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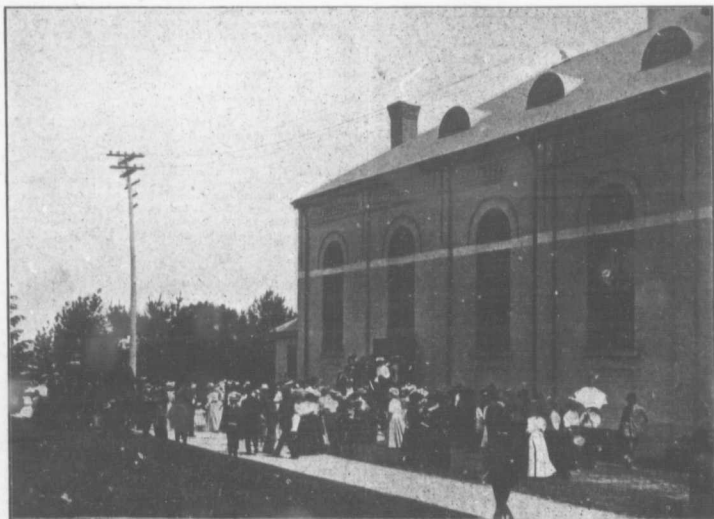
NUMBER 21

The CANADIAN DAIRYMAN AND FARMING WORLD

PETERBORO, ONT.

JUNE 10, 1908

Dairy & Cold Storage
Commissioners, Dept. of
Agriculture, D.C.



EXCURSION DAY AT THE ONTARIO AGRICULTURAL COLLEGE, GUELPH.

A trip to the College in June makes as pleasant an outing as one could wish for and those who go are entertained right royally by the genial President and his efficient staff. Not only is it a day of enjoyment but there is much to be learned as well during a visit at this institution. Take a day off this month and go to Guelph on the Farmers' Institute Excursion that goes from your district.

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Canadian Apples in the Old Country

Of the 2,500,000 barrels exported last year from America, 1,500,000 came from Canada, and were nearly all consigned to British firms. Of the apples from Canada, about 70 per cent. were grown in Ontario and 30 per cent. in Nova Scotia. Ontario apples are shipped mostly to Liverpool and Glasgow; Nova Scotia apples almost entirely to London. Some shipments are also made from both Provinces to Cardiff, Newcastle, Manchester and Leeds. The American apples that compete with Canadian apples in the British markets come principally from Maine and New York. There is, however, a lively actual competition between the apples from one State or Province and the apples from any other. What competition there is resembles that which might exist between dates and figs; each product seems to be separate and distinct, both in its appearance and in the manner in which it is packed; and the conservatism of the British consumer would make it hazardous to attempt any sudden or radical change.

Nova Scotia apples are packed in smaller barrels than ours, made of spruce staves and bound with old-fashioned hoops. One recognizes familiar names among them—Baldwins, Kings, Spies. It would be difficult to add to the fame of the apples grown in the Annapolis Valley. The delicate aroma and luscious quality of the Gravenstein and the Bishop Pippin are justly admired, and place these varieties among the very best in the world.

A USEFUL PURPOSE

The apples that are exported from the State of Maine are mostly Baldwins. They are shipped in large quantities by way of Portland and Boston. Maine Baldwins occupy an important place in British markets. They are cheap, and of inferior quality, but serve a useful purpose in bringing apples within the reach of people who cannot afford to pay higher prices for better fruit. It is not an unusual occurrence in the Liverpool Fruit Exchange for a lot of Maine Baldwins branded with "Fancy" and many crosses, indicative of high quality, to go with difficulty at 11s. 6d. of 11s. 9d., and the next lot some well known brand of Canadian Baldwins, marked simply No. 1, begin with eager bids of 18s.

The other New England States also export apples, though not in any considerable quantities. Vermont Spies are said to be of very high quality.

From the Hudson Valley and the four great apple counties of Western New York, large shipments are made to European markets. These are usually of good quality and bring fair prices. But careful sorting and packing are not so much in evidence as they ought to be, notwithstanding the assurances stenciled on the top of the barrels. Their home market is more important to them than ours is to us, and our export trade is, in consequence, better developed. Winter shipments of Greenings from cold storage are the most characteristic of their exports. These are well appreciated and command high prices.

THE BEN DAVIS

Apples from the Western States occasionally find their way into British markets. It is well known that throughout the West, chiefly in Kansas, orchards have been extensively planted, and great quantities of apples are now grown there. The most popular variety and by far the most abundant is the Ben Davis. It is a handsome apple and a fine keeper. The tree is hardy, good bearer and produces a crop a few years after

The third of a series of articles written for the Toronto News by E. J. McIntyre.

planting. The quality also of the Western Ben Davis is good, and should by no means be gauged by the quality of the Canadian Ben Davis. Who is not familiar with the well shaped, handsome apple that looks not unlike the firm or high, but tastes like a frost-bitten turnip? Exports of Western Ben Davis apples have not been successful. The voyage is long; the shipping rates high; apples are perishable, and the Ben Davis has not a good name.

The Newtown Pippin is the highest priced apple to be found in British fruit shops. It is a large, well shaped apple, and looks very handsome in its delicate coloring of pale green and gold, and its spotless surface glistening like wax. It grows mainly in California, Oregon and Virginia, in which latter State it is known as the Albermarle Pippin. The best samples come from Oregon. They are wrapped in paper like oranges, are carefully sorted in graded sizes and packed in boxes. A dealer buying a box of Newtown knows that he will have no wastage and all the apples in the box are true grade and quality. The Newtown has a pleasant taste and a mild, agreeable flavor.

FANCIEST OF THEM ALL

But the fanciest of fancy apples, it must be admitted, come from British Columbia. Spitzenbergs, Kings, Spies and Baldwins, acquire in that favored province a wealth of size and glorious coloring that is nothing short of marvellous. The plumage of the Golden Pheasant is scarcely more gorgeous. One can easily imagine them taking the lead in British markets against all competition, once an export trade is developed. In flavor and quality they do not quite reach our standard, but they are certainly not inferior in these regards to the apples of Oregon and California.

However, when all is said, the deliberate opinion expressed before is hereby repeated. It is in the Province of Ontario that the apple attains its greatest excellence. Our Northern Spy represents the highest development of the apple species. Many kinds of apples are attractive in appearance; many are pleasant to the taste; and some are very luscious; but the Northern Spy combines the beauty, fragrance, aroma and delicious melting quality of them all.—E. J. McIntyre.

S.S. Latona Lost

Canadian shipowners of perishable goods will learn with regret of the total loss of the S. S. Latona of the Thomson line. The Latona homeward bound and Janic were in collision off the Lizard on May 19th. Cable despatches contain the information that all the crew were taken off in safety.

The loss of the boat will be a serious one to the St. Lawrence trade as she was recognized as being one of the best boats in the service coming to Montreal. Being originally built for the Australian trade her cold storage compartments were ample to ensure the proper temperature for the safe carrying of fruit and dairy produce to Great Britain.

New Building for M.A.C.

The advisory board of the Manitoba Agricultural College has approved plans for a new building in which to conduct the teaching of mechanics and engineering. The building will be of square or white brick, three floors, and will be located between the dairy building and the river.

A building for domestic science teaching purposes is also urgently needed and is being considered by the board.

Issued
Each Week



The CANADIAN DAIRYMAN AND FARMING WORLD



Only \$1.00
a Year

AGRICULTURE, THE KEYSTONE OF CANADIAN PROSPERITY

VOL. XXVIII.

FOR WEEK ENDING JUNE 10, 1908

No. 21

DAIRY FARMING vs. EXCLUSIVE GRAIN GROWING

N. J. Kuneman, M.A.C. Winnipeg

Dairying helps to solve the weed problem and grows. The Farmers engaged in Dairying are the most prosperous.

THE advantages of dairy farming over exclusive grain growing are numerous. With dairying you do not have all your eggs in one basket, so to speak. If your grain crop is a failure you have nothing to fall back on, and as a result, you are very often put to your "wits end" to meet obligations until an-



N. J. KUNEMAN

Instructor in Dairy Department, Manitoba Agricultural College, Winnipeg

other season comes round. People who have ever experienced this, well know what it means. It practically takes two seasons to make up and should further misfortune overtake him, it may mean his complete ruin. He then becomes discouraged, quits in disgust and says that farming does not pay. We have seen this thing many times over in Manitoba. In passing through some districts we come across homesteads that have been vacated for no other reason than that exclusive grain growing has been practised and failure of the crop put their owners out of business. Places having become mortgaged for all they are worth, are left to the loan companies or speculators for disposal to some one else.

It is to be hoped that the second owner will go in for mixed farming, which is the best and least expensive to start up in as less machinery is required and fewer horses are needed.

SOLVING THE WEED QUESTION

By following mixed farming or dairying, a system of rotation of crops can be followed and hoed crops can be introduced. By so doing, the land can be kept free from weeds, and what is most important of all, the fertility of the soil can

be retained. At the present time, farmers here are "up against" it owing to slipshod methods of farming that have been followed by some of those exclusive grain farmers. I refer to the weed question. As you are aware, the Government has taken this in hand and has passed a very stringent Weed Act, which, if put into force, will mean the destruction of the whole of some crops because they are so badly over-run with weeds. Some of the worst weeds that we have to contend with are the sow thistle, the Canada thistle, wild mustard, wild oats and stink weed. There are others but they are not as numerous at present nor do they require our attention as much as the foregoing. These conditions can be overcome if the farmers will only make up their minds to follow more intensive farming. They will have to get away from the old style of doing things, by farming less, and farming better. They will have to pay more attention to the destruction of weeds by doing more surface cultivation, in fact by doing everything more thoroughly than they have been doing heretofore.

GRAIN vs. DAIRYING

Farmers must also follow a system of rotation and the growing of clover and grasses. By doing this more cattle will be kept to which the roots and ensilage can be fed. If more cattle are kept, the manure will be returned to the field, thereby retaining the fertility. If you grow clover, you will return that most valuable of all constituents—nitrogen—to the soil. Nitrogen is taken from the air by the leaves of the plants and stored in the roots. A crop of clover plowed down is of great manual value and will put another good constituent into the soil in the form of humus, which will tend to hold the finely powdered soil together and keep it from blowing away from your seed. A crop of wheat will remove about \$6.25 worth of plant food per acre from the soil; a crop of barley, about \$6.70, and a crop of oats about \$6.85. A cow giving about 6,000 lbs. of milk will take about 64 cents worth of fertilizing constituents from the soil; 240 lbs. of butter will take from the soil about five cents for every 1,000 lbs.; a fat animal, \$4.50 per 1,000 lbs. increase in weight; and hogs, \$3.10 for every 1,000 lbs. increase. Eighty-five per cent. of this plant food, however, is returned to the soil in the manure. Then the shipping rates on dairy products are less than the rates on grain because

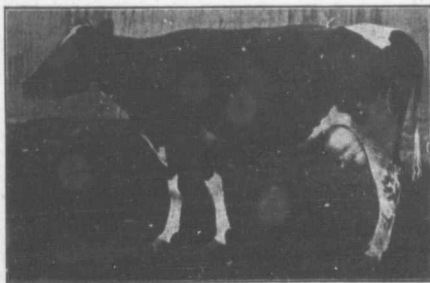
they are a finished product. A ton of wheat at 75 cents a bushel will sell for \$25; a ton of hay, \$10; a ton of butter at 25 cents a lb., \$500; a ton of cheese at 12 cents, \$240; and the shipping rates are nearly the same on all. Where a variety of crops is grown, there is less danger of failure than where only one crop is grown.

Dairying also distributes the labor throughout the year, and this labor can be hired for less when engaged by the year. Labor is a great problem in this province at the present time and it is difficult to secure suitable men when most required. If farmers would hire by the year they would then have their help when the harvest time came and I am certain that if such labor is properly directed, it will be profitable to its owner.

DAIRY FARMERS PROSPEROUS

In many cases, however, the dairy farmer has great difficulty in obtaining men to carry on his business properly, because the men are compelled to work in the fields until sunset, and then are obliged to milk cows and do any other chores that have to be done. As a result some dairymen are without help for a great part of the year and they must get along as best they can. It is no wonder they find dairying unprofitable, when they are bound to neglect some of their work, and as a consequence become discouraged and say that dairying does not pay. These are some of the facts concerning the business that are working against our interests to-day. A man who carries on dairy farming successfully will have good returns from it and will have a source of revenue the whole year through. We have good illustrations of this in Manitoba. In passing through some of our best dairy districts, we see fine houses, fine barns and farms well fenced, and in fact the farmers have everything that they require, and are in good circumstances. This is all due to the dairy industry and its co-industries or side lines, such as the raising of hogs, and poultry.

Especially is it profitable to raise hogs and poultry as we are obliged to import great quantities of both, which is not valid reason why our



Madam Dot 3rd's Princess Pauline DeKol (3708).

The second cow to qualify for the Holstein Record of Performance. Owned by F. Sangster, Ormstown, Que.; mature cow. Number of days in milk 303. Total lbs. milk, 15137; total lbs. fat 438.974. Average per cent. of fat 3.30. Production required for registration 10500 lbs. milk and 337 lbs. fat.

farmers here in Manitoba cannot produce enough to supply the demand. It is money lost to them and this province. The prices for pork and poultry are always good. There is much grain sold for less than the returns it would bring if fed to stock, besides, when fed to stock we would retain the fertility of the soil.

CARING FOR THE COWS

Milk cows should be fed liberally because 60 per cent. of what a cow eats goes to sustain herself, and he who would withhold the other 40 per cent. would be foolish. For the roughage, feed clover hay, good, clean, prairie hay, corn fodder, corn silage, and perhaps a small quantity of good, clean oat or barley straw. For roots feed mangels and sugar beets. These feeds are available in Manitoba and as a rule are reasonable in price. For concentrates or grain ration, bran, shorts, oat chop, barley chop and frozen wheat chop may be fed. The quantity to be fed depends on the amount of milk a cow is giving and her capacity for roughage. A cow should be fed all she will clean up nicely. If feeding roots, from 20 to 35 lbs.; silage, from 25 to 40 lbs. and one pound of grain to every four or five pounds of milk she gives. The feed should be salted regularly or the cow should have it become her at all times, as salt is a good salt, promotes health, and creates a good appetite. Cows require plenty of good, pure, clean water to drink and should not be allowed to drink out of sloughs, etc. In the winter, they should have water with the chill taken off it.

The stabling should be, above all, well ventilated and have plenty of light. Stables should be so constructed that they can be kept clean easily and so the cows can be kept clean also. In fact, it should be built in such a manner that it will be both a pleasure and an encouragement to work in it. If these facts are followed, dairying, I am sure, is profitable, and the owners of dairy cows will do much towards the improvement of the present existing conditions.

How many farmers ever think of watering their horses before feeding them in the morning? How much do they lose by not doing it? The horse comes from work at night, gets a drink, then is fed moist dry grain, eats hay part of the night, and in the morning another dry feed, and by this time is very dry himself, so when he reaches the water he fills his stomach so full that undigested food is forced out of the stomach and is a drainage rather than a benefit to the horse. Try watering your horses before feeding in the morning, thus slaking their thirst and at the same time washing their stomachs ready to receive the morning feed; when being properly moistened with saliva it will remain until thoroughly digested.

Weeds rob the soil of moisture. The amount of water that must be taken up by the roots of any plant and exhaled out into the air through the leaves is enormous. Experiments have shown that for most of the cultivated grasses from three to five hundred pounds of water must actually pass through the plants to produce a single pound of dry matter. In seasons of drought, when there is scarcely enough moisture to supply the cultivated crops, it is easy to understand the injury done by the presence of a large number of additional weedy plants. This is doubtless the most important of the weed injuries, for it must not be forgotten that the moisture in the soil is the all important thing. Ask the average farmer why he cultivates his corn, and he will say, "To kill the weeds," when, as a matter of fact, it is, or should be, for the purpose of conserving the moisture in the soil. The weeds are killed purely as an incidental matter. A perfectly clean cornfield needs cultivation as badly as a weedy one.—Vernon H. Davis, Ohio State University.

WHERE RURAL DELIVERY SAVES \$100 A YEAR

The Eighteenth of a Series of Articles Written by an Editorial Representative of this Paper, who Recently Visited the United States, with the Object of Studying the Free Rural Mail Delivery System.

"Rural Delivery saves us at least \$100.00 a year," said Mrs. J. R. Adams, of Huntingdon Valley, Pennsylvania, to me when I called at her home. "Even if it does increase our taxes it is a splendid thing for the farmers. My husband makes a specialty of raising ducks for the Philadelphia market.

Before we got Free Rural Delivery we used to get our mail from the Huntingdon Valley post office two and a quarter miles away. A young man, who stayed at a neighbors, used to bring us our mail at night. We had to go to our neighbors, about a quarter of a mile from here, to get it. If it happened to be raining we would not go and then we did not receive our mail until the following day. We paid another boy 50 cents a year to bring us a daily paper from Somerton. Now we get our mail delivered at our door every morning. It is fortunate for us that we do, as the young man who used to bring us the mail has moved away and we would have to go or send for it ourselves or do without it if it was not for free rural delivery.

"We market an average of 500 lbs. of ducks a week during nine months in the year. When Jewish holidays come they influence the market greatly. The dealer in Philadelphia, to whom we ship our ducks, keeps track of these holidays and writes us in regard to them. Sometimes he used to write and ask us to have a lot of ducks at his place by a certain time. It frequently happened that we did not get his letters until the day that the ducks should have been in Philadelphia. As a result, we often lost two or three cents a pound on 500 or 800 lbs. of live ducks. This meant a considerable loss to us. When we save only two cents a pound on 500 lbs. it is equal to \$10.00. Now that we have free rural delivery we get our mail promptly every morning. The dealer can write us at night in Philadelphia and we will have his letter the following morning. This means that we will easily save \$200 a year as a result of having our mail delivered promptly. That is why I believe that even if rural delivery does increase our taxes it is a fine thing for the farmers.

"At one time we thought of having a telephone put in, now we do not expect to need it. We are so pleased with the service that we are shaking with fear at the thought that our route, which is only a new one, may not be sufficiently patronized and thus may be discontinued. For that reason we are buying all the stamps and money orders, from our mail carrier, that we possibly can. The first mail we received through the rural delivery mail carrier brought us 22 letters. A number of our friends had heard that we were going to get rural delivery and had written to congratulate us.

KEEPS THE ROADS OPEN

"One reason why I wanted rural delivery," said C. H. Drummum, of Huntingdon Valley, "was because I knew that if we got it our road in winter would be kept open, even in stormy weather. Thus we would always have a clear road, as the mail roads are always broken first.

"The route in this section was started by the post master at Huntingdon Valley, who wanted to increase his trade. He went around with the carrier and explained to the people that it would not cost them any more to have their mail delivered by the rural carrier than it would have a box at the post office. Some of those who refused to take the service at first have since given orders for rural delivery boxes. Our carrier has a route 26 miles long with 80 boxes.

He expects to have a considerable number of additional boxes before long."

TWO NICE FEATURES

As I walked down the roads, stopping at the different farm houses, two things impressed me most favorably. One was that the farmers, who had rural delivery boxes in front of their houses, nearly all had their names painted on their boxes. As these boxes were on the side of the road it was possible for a stranger to tell who lived in each house.

The second point was that at the various cross-roads there were signs indicating the way to the various post offices in the district and mentioning the number of miles to each. Thus, strangers could tell where they were without having to drive into the farm houses to ask for information. I was informed that some states have laws making it compulsory for the township councils to erect signs of this nature at every cross-road.

Noticing that there was no rural delivery box in front of one fine farm house that I passed I asked a boy who was working in the field what



Meeting the Mail Carrier

In the early days of the Rural Delivery System in the United States, the carriers were permitted to dismount from their vehicles. The illustration shows a farmer in Carroll County, Maryland, crossing a road to meet the mail carrier. Of late years the carriers have not been allowed to dismount. Mail boxes must be beside the road where the carrier can reach them from his rig.

the reason was. He replied 'Oh, we do not bother with it as we have to go into town every morning with our milk and we get our mail then.'

"We used to have to go three quarters of a mile for our mail," said Mr. Poiron, of Huntingdon Valley, "and as a result we went for it about only three times a week. Now the rural delivery drops the mails in our box every morning and we have to go only 15 feet to get it."

HOW THE ROUTE WAS STARTED

The manner in which this route came to be started was described by Mr. Andrew Ervin, the post master at Huntingdon Valley, a general store keeper. "I knew," said Mr. Ervin, "that a rural route would be established in this section soon and I felt that it had better start from our post office than from some other, as if the route started from another local office it might take a lot of my trade.

