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FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

JUNE 23,

1910.



A WELL PRUNED APPLE TREE IN ONE OF THE DEMONSTRATION ORCHARDS

Some most remarkable transformations have been worked by pruning in the demonstration orchards, near Collingwood, Ont., under the supervision of the Ontario Department of Agriculture. Full particulars of what has been done are given in the article on page 3 of this issue. The illustration shows one of the trees in Mr. Owens' orchard, Duntroon, after it had been pruned by Mr. W. F. Kidd, of Simcoe, the man who may be seen holding the saw. Next to Mr. Kidd may be seen Major J. A. Currie, M.P., and beside him Mr. W. J. Owens. Before and after scenes of this same tree are given on page 4.

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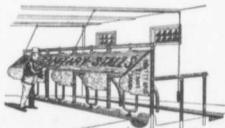


FIG. 200

The "BT" Lifting Manger.

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Seed Branch Extension Work

Every year should add to the sum total of our information about the different farm crops. A very effective way in giving such information is through personal touch. The District Representatives in Agriculture of the Ontario Department of Agriculture have demonstrated this fact beyond the question of doubt. The Seed Branch of the Dominion Department of Agriculture, under the direction of Seed Commissioner G. J. Clark, has adopted this idea in authorizing the selection of about 25 competent men in each of as many counties to visit the farmers on the side lines, and concessions and discuss with them the best methods for producing pure small seeds such as alfalfa, red clover, alsike and timothy.

Some reasons for such a line of policy may be had in the facts that: 1st, more farmers every year are demanding a pure supply of good seed; 2nd, seed merchants are finding it increasingly difficult to supply this seed and make a profit, as so much weed infested seed is marketed that the tare is so great that it makes it unprofitable to clean it so that it will meet the requirements of the law; 3rd, the dumping ground they once had for such seed is being gradually closed to them, in that "Uncle Sam" in many States is passing seed laws similar to our own; and 4th, in importing seed there is always danger of bringing in new weeds and adding to our weed troubles.

A VALUABLE TRADE.

This trade in small seeds is a most valuable one to hundreds of Ontario farmers, and they should not let it slip from them. We should double our efforts to hold it, and we can hold it if only very simple and ordinary precautions are taken. It will be the work of the Seed Branch agents to discuss with the farmers how this may be done.

There is a growing opinion that the seed law should be amended so that the grades 1, 2 and 3 and rejected might be defined to enable all purchasers of seeds to know just where they stood when buying seed, and the opinions of the farmers will be taken on this suggestion.

It is not expected that all the farmers who are growing seed this year can be reached in the three weeks from June 20th to the middle of July, when these men will be out. It seems the most opportune time of the year for such work as the field which is calculated for seed may be visited and valuable suggestions offered as to how the crop may be handled to make it comparatively free from the bad weed seeds.

Through the agency of the rural phones it will be possible to call together at one farm five or six neighbors who are growing seed and discuss the matter with them collectively. Some literature treating on the subject will be left for distribution, and in this way it is hoped that the message of these agents will be greatly multiplied.

If the work proves beneficial and leads to results such as farmers who produce seed, taking more pains to sow clean seed on a clean chance and follow that up with the necessary weeding in the field, and we believe it will, then it is possible that the work will be extended another year.

COSTLY EXPERIENCE.

It may be said that last year more farmers learned what ribgrass or buckhorn seed in red clover was than ever before. Those who had it in quantity in their seed either could not sell it, or they had to take a very low price for it. This led to a better acquaintance with the cause for this. It is expected that a large number of these farmers will learn that the plant looks like, as the seed branch agents will be prepared to go to the field and point out such weeds as if left will contaminate the crop.

Ragweed, catchfly, bladder campion and others of more or less frequent occurrence in the small seeds will also be dealt with.

Besides this these agents will collect some information for the Conservation Committee on schedules prepared by the committee.

It is expected that in this way as much help will be given to the production of pure small seeds as has been given to the cereal crops through the field crop committee, which has been going on now for four or five years.—T. G. Raynor, Seed Branch, Ottawa.

Items of Interest

The efforts of the council of the United Counties of Northumberland and Durham, assisted by the Board of Education, and citizens of Port Hope, have resulted in the Ontario Government deciding to start an agricultural class in the town of Port Hope next fall. It is understood that another branch office of the Department will be opened in Lambton County.

