustrated that you would like, advise us, and we will do our best to get it for you. Write all prices plainly, giving name and address, size and number of pattern desired. Address, Pattern Dept., Farm and Dairy, Peterboro, Ont.



GIRL'S COAT 6966

The coat that is made simply, with loose fronts, is always becoming to the younger girls and is greatly in vogue. This one has slightly cut-away fronts that are smart. For a girl of 12 years of age, will be required 4 yards of material 27 inches wide, 3 yards 36 or 3 yards 44 inches wide, with 4 1/2 yards of braid. This pattern is cut in sizes for girls of 10, 12 and 14 years of age.



SINGLE BREASTED COAT, 6912

The single breasted coat that is made with a fancy collar is one of the latest developments of fashion. This one can be finished with round or straight fronts, as liked. Medium size requires 6 1/2 yards of material 27 inches wide, 2 1/2 yards 44 or 3 yards 52 inches wide with 3/4 yard of velvet. The pattern is cut in sizes 34, 36, 38, 40, 42, and 44.

Sewing Room Hints

Mrs. C. J. Smith, Peel Co., Ont.

A PLACE FOR THREAD

Of the many disorderly things in the home the work box is usually the most so. I decided mine should be in better order. I took a lath 24 inches long and placed nails with small heads about every inch along the entire length. It painted this white. I put three long nails in the wall near the sewing machine, placing the lath on these, which I also painted white. A spool was slipped over each nail



BOY'S RUSSIAN BLOUSE, 6918

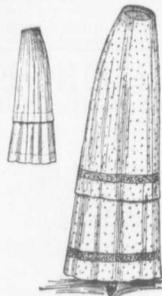
The Russian blouse is always a favorite boy's garment. It is simple and becoming and it is both smart and masculine in effect. This one can be made from any material used for blouses of the kind. It is supplied with a generous patch pocket and finished with a standing collar that closes at the shoulder seam. For a boy 10 years of age will be required 3 yards of material 27 inches wide, 2 yards 36 or 4 1/2 inches wide, 10 and 12 years.



HOUSE GOWN WITH FOUR GORED SKIRT, 6911

The simple, yet attractive, house gown is one that is always in demand. Here is a model which is simplicity itself, yet it is eminently smart. The waist is cut in one with the sleeves after the very latest fashion and the closing is made at the left of the front. The skirt is narrow, and the gown is attractive and becoming. Medium size requires 7 yards of material 27, 3 1/2 yards 36 or 4 1/2 yards 44 inches wide with 3/4 yard 27 inches wide for the trimming.

This pattern is cut in sizes 34, 36, 38, 40 and 42 in.



FIVE GORED SKIRT, 6919

The skirt that gives a tunic effect, but in reality is all in one, is a favorite. This one is laid in a wide tuck at source depth which suggests the tunic especially, while the perfect simplicity of the model is maintained.

The quantity of material required for the medium size is 7 1/2 yards 27 inches wide, 4 1/2 yards 36 or 4 1/2 inches wide when material has figure or nap, 3 1/2 yards 27 inches wide when it has neither figure nor nap with 4 yards of banding. The width of the skirt at the lower edge is 2 1/2 yards. The pattern is cut in sizes 22, 24, 26, 28 and 30 in.



SURPLICE WAIST, 6913

This is a dainty attractive surplice waist. It is made over a gimpse lining, but the blouse itself is cut in one with the sleeves and requires material only 18 inches in width, so that it can be made from lace or other fancy material with perfect success.

Medium size requires 2 1/2 yards of material 18, 21 or 27 inches wide, 1 1/2 yards 36 or 44 inches wide, with 3 yards 21 or 1 1/2 yards 36 inches wide, 1 yard of all over lace 18 inches wide to make the gimpse lining as illustrated, 3 yards of banding and 1 1/2 yards of ruffling.

This pattern is cut in sizes for a 34, 36, 38.

BUTTONHOLES WITHOUT TWIST

Double sewing silk in the needle, then about four inches from the end place the two strands together over the forefinger of the left hand and pass the needle through both strands of silk. Do this every three or four inches the length of the silk. This will not tie a knot, but sews the silk together, keeping it from kinking. I prefer silk used in this way to the buttonhole twist.