"I first saw our Congressman and through him secured an application form from the Post Office Department petitioning for the establishment of

a rural delivery route. I then laid out a 25 mile route, and drove over it to get the names of those who would take rural delivery. The post office department required that three quarters of those people who accepted rural delivery could agree to put up boxes as a guarantee that the service would be patronized. Nearly all the people agreed to take rural delivery and to put up boxes, although a few refused to do so. Some parties were getting their mail through other post offices and did not want to change.

"I did this work in the spring. The Inspector came out in the summer and went over the route and changed it slightly, so that the carrier would not have to travel over the same ground twice on any part of the route. The route was started on September 16, 1908, with 65 boxes. It now has 80 boxes and we expect that before long there will be more.

"Quite a number of the people on the route mail me their orders for groceries and I deliver the groceries to those who live within two or three miles of my store. Our office is a fourth class office but the service is growing so rapidly it may soon go up to a third class office."—H. B. C.

The Secret of Large Yields

Geo. Rier, Oxford County, Ont.

The whole secret of large yields of milk is that a cow is considered to make milk from her whole system, devoting all her energy to the work. She has, as it were, a storage battery storing up energy whilst dry, and strengthening her whole system. The feed fed whilst a cow is dry often has more effect on large production than that fed dry, at the time she is producing so heavily. A cow's stomach can easily be overloaded. A cow that is fed too much and is bilious or sick is not likely to produce so well as it fed just enough to satisfy her.

Many cows are knocked out by over-feeding. It is impossible to say how much a cow should have to produce the best as so many cows have to be fed and considered as individuals. A cow when she first freshens must be considered as an individual. Owing to the tax of motherhood her stomach will not be so strong and she must be fed very judiciously for a couple of weeks. Considering the demands of motherhood in itself no little tax upon the cow besides producing heavily, we see how absolutely essential it is to give a cow the very best care and feed at all times. It is necessary if we expect good work from the cows to fit them for the work.

TWO MONTHS REQUIRED TO RECOVERATE

A cow should be dry two months or more yearly and whilst dry is the time to feed her for the next year's work, to strengthen her up. This is an essential point in managing dairy cows. But it is not followed. Not well enough understood what a tremendous tax it is upon a cow to produce milk yearly? If we want say 7,000 lbs. of milk from a cow consider that she is providing 2,800 quarts of milk equal in value to that many pounds of beef. How important it is to recuperate her system. Furnish her with energy for the next year's work whilst dry. Is this often done? On the contrary cows are dried up often not to feed them up and recuperate them but to save feed on them. The result is a poor cow, poor in energy, weak, when she should be strong. So long as the present system or lack of system prevails we cannot hope to get large yields.

A cow to give large yields must be bred with the inherent ability to devote her energy to milk production. The ability is of no use unless she has the energy. This can only be secured in a good measure whilst the cow is dry. It is well known cows do not give the same quantity of milk each year. It will depend upon what fettle she is in when freshening. Sometimes a cow will

not get in as good condition as we would desire. It may be that the pasture has been poor and the cow has run herself down more than we made allowance for. She may have milked so heavily she has not recuperated properly. But the greatest cause of a poor condition is that no attempt has been made to put her into condition. Hence low production is sure to follow.

THIN COWS REQUIRE 2 YEARS TO GET IN SHAPE

It is well known by some dairymen who are considered good feeders, that it is necessary to feed a cow that has been in poor hands two years to get her system strengthened up so that she will be able to do her best work. She will likely give considerable more the first year of good feeding, but it takes two years to bring her to her maximum production. This shows that the milk does not come directly from the feed, but as the energy is built up in the cow she is stronger and is able to do greater work.

Of course it is important that a cow should be fed well when she is producing else she will draw more largely upon her bodily energy and when she has depleted her system she will have to shrink in her milk flow. However, it is always injurious to feed a cow too much or overload her stomach. We want cows that are constitutionally strong, and we must do all we can by judicious feeding and care to keep the cow in as good fettle as possible.

But, since with the very best care and feed we can give a good cow, she will draw upon her system and deplete her energy, it is necessary to have her dry long enough to replace this energy. It is because this is not done and cows are fed so poorly whilst dry that we see such poor results. There is no use of a man asking for a ration when a cow is fresh. A man needs to know how to feed her whilst dry as well as all the year round. The best way to teach that is to show the tremendous energy that the milk cow expends in producing milk.

Modern Methods of Clearing Land

Alfred Carr, Nipissing Co., Ont.

It is very evident that the old methods of clearing land are quickly passing away. It is less than two years ago that we were digging the stumps up with axe and shovel. Coming into a heavily wooded country with but few and small clearings, we knew quite well what lay before us. So we went boldly at work with axe and saw, chopping and logging, etc. But the problem was how are we going to get rid of the stumps, which averaged about 150 to 200 per acre. Of course it was impossible to cultivate the land with the stumps standing and taking up so much space.

Our land is heavy clay and free from stones and grit, so we could chop off the roots until we could pull them over with the team. This, however, left a lot of roots in the ground which prevented us from ploughing until the roots were rotten which meant from five to ten years. So we tried the block and line system. This proved to be slow, laborious and expensive, although we had a good steady, heavy team. We were continually breaking parts of the harness on the line. Even then the largest stumps remained.

Consequently we decided to purchase a stump puller, and can say after considerable experience, that it is a much easier, quicker and cheaper method than any of the former. After the logs are removed, we go through and pull the smallest stumps with the team and then select a good sound stump for an anchor. We use 160 feet of ½ inch steel wire cable, in two sections. One piece is removed when working closer to the machine. We also use a double power pulley for any stumps that are larger than the anchor, to prevent pulling the anchor stump. We pull

all within reach. It takes from 1 to 3 minutes to pull an average size stump and then attach a strong decking line to clear the track for the next setting. We go through the whole patch in this way, and leave the stumps upset for two or three weeks. If the weather be warm and dry, after this we go around and fire the stumps. Much of the loose matter burns off which makes the stumps lighter to draw and pull.

I do not think it would be advisable for each settler to get a machine, because there would be a great deal of the time it would not be in use. One or two machines in a neighborhood would be sufficient, for unless one has a large field to stump, it would be cheaper to hire than to buy.

I do not advocate any particular machine, because there are several good machines made. The main feature is to get it of a simple and strong construction. We use a Milne, one-horse "Iron Giant" and it gives excellent satisfaction.

Statute Labor a Thing of the Past

In our township our old system of doing road-work by statute labor became very unsatisfactory. Some of our people did their work well but others would not work at all. Eleven years ago, when I first became a councillor I found some beats had done no work for three or four years. The pathmasters were as bad as the rest and the council was very slack.

Eleven years ago we submitted a by-law to the ratepayers to commute our statute labor at 45 cents a day. This was carried by a large majority. The advantage of this system is that every rate-payer pays his share and no more and every one has an opportunity to tender for new system, and we get more uniform work done. We have our roads divided off into sections two or three miles in length and let a contract on every section, letting all our contracts early in April.

Our new system is giving general satisfaction and we have very little trouble with it when working it now. My opinion is that statute labor was a good thing in its day, but it's days have passed.—Robt. Brown, Reeve of Westminster.

In making hay from alfalfa, the greatest care should be exercised in saving all the leaves and the finer parts which are so easily wasted. The alfalfa when cut with a mower should be gathered after it is partly dry with the hay rake and placed into windrows sufficiently loose to dry out still more, but compact enough to hold the leaves and finer parts. It is difficult to teach one just how to make hay from alfalfa. It must be learned from experience. However, when one realizes the possible losses in alfalfa haying, he should make a careful study of the principles underlying successful practice in handling this crop.

As a general rule, we try to give good sound food to our cows without ever resorting to the use of stock or condimental foods, which are of very little use. As Prof. Henry says: "A good manager of live stock will have no use for these high priced condimental foods or condition powders; a poor manager will never have fine stock by employing them." Silage, hay, and straw, for roughage, bran, shorts, corn meal, oil cake, and ground oats, for concentrates, is what we use. Roughage is given three times a day, only what will be eaten up clean, except in the case of straw which we let them pick over, throwing what is left under them for bedding. Without trying to come within an ounce of the mark, about one pound of meal is given for four pounds of milk. The cattle are fed and milked regularly, are given a good bed of straw, twice a day, are brushed daily, and everything is kept as neat as possible in the stable, so as to make them comfortable.—Gus Langelier, Quebec County.

Shall We Build a Silo t'is Year?

This is a most opportune time to give the question of silo building consideration. Doubtless many farmers and dairymen are giving this very earnest deliberation at this time, after the severe experience of the past winter. 'Tis certain that the dairyman who had a good full silo last fall is quite ready to endorse everything that can be said in its favor and we can recount many who have brought their stock through the winter in good condition with this economical feed that would have been strained through with "cut it." Last winter we saw those who with reduced crops of fodder, attempted to winter their stock on a scant supply, or made large purchases of feed to save sacrificing their herds. These were the men who had not yet built a silo. They did not appreciate the merits of silage as available and economical food for our dairy cows. These men have not been getting the results that are possible in the economical production of milk and cream. We are convinced that there is no improvement that can be put on the dairy farm out of which so much good will come and such dividends will accrue, as from a good substantial silo.

In all dairy sections of the United States, in many parts of Canada and also Europe, the number of silos is legion. The reasons for building them are innumerable. They pay a handsome dividend on the investment much better than mining stocks, bank stock or various other stocks that take wings and fly away—into some sharper's pocket. Our silo remains to do its important work of keeping the feed for our dairy cows succulent for winter feeding.

The silo enables the farmer to prepare his feed for winter use at a time of the year when it is most convenient, and in a way that requires the least labor and the least expense. The silo enables him to store his corn in the least space and the disposal of it to the stock on his farm at a higher price than could be realized out of the same material put

up in another form. The dairyman gets a much greater quantity of feed per acre by sowing corn and converting it into ensilage than he could in any other way, besides it makes a feed that is palatable and most desirable.

While ensilage is good feed for horses, cattle, sheep, hogs and poultry, it is especially valuable as feed for the dairy cow. It provides her with a uniformly succulent green feed for winter as well as that portion of the summer when vegetation is dried up and the earth is parched, thereby enabling her to maintain a good flow of milk at a time when with other feed there would be serious shrinkage.

There are many crops suitable for ensilage. None, however, come up to corn for a large yield and the raking of a high class silage. We believe that the corn plant will hold its popularity and will be most generally used for ensilage for many years to come. Its productiveness, its good keeping properties, and its adaptability to a variety of climatic conditions gives it first place among the crops suitable for ensilage. The results of various experiments carried on by Experiment Stations in both the United States and Canada prove to us that ensilage can be grown and put in the silo at a cost from \$1.50 to \$2.00 a ton.

It has been proven beyond a doubt that two tons of ensilage are equal to one ton of mixed hay, and can be produced at a lower cost. In every instance where ensilage has been substituted for hay as a portion of the ration we have found an increase in the milk flow, and sometimes a slight increase in the butter fat.

The feature of the silo that predominates is economy. It economizes room and labor and the cost of butter fat. Every dairyman should give the matter of building a silo serious and immediate consideration.

Prepare some land for the corn crop, and put up a line seed bed, sow with a drill, seeder, or corn planter, in rows not closer than three feet apart (where the land will permit planting

in hills 3 feet 6 inches apart each way will give the best results). Sow about $\frac{1}{2}$ bushel per acre, if in drills, cultivate freely and a corn crop will be a certainty on almost any well-drained soil. While the crop is growing and developing think over the kind of silo that will best suit your requirements. The old box silo is out-of-date. The round silo has come to stay. Of round silos there is the elm-hoop, the stave and the concrete, all are good and if you choose either you will make no mistake. Only get a silo. Be sure and plant the corn so that you will have something with which to fill the silo next fall.—W. F. S.

Handing Alfalfa

"We always cut our alfalfa just when it is coming into blossom," said Mr. Henry Glendinning of Manilla, Ont., when speaking upon this subject at the dairymen's convention. "The ideal time to cut alfalfa is when one-tenth of the blossoms are out. We always cut the alfalfa in the forenoon; we never cut it in the afternoon. We ted it throughout the evening. We rake it towards the afternoon and place it in small piles and allow it to stand there three or four days if the weather is good. If the weather becomes showery, however, this is another matter. If the weather continues fine, we turn these coils over and spread the butts out. Then in the afternoon, we draw it in. This is our method of handling the first crop."

The second crop is handled in the following manner: Cut in the forenoon, ted in the forenoon and rake it in the afternoon. If the weather is all right and let it lie in wind-rows overnight. The next day, after the dew is thoroughly dried out, we ted it again. About four o'clock in the afternoon, we go out and load it, using the hay loader. This same method is followed for the third cutting."

When asked if he did not knock the leaves off by tending, Mr. Glendinning replied: "The alfalfa is frequently tending, it is not allowed to lie long enough to dry and it will be found that the leaves will be all on. If you allow it to lie for a day or even a few hours and it is exposed to the sun, one will find that there will be a large quantity of leaves drop off, but by keeping it tending, the leaves do not have a chance to dry and fall off."

Mr. Glendinning never salts his alfalfa or any kind of clover when storing it in the barn. He has very decided objections to salting hay, claiming that where there is a heavy salting, it comes out brown instead of that green color which we so much desire in hay for winter feeding; much better hay will be obtained if salts is kept away from it.

The Ideal in Dairying

The following extracts taken from an address given by President W. J. Gillet at the Wisconsin Dairymen's Convention, while referring particularly to the Wisconsin cow, are equally applicable to the conditions of our dairymen:

"The time was never known in this country," remarks Mr. Gillet, "when a herd of good cows, properly fed and judiciously managed, did not compensate its owner well for the feed, time and labor expended, and it is safe to say that we have passed through contingencies that are not liable to be repeated in the near future."

"I cannot refrain from calling attention of the average earning capacity of our cows under prevailing Wisconsin conditions. A large number of herds within our borders are showing a yearly average of 300 or 400 lbs. of butter per cow per year, in fact, many are even surpassing these

figures, which would indicate an average earning capacity of \$100 or more a cow in many instances. What, then, must be the conditions under which many of the cowkeepers of the state are producing, that the average is reduced to 170 lbs. of butter a cow or to an average earning of \$30 a year? To the owner what is the average? It is not so many animals that are allowed to live in the guise of the profitable dairy cow? It would seem that prevailing conditions in many herds, as well as for other dairy purposes, are but burlesques to the dairy business.

For the purpose of comparison and as an illustration of the possibilities in breeding, development, care and feeding of the dairy cows, you will pardon me for mentioning the performance of a cow in our state that recently completed a record of 27,432 lbs. of milk containing 998 lbs. of butter fat, or the equivalent of 1,164 lbs. of butter. The actual return from the milk of this average Wisconsin cheese factory, aside from the value of the by-product, was \$320.13, or more than eight times the annual earning of the average Wisconsin cow, while the quantity of butter which could have been made from the fat she produced was more than six times the amount produced by the average cow, omitting the proportionate increase in the value of her by-product.

The results that are possible for one to accomplish are always attainable and within the reach of his neighbor under the right conditions.

Of course, we never expect to see many cows produce 1,000 lbs. of butter fat per year, but it would seem that, by better breeding, better feeding and caretaking, deeper thought and a wider observation of cause and effect, we might expect to see a cow producing a capacity of the average Wisconsin cow.

VALUE OF MIND OVER MUSCLE

There are many cow keepers who are, to a greater or less extent, mind over muscle in their upbuilding, resulting from a lack of knowledge and a keener appreciation of the principles that lead to progression. Many are overworked by manual exertion and neglect the more important part of allowing the brain to solve problems that would lighten the burden of the weary hands. Our most successful dairymen and our best breeders are those whose minds, as well as muscles, have been engaged in the execution of their business engagements.

There is little hope for him who settles down in his own shadow, content with his own accomplishments; for it is discontent that prompts the mind to find a function, and well will aspire to do better and he who does better is sure to try for further improvement. The spirit of aggression offers less of progression and there is always hope for him who is willing and anxious to be taught.

What we need in our rural districts and for a deeper uplifting of our dairy husbandman is more education, more light and a deeper, broader and keener knowledge of the forces that stimulate improvement and progress. The solution of the great proposition lies in a wiser selection of our breeding animals, better caretaking and more liberal and intelligent use of feeds.

It is no speculation or experimentation, but as sure as the laws of gravitation, and by him who realizes these things and acts accordingly, we may expect the standard of excellence to be constantly improved and by him who is negligent of and indifferent to them the average will never be raised.

In the approved pure bred sire lies the foundation for up-building and the salvation for future live stock improvement, and the sooner our



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HORTICULTURE

Fruit Crop Prospects

Fruit growers are looking forward to a good crop. The present condition of trees and bushes indicates a favorable season. The following reports point out the situation in the various districts of Ontario.

HASTINGS COUNTY, ONT.

Trenton.—Apple and pear buds are about one-half less than last year. All the Japan plum buds are dead that were above snow limit; and other varieties, very few buds showing. In cherries, Richmond is full; others, more or less injured. The season is backward; nothing is in bloom yet.—W. H. Dempsey.

PEEL COUNTY, ONT.

Clarkson.—All fruit trees and bushes look healthy and promise good crops. Apples are showing lots of buds. Plums will be a better crop than last year. Strawberries are looking well; even those that were not protected are doing fine. Raspberries promise a good crop, with the exception of some of the old patches, which did not come up very well on account of the drought last summer. Grapes look healthy and promising.—W. G. Horne.

HALTON COUNTY, ONT.

Oakville.—Apples, cherries, pears, currants and gooseberries promise well; plums, fair; strawberries, raspberries and blackberries wintered well.—W. H. MacNeil.

Burlington.—Early apples show a fair amount of bloom; late varieties are not far enough advanced to predict. Pears show from a medium to full bloom. Japanese plum trees are frozen badly; European show a moderate bloom. Cherries show a full amount of bloom. Berries wintered well.—W. F. W. Fisher.

LINCOLN COUNTY, ONT.

Jordan Harbor.—Peaches were full bloom although some were knocked off by hail; however, there are more blossoms left than would make two crops; sour, one-half crop; apples, two-thirds; pears, full. Japanese plums promise a full crop; domestic, one-half. Not any strawberry blossoms have been injured yet.—H. S. Peart.

St. Catharines.—Pears are full of buds. Peachers are coming into bloom and promise a good crop. Japanese plums are full of bloom; European varieties are making a fair show.

Two-thirds of the varieties of apples have plenty of bloom buds; the others are light. On the whole the prospects for crops in all lines are good. The season is a little backward and strawberries are just beginning to show bloom and look well. Raspberries are fair.—Robt. Thompson.

OXFORD COUNTY, ONT.

Ingersoll.—From present indications, there will be a full crop this year. Japanese plums promise ex-

ceptionally well; also Greening apples. Other varieties show an average of bloom. The backward spring and weather conditions are all that can be desired at this season for a fruit crop.—J. C. Harris.

Burlington.—Plums are in bloom on fruit trees in this locality is good and indications point to a good crop.—Arthur Fraim.

BRANT COUNTY, ONT.

Burford.—Present appearances indicate a good bloom on all fruits. No damage has been done by frosts.—F. M. Lewis.

SIMCOE COUNTY, ONT.

Orillia.—Buds on Duchesse and other varieties now advanced promise much bloom.—Wm. Bacon.

GREY COUNTY, ONT.

Owen Sound.—The show for bloom on trees of Baldwin and Spy that were heavily loaded last year is rather poor; but generally speaking, it is good. Kings and Russet are well covered. Plums, pears and cherries show a fair amount of bloom. Everything is very backward owing to the cold weather. Bloom will not be out for some time yet.—A. E. Sherrington.

BRUCE COUNTY, ONT.

Walkerton.—Prospects for a good crop of apples, plums, pears and cherries, were never better. Bush fruits give promise of a fair crop, but everything is very backward owing to the cold weather. Bloom will not be out for some time yet.—A. E. Sherrington.

Best Six Winter Apples

Prof. G. Raymond, La Troppie, Que. In recent issues of the Canadian Dairyman and Farming World mention was made of the best six summer and fall apples for planting in the Province of Quebec. In winter apples, I will mention the following:

PENWATKE

With Penwauke, we enter into the class of keeping apples, those which keep for a longer or shorter time, some even to the apple season the following year, as the Ben Davis. These are they, which, by reason of the scarcity of fruit at different times, when they attain maturity, bring the highest prices, either in the local or foreign markets.