A most successful picnic was held at Mr. J. H. Garbutt's farm, Peterborough, Ont., on Friday last on the occasion of the annual meeting of the West Peterboro Farmers' Institute. The Women's Institute of Lakefield attended. H. C. Duff of Norwood and Mr. Simpson Rennie of Toronto gave practical addresses. The outing should do much to revive interest in the Farmers' Institute.

Applications from 50 different districts throughout Manitoba had been received up to June 8th by the Provincial Elevator Commission for the erection of grain elevators. The commission has a staff of 12 experts on the road investigating elevator facilities and possible sites for public elevators. It is expected that in a short time applications will have been received from 60 per cent. of the grain growers of Manitoba for the installation of public elevators at principal points in the province.

The United Counties' Council of Durham and Northumberland at their June session endorsed the scheme of the deputation that waited upon the Government. February last, with a view to getting the waste areas of the united counties reforested. The Council is still hopeful, and believes that although the Government is moving cautiously and slowly in the matter they will in the near future make some move and that being the first to make the request, Durham and Northumberland will receive first consideration.

According to the report of the National Transcontinental Railway Commission 63 per cent. of the grading on the whole line from Moncton to Winnipeg is now finished and 60 per cent. of the bridging. During the year, 521 miles of track were laid, the total track mileage on March 31, totalling 700, with an additional 165 miles of sidings. Steel is laid on about half of the distance from Moncton to Winnipeg. Construction work is being vigorously pushed this summer on every section of the line, and it is expected that the road will be ready for through traffic in August or September of 1912. The line from Winnipeg to Fort William will be opened for regular traffic next August. The total expenditure on the road up to the end of the fiscal year was \$71,137,993.

Red Clover Seed.—The Seed Commissioner, J. H. Clark, advises farmers who have not sold all the first cut of early red clover as soon as possible after June 20th, and thus provide the best conditions for a good second growth for seed crop. The best way to clean clover, he says, is to pull the weeds before the crop is harvested. The increased market value of the seed will more than pay the labor outlined.

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THE POSSIBILITIES OF APPLE GROWING BEING DEMONSTRATED

Illustration Orchards Have Been Established in the Georgian Bay District, Ont. Natural Conditions Most Favorable to the Production of Apples. Trees Sadly Neglected. A Solution of the Situation

WONDERFUL possibilities lie before the apple growers of the Georgian Bay District. It is the home of the Spy. Other valuable commercial sorts as well as all seem to be especially adapted to the prevailing soil and climatic conditions. The rank and file of orchardists in the district, however, heretofore, as outlined briefly in Farm and Dairy last week, have not been alive to their opportunities in respect to apple growing, and while there is on practically every farm from one to 10 acres of orchard, the trees have been



I. F. Metcalfe

neglected until they are in a sad state and quite incapable of returning fair profits until placed under better management.

AN ERA OF AWAKENING.

The district, so far as apple growing is concerned, is now entering on an era of great awakening. The possibilities of the apple orchards are being proved in a most practical way by means of demonstration orchards. The township of Nottawasaga, which is in Simcoe County, and borders on the Bay, has been organized by the district representative of the Ontario Department of Agriculture, I. F. Metcalfe, B.S.A., and six orchards, located at advantageous points, have been selected for the work of demonstrating to the fruit growers how to prune, spray and cultivate their orchards. It is expected ultimately to show that there is a remarkably good profit in orchards when properly managed.

The orchards selected for the work of demonstration are all located on main roads. Large signs draw the attention of all passers by to the work that is being done. The remarkably improved appearance of the orchards since they have been renovated and the practical demonstrations in pruning and spraying in all of the six orchards to which the farmers were invited, have aroused great interest. The work so far has included scraping, pruning and spraying the trees, and manuring and cultivating the orchards. Shortly the orchards will be seeded down to some cover crop, which will check the growth of the wood and allow it to mature before the cold weather of winter must be endured. Three sprayings in all will be given during the season. These, it is thought, will be sufficient, since there is only one

brood of the codling moth in this northern district. With the exception of one of the orchards where part of the trees were sprayed with Bordeaux, commercial lime-sulphur diluted one to 40, and arsenate of lead, three pounds to the barrel, is the spray mixture used.

NOTHING COMPLICATED ABOUT THE WORK.

The spray outfit used for demonstrating is of a very ordinary kind. The wagon and tower were fitted up by the owner of one of the orchards; the outfit is such as any farmer might make for himself. The work is being done in the simplest manner possible, and materials in their most convenient form are being employed. Afterwards, if the farmers of the district care to go into spraying on a wholesale plan, the home-made spray preparations will be given a trial.