CUTTING BIAS PLOTS

When cutting fabric of thin material, take an exact square of goods, begin at one corner and roll up goods into a roll, pin to keep from unrolling, then begin at one end of roll and cut.

HOLSTEINS WOODCREST HOLSTEINS

A few choice Bull Calves for sale, six to ten months old. Sons of Homestead Girl De Koi Sarcastic Lad, and grandsons of Pietje and T. S. Inspector. Write for pedigree and prices.

WOODCREST FARM WINTON, ULSTER CO., - NEW YORK

HOMESTEAD HERD

Offers Homestead Colantha Sir, Dredrop, Dan Belle Dredrop 6th, 11.75 lbs. milk in ten months, Record of Performance at age 11 months old, daughter, Belle Dredrop, 25.10 lbs. in 7 days and Lord Dredrop, Sire Dutchland Colantha Sir, Abekker, whose dam and sire's dam average 318 lbs. butter in 7 days. Age 12 months. Write for particulars and low prices.

EDMUND LAIDLAW & SONS R.R. No. 1. Aylmer West, Ont.

RIVERVIEW HERD

Offers Bull born February 14th, 1910, Sire Sir Anglie Mesta Segis. Six dams in pedigree average 50 lbs. in 7 days.

P. J. BALVEY 413-10 Lachine Rapids, Que.

BUY SUMMER HILL HOLSTEINS

More high record cows in our herd than any other in Canada. We have at present five heifers and cows averaging over 7 lbs. butter in 7 days. Present offerings: 1 Bull Calf from a 27 lb. dam. 1 Bull Calf from a 25 lb. Junior and four year old. 1 Bull Calf from a 30 lb. three year old. 10 lbs. all stored in Canada. Colantha Sir (472) our herd Bull. The sire of our Record Senior two year old for nearly two years. The sire of our Record year old for 7 days, and our Canadian record year old for 7 days. Come and see the herd. Trains met at Hamilton if directed.

Bull Phone 0471. Hamilton. R.F.D. No. 2 D. C. FLATT & SON, - HAMILTON, ONT.

HOLSTEIN BULL FOR SALE

One year old April 7th. Weight about 80 lbs. dam marked, more black than white, his dam has a Junior two year record of 14.89 lbs. and his sire is a son of a 10 lb. old with a record of 12.12 lbs. Registered, transferred and expressed any day. Write for particulars. Prices reasonable.

R. CONNELL, ROEBUCK, ONT. (Greenville Co.)

Lynden Holsteins

An offering bulls and bull calves for sale from their sire Count Segis as 67 lbs. a day, and from 20.40 to 25.17 lb. butter each in 7 days for full age and setting. Write for particulars. Prices reasonable.

SAMUEL LEMON, LYNDEN, ONTARIO

Bull Calves For Sale

Nearly bred from officially tested dams and grand dams. Sire Count Segis. Walker Pietertje was imported from the sire of Stevens' herd, Lecona, N.Y. His dam's official record is 22 1/2 lbs. butter and 31 lbs. milk as a two year old, and 29 lbs. butter and 31 1/2 lbs. milk as a three year old. His dam and nine of his grand sire average nearly 27 lbs. butter.

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A beautiful 14 months Holstein Bull of choicest breeding, cheap for quick sale, and satisfaction guaranteed. For description and price write to:

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OUR FARMERS' CLUB

Correspondence Invited.

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

RAY VIEW, Apr. 5.-March has been an interesting month for the farmers. Three big seed shows were held, one in each of the County towns. The attendance at all was large; indeed so large that halls big enough were available to accommodate the great crowds. These seed shows have become very popular here and have grown to vast proportions. The entries in farm seeds at the largest show numbered about 200. The grain, grass and vegetable seeds shown were very superior. Our farmers are waking up to the fact that Prince Edward Island is getting to be a great seed emporium. On account of our freedom from bad weed seeds here our oats and in demand for seed in the other maritime provinces. Wild oats are hardly known in the Island. A great trade has already sprung up in very profitable prices. The seed shows have helped greatly to add to our grain. The judges from the other provinces who attended the shows said that they never saw so many samples of pure seed at any other show.-W.S.