It has been repeatedly said that in the Province of Quebec there is as yet no winter apple specially adapted to it. Those of which I am going to give a description have only a relative hardness; their success is largely a question of circumstances, of place, of exposure and above all, the care given to the cultivation of these trees. Shall we eventually have this greatly desired apple unting, with the desired hardness, such qualities as will permit it to advantageously sustain the competition of apples cultivated under more clement skies? There is hope because of the work now being carried on, of which one may presume well.

The Penwauke is a large apple which keeps a part of the winter. Its beautiful appearance and its size as well as its good flavor, make it a favorite fruit for exportation. The tree is very hardy and its fruitiness is most satisfactory. It is one of the most vigorous winter apples and one of those which pay the grower best. The fruit falls very easily and care must be taken in consequence to pick them before maturity. In fact, it is the first winter apple picked.

SALOME

People have said to me that the Salome was the apple of the province of the Province of Quebec. I really believe it, at least, for certain dis-

tricts. This is a hardy tree of remarkable fruitfulness. Its fruit is of medium size, rustred, with little white spots and green on the shaded side. It is of beautiful appearance and shows up well on the market. I do not hesitate to recommend this variety as I am sure that it will give satisfaction to those planting it. In our orchards, without any special care, it does well and gives us a very profitable crop.

SCOTT'S WINTER

Many do not care to cultivate Scott's Winter as the fruit is small, in fact it hardly attains the size of an ordinary Fameuse. However, this is an excellent commercial fruit on account of its deep red color and good keeping qualities. It is, moreover, a tree which yields enormously and which thus makes up for the smallness of the fruit. We have sent it to England in boxes and obtained the same price as we have for much larger apples. It is a hardy tree which grows well adapted to our winter. An acre planted in Scott's Winter will give as good returns as any other variety. This variety certainly merits our attention, and we should introduce it into all our commercial orchards and I do not think we will ever repeat doing so.

BEN DAVIS

Ben Davis is the longest keeper. It appears on the market at a time when no other is able to compete with it. It may be considered that it will then fetch a most remunerative price. Although it is not of the first quality for dessert, a character which I wish to point out, yet its beautiful appearance gives it a place by itself in the class which we are considering. It has also enjoyed the favor of the planter for a long time and there have been considerable plantations made of Ben Davis. I know fruit growers who have made fortunes out of this fruit. The tree bears early and gives regular annual crops.

It needs to be planted in well-drained land and sheltered as much as possible. Its rapid growth renders it particularly susceptible to the sun's rays in the spring time. This, one can remedy by proper cultivation, the details of which would take too long to enter into now. Supposing Ben Davis do not live very long, (I have seen trees 25 years old), one can, by making the plantations closer, draw from its cultivation, revenues which will certainly remunerate him for their early death.

GOLDBY RUSSET

The Golden Russet should find a place in all commercial orchards by

reason of the quality of its fruit and the high prices it always brings. It keeps easily till June and even into July. The tree is hardy and if it keeps one waiting a little while for its fruit, there is consolation in the good crops which it afterwards gives, regular, annual crops which amply remunerate one for the time it was necessary to wait, by the profits procured.

FALLAWATER

Fallawater is a variety but little known in Quebec. It is worthy of recommendation for those who wish to establish a good bearing orchard. The tree is hardy and bears enormously. Its fruit is very large and of good shape, green, but streaked with red on the sunny side. It keeps without difficulty until spring time and always brings a good price.

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POULTRY YARD

Knowledge Necessary

A. G. Gilbert, former Standing Committee Officer

Poultry keeping cannot be made profitable without a knowledge of how to make it so. No matter by whom carried on a certain knowledge of breed, feed, and management is absolutely necessary. The farmer's stock may not be pure, or his poultry house of the latest or best pattern, but these obstacles to success can be easily and cheaply removed. He has the grain, the green food and other essentials in abundance, in many cases in the shape of waste.

But despite this, it should ever be remembered that to the farmer, his poultry is only one of the many branches of his farm work. It would certainly be misleading him to advise him to keep more fowls and hatch out more chickens than he can properly—which means profitably—handle. From 100 to 150 hens is all that I would advise the ordinary farmer to keep. He should be able to hatch and rear from 100 to 150 chickens. If he has help from his family a greater number may be hatched and raised.

With right methods financial success will follow

Edward Wyatt, Middlesex County, Ont.

Fanciers like everybody else are now, or should be, reaping the benefits from a rich and bountiful harvest. They are taking advantage of the prosperous times which fact is being chimed into their ears by the politicians of our own country as well as that of our cousins to the south of us. Nevertheless, we have fairly good times, for which we should all be very thankful. Furthermore, we should do that which will insure us all that is coming to us. For as the saying goes, we should be made hay while the sun shines. Fanciers everywhere have during the past season made an effort to raise a large number of fowls, though the season was a very late one, that came as near to the Standard requirements as possible, for they realize in the fancy poultry business' 2000 times brings good sales, as well as in every other business.

Some fanciers, especially those who are in the first year of the fancy, may get discouraged at the slow sales of the young stock upon which they placed great reliance to make up for the cost of the original birds and a share of their accommodation and feed. They may think that pure-bred fowls, being considered fancy stock, the wealthy of well-to-do classes may purchase them, and some may begin to suspect that fancy fowl raising is a delusion and a snare, misrepresented by the poultry press, and that too high an estimate is

placed upon the profits. Surely a business without its successes and its obstacles, its good and poor trades, its brisk and quiet times, would be something above natural.

ADVERTISING WILL HELP

Surely no sensible person would expect a constant rushing trade in fowls the whole year round when every other business or enterprise may be temporarily paralyzed. The amateur can do much during the season by judicious advertising. He cannot at any time compete with the veteran who has secured customers every year from the start, whose name is familiar to almost every lover of fowls, whether he be a practical breeder or not, who has advertised his fowls every year in widely read mediums, who takes an active part in poultry associations and shows, who discusses questions of importance and brings himself and his fowls prominently before the poultry fraternity in various ways. The amateur cannot even hope to dispose of all his surplus fowls the first few years in the fancy, no matter what may be the times. Every other amateur and professional has fowls to sell and only in keeping pace with the demand can the fowls be

Every amateur and every professional as well must learn the all-important lesson to bear with patience every trial making efforts to meet every obstacle and carry a confident heart for every fate. These suggestions are offered to every amateur fancier with a view of assisting and cheering him during his probation, and to every one who is contemplating buying fowls this season for future breeding and selling of same.

The beginner is generally too enthusiastic, too confident, too positive about making money and making large profits from a few fowls. When these expectations fail he is apt to become despondent and apt to throw up his hands in despair. He will not reason to himself why it is thus; why one fancier is more successful than another, like one merchant, mechanic, or professional man, leading all others. For this reason and others the fancier should make fowl-raising an auxiliary pursuit, instead of depending on it alone.

By strict economy and industry he can from a small beginning increase his stock annually so that in time he may work up a trade to warrant the giving of his whole time or attention to it. This is an extreme case, to which very, very few try to attain. But at the start at least, every one should make it a secondary pursuit, and avoid incurring unnecessary expenses in the way of elaborate and costly houses and appurtenances until the business and profits therefrom insure him of undertaking more commodious accommodations.

BEGIN LOW AND WORK UP

Quite a number of enthusiastic and ambitious men succeed and seldom can from spare cash, dash into fancy poultry breeding on a large scale at once, or on the first impulse, building costly houses and fit up elaborate buildings for the breeding of some fancy variety which has captivated their taste, or from which they expect to reap a golden harvest. Such amateurs seldom succeed and seldom continue long in the business. They are not of the right kind of material for successful breeders. The successful merchant is the man who begins low and works up; so with the chicken man. But there are those who disregard at the start the many essential elements necessary for success, and when they fail in realizing their expectations they naturally attribute it to the many unforeseen obstacles connected with poultry culture.

As we are in the midst of the season when hundreds who are cap-

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ivated by the beauty of fine feathers will be making their first purchases, to such I would say, cultivate and practise good management, economy and industry if you wish to be successful. There are many breeds to choose from, and if you have no choice in the matter, get a breed suitable to your place, surroundings and facilities for keeping same. You admire one breed more than another and it is adapted to your place and purposes, it is the breed you should procure because you will give it better care and take more interest and pleasure in improving it. Be sure to get good, healthy stock, not necessarily prize winners, unless you are out for breeding that kind and are willing to pay the price. If, then, you have the necessary qualifications for carrying out your intentions there is nothing to prevent your reaching the top of the ladder as a successful breeder and fancier.

A Successful Experiment

The results obtained from experiments that have been conducted recently at La Trappe Agricultural College, La Trappe, Que., with Zenoleum in the incubator, bear out the results of experiments tried at Guelph and indicate that Zenoleum tends to increase the percentage of chickens hatched, and to improve their health.

Writing about the experiments the manager of the poultry department says: "We find that the use of Zenoleum in the incubator just before setting the eggs is a preventive against white diarrhoea, that bene to the poultry industry, as a result of the incubator, in order to help the egg shell dissolve slowly, and furnish for that egg shell, the lime necessary to the building up of a strong chick."

Increases Vitality of Chicks

In the use of Zenoleum in hatching with incubators, Prof. Graham, in Bulletin 151, says:

"Experience so far indicates that various operators have not used enough of the mixture. In our experimental work at Guelph, we proceeded as follows: First, the machine was heated up as usual, and was ready to set. We then made a 10 per cent. solution of the zinc compound mixed with warm water. The interior of the machine was thoroughly scrubbed or soaked with the solution. Sufficient of the solution was used so that the top of the machine would drip; the sides were very wet and

the bottom was covered with the mixture. The tray was washed, and the thermometer. Care was taken to cover every inch of the machine. While the machine and tray were still wet the eggs were placed in the machine. One can readily imagine that with such a mixture inside a hot machine the odor is strong. What the active principle is I am not prepared to say, but so far by thus washing the machine we have increased the vitality of the chicks. They are not yet equal to hen-hatched chicks but approach them fairly well in salt content, which, by the way, appears to be the indicator of vitality. The more ash or mineral in a chick, the more vitality it appears to have. Our experience to date is that the washing should be done before the eggs are put in, and further, if done any time after, say the first day, it is of little or no use. We have not had favorable results from washing machines at the end of the first or second week."

GOOD RESULTS

My last ad. in the Poultry Exchange of The Canadian Dairyman and Farming World has given me good results. I think your paper one of the best advertising mediums.—J. F. Trevorton, Pouchers Mills, Ont.

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The Chewing Tobacco of Quality.



2871

Live Stock Importations

One of our staff a few days ago, thanks to the courtesy of Dr. Couture, Inspector, had the privilege of inspecting the cattle now in the quarantine station at Quebec. They number in all 79 head, made up of four importations, as follows: 22 Jerseys, for H. Bull & Co., Brampton, Ont.; three head for R. J. Fleming, Toronto; and one calf for E. B. Elderkink, Amherst, N. S.; 22 Ayrshires, for Messrs. K. Hunter & Sons, Maxville, Ont.; 20 head, for R. R. Ness; and 11 head, for A. Hume & Co., Meire, Ont.

The Jerseys are a choice lot and have been selected from the best Island herd, and range in ages from six months to two years. Worthy of notice in the lot selected by the

Messrs. Bull, are the three year old heifer, Myrtle, by Jolly Fox. Beautiful in form, she is of the true Island type, and has great possibilities in udder development. Primrose of Huntville, is of foundation stock, has many fine points, and is a good handler. Elifidas Leda, by Lidas Golden Lad, is a beautiful fawn in color, has a true Island head, and is symmetrical in form, and almost perfect in udder.

The two year old, Kate, by Goldworthy, is a solid, rich fawn in color and has every appearance of grand udder development. Mosrilles Pride, by Idas Glory and Minoras Pearl, by Ashley King, are a beautiful pair of heifers, touching the two year mark. Nestor's Blossom, by Nestor, is another heifer of merit. Among the calves and yearlings were several extra choice ones, not-

ably Purzance, by Mabel's Raleigh, of sweet form and good quality. The yearling bulls are a high class pair and our taste runs to Gauntlett's Duke, by Highfield Lad, a large, well developed youngster of the latest Island type showing grand quality, is of good length, well proportioned, and showing strong character. He should be an impressive sire. His mate, Golden Lad, by Mabel's Lad, is of finer build, has excellent quality, is of solid color and type to type.

The three year old cow for Mr. Fleming, Pauline 3rd, by Snapshot, is light fawn in color and is a cow of merit, as also is the two year and calf. The calf for Mr. Elderkink is dark in color, and of fine type and quality.

The Messrs. Hunter & Sons' Ayrshires number 22 head, 17 females and 5 bulls. Stylish Hillhead of Lessnessock denotes rich breeding, is a cow perfect in form and type, carrying a well balanced udder with fine, well placed teats. She has an official milk record of over 800 gallons in 30 weeks. Grace 2nd of Daifible, five years of age, is a strong, showy cow of great qualities, and no doubt udders up right. She won 1st at Thornhill and Dundee show and reserve champion at both. The six year old cow, Violet of Castlemain, is a large, deep bodied cow, built for business, and has a milk record of over 800 gallons of milk in 252 days. Morton Mains Nannie, is another cow of the business type, has great length of barrel and quarter, and no doubt swings a great udder when fresh. She also has a milk record of 800 gallons in 250 days. The three year old, Lady Scot, has apparently every qualification to make her a good producer. Of right breeding and individual merit is Lessnessock Queen's Kate, a model dairymaid. She promises a grand udder. Her mate, Favorite Beauty 5th of Auchincloss, has many fine points in her favor, while White Rose, a McAllister heifer, though a shade coarse head, has every appearance of grand udder development. Among the yearlings, Lady Cherry and Old Hall Cherry 7th, are trim heifers of high quality. The Lessnessock heifer by Spicy Robin, although younger, is of fine type.

The three calves, Stately 11th of Lessnessock breeding, Fairfield Mains Bessie and Lessnessock Sprightly, are likely to have a good future before them. The bulls, Howies Crusader, nearly all white, combines style, quality, form and strong character, with true dairy type. He should make an impressive sire, and is from Morton Mains Wynflete.

Brogan Mains Guaranteer, has a little more red, but is impressive as his mate, but has abundance of quality. This, combined with true dairy form, makes him a fine sire. Auchincloss Prince of Lincoln breed- ing is a well balanced fellow, with strong back and fine shoulders. This bull should get no other producers but animals of merit. These bulls have lately passed the year mark.

Helm's Prince of Lessnessock, the junior or the others, by at least 30 days, has many commendable points, as has also the eight month calf, Balla's Prince of Lessnessock stock.

The three year old heifer, Bloomer of Glenhamrock, being bred in A. Hume & Co., has been in milk for some time and is thin in flesh, but shows great milk veins and udder development, combined with large size and excellent quality. Daisy Queen of Gardrum is a large heifer of the right kind and true to type. Her dam has a milk record of over 820 gallons of milk in 36 weeks, while her mate, Annie Laurie of Dalmarstock, has a milk record of 479 gallons of milk in 184

days. She combines quality, style, form and dairy type with large milk production.

Ocean Queen of Gardrum, just over two years, is a heifer of fine countenance and good quality, combined with great productive capacity. Her dam having a record of over 8,000 lbs of milk in 252 days, shows she is from a family of producers. The yearling bull, Broodmare, is of true Ayrshire type. The calves are of Gardrum breeding and also are a choice lot. The bull Aikenhead Rover, about 12 months, is a good breeder as his sire is Nether Hall-up-to-Time I. This is backed up by good individuality, as he is a bull of good form and strong character.

Harry Lauder of Gardrum has not quite the style of his mate yet he is of pronounced dairy type and contains some fall bloomed blood. His grand dam has a record of 11,000 lbs. of milk, testing 3.6 per cent of fat, in the 12 months. The bull calves, Rare Style of Midland and Stewarton Lad are likely youngsters made up of 10 bulls and 10 females. The two year old bull, Gay Cavalier, by Durward Lily 19 is an animal of strong character, large for his age, and of grand quality. He carries a fine middle, in fact few holes can be found in him. As a yearling, he was first at Glasgow and Galston, and second at Kilmarnock. Morton Queechey Mains is a fine yearling, large, of strong character and substance, combined with good type and quality. He was second at Ayr and Kilmarnock this season.

His mate, Morton Mains Puryou, has great depth of barrel, and is of true dairy type. This combined style and quality should make him a worthy sire.

Sir Robert and his mate from the Auchincloss herd are a pair of pronounced quality. They are of fine size and quality. The same may be said of the four Barcheskie lads. While the one bred by Lindsay of Tor, is a bull possessing high quality, with size and style.

Among the females is a four year old cow of great quality and style, having a fine shoulder, symmetrical body and a well balanced udder. The cow and two heifers of grand — were selected from the herd of Lindsay of Tor. The beautiful three year old heifer, Princess Ayrshires. She has a symmetrical udder and fine large teats. The two Glenashaurock heifers, Lady Diana and Lady Jans, have been well brought out and give promise of great milking capacity. They were both prize winners in Scotland during the past two years. Lady Nadyne, a three year old heifer, has the lot for quality and type, while a Barcheskie heifer follows her closely.

These breeders are to be commended for their enterprise.—W. F. S.

The dairyman leaves his family a better farm and a larger bank account than when he commenced. The grain raiser doesn't.—W. F. Stephen, Huntington County, Que.

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JNO. COLINGS & SONS, Harrison, Ont. C.P.R. and G.T.R. Oxford Down Sheep, Shorthorn Cattle, Yorkshire Swine. Stock for sale. 0-15

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JNO. AYER & SON, "Blewett Farm," Bowmanville, Ont., breeders of Southdowns Stock for sale. 0-15

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CHAS. CURRIE, Morrison, Ont., breeder of choice Tanworth Swine. Stock for sale. 0-15

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LOHNE FOSTER, "Glenholm Stock Farm," Myrtle, G.T.R. and C.P.R., breeder of Yorkshire Swine. Young stock for sale. 0-15

D. DOUGLAS & SONS, Mitchell, Ont., breeders of Swine. B. Turkeys, Toulouse, Ducks and S. C. W. Log-woodence invited. 0-15

KELLY SONS, Hagersville, Ont., breeders of Improved Yorkshire Swine. Stock of all ages for sale. 0-15

J. W. TODD, Cortland, Ont., breeder of English Berkshire and Tanworths. Breeding stock for sale. 0-15

A. A. COLWILL, Newmarket, Ont. (successor to Smith Bros.), Shorthorn and Tanworth Swine. Choice young stock for sale. 0-15

S. SNOWDEN, Bowmanville, Ont., Box 33, breeder of Large English Berkshires, Hocks, Light Brahmas, W. and D. Leghorns, Rouen Ducks, W. Holland Turkeys. 0-11

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Prize of all ages from imported stock of the choicest breeding and individual excellence. Satisfaction guaranteed.

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should be Adversed
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Column.

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FITZGERALD BROS., Mount St. Louis, Ont., breeders of Shorthorn Cattle and Shropshire Cattle, offering great bargains now. 0-15

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GEO. B. ARMSTRONG, Bowhill Stock Farm, Teeswater, Ont., imported and Homebred Shorthorns for sale. 0-15

JOHN GARDHOUSE & SONS, Highfield, Ont. See large ad. 0-15

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A grand consignment of Imp

Stallions, Mares and Fillies

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John Gardhouse & Sons

HIGHFIELD, ONT.

Long Distance Weston Station, Phone G.T.R. & C.P.R.

Inquiries and Answers

Readers of the paper are invited to submit questions on any phase of agriculture.

Clover for Seed

Please let me know through your journal what is the best time to top-cut a clover field from June 1st to 15th, to expose the seed. I have two fine fields of clover and I am thinking of keeping them for seed if they blossom out well. A. J. Wood Co.

If your clover field has been pastured, the cattle should be taken off about the 10th or 15th of June. It is well to go over the ground with a mower and cut off any weeds that the cattle may have left and also to give all the clover an even start. If your field is in meadow at present and you intend to take off a crop of hay, you will get the largest yield and the best quality of red clover seed if this first growth is cut for hay early in June, or when the first clover heads appear. It is necessary to cut the first crop early in order to escape the depredations of the red clover midge, which has been so destructive to red clover in most parts of Ontario for some time. By cutting the clover early, and curing the first crop for hay, most of the larvae of the midge are destroyed, and even if any survive, the second crop of clover will be in bloom before the second brood of midge are developed. Sometimes a good crop of red clover seed is obtained by cutting the first crop late so that the second crop of clover will bloom between the second and third broods of midge. It is not advisable to count on this practice, however, as it is uncertain and on the average, much better results are obtained where the clover is cut early, or, better still, where the field has been pastured and the cattle turned off before the 15th of June.

Re Packing Butter

Will you kindly answer the following questions for me through the columns of your paper?

- 1.—Is it necessary to line with parchment paper, old or new butter boxes into which pound prints are to be placed?
- 2.—Should this paper be soaked in hot or cold water before using?
- 3.—If the boxes are clean, should they be scalded before the butter is put therein?
- 4.—Which will give the most exhaustive churning, cream of low or high temperature?
- 5.—Is there any limit to the amount of moisture which may be incorporated in butter either for hot or for cold cream?
- 6.—Can you suggest any remedy for the butter sticking to the printer? Sometimes I experience difficulty in freeing the printer from the top of the print after the print has been pushed out. I scald the printer for about five minutes and then cool it by allowing it to stand in cold water for about an hour. I also

scrub it with salt every two or three days.

- 1.—If the boxes are not paraffined, it is necessary to line the box with parchment paper. If the boxes are paraffined, no lining is necessary.
- 2.—If the boxes are to contain prints, there is no necessity of soaking the paper in water.
- 3.—The boxes do not need to be scalded before packing, if they are clean.
- 4.—The most exhaustive churning can be obtained from a cream of a moderately low temperature; 58 degrees will be found to give satisfaction in most cases.
- 5.—The moisture content of butter may vary from 8 to 20 per cent., and averages about 12 in good butter. If it contains over 16 per cent. of moisture, it is deemed adulterated in Canadian and British markets.
- 6.—If the butter sticks to the printer, it is generally due to the cream being heated at too high a temperature. Over-working the butter will also cause this. Ordinarily, the butter will never stick to the printer in the fall or winter.

Milk Supply of Edinburgh as Seen by a Canadian

Ed. The Dairyman and Farming World.—Having had the opportunity of observing some of the things bearing on the milk supply industry of the City of Edinburgh I trust The Dairyman and Farming World will permit me to give through its valuable medium some of those observations to my friends in Ontario.

The Burgh of Edinburgh extends out from the city proper and includes, besides some of the things which are kept besides other stock, three thousand dairy cows which produce milk for the city trade. These 3,000 are under strict supervision, while the remainder, about 9,000 cows are not subject to city regulations, although the milk is. I visited the large dairy farm of Mr. Alex Smith in the Upper Braid Farm, just three miles out from the city, accompanied by the Canadian Commissioner, Mr. Race. We were received by genuine Scotch hospitality and shown over the dairy and farm.

Mr. Smith is milking at present eighty grade shorthorn cows, one Ayrshire grade and one black polled. Last year the 82 cows gave an average 2 1/2 gallons a day each or an average annual record of 10,047 lbs. each. This, you might think a remarkable record for shorthorn grades, but we must consider that Mr. Smith does not breed but a few of the very best milkers and no heifers are included in this herd. He buys all his cows on the Edinburgh market. They cost him £25 to £115.00 each, all above 4 years of age, and before they reach the age limit of 10 years they have gone to the block, at from 15 to 16 cwt. for \$82.00 each.

These cows are subject to veterinary inspection by city once a month. They do not use the tuberculin test. The cows require 800 cubic feet of air space each. City water only must be used for the cattle and for washing purposes. The stables must be light and whitewashed, with concrete floors, walls and mangers. The stalls are 7 feet 6 inches wide for the stalls, 7 feet 4 inches long with gutter 20 inches wide and 8 inches deep. The cattle are tied with chains.

A Few Good Clydesdales and Hackneys



A very choice lot of Imported Clydesdale Stallions and Fillies, sired by such noted getters as Baroness, Baron Mitchell, and Marcellus. In Hackneys I have to offer two big trappy handsome Stallions and two mares sized and exceptionally bred ones from three to five years of age. All show high straight action and combine the choicest breedings. My Fillies I have a number of prize winners at Canada's leading shows, as well as a number of coming show winners to offer. Prices will be right for the goods and suitable terms can be arranged. Come and see them.

W. E. BUTLER, Ingersoll, Ont.

The Belvoir Herd of Shorthorns

Will be sold without reserve at DELAWARE, ONTARIO

Tuesday, June 23rd, 1908

This is the last of 50 year connection with the breed. At New York Mills I earned my spurs when under my management 110 head averaged over \$3,000.00 each. We have the same old blood reinforced by the vigorous Scottish quick maturing sort and yet retaining the milking and steer growing propensities pertaining to the old breed that made Ontario famous. We must have beef but also cream and butter.

Trains will be met at Komoka, C.P.R. and G.T.R. and Caradoc, C.P.R.

Catalogues on application.

Come and help to make my last years happy.

RICHARD GIBSON
Delaware, Ontario

They are fed three times a day, and watered once. The daily food is mash, one bushel, made up of disjuncting grains, treacle, bean meal and hay, 4 ows. salt and boiling water. They get also 90 lbs. roots—sweet turnips in the early winter and mangels and sugar beets later. Sugar beets cost \$2.00 a ton. Mr. Smith maintains that turnips are very indigestible at this time of the year, but turnip milk is never objected to. They milk three times a day, a rather unusual thing in our country, and the milk sold must not test less than 3 per cent. butter fat and 8.11 per cent. other solids. This milk is sold warm and is carried in tin cans from 2 to 12 gallons and delivered at the doors in smaller cans. The Edinburgh authorities do not worry about the milk being chilled or the utensils being sterilized.

They do ask for pure milk from healthy cows. Mr. Smith favors nature methods of milking not with the machine, but with moist hands, thus preventing dust.

Perhaps the Toronto milk producers will be surprised when I tell them that this milk is retailed for 4 pence or 8 cents a quart, and 2 pence halfpenny or 5 cents a quart wholesale. Yet Mr. Smith maintains a staff of 15 employees, and pays \$21.00 an acre a year rent for the arable land and \$5.00 for pasture or rough land for a farm of 145 acres, but you might not be surprised at this, nor to see his beautiful home with its luxuriant lawn and flower garden. When you take a look at his herd, a uniform lot of splendid dairy type of shorthorn, well groomed and

sleek, for everything speaks of prosperity around him. My own opinion of the reason of Mr. Smith's success as a dairyman is his wise selection of the dairy cow, his care and freedom in feeding, close personal attention to the health and comfort of the animal, and his intense system of soil cultivation, tending Mr. Taylor the greatest possible amount of feed. It is a rare treat to be entertained by such a host and hostess as Mr. and Mrs. Smith and my wish is that many other Canadian dairy farmers might have the privilege of such an object lesson as the Canadian Commissioner and myself had at Belvoir—L. E. Annis, New York County, Ont., a director of the Toronto Milk Producers Association.

WANTED INFORMATION REGARDING A GOOD FARM

For sale. Not particular about location. Wish to hear from owner only who will sell direct to buyer. Give price, description and state when possession can be had. Address

P. DABYSHIRE, Box 134, Rochester, N.Y.

ARTIFICIAL MARE IMPREGNATORS

For getting a fast from 100 ft. away from one service of a stallion of lock, \$3.50 to \$6.00. Safety Impregnating balls, especially adapted for getting a fast sows and regular breeders, \$2.00. All goods prepaid and guaranteed. Write for Bulletin Goods Catalog. CRITTENDEN & CO., Dept. 84 Cleveland, Ohio, U.S.A.

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Removes Bursal Enlargements, Thickens, Vires, and Irritates, Pains, and any Full or Swelling, Cures Lameness, Rheumatism, without laying the horse up. Does not blister, and does not sting. 25¢ a bottle, delivered. Fraughts 1-4 free.

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

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We want the readers of The Canadian Dairyman and Farming World to feel that they can deal with our advertisers with our assurance of the advertisers' reliability. We do not wish to see our readers misled by the most reliable advertisers. Should any subscriber have cause to be dissatisfied with a treatment he receives from any of our advertisers, we will investigate the advertiser's conduct. Should we find reason to believe that any advertiser is dishonest or unscrupulous, in the slightest degree, we will discontinue immediately the publication of their advertisements. Under the circumstances warrant, we will expose them through the columns of the paper. Therefore we will not only protect our readers, but our reputable advertisers as well. All that is necessary to entitle a subscriber to the benefits of this Protective Policy is that you include in all your letters to our advertisers the words: "I saw your ad. in The Canadian Dairyman and Farming World." Complaints should be sent to us as soon as possible after reason for dissatisfaction has been found.

THE CANADIAN DAIRYMAN AND FARMING WORLD
PETERBORO, ONT.

TORONTO OFFICE:
Room 306 Manning Chambers, 72 Queen St. West, Toronto.

SHIPPING GREEN CHEESE

The shipping of cheese within a couple of days of the hoops has not been very prevalent so far this season. This is not saying that the practice has been discontinued altogether. Every time a buyer offers a good price for cheese to be shipped up at once, the temptation arises to ship green cheese. Who is the more to blame for the offence, the buyer or the salesman, is hard to say. One thing is certain if the buyer would not buy cheese until it is cured or until it has changed from curd to cheese, there would be no green cheese shipped. But the buyer will not guarantee this and hence the difficulty may arise at any time.

The conference of dairy instructors and others called by Dairy Commissioner Ruddick, at Ottawa, on Wednesday last, to discuss this question, may help to solve the problem. The instructors are finding that the shipping of green cheese is greatly hampering their work. They are not

able to advise definitely how the cheese should be made. If cheese is to be shipped green a change in the methods of making is advisable. But any modification in methods will not remove the difficulty and shipping cheese in a raw state or in other words, shipping curd is not to be commended.

The best way out of the difficulty is to discontinue the practice altogether. Any advantage a factory may gain by getting its cheese out of the curing room, when a couple of days old, and thus avoiding the expense and trouble of curing will be entirely nullified by the injury to the produce by such practice. The factory's reputation will suffer and its future business will be injured from the standpoint of the patron, the maker and all concerned. There is nothing to be gained by it. Every time green cheese is shipped future business is sacrificed for present gain. No matter what change in methods of making may be followed the maker is not in existence who can make cheese to ship when a day or two old, and guarantee that the quality will be first-class. There will always be an "if" in the way.

GRADE STALLIONS A DELUSION

Ontario should become one of the greatest horse breeding centres of the world. It never will until our government takes a more active interest in the horse raising industry. So little educational work has been done, in the way of showing the best lines of breeding to follow, that thousands of our farmers each year breed down instead of up. The success our leading breeders, such as Griffith Bros., of Clarendon; Robert Beith, of Bowmanville; Smith & Richardson, of Columbus; John Bright, of Myrtle, and many others, have met with proves Ontario to be an ideal breeding centre. Were our farmers to profit by the examples set by these breeders Ontario might furnish high grade horses for the continent.

The Ontario Horse Breeders' Association is urging the government to refuse permits, after three years, for the travelling of grade stallions. While to many this recommendation appears to go too far there is much that can be said in its favor. In all foreign countries noted for one or more pure breeds of horses practically no "scrub," "grade," or non-registered stallions are used for public service.

While it is not denied that there are some "grade" stallions that leave better stock than some so-called pure breds, there is one outstanding defect of the "grade"; he is not potent. This defect alone prevents us from even hoping for much improvement in the quality of the horses we raise as long as "grade" stallions are used at all extensively. If we are to expect lasting improvement we must cut out the grades.

Not until a special type of horse has been pure bred in one direction for many years will its stallions or mares possess the power of stamping

their characteristics upon their offspring. That power is termed prepotency. It is lacking in a majority of low grade stallions. Grade horses possess a little pure blood, but not enough to ensure their transmitting their good qualities for more than one generation.

Many grade stallions are fine lookers and appear to possess all the good qualities we should expect to find. Their outstanding defect is that behind their good looks, they lack this quality of breed prepotency. It has been said, with truth, that their good looks are like the thin layer of silver that gives a plated article its look of reality, but which serves only to cover its base material. This base material predominates in the make up of both. The prepotency of the scrub and low grade horse is obtained from the predominant elements which were derived from scrub ancestors and serves only to transmit these undesirable elements. A grade stallion may be stronger than many a pampered pure bred, so far as begetting numerous, rugged offspring is concerned, but he stamps all of them indelibly with the seal of the scrub. Before we can expect any marked improvement in the quality of our horses we must take steps to see that only the better class of stallions that are used on our common mares. This can be insured best by the government taking steps to see that none but sound stallions are allowed to travel and by taxing or otherwise restricting the use of grade and mongrel stallions. The country is ripe for such legislation.

JUNE EXCURSIONS TO GUELPH

The season of Farmer's Institute excursions to the Ontario Agricultural College at Guelph is again at hand. Those who are acquainted with the work that the college is carrying on and more especially those who in the past have paid one or more visits to the college, are fully aware of the advantages to be derived from a trip to that seat of agricultural learning—"The Farmer's University." All who have visited this institution during June have vivid recollections of a most pleasant outing and of being entertained richly royally.

Not only can one spend the day at Guelph with much enjoyment, but it may be made a profitable day as well. There is much to learn from the different departments that one may visit. An hour or two spent amongst the experimental plots in company with an instructor will more than repay for the expense connected with this trip. Here one will learn from object lessons in a way that is not possible in any other manner. One will learn of the best varieties of crops to grow, the most approved manner of planting and of cultivation, of the best time to sow and how to sow. In many instances, farmers are loath to believe that there is much difference in the yielding qualities of different varieties of certain grains. After spending a few hours in the experimental plots, in company with a man who knows, one cannot fail but be convinced of the great superior-

ity of some varieties over others.

But not only in the experimental plots can one find something that will be of value. There are many other departments that will prove of interest and from which much valuable information can be gleaned. The horticultural department, the dairy, the poultry and other departments each and all are of interest and well worth the time that one can spend therein. The ladies will be well entertained, interested instructed as they inspect the department of special interest to them. There is much at the college for them to see and a day will prove all too short for the purpose.

Those who have visited the college in the past are the most enthusiastic over the prospects of paying another visit. Those who have never seen the college should strain a point to attend when the excursion runs from their district during this month.

THE PATRON'S END OF IT

Every year the patron becomes more and more the important factor in the dairy business. The system of manufacture has been so improved and the maker so schooled in his work, that if he has proper buildings and the necessary facilities for making and secures suitable raw product the quality of the finished article is assured. More than ever before everything depends upon the raw material or the quality of the milk which the patron supplies.

There are many patrons of factories who fail to realize this. Either through ignorance or carelessness they supply milk defective in flavor or inferior from some other cause and then wonder why the cheese made at their factory takes a second place and sells for a lower price than that of the neighboring factories. Good cheese or butter cannot be made from poor quality of milk. Likewise if the maker knows his business and the majority of them do, and he has the proper appliances and necessary conditions for making in, the opposite of this holds true—poor cheese or butter, cannot be made from good milk. These are axioms in modern dairying that patrons will do well to remember.

From the cow to the milk-stand or to the weight-stand at the factory, if he hauls his own milk is the patron's special field. No outside aid will help if he is not willing to undertake the responsibility of caring for the raw product till it reaches its destination. The responsibility is not a heavy one, if the little things about the care of milk are looked after. It is just as easy to care for milk in the right way as in the wrong way, if one only thinks so. Habit goes a long way. To form the habit of milking in a cleanly manner, of straining the milk, of aerating and cooling it as soon as the milking is finished, and of placing it where the atmosphere is pure to keep over night or until taken to the factory, is to solve the problem. A habit once formed becomes a second nature and renders the task involved an easy and pleasant one.

Why Don't You Try?

No one knows what he can do until he tries, and many of our readers have found that it paid them well to try to obtain our subscriptions to The Canadian Dairyman and Farming World.

Why don't you try?

Read the cash and live stock premiums offered on the back cover of this issue. There is no reason why you should not win one of the prizes.

Note what a few of our subscribers say about the paper. We receive many such letters.

Mr. E. E. Chaffee, Glengarry County, says: "I like The Canadian Dairyman and Farming World. It is O.K. I would not like to miss any copies of the paper."

Mr. C. J. Greenwood, Northumberland County, says: "I could not do without The Canadian Dairyman and Farming World."

Mr. Stephen Ackland, Queens County, P. E. I., says: "I am very much interested in The Canadian Dairyman and Farming World."

The Cheap Production of Pork

The man who has not provided a clover field for his sows and pigs to run in from now on through the summer, has no business raising hogs," says a farmer writing to The Indiana Farmer. The profit in hog production comes from making the greatest gains from the pasture and not when the hogs are put on grain feed. There should be no let-up in crowding the pigs. If the sows have been properly handled, they can stand heavy feeding while the pigs are sucking. Turn out the sows with their litters. If the sows have a good water supply but let them live in clover now for a couple of months. If you have not clover for them, provide rape instead. It will be well to provide some rape far them at any rate as it will be very acceptable later on.

Fight the Weeds

The fight to exterminate weeds should be carried on vigorously for the next two months. On all parts of our farms and more especially where a poor stand of a crop is to be had, there the weeds are to be found in abundance. There is too much careless seeding of small grains with the result that many fields are overrun with bad pests that will take hard work to clean up. It will take time, but it will pay to watch the grain fields and pull up the more obnoxious varieties that have been seeded with the grain. The wild mustard should be pulled, or if it is too thick to permit of pulling, then spraying with bluestone should be resorted to. Chances should not be taken by permitting the weeds to go to seed for if they ripen and shed their seeds, the next year the work of eradication will be twice as hard.

The corn fields should be kept free at all hazards. Probably nowhere is there a better seed bed offered for weeds than in the corn field, so here we must put in our best efforts to keep the weeds in check from planting time throughout the cultivating season. One should never get in such a hurry that he cannot take time to stop to pull up a bad weed that the cultivator fails to catch. As weeds seed so very profusely, a single weed, allowed to go to seed in a well-cultivated place such as the corn field, will produce seed enough to stock the farm with its descendants.

Then look out for the roadways. If they are not pastured closely keep all weeds mowed down. The weeds unless prevented grow luxuriously upon the public highway and if they produce seeds, you may rest assured the adjoining fields will soon be covered. Do not wait for the inspec-

tor or the pathmaster to force you to cut the weeds upon the highway along your property. It will pay you many-fold to be prompt in attending to these weeds which will soon infest your cultivated land if not attended to.

Caring for Cows in Summer

Now is the time when the cows are at their best. It will pay to keep them up to their full capacity from now on for upon how well they are cared for during the summer months will depend the abundance of milk to be gotten from the milch cow next fall and winter. At present, the pastures are good so we need not worry on that score for a month or so. However, if as yet you have neglected to provide some green crop that can be used for July and August feeding, it should be done immediately. We may be blessed with an abundance of pasture throughout this coming season but it is never safe to depend entirely upon our meadows and pastures to furnish us with the necessary feed for our cows throughout the summer. The dairyman who is caught napping in this respect is the man who pays dearly for it ere the following winter has passed. If the cows can be carried up to October 1 without much loss in their milk flow, you will have them in fine shape for doing good work during the fall and winter.

Keep the dogs away from the milk cows; it will pay one well to go for the cows rather than send the average dog to bury them up. See that the cows have some shade in their pasture and provide salt for them at all times. It is a well-established fact that the cows cared for properly, for the next two months will be the money-making ones later on. Do not neglect your cows during the rush of the summer work. On dairy farms most of the work that is done throughout the summer is done to provide fodder for the cows during the coming winter. On this account it assuredly is poor policy to neglect the cows from which we expect to get returns for the labor we are now expending.

The Quack Grass Question

From that excellent bulletin No. 80, on weeds and their eradication by Prof. H. L. Bolley of the North Dakota Experiment Station, the following on quack grass and other weeds is taken:

"Quack-grass is spreading rapidly throughout the Northwest because of present agricultural methods. The weed would not prove such a menace in a country of greater pasturage requirements and more intensive cultivation methods. Continuous growth of cereals, loosely handled, gives this weedy grass every opportunity to develop. Where an area is once infested the plant is soon dragged to all parts of the farm. As with certain other weeds that have become general, most farmers are paying but slight attention to small patches, and others are much disturbed about the rapid spread, and yet others are already awake to the fact that they have the weed almost general upon their lands and are now getting correspondingly lessened yields of grain at a much greater cost.

To advise farmers whose lands are now overrun by this grass may seem adding insult to injury, for to quack-grass extermination there is no easy road. No spraying method is economically possible while other applications of salt have not proven satisfactory.

WHAT TO DO

(1) In small patches, up-root in dry, hot weather and as far as possible remove all underground stems. Visit the areas once every 8 or 10



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days and remove every visible spear of grass, with the attached under-ground stem.