ONTARIO HASTINGS CO., ONT.

CHAPMAN, April 13.-The snow is nearly all gone but the weather has been very backward. Feed is quite plentiful and food is being stored in good condition. Dairy cattle are bringing good prices for many years. Farm help is very scarce.-H.S.

WELLINGTON CO., ONT. MOUNT FOREST, Apr. 5.-The most of our snow is gone. Wheels are commonly used. This is a good time to add for sugar making. There were a few of good days early in March for sap but practically no sugar was made. The weather since. Quite a number have left for the west this spring. The east could give profitable employment for all who would but the west has also golden opportunities. Our seed fair will be held on the 25th and is well patronized as it should have been. Exhibits are being shown to a large extent. The spring show is to be held on April 19th.-G.H.

ESSEX CO., ONT. COMET, April 5.-I will give you some dates when we have done our seeding in Essex county. We put in oats on April 1st in 1897; April 15th in 1898; but the 1901; March 27 in 1902; March 31 in 1903; May 5 in 1904; April 6 in 1905; April 29 in 1906; April 12 in 1907; April 22 in 1908; April 18 in 1909; all done March 29 in 1910.

We started March 20 in 1911 but don't know how long it will be before it is finished. I marked these dates on my wall when I was seeding. The farmers who are going in for tobacco here this year are all going in for seed corn, which will be good thing for everybody in the state of a cure. There has been lots of seed corn shipped from here east this year. I see my corn in the home and a bushel and if I have as good corn this year will advertise in Farm and Dairy. I have turned my cattle out on April 1 to 15. I expect to turn them out this year on the 15th.-W.S.

BRITISH COLUMBIA NEW WESTMINSTER DIST., B.C. CHILLIWACK, April 3.-We are having fine weather. All early vegetables are in and up. Crops are green now. The farmers here have considerable stock. The autos are out and spring activity is in the air everywhere.-J.C.

GRANGE NOTES

Bro. J. Mills has organized a Grange in Hamilton to be known as Pasture Grange, with 13 charter members.

Bro. Pritchard has completed the organization of a Grange at Holstein in Grey county. This makes three granges in that county and there are three also in Dufferin.

Meetings are to be held at Melancthon, Corbeton and Riverview in Dufferin County, and it is expected organization will take place there.

Eugene Mason is going to Walkerville shortly for the purpose of pushing organization work there.

GOSSIP

Three years ago the firm of Jos. Heid & Co., Hamilton, sent us, Summer-Seed, P.E.I., shipped to the Canadian shipment made of seed oats which were used in seed oats. Prince

Edward Island, however, is still producing oat feed which is said to be of quality which cannot be equalled in any other part of Canada and if you want good seed write to the above mentioned firm and satisfaction is guaranteed.

A RECORD MAKING JERSEY

Strampton Lady Gorge, a Jersey was established which is said to be a world's record. On Feb. 8th, 1910, when two years and 66 days old she dropped her first calf, and for 365 days her milk was weighed in accordance with the rules of the Canadian Record of the record officers. Her monthly production being as follows: February 8th to 28th, 537.75; March, 1,025.4; April, 998.4; May, 1,053.5; June, 1,001.6; July, 1,013.1; August, 938; September, 863.3; October, 839.5; November, 794; December, 915.3; January, 837.6; February 17, 1914; 11,064.75 lbs. of milk which yielded 536.645 lbs. of butter.

This heifer dropped her second calf March 2nd, 1911, less than 30 days after completion of the test. She was exhibited at Toronto, also contended in Winter fair

Sold His Holsteins

Through my small advertisement in Farm and Dairy succeeded in selling my 11 head of grade Holstein cattle. They were all bought by a farmer in Hastings county, who, after seeing my advertisement, came up to my farm and made the purchase. I received enough answers to my advertisement to have enabled me to have sold three carloads of stock, had I had the animals to sell. Some of these replies were received from as far west as Sault Ste Marie.

I set what I considered a high price to one man who wrote me from Palmerston, but he sent word by return of mail asking me to ship the animals. In the meantime, however, I had sold them to the man from Hastings county. The animals were sold for from \$60 to \$100 apiece, which confirms my belief that there is nothing so good as grade Holsteins, except pure bred.