(2) Or, cut off in July and cover closely with tar paper so as to quite exclude the light. Allow the paper to remain there through July and August, then plow deeply.

(3) Or, cut off closely in July and cover deeply with straw or manure. Visit the areas often. Dig up any scattering plants not covered.

(4) If in large areas, mow off when in blossom, break the sod shallow (not to exceed 2 or 3 inches) in mid July. Back-set in mid-August at a depth but slightly deeper than before. Then disc and harrow throughout the fall, never allowing any green leaves to show. Then plow deeply in the

late fall. Plant a cultivated crop the following season and follow the cultivator with a heman to look for every spear of the grass. Or, after thoroughly preparing the seed bed in the spring give it a hearty seeding of German millet, say 2 to 2½ pecks of good seed, preferably sown broadcast. Sow the millet late in May. At no time during this process of field preparation should the quack-grass be allowed to show green and if possible the ground should never be worked while wet. The drier the ground and hotter the weather the better the killing effect of cultivation.

Any annual forage crop of dense and rapid growth may be substituted for millets, though I think it has no equal unless it is fodder corn sown broadcast."

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Creamery Department

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

Believes in Grading Cream

Ed. The Dairyman and Farming World.—In reply to your enquiries in May 13th issue I would say most assuredly that I believe in grading cream.

The man who sends a first grade of cream has a right to the higher price while the one who sends an inferior grade should only receive a price in accordance with the merit of his cream.

Question 1. I believe that grading cream could be made practicable for the average creamery providing all the factories in the district would grade the cream.

2. I am satisfied that we would get a much better grade of cream at the creameries because the man who is sending the inferior grade of cream would be forced to accept a lower price for his goods or improve the quality.

3. I do not think the extra expense would amount to very much. It would probably mean a little extra vat room in order to keep the different grades of cream separate and some extra help for the maker. But I consider that the better quality of cream, which means better butter and consequently better prices, would more than offset the extra expense.

4. If the work of grading the cream is going to make much extra work for the maker he should receive some extra pay.

I wish your paper the success which it deserves.—F. A. Keyes, Huron Co., Ont.

Wants Condensed Milk Factory

Ed. The Dairyman and Farming World.—I would like to get in touch with a party in the condensed milk business with a view of getting him sufficiently interested to build a milk condensing plant in the Chilliwack Valley, B. C. Our soil and climate are a perfect combination for a stock and dairy country. The climate is mild, with sufficient rain to secure good crops. Also the soil is rich and well adapted for producing great crops of grass, hay, grain, roots and corn for fodder. I think I am justified in saying that milk can be pro-

duced as cheap here as anywhere in Canada. This country can grow good fruit also. At present our milk products are made into butter which sold last year at an average of 20½ cents per lb., which is a prosperous price.

However, about 70 miles from here, in the State of Washington, where conditions for producing milk and marketing butter are similar to what we have here, and where, until recently, there were about twenty creameries in operation. But since the erection of two milk condensing plants there the creameries are closed except to three that are inaccessible to ship to the condenser.

The condensing companies are able to pay more for milk than can be realized when made into butter and consequently get the business. We have two railroads in course of construction into the Chilliwack Valley, which will give good transportation facilities east and west.

There are at present about 4,000 cows in the Valley which could be increased to double that number in four or five years.

The great demand for canned milk in all sections of Canada including the Yukon country, where fresh milk is not obtainable, guarantees a good market. This together with a good supply of milk in sight should interest a party versed in that line of business to look this matter up.

I trust you will kindly publish the above in your valuable paper.—Thos. Richards, Rosedale via Chilliwack, B. C.

Note.—What our correspondent says as to the demand for condensed milk and the higher price condensed milk companies can pay for milk as compared with what a cheese factory or creamery can pay is quite true. It is a business, however, about which very little information is given to the public. Considerable capital is required and experts who can handle the manufacturing part are not to be had very readily. For these reasons few are in the line if they can take up a proposition of this nature. Can any of our readers help our B. C. friend out?—Editor.

Keeping Creamery Records

Circular 126 issued by the Dairy Division Bureau of Animal Industry, Department of Agriculture, Washington, D. C., gives a simple method of keeping creamery records. The Dairy Division has arranged a system of blanks which may be used for models in ruling books. Common record books with pages about 9 by 14 inches, with 36 lines, may be used and can be ruled by hand in a short time. The heading in each column indicates what returns are to be made. Certain forms are to be kept by the maker and others by the secretary. Forms 3 and 4 as outlined in the circular are of special value to butter makers. They provide for keeping a record each day of the number of pounds of milk and cream received, the list of the milk and cream, the pounds of butter fat in each, and the total pounds of butter fat received for the day and what is done with it. They cover one month. Form 3 is for use where creameries send out haulers or gather cream. It contains columns to show the creamery weights of cream; creamery received, pounds of butter fat received; hauler's weights; hauler's butter fat; hauler's pounds of cream short; hauler's pounds of fat short; hauler's pounds of cream over; hauler's pounds of fat over; price of butter per lb.; hauler's short, dollars; hauler's over, dollars.

Form 4 is for more general use. It contains columns for pounds of milk; pounds of milk test; pounds of cream; pounds of butter fat in milk; pounds butter fat from cream;

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and, of course, there are a great many more which you will find in our Big Free Dairy Book which we will mail to you and as many of your friends as you suggest.

It is considered the most interesting Dairy Book of the day. It costs us a lot to prepare, but it is free to you. Send for it to-day.

1 Heavy three-ply tin supply can. Holds good supply of milk and is low enough for a woman to easily pour milk into it.

2 Feed cup, skim milk cover and cream cover made of pressed steel, tinned. Absolutely true, and doubly as strong as the tin kind used in others.

3 Light weight bowl—chief cause of easy running.

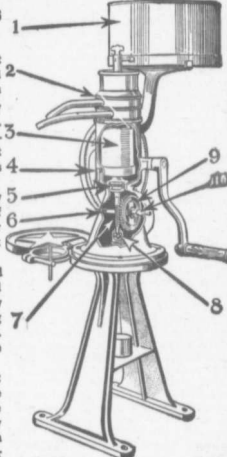
4 Very simple brake, applied at the base of the bowl, the only place where a brake may be used without injury to the bowl. No wear on bowl—only on a little leather washer.

5 Ball Neck Bearing which eliminates all wear on the spindle. Takes but ten drops of oil a day.

6 Case hardened pinion gear cut out of worm wheel shaft. No chance of working loose. Practically indestructible.

7 Spindle threaded to bowl. If ever wear should occur it can be unscrewed and replaced at less cost than on any other separator.

8 Three ball point bearing on which the bottom of the spindle revolves when bowl is in motion. The point costs little to renew. No wear on the spindle proper. Bowl will always adjust itself to proper center.



9 Worm wheel clutch stops all mechanism when crank is stopped, with exception of bowl and worm wheel. No lost motion in again starting crank as clutch grips instantly and without jar to the mechanism.

10 Points on worm wheel shaft are case hardened until they will cut glass. Fit into case hardened sockets. Wear is reduced to a minimum. Worm wheel and its shaft may be taken out and replaced by just removing a plug on one side. Cannot be put back wrong. In fact, there is not a single part of the Frictionless Empire that can be placed anywhere but in its correct position.

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Toronto, Ont.

pounds butter fat from stations or routes; total pounds butter fat; pounds butter fat in milk and cream sold; pounds butter made; per cent. moisture 1 pounds, over run, per cent. over run; butter retained; tubs of butter shipped; pounds of butter shipped.

Where hand separator cream is received testing every day is recommended. (Except where the cream is sweet when delivered.) To keep her record considerable space is required. A form is given for use in a skimming or cream receiving station. For whole milk creameries, a

form is given for recording composite test twice a month.

A form of shipping book is given for use of the secretary also a form of monthly statement and a form for the annual statement. There are ten forms in all.

Bookkeeping for a creamery is so different from that of any other industry that special forms and methods of procedure are necessary. This circular 126 aims to provide detailed information as to method of procedure is given and any butter maker or secretary can use it. Accuracy and system are the requisites.

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CLEAN MILK.—By R. D. Belcher, M.D. In this book, the author gives the practical methods for the exclusion of bacteria from milk, and how to prevent contamination of cheese factories available to the consumer. Illustrated, 65¢ each, 146 pages. Cloth cover. The Canadian Dairyman and Farming World. Our complete catalog of dairy books sent free on request.

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. Send your letters to the Cheese Maker's Department.

Peterboro Cheese Board

The Peterboro Cheese Board met on June 3rd, when 2,643 cheese were boarded. The buyers present were Messrs. Watkin, Fitzgerald, Gillespie, Jones, Kerr, Weir, Gunn and Langlois, Morton and Cook. Mr. G. A. Gillespie secured the first option on the cheese, bidding 10 1/2 cents and secured 1,054 cheese. Mr. Watkin followed and bought 507 at 11 1/16 cents; Mr. Kerr, 898 at 10 1/2 cents; Mr. Jones, 115 at 10 1/2 cents and Mr. Cook, 50 at 10 1/2 cents.

Considerable discussion was raised on the statement of Chief Instructor Publow that a large quantity of green cheese was being shipped from Eastern Ontario, which, according to the instructor meant a loss of one cent a pound on all cheese that was too green. Mr. Watkin, an old and experienced buyer of Eastern Ontario, stated that Mr. Publow did not refer so much to the Peterboro district but that the practice was prevalent in districts around Brockville and Belleville. Around these latter places, there are no inspectors at the factory and therefore it is as much the fault of the buyers as it is of the proprietors and makers. It was stated that in some factories the inspectors visited, there was no cheese at all to be found on the shelves, and in many cases, cheese that were only two days old. Mr. Riddell, the president, urged the makers of Peterboro

district to not ship their cheese at too green a state and thus injure their reputation on the Old Country market.

On account of this complaint, a motion was made that there should be a meeting, to be held every three weeks but the motion was defeated. Many makers who did not have first class cool curing rooms stated that keeping cheese for three weeks during the hot summer months would decrease its value instead of increasing it. It was then decided to meet two weeks from the date of this meeting.

Another Criticism

Ed. The Dairyman and Farming World.—It is always easier to criticize than write a report, and it is therefore rather pleasant to defend some opinions expressed by the Director of the Provincial Laboratory at St. Hyacinthe.

Before entering on special points, there is one remark to be made on the criticism against the Report as a whole, namely, to ask for whose benefit this criticism is written? Is it written from a scientific standpoint? Certainly not. Is it then written in a popular way? By no means. Well, for whom is it written? Is it not written in favor of those who have to sell Rennet that smells bad? I think so.—J. Van der Smelt, St. Hyacinthe, Quebec.

Criticism of Director's Report Provincial Laboratory, Que

(Continued from May 27)

Another remark may be made about Table VII on cheese analysis. The Director gives there the number of bacteria per gramme and per pound of cheese. What the latter figures are good for is not quite clear. In the scientific world it is not the habit to work with the number of bacteria in pounds per article, and there is no practical use in giving the number of bacteria in a pound of cheese. What the maker could value is some information on the presence or absence of certain injurious bacteria and their relative number.

We note that Koch plates were employed by the Director in some of his experiments. These plates are nowadays very seldom used, because the chances of mould infection are much greater with them than with the more commonly used Petri dishes. A few moulds on a Koch plate are not the least indication that they originate from the cheese.

Finally, we must make a few observations regarding the experiments made with the UlaX milk filter.

It is generally known that the UlaX filter was introduced to replace the

cheese cloth filters, still used for filtering milk. They are not used to separate the bacteria from the milk, but to separate from the milk, hairs, dust, manure and other stable particles. The UlaX filter is made of a thin layer of cotton between two wire gauze disks, and the great advantage of this filter is, that it can be renewed by placing a new cotton disk between the wire plates. This arrangement is of course much too simple to expect any decrease in bacteria, and as already said, it was never meant to do so. The Director shows us in his report on page 365 that the UlaX filter has no influence on pure milk (in the bacteriological respect), and that in other cases the results on the bacteria are very small, and comes then to the conclusion that:

1. "The action of the UlaX filters depends chiefly on the nature of the milk filtered."
2. "That he cannot draw serious conclusions as for the solid and liquid residue retained in the cotton, for the following reasons:

(a) The disks of cotton may be contaminated during the trip, and amid the surroundings in which they have sojourned."

This sounds peculiar. The surroundings of the cotton are the box in which it was packed, so that the contamination will not be so enormous, especially as there are very few bacteria like to eat dry cotton.

(b) The quality of filtered milk is unknown, and therefore does not the number of colonies per cubic centimetre in the remains of the filter signify much?"

When there are few bacteria in the cotton, then the conclusion may be drawn that the bacteria go through the filter.

Table XIX, gives the number of bacteria before and after filtering with an UlaX filter. In the first test the Director finds the same number of bacteria before and after filtering and besides that a large number of bacteria in the filter, and writes about that fact on page 365: "The large quantity of colonies numbered per cubic centimetre of residue contained by the cotton of the filter cannot be explained except by the presence of germs in the cotton of the filter itself, which I did not sterilize. This cotton was certainly contaminated by the surroundings in which it had been kept (kept was not printed).

There the Director shows himself unconscious of the fact which is already known for years, namely, that by filtering, centrifuging, etc., lumps of bacteria are broken up, so that after such a treatment the number of bacteria found may be greater than before.

If the Director will spare a few minutes to read "Cleaning Milk by the use of a Gravel Filter, (The Bacterial Contamination of Milk and its control by F. C. Harrison, translation of the Canadian Institute, Vol. 7), he will find an experiment, done by Dunbar and Kister, 1899, who filtered 22 samples of milk through sterilized gravel filters, in 17 of which the number of bacteria after filtration was increased.

The average of five samples was: 450,000 before and 62,000 after filtration, and the average of the other seventeen, 1,300,000 before, 5,600,000 bacteria per c.c. after filtration. Backhaus has reported: "That these filters have no effect in reducing the number of bacteria in the filtered milk. The mechanical separation is good, all coarse particles such as hair, straw, manure, etc., are arrested, but the bacteria are washed out of the manure and the milk contains more bacteria than before filtration."

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facts, the results of the Director's experiments are easily interpreted.

Whether there is more in this report open for discussion, the writer of this criticism does not know, because he only took up the points in which he himself was interested.

The writer does not know the director of the Provincial Official Laboratory, but he is of opinion that nobody has the right to publish any statement which may be injurious to any person's reputation, without being also absolutely certain of his experimental data, and the conclusions drawn from them.

J. Van der Leek,
Macdonald College, Quebec

A dairy school has been established in New Zealand. This is the first institution of its kind in Australasia. This school will not take the place of the technical schools of which there are a number in that colony. The school will be divided into two parts—scientific and instrumental. What the University is to the medical, law or clerical student, this dairy school will be to the farmer's son.

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Hail to June

Hail to June, who comes a-singing,
 Roses in her hair!
 All the little birds are winging,
 All the blossom-bells are ringing,
 Golden chalices are flinging
 Fragrance on the air.

Hail to June and glad-to-morrow,
 Song and summer-time!
 June who covers all the furrows
 Thick with blossoms; June who
 borrows
 All the wealth of earth, and sorrows
 Hides within a rhyme!

Celia Myrover Robinson.

A Slip in Orthodoxy

By Joanne Gleed Strange.

"Yes, John, there's the church and I'm quite sure this is the house!"

A prim little woman in a gray gown turned into the gate and walked briskly, in spite of the warm August day, up the long brick sidewalk to the parsonage. She was followed by a tall, erect man in a Prince Albert and silk hat, who looked from side to side at the carefully mowed lawn and at the beds of pansies and mignonette near the house. She waited for him at the steps of the porch, and as they reached the door he looked down at her and smiled while she carefully arranged her gray gown and straightened her neat little straw bonnet before pulling the bell.

"It looks just as it used to, I do declare!" She glanced from the big brick church on one side to the cornfields on the other, which stretched away in the distance, and then up to the man who was still looking at her, and her eyes were strangely young in spite of the wrinkles about them, and her cheeks were slightly flushed.

"Are you quite sure there is time, John?" Don't you think we ought to hurry?" She pulled the bell again. Then turning to him, she carefully brushed a speck from his correct black coat with her lace-edged handkerchief.

"Plenty of time, my dear," he answered in his deep voice; and he smiled again as the pink in her cheeks grew deeper and her eyes lowered at the "my dear."

"I'd be willing to stand here all afternoon and look at you." He leaned against a porch pillar and took off his hat, brushing the thick iron gray hair from his forehead. "Only if we can't get this minister, we must look up the justice. I'm going to marry you to-day, Methodist parson or not." He straightened up put on his hat and reached for the bell himself.

"They must be home." There was an anxious tone in the little lady's voice. "It would be dreadful not to be married by a Methodist minister, when I've been a Methodist for almost forty-five years. There I hear some one. John, John," she whispered in a flutter, "you sure you've got the ring?"

"Sure's shooting, Amelia. Don't you worry. I say, hurriedly, 'you do the talking. You know the ways of parsons better than I do—haven't been near one for twenty-five years—not since I went with you, way back in—"

"Hush!"

The door was opened by a rosy-

cheeked, panting maid, her clean white apron tied over one hip.

"Is—is this the parsonage?" The lady's voice trembled a bit.

"Stum," breathed the maid, holding aside the door.

"Is—is the minister in?" asked the visitor, stepping over the sill. The gentleman followed, his silk hat in his hand.

"No, mum, yes'um, no—that is, Mrs. Neal is in, mum, and I can fetch Mr. Neal for ye. Just step into the steady, mum. I'll call the missus," and the maid vanished down the hall, leaving the couple to look at each other, and to hear in a stage whisper: "Come quick, stum. They wants the minister. I thinks it's a weddin' fra' the looks of 'em."

And when Mrs. Neal, a smiling young woman with fair hair and blue eyes, came cordially to greet them, she found a very blushing, "awfully fussed little woman," as she told her husband afterwards, "and a big man with 'er all 'er twinkles" standing close together in the hall. She took them into the study, saying she had sent the maid for her husband. He was at work in the garden. It was such a fine day for wedding he couldn't resist it, she told them. Wouldn't they be seated? Hadn't it been a fine summer?—she continued as they both found chairs on opposite sides of the room—so cool and pleasant. Mr. Neal had thought of taking them to the seaside for August; but the baby was teething, so they decided they had better keep him home. He was asleep now. But it had been so cool they hadn't minded. Did the callers live in Pleasant Valley? She thought she hadn't seen them, but then she and Mr. Neal had not lived there so very long, and didn't know every one yet. They were Quebec people, but they did like Ontario so much.

The little woman was becoming nervous, and the big man watched her as she explained how she had lived all her life in Norris Falls, but she had visited in Pleasant Valley twenty-two years ago, and had always hoped to come back some time. She—they were going on a trip. The place didn't seem to have changed much in that time. She—they were going on a trip. Here her face became pink again and she looked quickly at the man. They were going to Montreal and then to Quebec, and then to Halifax. They—

A door slammed and the minister entered the room. His keen eyes looked first at the woman and then

at the man, and lastly at his wife, who rose and said to her visitors, "My husband, Mr. Neal!"

Mr. Neal shook hands with each of them cordially. "I'm sorry to have been so long," he explained, "but I was out in the garden when Maggie called me and was anything but presentable. It's a fine day for gardening." He seated himself and looked from one to the other as he talked.

The big man admitted the fineness of the day; thought it a trifle warm; wiped his face with his handkerchief and, after glancing several times at the little woman across the room, whose eyes were fixed on him, he straightened his shoulders, looked the minister fully in the face and said: "We called on you this afternoon because we wish to be married. Miss Chesna is from Norris Falls and I am from Draver, and we came here to be married because we preferred a quiet wedding, and didn't care to have every one in Norris Falls talking about it till we were well away from there."

Mr. Neal nodded gravely. "I have the license here;" the man tapped his breast pocket, "and we came to you because Amelia would be married by a minister of her own denomination, even if she wouldn't be married in her own town." He smiled at the gray-gowned figure on the couch.

The minister looked at his wife and smiled and then turned again to



"Is—is this the parsonage?"

the man. "Have either of you been married before? You see there are some questions I must ask," he explained as they both laughed, the man throwing back his head and filling the room with his merriment, and the little lady's gaily rippling in spite of her nervousness.

"Well, I haven't," chuckled the man. "How about you, Amelia?" "How foolish you are, John!" Then with dignity: "You let me talk. We aren't either of us married," she explained to the minister and his wife. "We—were expected to be married some time ago—twenty-five years ago to-day—but it was postponed." She said this simply, but she held high her head in the little straw bonnet. "And if we don't hurry a bit we won't get that five-thirty train. It's most three already."

The minister looked at his wife. Her eyes were strangely soft, and she smiled at him.

"Perhaps Miss Chesna would like to come into my room and take off her gloves," she said, and led the way from the study. She stopped to tell the maid to make some lemonade and get out some cookies and fruit-cake.

When they returned to the study some moments later, they found the two men discussing the merits of the State of Colorado, and of Denver

in particular, quite as if they had known each other for years.

John got to his feet as they came into the room. The little lady had taken off her bonnet and had combed up the soft grey hair on her forehead, and in the lace at the neck of the grey dress Mrs. Neal had pinned a pink rose. John looked at Miss Amelia so long that she hurriedly selected a red rose from the vase on the mantel and pinned it to his coat.

Mrs. Neal bustled about, lowering the minister the shades, and bringing great bowls of nasturtiums and sweet peas and scarlet rambler from the other rooms, and as a last touch, she sent Mr. Neal, upstairs for a white fur rug to put in front of the bow window where the bride and groom were to stand.

It took Miss Amelia a long time to fasten the flower in the groom's button-hole, and it was only when the little maid had been called in as a witness that the rose was pinned quite to the bride's satisfaction.

Then the groom brought out the license and placed it on the table, and with a little red wax seal. The ring," he explained, looking smilingly down at the grey head which barely reached his shoulder.

"Oh, you want the ring service?" The minister opened the box and took out the little gold band, handing it to the groom, whose fingers were not very steady just then.

"I have your names correctly," the minister asked, "Amelia Chesna and John Wetherby? That's right, I think. Now, if you will just stand together on the rug, I'll begin."

The young minister was very solemn as he read the marriage service, and his wife thought she never had heard him give it more impressively, not even at the biggest church weddings they had ever had. The maid was eager for the responsibility of her apron was still on sideways and she had added a cap which perched coyly over one ear, but no one noticed her. The bride and groom were far beyond noticing anything. His voice trembled a bit on the "I will," and his hers was clear and firm, but they almost dropped the ring between them, making the little maid gasp and put out one hand involuntarily.

The groom held the bride's hand during the prayer, and after the "Amen," he kissed her and Mrs. Neal kissed her, and the minister congratulated them, and the little maid hurried from the room wiping her eyes on her apron.

Then the minister produced a little white and gold wedding book with forget-me-nots on the cover—their wedding present, he told them—and they signed their names in it, and Mrs. Neal signed hers and the little maid was the first to scribble "Marguerete Angeline Casey" in a large round hand, making a slant down the page.

After this she had the lemonade and the fruit-cake, the cookies, served at the best china by Marguerete Angeline, the minister and his wife keeping up the conversation, the bride and groom content to sit silently together on the sofa.

But there was a five-thirty train to make, and this quiet aftermath could not last forever. Mrs. Wetherby went to Mrs. Neal's room to put on her bonnet and gloves, leaving John and the minister to settle the fee.

"You've been so good to us, my dear!" the bride said softly, pinning on the straw bonnet before the mirror—"just as if we'd always known you, and I'm so glad I insisted on coming right up here. I seemed to remember the place, even after so many years. I went to that church when here was the site of a school. She sat under a window looking

toward the brick church and drew on her gloves, while Mrs. Neal tried to gather a large bunch of roses and pink-and-white sweet peas for the bride to carry away.

"What's become of the vine on the church?" Mrs. Wetherby asked suddenly.

"The vine?" queried Mrs. Neal. "Why, yes. When I was twenty-two years ago, the church was almost covered with English ivy, and now it's gone. I never did notice it when I was coming down the street. Did it die?" she asked leaning toward the window.

"There never has been a vine, not since we've been here. Are you sure it wasn't the old frame church you mean? This church has only been built some fourteen or fifteen years, I believe."

"No, it was the brick church, twenty-two years ago." Mrs. Wetherby spoke with conviction. She stood up and looked carefully from the window. Then quickly turning, she asked breathlessly, "Why, what church is that?"

"The Presbyterian, of course," Mrs. Neal looked up from her flowers. "The Presbyterian," repeated Mrs. Wetherby, sitting down very suddenly, her face quite white. "Are you sure it is the Presbyterian?"

"Yes, certainly. Are you ill? Let me get you some water. This heat—"

Mrs. Neal hurried toward the pale little woman near the window.

"No, No, I'm all right. It—it's the church! Where then, is the Methodist church?"

"Wide, and her hands grasping the arms of the chair.

"Down two blocks, on this side of the street." Mrs. Neal reached for a fan on the dressing table and it toward her guest, but Mrs. Wetherby only leaned forward in her chair and exclaimed, "Can it be that your husband is a Presbyterian minister?"

"Why of course, don't you know?" Mrs. Neal's voice was full of alarm, but before she could run for some water, Mrs. Wetherby had buried her face in her hands, and was laughing most hysterically.

"Oh, dear! oh, dear! Me married by a Presbyterian minister! Me married for good and all, with a ring, by a Presbyterian. Why, my dear, she sat up suddenly and explained to the bewildered Mrs. Neal—"why my dear, I've never been inside of any church in my life, scarcely, but a Methodist."

"I thought it was the Methodist church and that your husband was the Methodist minister. Oh I'm dreadful!" and down went her face in her hands again as Mrs. Neal burst into a rippling laughter, leaning against the chiffonier.

"What ever will John say!" The bride got to her feet and fairly ran into the study.

"John Wetherby," she interrupted, just as the envelope passed from Mr. Wetherby to the minister, "what do you think we've gone and done? We've been married by a Presbyterian minister. What shall we do?" She laughed hysterically.

John's jolly laugh sounded even to the little maid in the nursery with the baby. "Do? Well, I guess it's legal, isn't it, even if it isn't Methodist, Amelia; I suppose it'll hold, don't you?" He laughed again and looked at the minister, who was still a bit puzzled, and then at Mrs. Neal in the doorway, whose face was flushed and whose shoulders shook.

"You ought to have known a Methodist minister, Amelia, since you've never known any other kind!" Then, noticing the trouble in her face under the straw bonnet, he took her hand and said quietly, "But if you feel any better about it, dear, we'll hunt up the Methodist man and do it over." His eyes twinkled at her and then

at Mrs. Neal and at the minister, who was beginning to understand.

"But Mr. Witte, the Methodist minister, is out of town," Mr. Neal explained, "and he won't be back until next month."

"Maybe we could get a Baptist," teased the bridegroom.

"Nonsense, John," the bride drew her hand away, and looked up at him. "Of course, it's all right." She smiled faintly at the minister and his wife. "Only I don't know how I could have made such a mistake in the church. I don't see."

"They say engaged people aren't really responsible," John said.

"And I think it's pretty true, isn't it, Helen?" Mr. Neal appealed to his wife, whose lips still twitched and whose blue eyes danced.

"It's too bad to disappoint you, Mrs. Wetherby," he said, "but really I'm glad you made the mistake, or we might never have known you, you see." She held out the bunch of roses and sweet peas and then left the room, returning with a bag of rice and a pair of little worn shoes, as the bride and groom moved toward the door.

"It's too bad to disappoint you, Mrs. Wetherby," she exclaimed, "even if a Presbyterian has started you in life to-day."

The big man drew his pocketbook from his breast pocket and slipped a crisp bill into the minister's hand. "To go in the envelope with the other," he explained briefly. "And to my notion that was the best wedding service I ever heard of."

"This goes to the wife. She gets the wedding fees." And the minister exchanged the envelope and its contents for a handful of rice and the old shoes.

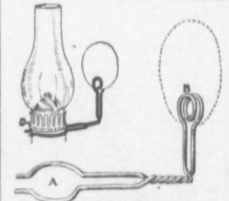
"I'm not so sure but that we ought to turn it over to Mr. Witte, Mrs. Neal laughed, opening the door for them, and following them on to the porch.

"Nonsense!" replied Mrs. Wetherby. "I'm glad we came to you, and I'd do it again. I truly would. I really mean it," she called over her shoulder, as the rice and old shoes were thrown after them.

"And so would I," and the big man stopped for the little shoes and stuffed them into the pocket of his Prince Albert. Then he took off his hat and waved it to the couple on the porch.

Eye Shade for Lamp

One of the most convenient things I have about the house is a lamp shade that is simply a piece of wire bent into shape like the drawing. A shows the part that fits around the

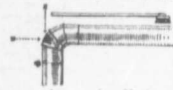


lamp. It can be used on any lamp, or removed instantly if not desired. It cost only ten cents. The shade is simply a piece of cardboard slipped into the crutch marked B where it is held securely.

Amflick always leaves a definite mark. No man will ever be again as he was before. Either he will become more serious, transfixed, devoted, careless, indifferent or hardened. In every life affliction is a time of trial; and out of it comes decisions, development and destiny.—Rev. F. B. Makepeace.

Easy Stovepipe Cleaning

We use wood for fuel, and instead once a month to clean it. I had an opening made in the elbow, with a shutter over it. When the pipe is foul I open the shutter and clean it out. I use a stick with a brush or



any sort of a swab. If the pipe is long a jointed rod can be used. The seat that is in the horizontal lengths can be pushed out of the end or drawn forward, so that it will drop down the perpendicular lengths. It costs no fifteen cents to have the elbow fixed in this way.

Women's Institutes

In an address before the members of the Peterboro District Cheese and Butter Makers' Association, recently, Miss Rose of Guelph drew a comparison between the homes of a century ago and those of the present day. "We, as housekeepers in our homes," she said, "should know more about good housekeeping than our grandmothers do. You may not agree with me in that statement, but when people live crowded together, we have unsanitary conditions, poor ventilation, and different food problems presented. We have to cope with these questions as housekeepers and so it is more necessary that the women of the present generation have a deeper knowledge of the most important subject of housekeeping. It always seemed to me that when conditions present themselves, something rises to meet these conditions even in a small way. Down at Stony Creek, in 1897, some women there got an idea that it would be nice to have Women's Institutes in connection with the men's institute. The men were receiving knowledge along their special lines and these women thought that it would be nice to have a women's meeting similar to the men's and so gathered together and formed the first women's institute in 1897.

THE FIRST WOMEN'S INSTITUTE

"Now, we have in Ontario, nearly 425 women's institutes as a result of that one little institute in Stony Creek. These institutes under the direct supervision of our Government, are supported by the Government and I am free to say that I know of no one society even the missionary societies, that is doing more good than our women's institutes. These institutes start at the very foundation; they start at the home. What goes out of the home makes our country and if we can get our home life better, we have little fear of the country in general. That is why I contend that our women's institutes are doing more good than any other society that I know of."

'THE MEETINGS'

"What do we teach our women? We have our regular monthly meetings. The women gather together, often in the town hall or in some of the homes. There are all the way from six to 100 women and they discuss all problems relating to home life. Ventilation and sanitary conditions always receive attention. Our grandmothers did not need these lessons, because all their ventilation came through the holes in the log cabins. It would be very foolish to go out and talk to such people about an elaborate system of ventilation. They did not need it, but our well built homes, our double storm windows and other comforts that we enjoy,

make it necessary to study carefully the ventilation of our homes. The more crowded we get, the more bacterial growth we have and this makes it necessary to dispose of all waste matter from the kitchen. Men don't think enough of this work. These subjects are thoroughly thought of at our institute meetings.

THE FOOD PROBLEM

"We take up the food problem. We talk about balance rations, not for the cows or pigs, but for the men. Men have been only a secondary consideration. We had to have this matter all studied out for the pig and the cow and after, the Government thought a little attention should be given to man. Many children are starved at tables of plenty because they do not get a proper combination of foods. They are over-fed in some lines and under fed in others. They get too much sweet stuff and not enough of the protein or muscle-building foods. If you feed a lad properly, you also have a better natured child. A child does not have so much sweets when fed in a proper manner. I often feel sorry for the way children are fed when I am at the table and see them. Last summer, I was at a table and there was a little child that could not walk and the father thought that it should be all he did. He gave it meat, potatoes, and all other heavy foods. Thus you can see the need there is of having proper instruction in the care and feeding of children. This is taken up very fully at our institute meetings.

"We study the matter of proper clothing and fuel but probably the nicest feature of our work is that we get the women together. Women of all denominations meet together and in this way, there is a mutual understanding between them.

"Especially in the rural districts is the instance of helping the women. In town, we have many other societies. Our women's institutes know no caste. Any woman who pays 25 cents can be a welcome member of the women's institute."

What One Woman Believes

I do not profess to be a perfect house keeper, but I do believe in making my work just as easy and delightful as possible. If I cannot afford to buy all modern conveniences I try and invent something that will do just as well. We have a plain little home but we seek to make it as real a home as we can.—Mrs. D. J. McClure, Peel County, Ont.

His Wife Must Have It

The Canadian Dairyman and Farming World is good reading. My wife must have it to read. Enclosed please find subscription for one year.

—Walter Bowron, Hamilton, Ont.
Never use hot water to rinse either hands or utensils after preparing onions, as it sets to set the odor. Cold water in abundance will remove the odor.

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THE COOK'S CORNER

Send us in your favorite recipes, for publication in this column. Inquiries pertaining to cooking are solicited, and will be replied to, as far as possible, after receipt of same. Our Cook Book sent free for one new yearly subscription at \$1.00 each. Address, Household Editor, this paper.

Serving the Strawberry

FRITTERS

Sift 1 cup flour with $\frac{1}{2}$ teaspoon salt and 1 teaspoon baking powder. Beat 1 egg till light, add $\frac{1}{2}$ cup milk, and then gradually stir in the dry ingredients. Lastly add 1 cup strawberries and drop by spoonful in deep hot fat, and fry to a golden brown. Drain on paper and serve with the following sauce: Beat together 1 egg and $\frac{1}{2}$ cup sugar; set bowl in a saucpan containing hot water and beat hard while adding $\frac{1}{2}$ cup hot water. When it thickens, remove from fire, and flavor with lemon.

STRAWBERRY FOAM

Mash 1 cup strawberries and press through a sieve. Beat 1 cup cream until stiff. Beat the whites of 2 eggs and gradually beat into them $\frac{1}{2}$ cup powdered sugar. Continue beating until very stiff, then fold in the beaten cream and the strawberry juice. Serve very cold. This is an excellent summer dessert.

STRAWBERRY SPONGE

Mash 1 pt strawberries and press through sieve. Cover 1 oz. clear granulated gelatine with 1 cup cold water and let stand 20 minutes. Simmer to minutes 1 cup sugar and 1 cup water, then add the gelatine, stir, remove from fire, cool, and then beat until it begins to thicken. Add the strawberry juice and beat again, then add 1 teaspoon lemon extract, and set away to become firm.

STRAWBERRY SALAD

This is a dessert salad, and is agreeable to all who like a touch of novelty. Hull 1 pt strawberries, sprinkle with 4 tablespoons sugar, pour over 2 tablespoons orange juice and 1 tablespoon lemon juice. Stand on ice till chilled, and serve with wafers, Currant juice, vanilla syrup, or an equal bulk of raspberries, make delightful additions to this salad, and it is delicious served in scooped out oranges, the orange pulp being cut small and mixed with the berries.—Essie E. Bell, York County, Ont.

An Ideal Cooker

My cooker, compared with the fireless cooker, needs a steady fire. It

is called the Ideal Steam Cooker. My husband bought it at the Toronto exhibition about five years ago, and it is indeed a treasure.

It is made of copper, and not like the tin cookers which rust out in a short time. There are five disks, or layers, in it, making five compartments. The cooker I have is a round one, but I think I would get a square one were I buying another. I have seen a picture of one and think it would be an improvement on the round one.

HOW IT COOKS

The meat cooks beautifully in this cooker. Last summer many of our neighbors complained of their beef being tough. We bought from the same butchers, and their was no fault found with our meat. It always comes out of the cooker tender and juicy, and the soup stock is excellent. Potatoes and all other vegetables also cook perfectly, and no odors escape.

We have a large family party every Christmas—about 25 in all. I cook the turkey in my steam cooker, then lift it out and brown it in the oven. The plum pudding is always a success when cooked in this way. For freshening days, and all kinds of "brees," my stove is not filled up with countless pots and pans; instead, it holds just this one big shining vessel and the like kettle.

The Ideal Steam Cooker might not suit the more fastidious house keeper. One would think that the odors would mix and spoil the different dishes. I have cooked onions and steam pudding at the same time, and one does not spoil the other. This cooker cost me \$8, and is worth many times the price in my home.—Mrs. D. J. McClure, Peel Co., Ont.

Our New Cook Book

We have purchased at a greatly reduced price, a valuable and reliable Cook Book, which we are able to offer to our readers as a premium for the securing of one new yearly subscription for this paper at \$1 each. This Cook Book is nicely bound, and contains several hundred reliable and tested recipes, and much additional information regarding the various processes of cooking. It is a book well worth the efforts of every housewife to secure. Send your new subscriptions, for money for same, to the Household Editor.

Turnips bottled in jackets like beans are much better than if pared. Adding a little sugar to the water will correct any bitterness.



A Croquet Set Free

Nearly every boy and girl in the country is fond of playing croquet, and most of the young folks have a good lawn where they can spread a set of wickets for playing. To each boy or girl who will send us two new yearly subscriptions for our paper, we will send a nice croquet set. This set has 4 balls. We can send a set with 6 balls for three new subscriptions. These subscriptions must be taken at \$1 a year. Send us the money with names and addresses and the croquet set will be sent you at once.

Address your letters to the Household Editor, and get to work soon. Summer is here now, and it is just the time when you want to play croquet, during the long summer evenings. Write us for lists of other prizes.

A Good Record

We are pleased to present to our readers a rather interesting illustration sent us by Mr. J. L. Warren, Halton County, Ont. Mr. Warren



A Young Driver and His Team.

writes as follows: "I enclose \$1 to renew my subscription to The Canadian Dairyman and Farming World. I also enclose a picture of an old team I have, which is 27 years old and my little boy two and a half years old, holding the lines. The wood on the wagon was cut from a tree about 250 years old."

The Summer Boarder

Farmer Sacks.—Here's a letter akin 'n' about board for the summer, an 'wain't' to know is that a bath in the



house. What'll I tell 'em, M'rands? His Wife.—Tell 'em the truth. Tell 'em if they need a bath we'd advise 'em to take it afore they come.

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Kingston, Ontario.

Value of Home-Grown Herbs

By M. M. Sproull.

Near where the roses grow and not far from the kitchen door of a Long Island, N.Y., home, is a tiny plot of ground known as "Mother's Garden." This piece of ground is only four feet square but the pleasure derived from it reaches many miles.

The garden was planted with the idea of gathering together, into small space, all those sweet herbs which delighted the hearts of our great-grandmothers, scented their linens and made savory the dishes they set before their lords.

After handling the fresh-picked herbs, one does not wonder that the

gentle dames reveled in them, and by their judicious use sent their names down to posterity as famous cooks and rigid house-wives of fragrant homes.

THE USES OF HERBS

Between the herbs which one has gathered and dried oneself and those bought in packages, there is the widest possible difference.

Let one have a garden and become accustomed to the fresh herbs and the bought ones will cease to be inviting. Besides, when a turkey is to grace the festive board, the herbs for seasoning are always there. The garden supplies the summer savory, sweet marjoram, thyme—English or French—as well as parsley. If a goose is the order of the day the sage and onions are ready at the door. There is never any scurrying round to find mint to make sauce for the roast lamb. It is always to be had for the picking.

There are other herbs, too—tarragon, dill, coriander, sweet fennel,

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MILLS AT WINNIPEG, GODERICH AND BRANDON

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

rosmary, and, last but not least, lavender, that sweetest of all herbs.

ATTENTION REQUIRED

This garden though small, demands a certain amount of attention.

The mother at whose request the herbs were planted, however, gives but little thought to their care until they are in bud and almost ready to blossom. Then she has a busy day before her. Taking a pair of scissors and a large tray, she repairs to the garden, and spends most of the morning cutting the herbs and laying them in separate piles on the tray. This done, she takes them into the house where they are bunched, tied by the stems, and hung up to dry.

The lavender is treated in quite a different manner from the other herbs. This is laid, while fresh, with the heads of the blossoms all evenly together and tied firmly just below the flowers. The stems are next turned back over the blossoms so as to completely cover them and tied again, forming a small, green ball and leaving the stem ends for a handle. By way of decoration, a small bow of lavender satin ribbon is sometimes tied around the stem ends.