It is only eight years since I started breeding grade Holsteins. I have now disposed of all my grades, and have nothing but pure bred, having started in the pure bred about five years ago.-W. R. Shield, Mount Pleasant, Durham Co.

Note.-Brother breeders, would you do likewise? Would you make sale for your surplus stock? Then advertise in Farm and Dairy. It will pay you.-Editor.

HOLSTEINS

There is just one fault with Farm and Dairy. It does not come often enough.-F. Eaton, Colchester Co., N.S.

HOLSTEINS FOR SALE

Four high grade Holstein cows, due in JAS. STOTHART, PETERBORO, ONT. Box 910.

BROOKSIDE HOLSTEINS

Present offering one young bull 12 mos., also bull calves from good cow sires by Sir Mutual Pail, grandson of De Kol end T. S. Inspector. - KEENE, ONT. Tel. PETERBORO.

HOLSTEINS

If you are wanting HOLSTEINS, any age, either sex, write:

GORDON H. MANHARD, Manhard, Ont.

EVERGREENS FARM HOLSTEIN HERD

Has at its head Velstra Triumph (Imp.) 371, the only bull in Canada whose dam and sire's dam have each given over 100 lbs. milk in 1 day. We have E. P. OSLER, who will give you some choice bull calves for sale; buy now and you will avoid high price for your next year's service bull.

GEO. W. ANDERSON, ROSSMORE, ONT. Belleville District

Lyndale Holsteins

We are now offering two young bulls fit for service, one from a 29 lb. Junior 3 year old and bred by a son of a 28.7 lb. cow. Both bulls are good individuals light in color.

BROWN BROS., - - - LYN, ONT.

LAKEVIEW HOLSTEINS

1 Young bull born June 12th, 1910, offered. He is sired by Count Hastings Fayne De Kol, whose sire, Pietertje Hengerveld Count De Kol, has 95 A.R.O. daughters and whose dam is dam of Grace Fayne and a home bred 35.00 lb. youngster in 7 days. This young bull is half black and has an extra good individual, his own dam is running about the 35.00 lb. mark milk this period of lactation.

E. P. OSLER, - - - BRONTE Telephone.

FAIRVIEW FARMS HERD -HAS FOR SALE-

Sons of Pontiac Korndyke, sire of the world's record cow, Pontiac Chloride De Kol 2nd, 37.20 lbs. butter in 7 days. He is sire of seven daughters whose 7 day record average is 31.15 lbs. milk and 37.20 lbs. butter in 7 days. This young bull is half black and has an extra good individual, his own dam is running about the 35.00 lb. mark milk this period of lactation.

We have in service, and can offer you sons of Sir Johanna Colantha Glad, a son of the highest record daughter of Tengerdus De Kol; 414 A.R.O. daughters, and four over 30 lbs. Each is sired by a son of Colantha Johanna Lad, whose dam is the 4th of Johanna, has 7 days record of 35.22 lbs., making his dam and sire's dam average 35.61 lbs. each, which is higher than that of any other sire in the breed. Let me send you breeding and quote price on anything you want in first-class Holsteins; young sires or Speciality class Holsteins; young sires or Speciality.

E. H. DOLLAR, St. Lawrence Co., N.Y. Near Prescott, Ont.

HOLSTEIN CATTLE

THE MOST PROFITABLE DAIRY HERD Illustrated Description of the Free HOLSTEIN-FRIESIAN ASSN OF AMERICA P. L. HOUGHTON, SECT. BOX 148, "HATFIELD", VT.

ELMDOLE FARM HOLSTEINS

FOR SALE.-One yearling bull, and bull calves, sired by "Paladin Ormsby" whose nearest dam averages 23 lbs. butter in 7 days, and from dams with good records, one 10.500 lbs. in 6 months, and 7 day record 25.00 butter 690 days after calving.

FRED CARR, Box 115, ST. THOMAS, ONT.