IN FLORENTINE FASHION

The lavender, when bunched in this way, assumes a very much the form of one of the balls over which stockings are sometimes slipped to facilitate darning.

This is the shape in which the Florentines tie their lavender and it is a very advantageous method, for while the sprigs thus bunched retain their fragrance almost indefinitely, the covering formed by the stems prevents the dried blossoms falling and scattering about.

These little clubs of lavender are placed in the drawers of linen closets, where they impart a delicate aromatic fragrance to the house linen.

TIED IN PAPER BAGS

The other herbs, when thoroughly dried, are slipped head first into paper bags, the open ends of which are twisted tight around the stems and tied.

There are many of these bags and on each one is made a note stating its contents, and for whom it is intended. First, there are those for home use, but there are plenty more. Here is one for the little woman who took home a root of sage, hoping it might grow in her city yard. Another is marked for a young friend who, having lived until recently in the country, complains that her city crocer can supply her with no herbs except packed ones, which smell as though they had come out of a mummy case. So "Mother's Garden," though so very small, is a source of pleasure to her friends as well as to herself and all the members of her household.

DOUBLE TRUSS PREVENTS SIDE SWAYING

No disagreeable or dangerous side swaying when milking our Berlin Double Truss Extension Ladders. Double Truss prevents H. Laddens 30 to 35 feet long. Ask your dealer for them.

Catalogue Free gives further information.

Also makers of WASHING MACHINES and LAWN SEATS.

Berlin Woodware Co
BERLIN - ONTARIO

Asked and Answered

Readers are asked to send any questions they desire to have answered. The editor will aim to reply as quickly and as fully as space will permit. Address: Household Editor, Canadian Dairyman and Farming World, Peterboro, Ont.

How can two chessmakers board themselves in a chosen location during the coming summer so that the cost will not be great?—An Inquirer, Ont.

It would be considerably more satisfactory, and almost as cheap, to secure rooms and board at some private house in the vicinity of factory. Good board should be obtained for about \$3 a week. In a frame factory it might be possible to fit up a room that would serve as a bedroom or living room for a single maker. Getting his own meals, etc., however, would be most unsatisfactory, and is a plan that we would not recommend. For married makers it is advisable to erect a small cottage adjacent to the factory. Single men would do better to secure board with a neighboring family.—G. H. C.

Kindly advise how to take mildew stains out of linen, caused by water leaking through a jardiniere?—A Quebec Housekeeper.

Javelle water will be found to be effectual. If necessary, use it undiluted but preferably add water.

What is the best time to plant out hyacinths that have bloomed once in the house?—Jessie Burns, York County, Ont.

Plant them in autumn about the end of Sept., or during October.

What will kill or destroy ants in their hill; what will keep them out of a house, cup-boards, etc.; they seek all boxes containing clay, or newly made garden beds in which to build. How can they be kept out?

HOW TO GET THIS PREMIUM FREE

Send us the name of one new subscriber together with \$1.00, and we will mail you free of charge patterns for a "Baby's First Show Outfit."

It is an easy and simple matter to secure one new yearly subscriber for the Canadian Dairyman and Farming World—Secure one and we will send you this premium FREE.

Description of THE BABY OUTFIT.

No. 1 shows a coat with shoulder cape and comfortably full sleeves that is adapted to all materials in vogue for garments of the sort. To make it fit will be required 3/4 yds. 21, 1 1/4 yds. 44 or 1 1/4 yds. 66 in. wide.

No. 2 shows a practical and altogether desirable little wrapper that can be made from flannel or flannelette and which will be found exceedingly useful to slip on over the nightgown. Quantity of material required 1 3/4 yds. 18 yds. or 1 1/2 yds. 44 in. wide with 1 1/4 yds. of insertion and 1 1/4 yds. of edging.

No. 3 shows a pretty little dress with a pointed yoke. Quantity of material required 2 1/2 yds. 36 in. wide with 1 1/2 yds. wide for the yoke if contrasting material is used, 1 1/2 yds. of edging.

No. 4 shows a little Dutch cap that can be made from lawn, silk or any preferred material and finished with a ruching as illustrated. Quantity of material required 1 yd. any width.

No. 5 illustrates a practical and altogether desirable petticoat that is made with a straight skirt and comfortably fitted waist. For it 1 1/4 yds. of material 36 in. wide will be required.

No. 6 illustrates the best possible style of drawers for the tiny child. They are simply roomy, allowing perfectly free movement while they are present while they are present while they are present. They are made with 1 1/4 yds. of material 36 in. wide with 1 yd. of insertion and 1 1/4 yds. of edging.

No. 7 simply illustrates the under waist that also is shown in combination with No. 5. This premium WILL NOT BE SOLD separately. You can secure it only on the conditions outlined above.

USE THIS BLANK IN REMITTING

Address—THE CANADIAN DAIRYMAN AND FARMING WORLD, Peterboro, Ont.

Enclosed please find \$1.00 to pay for Subscription to the Canadian Dairyman and Farming World for one year, to include as premium the Baby Wardrobe Patterns described above.

Date _____

Name _____

WRITE CHRISTIAN NAME IN FULL

Address _____

(Watch for Next Week's Premiums).

away from these as they are injurious to plants?—A Constant Reader, Walkerton, Ont.

For a reply to your question, read the article on page 11, in our May 27th issue. We might state further that there is nothing better for getting rid of ants than bisulphide of carbon. Pour a quantity into each of the openings of the disks or hill, closing them up by stepping on each as it is treated. The fumes will penetrate the chambers in every direction, and if a sufficient amount has been used, will kill not only the adults, but all larvae as well. A single application is usually all that is necessary; but in a very large colony it may sometimes happen that the farther chambers are not reached by the fumes, and that the nest reappears near by—rarely in the old spot. When that occurs a second treatment is tolerably certain to be effective.

It has been recommended that, to get the best results, holes, be poked with a stick into almost every part of the hill, but I have not found this of any great advantage. It has also been recommended that, after pouring a considerable quantity—say three or four ounces—into the main opening of the nest, the vapor be exploded by means of a match held at the end of a stick. Whoever attempts this, however, must remember that the vapor of the bisulphide is exceedingly inflammable, and must make certain that he is far enough from the opening of the nest to prevent being caught by the flash.

A good remedy for ants in a house is to mix sugar and borax and place it in the cupboards or on the shelves, where the ants are most numerous.

If there is any person to whom you feel dislike, that is the person of whom you ought never to speak:

The Sewing Room

Patterns 10 cents each. Order by number, and sizes. All measurements give age; for adults, give bust measure for waists and waist measure for skirts. Address all orders to Pattern Department.

SINGLE BREASTED JACKET 5300



The pattern is in sizes for a 24, 26, 28, and 30 in bust measure and will be mailed for 10 cents.

MISSIE'S PRINCESS DRESS 5314



The quantity of material required for the 16 yr size, is 9 1/2 yds 21 or 24, 8 1/2 yds 27 or 4 1/2 yds 44 in wide, 5 yds of banding, 1 yd 18 or 21 in wide for chemise and cuffs, sateache according to width used.

The pattern is cut in sizes for girls of 14 and 16 yrs and will be mailed for 10 cents.

BLOUSE OR SHIRT WAIST 5302



The long waisted or Princess style dress is very generally becoming to little children. The little dress is simple and can be made either with or without body lining.

TUCKED FRENCH DRESS 5302

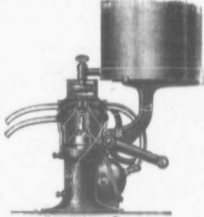


Material required for medium size (4 yrs) is 2 1/2 yds 27 or 32 or 2 yds 44 in wide with 1/2 yd 27 in for the collar, 1 1/2 yds of banding and 3/4 yd of edging. The pattern is cut for girls 2, 4, and 6 yrs of age, and will be mailed for receipt of 10 cents.

A NEW DANISH INVENTION IN SEPARATORS

Has been introduced in Canada Recently and done Excellent Work Under Test. It's Principles Described.

Much interest is being manifested in a new Danish invention in cream separators that is being introduced in Canada. It has been tested at the Manitoba Agricultural College and shown to a number of our leading Can-



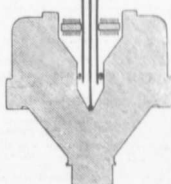
Section of the New "Perfect" Hand Separator
Kendzier's Patent

nadian dairy authorities, and is creating great interest.

It is common knowledge that one of the principal drawbacks connected with all separator systems hitherto in use is their great delicacy with regard to the balance of the cylinder. A slight shifting of the bowl insertion, casual layers of milk mucus in the bowl, a careless treatment of same or its various parts, etc., etc., is quite sufficient to put it out of balance so it gradually begins to shake so violently in the frame that at last it cannot work any longer, but has to be sent to the factory in order to be rebalanced.

That the user under these circumstances, besides having to meet the cost of repairs, is caused loss by the deficient clean skimming and the greater wear and tear of the moving parts, which is a natural consequence of the disturbed balance of the cylinder, is notorious.

Moreover, there is to all existing separators with plate-insertions the objection, that the user also, with

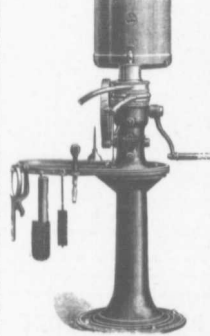


The Principle of the Machine.
Fig. 2.

regard to the balance always has to place the bowl's feeding tube and the plates in a certain fixed order, if the machine is to work at all, which is a waste of time, and tedious, and therefore unpractical and expensive. Therefore, the fact that they need no

longer to be troubled with those considerable drawbacks and the costs occasioned by same deserves the attention of all dairy-works—large as well as small.

The engineer director, Ivar Knudsen, candidate polytechnicum, of Burmeister & Wain, Ltd., Copenhagen, has succeeded in inventing a separator, which is in every sense of the word self balancing, and which has, accordingly, done away with all the above mentioned and all other deficiencies characterizing the other systems. This new ingenious invention marks a new epoch in the development of the separator. Our dairymen have, consequently, every reason to make the acquaintance of this separator. An account of the particulars of the construction and the advantages conferred on dairying through this



The New "Perfect" Hand-Separator
Mounted on Stand

new skimming machine is here given.

A New Feature.

The chief principle and novelty of Messrs. Burmeister & Wain's separator is that the suspension of the cylinder (which is without a fixed shaft) is placed a considerable distance above the centre of gravity, while a small supporting bearing replaces the neck-bearing usually employed is placed in the centre of the cylinder (See fig. 2, which roughly illustrates the principle of the machine). The cylinder is loosely suspended on the end of an upright standing axle, which is likewise loosely connected with the worm, and thus the cylinder rests upon its bottom stop. At the centre of gravity the cylinder is, as already mentioned, supported by a little ball train (with 6 balls), which transfers the oscillation to a tube, supported by a friction plate, sandwiched between two other plates. This friction plate causes that even when the cylinder gives the tube an oscillation, this gives no reaction, as the tube does not move without impulse from the cylinder.

It will be understood from the foregoing, that the bowl can thus freely occupy any position and, therefore, remain perfectly unaffected by even a very considerable side-heaviness.

By way of experiment a power-separator has, for instance, been put at the speed of 4,800 revolutions a minute with about 125 grams placed on the one side of the bowl, without the least vestige of shaking of the frame being experienced, which must be considered exceptional for good.

Other Novelties

The construction of the cylinder itself comprises many important nov-

elties. Thus there are no tubes, which in most cases are difficult or impossible to clean, but open, and accordingly easily accessible, grooves are employed which permit of the most convenient and yet most thorough cleaning. The plates and feeding tube are exceedingly easy to insert, because they are not, as in the case with other plate-separators, to be placed in a certain order, and in a certain way (the plates on other separators are numbered), but may be inserted in any way. The plates are, accordingly, round and without slots.

The most essential advantages of this separator may be summed up as follows:—

1. The cylinder is self-balancing, and remedies every side-heaviness itself, and has, accordingly, never to be rebalanced, and saves the user from the expense and stoppage of work caused thereby, which are so often necessary with other systems.

2. Feeding pipe plates are inserted in any order (the plates being unnumbered), and may be kept in stock as spare parts (which is also the case with other parts of the cylinder).

3. The working is exceptionally smooth, as the friction on the moving parts has been reduced to quite a minimum on account of the self-balancing qualities of the cylinder.

4. The wear is, accordingly, infinitesimal. The consumption of power is exceedingly small; by a 600-lbs. hand separator, for instance; about 0.06 h.p. equal to 45 kilogrammeters per only, i.e., but 15 kilogrammeters per 200 lbs. milk, which is an exceptional result.

5. The consumption of oil is so small, that the hand separators for a couple of hours work requires only 2-3 drops of oil for the direct lubrication of the cylinder, while the power-separators' lubrication for the same purpose, and holding 3-5c oil, need be filled only once a month.

Clean Skimming.

That the clean-skimming, when so many factors tend to its perfection, must be the best obtainable is a matter of course. A circumstance of special interest, which alone is sufficient to illustrate the particularly fine clean-skimming capacity of this separator, is that it is able to clean-skim cold milk. This was one of the special objects in view when the machine was designed.

This separator is considered the best skimming machine ever produced. The foregoing mentioned advantages meet a long lasting desideratum and make it a most valuable and very interesting novelty in the Dairy Machinery line. It has been tested at several places both in United States and Canada, such as at the University of Wisconsin, Madison, U.S.A., Michigan, Experimental Agricultural College, Lansing, Mich., at Ontario Agricultural College, Guelph, Ont., Central Experimental Farm, Ottawa, and the Government Agricultural Col-

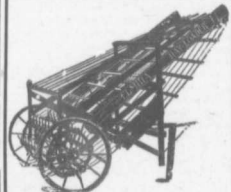
lege in Winnipeg, and at all places the results of the tests, especially where cold milk was used, have reached a degree that anything like it has never been known before. This separator will be shown at the Calgary and Toronto exhibitions this year.—Adv't.

Stock Car going West

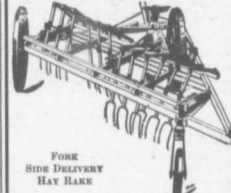
In our last week's issue, mention was made that the association car of pure bred stock was expected to leave for the West about Wednesday, June 17th. After we had gone to press, we received notice from the director, Mr. A. P. Westervelt, at Toronto, that their arrangements had been changed and that the car would leave a week earlier.

"Essentials in road-making: make the bottom, see that it is tile-drained if necessary, then make the ditches and then have a uniform drop to the ditches."—Commissioner A. W. Campbell, Toronto.

FARMERS' LOOK



We are the oldest makers of Loaders and Side Rakes in Canada. If we have no agent in your neighbourhood write us direct for prices.



Can also supply Rotary Side Delivery Hay Rake, equipped with 7 adjustable castor wheels. Write To-Day

Elmira Agricultural Works Co., Ltd.
ELMIRA, ONTARIO

The SUCCESS MANURE SPREADER

OLDEST
NICEST WORKING
BEST WORK
LIGHTEST DRAFT
MOST DURABLE



The "Success" has the largest rear axle and strongest drive-chain of any spreader made. It is the only machine with Baker frosting-device and many other points covered by strong patents. Our catalogue tells all about it and gives much valuable information for farmers. Write for it.

MANUFACTURED BY

The Paris Plow Co., Limited.

WESTERN BRANCH:
WINNIPEG, MAN.

PARIS, ONTARIO.

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

MARKET REVIEW AND FORECAST

THE TRADER BANK OF CANADA
INCORPORATED 1895
75 Branches in Canada—Correspondents all over the world

Make This Your Bank

Let us collect and discount your Sale Notes.
Let us advance the money to buy Feeding Cattle and Hogs, Seed Grains, etc.
Let us issue Drafts and Money Orders to settle your foreign obligations.
Let us safeguard your Savings, on which we will pay 3% interest.
Come to us for advice on any financial matter. Make this your bank.

One of the 75 Branches of this bank is convenient to you.
Your account is invited.

Toronto, June 8th, 1908.—Trade conditions have improved considerably the past week or two and the feeling is more buoyant and hopeful. The whole mercantile situation generally shows signs of better times. The prospect of a big crop in improving things in the West and Eastern houses are experiencing an increased demand from that part of Canada. While there is more money available, rates have not lowered any. The improved business situation has created more demand for money and banks are not lowering rates.

WHEAT

The wheat situation is much weaker than a week ago and local quotations are below 80c at outside points. The prices are 87c to 89c with no buyers. On Toronto farmers' market fall wheat sells at 92c to 95c a bushel. There is a strong bearish feeling in the speculative market.

At the end of the day

"You can shoot SOVEREIGN shells all day and at the end not realize that you have been shooting, as the recoil is so slight," said an expert shot the other day. They have small breech and barrel pressure and give off no offensive gases, because loaded with Empire smokeless powder.

For all makes of arms. Costs one-third to one-fifth less than day buying ammunition. Our cartridges put all risk on the Dominion Cartridge Co., Ltd., Montreal.

DOMINION AMMUNITION

HOLSTEINS

We must sell at least 25 cows and heifers as one, to make room for the natural increase of our herd. This is a chance of a lifetime to get a good bargain; we also have a few young bulls. Postler Herman, Imp. son of Henderson Dekol world's greatest sire, head of Herd Com and son them.

H. E. GEORGE
Putnam Stn. 1 1/2 miles—C.P.R. 2547

BROOKLAND HOLSTEINS.

FOR SALE—Two bull calves, sired by the grandly-bred imported bull Manor Kornedy Wayne, whose dam and sire's two dams average 220 lbs. 14 one of milk and 14 lbs. one of butter in 7 days. The dams are also imported from high class breeding. For full particulars write

J. W. McCORMICK,
Merewood,
Dundas Co., Ont. E-624-08

NEIL STANGSTER

Breeders of Holstein-Friesian cattle of high-class merit. Write for prices of best sires. Write for prices

SUNNYDALE HOLSTEINS

Keyes Count DeKok (3502), also bull calves by such noted sires as Keyes Count DeKok (dam record 1944 lbs. milk, in one year, 20% in butter in 7 days), and Dutchland Sir Hengerveld Maplecroft, with 71 half sisters in official record; also from officially tested dams. Prices right.

A. D. FORTER,
Bloomfield, Ont. E-428-09.

SPRING BROOK HOLSTEIN AND TAMBORTH—5 young sires in farrow to imp.

Knows King David, 2 hours ready for service, Spring sitters by Imp. boar. Offerings in Holsteins: 1 bull, 11 milk calves, and a few females. My Motto, "Quality."
A. C. HALLMAN, Brestan, Waterloo Co., Ont. E-511-09
Salem C. Bull, Sale 5 years old, two cows and two yearling bulls. One Tamworth and one prize for particulars. SAKVELI LEMON, London, Ont. 0-400

At Chicago on May 30 wheat was quoted 35 1/2 c bushel higher than on June 1st. The speculative has been strong this season, and has so manipulated the market that the legitimate trader hardly knows where he is at. Cables are lower and the general trend is towards lower values. The United States crop report, which will be issued this week, is expected to have a beneficial effect upon the market. The Canadian crop of 1908 gives every promise of being a record one. The estimated yield of wheat in the three North-West provinces is 130,000,000 bushels or nearly one-half as much again as the yield of 1907. Of course predictions at this early date cannot be altogether banked on. The crop outlook just now, however, is better than it has been for a number of years in Western Canada. In the East conditions are also very favorable.

COARSE GRAINS

The oat market is easier and lower. No Canadian are the western and local trade is depended on. At Montreal things are quiet and the market easier, prices ranging from 52c to 53c to quantity. Manitoba rejected are quoted at 40c to 40 1/2 c a bushel. Here quotations are 40c to 40 1/2 c outside and 52c to 53c on the farmers' market. Barley quiet here at 57c outside. At Montreal malting barley sells at 62c to 63c a bushel. The pea market is firm. Quotations are 47c to 50c on this side; and over \$1.00 a bushel at Montreal.

FEEDS

The market for bran and shorts shows no change. Bran is quoted here at \$22 1/2 a ton in car lots. At Toronto, Montreal stocks are scarce and a good demand continues. There is more liberal offering from the West. However, dealers are not inclined to stock up. Manitoba flour is quoted there at \$23 in bags and shorts at \$25 to \$25 1/2 a ton in bags. Ontario bran is quoted at \$22 to \$23 a ton in bags, and middlings at \$24 to \$25. Although the Chicago corn market is lower and there is more offering, quotations here rule at this same at 80c to 81c, Toronto freights. This price is too high for feeders. Car lots of feed wheat are quoted at Montreal at 74 1/2 c and No. 2 at 69 1/2 c a bushel. Manitoba feed barley sells there at 56c to 57c a bushel.

HAY AND STRAW

There is a scarcity of choice grades of hay at Montreal and prices for these continue firm at \$15 to \$16 a ton in car lots. But the supply of lower grades is large and these are offering at lower prices. It is hard to get \$10 a ton for these lower grades. Some Canadian hay is being exported and cables are reported steady. Dealers here hesitate about giving quotations, owing to the period of declining prices, through which the market is now passing. Timothy is quoted at \$11 to \$12 for car lots on the West. Toronto, and baled hay and baled straw at \$8 to \$9 a ton. In Toronto farmers' market loose timothy sells at \$12 to \$14; clover at \$8 to \$9; loose straw at \$7 to \$8; and straw in bundles \$11 to \$13 a ton.

EGGS AND POULTRY

Receipts of eggs are increasing and there is a tendency to advance values, though quotations show little change from those of a week ago. East of Toronto last week dealers were paid 20c for eggs. In West, on Ontario, straight gathered stock are offering at Montreal at 18c a dozen. New laid sell here at 17c to 17 1/2 c in a jobbing way. On Toronto, the market new laid sell at 15c to 20c a dozen. Dressed chickens sell at 17c to 20c; spring chickens at 80c to 90c; turkeys at 15c and turkeys at 22c to 25c a lb.

FRUIT

The indications are for an all round good fruit crop this season. In the West, some sections of orchards give promise of a big yield. A gentleman from that district told the writer last week if one could look up the developments into a full grown peach there will be a good crop. The same may be said of other fruits. Apple orchards are in full bloom and a splendid bloom and this crop will likely be a bumper one. Dealers "will likely get a little less than last year, but many of them were hard hit with the crop of 1907 and will be a little more cautious this season."

DAIRY PRODUCTS

Receipts of cheese show considerable increase. They are still behind those of

any improvement in the export market, last year to date. Pastures are in excellent condition and much better than they were last year at this time. Cows are milking well under these improved conditions but the number in milk places is considerably below that of last year, so that the make is not likely to be as large as was expected. There is a dullness about the English market which that is hard to account for. No old stock of any account was on hand when the season opened and the new make about considerable falling off and yet there is not the activity in the market that other years have shown under similar conditions. The consumer in Great Britain is not buying as much cheese as he did a year ago at this season, and consequently there is not the demand. It may be that the lower values of bacon is having something to do with this. In any case, the condition and until it changes, the market will remain pretty much as it is. The market on this side is quiet. Montreal quotations are 11 1/2 c to 11 3/4 c for Western and 10 1/2 c to 11c for Easterns. At the local cheese boards during the week past have ruled a little higher than a week ago. Towards the end of the week sales were about 15c with some rates reported as high as 11 1/2 c for whites and 11-11 1/2 c for colored. Some sales were made at Western Ontario markets at 10 1/2 c.

Butter prices have not receded much since last writing. There is a feeling, that they have about reached the bottom for this season and will continue at that or present level for some time. Exporters claim that they are not low enough yet for the probable export. The Toronto 25 1/2 c lb. seems to be the basis the trade wants for export and the market may have to come down to this level if stocks increase very much. From 21 1/2 c to 22c are the prices at Montreal for choice creamery. At Huntington, Que., on Friday salted creamery sold at 21 1/2 c. The Toronto 25 1/2 c lb. is lower. Creamery prices are quoted at 21c to 22c; solids at 19c to 20c dairy prices at the rate of 19c to 20c to 20c a lb. On Toronto farmers' market dairy butter brings 19c to 20c a lb.

WOOL
There are more active conditions in the wool trade and more regular quotations are available. At country points dealers are quoted 7c a lb. for unwashed coarse fleeces; 8c for fine, and 12c to 15c for washed.

UNION STOCK YARDS HORSE EXCHANGE

Trade was a little stiffest work, the offering was light, and the quality rather inferior. Trade keeps brisk for good wagon horses and drivers, but for heavy weighters offering. Dealers find it hard to buy horses in the country. Farmers are not so sure of the holding as prices at which there is no money in the business for the buyer. One dealer at the market last week spoke of several horses and one of the district looking up horses and all he could get were four, for which he paid prices that would bring him little profit when he comes to sell them. The district selected team of black ponies sold on Monday's market at \$250 for the pair. For other classes last week's quality was good.

THIS WEEK'S HOG PRICES

The Wm. Davies Company, Toronto, will pay \$5.90 f.o.b. for hogs this week. This is an advance of 10c net. over last week, and is due purely to competition among local packers for hogs and not to

They report conditions in the English market bad. The Danish killings last week totalled 40,000. The "Trade Bulletin's" London cable of June 4th is a little more encouraging. It reads: "The market is firmer and higher, arrivals under light stocks and with a demand from Denmark lighter."

LIVE STOCK

The run of live stock last week was large. On Tuesday last 2,260 cattle were on the city market, and 1,870 hogs. The quality of the cattle showed some improvement. There were more good catted live stock last week on Toronto market than at any this season. The number of first-class butchers cattle offering early in the week was a little more than there was a demand for, with an easier feeling, though the situation improved towards the end of the week and prices ruled firm with a brisk demand. The action of the packers in buying subject to inspection does not appear to have affected the market.

HUME FARM AYRSHIRES

Our 1908 importation has landed, consisting in females of 3 year olds, 2 year olds, yearlings and calves. In bulls, yearlings, and calves, dams record up to 1,100 lbs. milk in Scotland. We also have a cow from our Record of Merit cows and others. Females, any desired age, either imp. or home-bred. Come and see our herd. Phone in residence, Horden Station, G.T.R. E-103-08
ALEX HUME & CO., Menie P.O.

NEIDPATH AYRSHIRES

Bull Calves dropped this spring. By imported Bull list prize Toronto, Ottawa, and Halifax. Long distance Phone, W. BALLANTYNE, Stratford, Ont. e-4-09

SPRING BROOK AYRSHIRES.

are noted for being large producers of milk, getting high in butter fat. A few bull calves, also a few heifers, with the stock bull, Crown Prince of Leinster (1906) imp., for delivery July 1st. Write for prices—W. STREFFEL, Huntington, Que. E-115-08

STONECROFT STOCK FARM

Harold M. Morgan, prop. Ste Anne de Bellevue, Choice young Ayrshire Bulls and Heifers for sale. Also Yorkshire and Imported Sires and Dams, February and March delivery. Largest selection. Highest quality. Write for prices. e-6-09 E. W. Bjorkeland, M.p.

THE SUNNY SIDE HEREFORDS

FOR SALE—A choice herd of 10 heifers and 10 bulls, 10 to 24 months old, at bargain prices; also a Yorkshire pig, male, side, and bred again, can be spared. E-2-09

M. H. O'NEIL,
Southdale P.O.

THE HOMESTEAD HERD OF ABERDEEN ANGUS CATTLE.—Present offerings: 8 months old bull, sire a Toronto champion, also cows and heifers of the choicest breeding. Must be sold to make room, as prices will surprise you. Write for prices. W. M. ISCHE, Proprietor, Springville, Ont.

Salem Herd of Shorthorns

is headed by the champion Gift Victor (Imp.) Cattle of all ages for sale.

J. A. WATT
E-10-08

ELORA STA., G.T.R. & C.P.R. SALEM P.O.

Buchanan's
Self-Compressing
Long Sling



—the result of 33 years experience in making Pitching Machines. Consists of three slings and sectional pulley for drawing ends together. Easy to operate, quick to work, and exceptionally strong. We make all kinds of Pitching Machines—Swivel Carriers and Triples, Slings, Harrows Forks, etc. Write for catalogue.

M. T. BUCHANAN & CO., INGERBOLL, Ont 2

very seriously. Early in the week trade was a little draggy on this account.

The export demand for choice, well-finished steers continues good. Steers of prime quality sold during the week at from \$6.10 to \$6.35 a cwt. Medium exporters ruled a little easier, but sold at \$5.75 to \$6, and export bulls at \$4.50 to \$5.25 a cwt.

Prime lots of butchers' cattle sold at \$5.70 to \$5.90; loads of good cattle at \$5.30 to \$5.60; medium, \$5 to \$5.25; common, \$4.60 to \$4.80; cows, \$3.50 to \$4.75; and canners, \$2 to \$3 a cwt.

The market for feeders and stockers ruled steady and quotations show little change. They are: good steers, 100 to 1100 lbs. each, \$4.75 to \$5; good steers, 900 to 1000 lbs., \$4.25 to \$4.75; good steers, 800 to 900 lbs., \$3.90 to \$4.25; good steers, 600 to 900 lbs., \$3.25 to \$3.90; and light steers 400 to 600 lbs. each, \$3 to \$3.25 a cwt.

Sheep and lambs are easier and prices are lower. They sold last week at \$4.50 to \$5 a cwt. for export ewes; \$3.50 for rams, and \$3.50 to \$5.50 a cwt. for yearlings. Choice grain fed yearlings would bring more money. Spring lambs sold at \$3 to \$5 each.

Trade at the Buffalo market has been slow also. Quotations there are: lambs, \$5 to \$6; yearlings, \$5 to \$5.25; weathers, \$4.75 to \$4.90; ewe, \$4 to \$4.25; and mixed sheep, \$3 to \$4.50 a cwt. The hog market ruled steady at last week's quotations which were \$5.75 f.o.b. at country points and \$10.00 at city and waterfront, Toronto, for selects, and \$5.75 for lights. At country points the quotations are the same for both kinds, the drovers making no distinction when buying. This should be remedied. When no distinction is made between selects and lights and fats there is no inducement for the farmer to produce the best, or the kind the packers say they want for the export bacon trade. It is to the credit of our farmers, however, that notwithstanding this lack of discrimination in buying the quality keeps up to the high level it does. There have been few complaints from packers recently regarding the quality of the hogs they are receiving. The farmer is keeping up his end so far as the quality is concerned and should receive more encouragement from the buyer. If hogs were sold and marketed in open competition the same as horses, cattle and sheep, quality would count for more than it does.

THE CROWN BANK
OF CANADA

AUTHORIZED CAPITAL, \$2,000,000.00

Special attention given to the business of Farmers, Cattle Dealers, also the accounts of Cheese Factories and Creameries. Sales Notes discounted. Money Orders issued payable at any banking town. Farmers' Notes discounted. Money loaned for grass or stall-feeding cattle. Municipal and school section accounts received on favourable terms.

SAVINGS BANK DEPARTMENT

Deposits of **One Dollar and Upwards** received and interest compounded 4 times a year.

Prompt attention given to the collection of Farmers' Sales Notes.

EXPORT BUTTER AND CHEESE

Montreal, Sat., June 6th.—There has been more doing in cheese this week, and as a consequence the market is closing with prices decidedly firmer, and with an active demand at all the country boards for the offerings on sale at the end of the week. Prices at country points this week opened easy at about 19 1/2c, but on Thursday at Brockville the market was rushed up to 11 1/2c, and this seems to have set the pace for all the other boards on the same day and during the balance of the week, and in some cases as high as 11 1/2c a lb. was paid, the bulk of the cheese selling at over 11c.

The receipts are increasing steadily, though the quantity is still behind last year. Shipments this week showed a decided increase over last week, and the market is closing with practically nothing left over for shipment next week. Everything points to a steady market for a few days, but with increasing receipts we should have easier prices by the end of next week unless there is a further increase in the demand from the other side, which is not considered likely at present prices.

The butter market is firm with a good demand for local trade for immediate consumption and also for speculative purposes. We have also experienced a demand from England for export, and several hundred packages were shipped this week. If prices declined another cent a lb. we should have a good demand from England for our butter, but it is still too low to bring them on to any extent. The country markets at the end of the week are ruling slightly higher than at the beginning of the week, this advance, however, is not likely to be maintained in the face of the rapidly increasing receipts.

MONTREAL HOG MARKET

Montreal, Sat., June 6th.—The market here for live hogs is practically unchanged from last week. Supplies coming in have been fairly large and we have experienced a good demand for them from all sources, and sales for selected lots weighed off cars have been made at prices ranging from \$6.65 to \$6.75 a 100 lbs. weighed off cars.

There is a good trade doing also in dressed hogs, and fresh killed abattoir stock is selling freely at \$9.25 to \$9.50 a 100 lbs.

GOSSIP

A SPLENDID SHORTHORN SALE

The sale of Shorthorns held by John Dryden & Son, Brooklin, Ont. on June 5th was a successful one. The quality of the offering was the best both in individual merit and in breeding. The animals were presented to the buyer in AI shape. It would be surprising if this were not the case. All the live stock at Maple Shade are always kept in fine condition at all seasons. Messrs. Dryden & Son can set a good example to breeders in this regard. An animal in their care gets every opportunity to do its best. They know good

HEAD OFFICE:
Toronto, Ontario

**You shake down the ashes
—not the coal—in the
"Hecla" Furnace**

There are
four
grate bars
in the
"Hecla"



Each
one can
be
shaken
separately.

You don't have to shake the whole fire to get out the ashes around the edges of the firepot.

You don't shake down a lot of good coal with the ashes.

You don't have to use a poker at all.

The "Hecla" Triangular Bar Grate allows you to shake just the part of the fire where the ashes are, without disturbing the rest of the coals.

Naturally, one grate is easier to shake, than four all geared together. That is why people find the HECLA "no trouble to look after."

Fused Joints—a patented "Hecla" feature—keep the house free of gas, smoke and dust.

Write for free copy of our new catalogue which describes these and other special features.

Clare Bros. & Co. Limited, Preston, Ont.

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

Shorthorns and how to feed and fit them. Nothing is overdone, and here is where the skill of the breeder and feeder is shown.

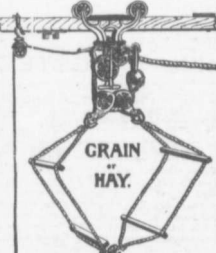
On the whole it was one of the most successful shorthorn sales ever held in Canada and averages coming in with the big sales of the United States. Several of the animals would have brought much higher prices there but the sale average ranks high. The forty-four animals averaged \$216.00 each. Only one animal, a young bull, was withdrawn, which speaks well for the demand for good Shorthorns and the straightforward manner in which the sale was conducted. It is gratifying to know that all the high-priced ones did not go out of Canada.

BELVOIR'S HERD TO BE SCATTERED

The Belvoir herd of Shorthorn which is advertised in this issue to be dispersed by auction at Delaware, on June 22nd, was established in 1870 by importations from England, and the United States of the best Bates and Princess females procurable. The 2nd Duke of Aldrich was then put at the head of this herd at a cost of \$2,500, being sold again at five years old for \$4,000, and again at ten years for \$10,000. Some years ago, Mr. Richard Gibson sold 20 females in Chicago for \$20,000. For several years such noted Scotch sires as Scottish Archer, Lord Chancellor, and later, the Crickshank Lavender bull, Tay Locharis, Imp., have been used in this herd.

Anyone wanting to put a sire into his ordinary herd that will produce profitable steers, as well as deep milkers, we think will make no mistake in attending this sale. For the man that thinks of stocking a select herd of Shorthorns, no doubt now is an opportune time to do it, when prices are below par. Just as sire as well in Shorthorns and they will be gilt edge property in the near future. When you write for catalogue, etc., kindly mention this paper. Mr. Gibson will freely tell you anything you want to know about his herd and you can rely upon what he says.

All Eyes are On this Invention
Tolton's
Fork and Sling
Carriers
The Favorites of Them All
Unequalled for Simplicity,
Durability, and Efficiency.



Thousands now in use, giving the best of satisfaction. All kinds of Slings, Forks and Carriers, suitable for wood, red or steel truck. Send for descriptive circular, or see our agent.

TOLTON BROS., L
GUELPH,



Big Fortunes Are Being Made In Minnesota Iron Lands

Yes. Not only big fortunes but little ones. The smaller people are getting a "show" at the great profits. Farmers, merchants, and others who have money in the iron-bearing lands of Crow Wing County, Minnesota, are getting profits in cash that exceed their fondest hopes. These iron-bearing lands are money makers for those who take out ore. They are situated in the Cuyuna Iron Range which lies along the Northern Pacific Railroad between Ironwood and Brainerd.

Some Old Sections

Though \$1,500,000 in dividends were distributed this year to the stockholders of only one company in Northern Minnesota, still the indications are that the iron-ore in older sections is getting scarcer and scarcer every year. New mines will have to be opened in greater numbers than before in other sections.

Your Opportunity—Our Proposition

This then is your opportunity. Many consider it the chance of a lifetime. We control a quantity of iron-bearing land in Township 46, Range 20, Crow Wing County, Minnesota. It is but 3 1/2 miles from Deerwood, a town on the

Northern Pacific Railroad between Duluth and Brainerd.

A Rich Strike Nearby

A short distance North of this property a prominent ore company has sunk a shaft and is now mining. In every direction drills have disclosed valuable finds of iron ore. Within 80 rods of this land drills have blocked out forty million tons of iron ore. The above ore company referred to has offered to supply us with money and take half the profits. We prefer, however, to develop it ourselves and divide the profits among those who invest with us in this valuable land. Consequently, we believe it will be an excellent opportunity for you to receive good dividends on your investment.

We are an organized corporation, capital \$100,000. The price per share is \$100 each. Our prospectus and other literature give full description of the property with pictures, guarantees, references, map, and everything that it is possible to put on paper which reflects an honest, straight-forward and reliable investment.

As to these lands will we repay you. Send for above prospectus quick, and ask us any questions if you feel inclined to. We will give you an honest, straight-forward answer.

IRON PRODUCING LANDS CO.,

822 Bank of Commerce Bldg., Minneapolis, Minn.

Money of Pure Bred Stock

Premiums Offered by The Canadian Dairyman and Farming World

Many energetic persons during the past year have obtained one or more of the following premiums:

Do you not think that a little hustling on your part would well repay you?

Why not commence work now—to-day?

READ THIS OFFER CAREFULLY:

PURE BRED STOCK

We will give a setting of eggs, of any of the standard varieties of swine, for only two new subscribers.

A pure bred pig, of any of the standard breeds, from six to eight weeks old, with pedigree for registration, for only seven new subscribers, at one dollar a year.

A pure bred Ayrshire, or Jersey bull or heifer calf, with pedigree for registration, for only thirty new subscribers, at one dollar a year.

A pure-bred Holstein heifer calf for forty-five new subscribers.

CASH PRIZES

If you do not desire to take advantage of any of the foregoing offers, we will give the following cash prizes:

\$1,500 for only 1,000 new subscribers secured. Write to the Circulation Manager for Full Particulars

within a year from the time you start work, at only one dollar a year.

\$1,200 for 800 new subscribers.

\$1,000 for 700 new subscribers.

\$900 for 600 new subscribers.

\$700 for 400 new subscribers.

\$500 for 200 new subscribers.

\$300 for 100 new subscribers.

\$200 for 50 new subscribers.

\$100 for 25 new subscribers.

\$50 for 10 new subscribers.

All the subscriptions must be new and for one year at a dollar a year each. We positively guarantee to pay the prizes mentioned.

Smaller cash prizes are offered for smaller lists. If you are interested, write us for sample copies, and fuller particulars. Now, while circulation sales are numerous, is a splendid time to secure clubs of new subscribers. Remember that The Dairyman and Farming World is the only purely farm paper in Canada published weekly for one dollar a year.

Write to the Circulation Manager for Full Particulars

The Dairyman and Farming World
PETERBORO, ONT.

EVERY FARMER NEEDS

A
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JACK-OF-ALL-TRADES ENGINE



They will Pump Water, Thresh, Grind Feed, Turn Separator, Churn, and make life easier.

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I.H.C. BINDER TWINE

1 LB.

1 LB.



STANDS EVERY TEST

IT HAS FULL LENGTH, FULL STRENGTH AND EVENNESS OF STRAND

It may be that you are one of the 500 feet of good, serviceable twine, and that is what he will get if he buys International twine. Farmers receive full value when they buy International twine.

International Harvester Company twine is guaranteed to be full length and full strength. Every Canadian farmer who used this twine last season knows that every pound complied with the government's inspection requirements.

While it is true that "a pound is a pound of weight around," it doesn't logically follow that the average length of a pound of sisal twine measures 500 feet. It should, and the farmer who uses a pound

Bear in mind that the brands of Deering, McCormick and International twine are guaranteed to average as follows:

Sisal,	500 feet per pound
Standard,	500 " " "
Manila,	600 " " "
Pure Manila,	650 " " "

Call on the local agent and have a talk with him concerning these brands of twine or write nearest branch house for further information and the farmer who uses a pound

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