GLENSPRINGS OFFERS

Six fine pure bred bull calves to two to 10 week old. Every one of them fully tested dam. Color markings to suit every taste. These are the High Hengerveld blood score one of Count Gerber's sons. Those that wish Carmel Silva and Alta Fouch blood secure one from Iuka Silva Beets Posch. Prices moderate.

E. B. MALLORY, FRANKFORD, ONT.

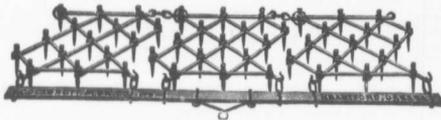
HOLSTEINS FOR SALE

On the Maple Stock Farm we are offering a number of young cows. We are a registered dealer making good records for heifers. Also a few young bulls ready for service. They are all from good cow sires by good backing. We invite inspection of our herd. Trains met at Waterford when advised. Purchaser can have his choice of the herd. W. SLAGT, BALTON, ONT.

COCKSHUTT

If You Want Bumper Crops Pay Special Attention To Your Seed Bed

Half the battle for a bumper crop can be decided in your favor if you have looked after your seed bed properly. Nothing is more important in all the range of farm work. To get best results equip yourself with "Cockshutt" Implements—THEN you'll know that you have started right.

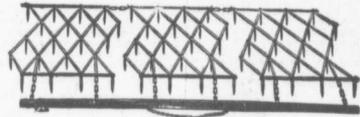


Scotch Clip Harrow

This drag harrow, with an all-steel frame, is the ideal harrow for hard, heavy work.

The teeth are made of extra tough and hard high carbon steel. They are wedge-shaped, and when driven into malleable clips they cannot become loose. As the teeth wear down they can be easily adjusted for length, or removed and very cheaply renewed. There are no bolts or nuts to work loose, thus avoiding endless trouble.

Made in three weights, in two, three, four, five or six sections, with 15 or 20 teeth to a section, as desired. This range of choice gives the farmer every opportunity to select a harrow which will exactly suit his needs.



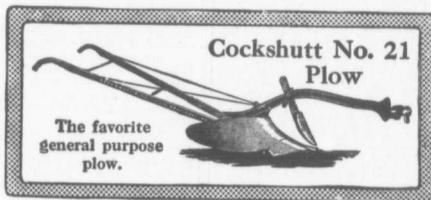
Diamond Harrow

The "Diamond" harrows are made of high carbon channel steel, carefully put together and embodying the most practical ideas. They make an excellent seeding harrow and will give complete satisfaction.

For all kinds of light work the "Diamond" harrow cannot be improved on. They are strong and serviceable and really do their work better than any other light harrow on the market.

They are made in two, three, four, five and six sections, with stay chains between the sections to keep them from spreading or swinging apart. Like all other "Cockshutt" implements, the "Diamond" harrow is thoroughly dependable.

No. 21 Will Plow Any Land Perfectly



Cockshutt No. 21 Plow

The favorite general purpose plow.

You Should Have Our Catalogue

This is without doubt the most popular walking plow in Canada. The plowman's work is made very easy on account of the extra leverage afforded by the long handles.

The mouldboard is made of special soft centre crucible steel and the share of the best grey iron, chilled extremely hard. This plow turns an excellent furrow, from 10 to 12 inches wide and from 4 to 8 inches deep. It is furnished with knife colter or with jointer and wheel, as desired.

Every "Cockshutt" plow is thoroughly tested before leaving the factory. The quality of material and workmanship is far superior to any other make and we know that this plow will draw lighter than others and will clean in any soil.

It fully describes the whole line of "Cockshutt" Farm Implements, including Engine Gangs, Walking and Riding Gangs, Sulky Plows, Single Walking Plows, Harrows (Disc and Drag), Harrow Carts, Land Rollers, Pulverizers and Compressors, Seed Drills, Planters, Cultivators, and Weeders, Potato Diggers, Road Scrapers, Pulpers, Straw Cutters, etc. Each and every one of these are made with "Cockshutt" care and embody "Cockshutt" quality. If you are without a copy of our catalogue, you cannot choose the implements you need with safety, but if you have a copy you can plan ahead for your needs and know that you are going to get the most value for your money from the "Cockshutt" line.

Send your name and address to-day. The catalogue is FREE.

COCKSHUTT

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