Some Effects of the Influence of the Orchard Demonstrations

This illustration, taken in an orchard near Collingwood, Ont., near one of the demonstration orchards, shows how many farmers, are starting in to improve their orchards. The lower branches of these naturally low headed trees were pruned off most improperly. The owner meant well, but did not know how to do the work. The Department, through the District Representative, I. F. Metcalfe, B.S.A., is prepared to show farmers in the district just how to properly care for their orchards.

—Photo by an Editor of Farm and Dairy.

The orchards are located on the farms of the following men: W. Hamilton, Collingwood; W. J. Owens, Duntroon; C. Campbell, Stayner; R. Steele, Cashtown; S. Blackburn, Creemore; John Osborne, Duncedin. These orchards are representative of orchards in the district, some of them being equal to the worst before they were taken over by the Department.

CONDITIONS IN THE ORCHARDS.

The orchard on Mr. Hamilton's farm when taken over was in sod. It was simply dying because of the oyster-shell bark louse. The orchard was most favorable for the work, since the trees were comparatively young and were not so large but

that something good could be made out of them. Several trees of the lot are left unpruned and unsprayed. These contain dead limbs, which on examination prove to be covered with the oyster-shell bark louse, their presence not having been suspected by the farmers, who wondered what killed the limbs. Mr. Hamilton's orchard at the time it was inspected by an editor of Farm and Dairy had taken on an appearance quite the equal of the best cared for orchards in other noted apple districts.

It was thought by many farmers that the orchard at Duntroon on Mr. Owens' farm could not be cultivated. It had previously been in sod—not unlike the other orchards taken over by the Department and practically like all the orchards in the district. Part of this orchard is of medium sized trees. These have been put into excellent shape, while some remarkable transformations have been worked in connection with the older trees in the other part. Many of the trees, in fact, most of them, had years ago been grafted to good commercial varieties, but these grafts had been allowed to shoot up unpruned and uncared for. Now this orchard is a very respectable one, and Mr. Owens is greatly pleased with the work that has been done.

UNPROMISING PROSPECTS.

Probably the worst proposition of the six was encountered in the orchard, taken over at Stayner on Mr. Campbell's farm. The trees were very old. They were high, thick in the tops and full of dead wood. Some great object lessons in pruning are to be found in this orchard, and they show what it is possible to do even with the worst of apple trees. This orchard has probably been set out for over 50 years.

The demonstration orchard at Cashtown on Mr. Steele's farm is by no means a promising one. The trees are scattered. They were previously so full of dead wood that the greater part of some of them had to be trimmed out. If it is possible to get results from this orchard, there is great hope for any other orchard, no matter how bad anticipated no exceptional results are anticipated from this orchard as a whole, good results are looked for from individual trees.

A CHARACTERISTIC ORCHARD.

A very unpromising, neglected orchard was taken over from Mr. Samuel Blackburn, Creemore. There was so much dead wood and fallen limbs in it that it was quite impossible to drive a rig through at all until a lot of it had been cleared away. The orchard is only a little more than one acre in extent, yet the pile of firewood obtained from the trimmings of these trees would keep the average farm house cook stove supplied with fuel for many months. Mr. Blackburn had thought this orchard to be a hopeless proposition and had

started to cut it down. Hearing this, Mr. Metcalfe secured his consent to take it over as one of the demonstration orchards. It now has a fair appearance and affords an excellent example of the intrinsic value of even the most hopeless orchards.

The orchard at Dunedin, on Mr. John Osborne's farm, like the others, had not been plowed in years, nor pruned, nor sprayed. It had borne some very good apples notwithstanding. The trees are thrifty and after the care they have received this season they will be in a position to demonstrate the advantages of up-to-date orchard practice.

It seems most remarkable that in a district favored as is this one, apple trees should have been allowed to suffer such neglect. Exceptional success should attend fruit growing in the district. The soil is well adapted to the growing of apple trees and of many of the semi-hardy fruit trees. The tempering influence of the Georgian Bay to the north and the protection offered by the Blue Mountains near by, which are a continuation of the Niagara escarpment, render the climate of the district most favorable for fruit. Years ago apple trees were planted here in large numbers. Farmers were encouraged by the remarkable growth made and planted still more of their land to orchard. Most of the orchards are comparatively old. Very few young orchards are to be seen. Thus it would seem that the discouragements previously mentioned that led the farmers not to plant more orchards, went so far as to keep them from caring for their old ones. Owing to lack of knowledge as to how to care for their apple trees, indifferent markets and prices, their owners allowed these orchards to become a very secondary consideration.

The influence of the demonstration work is already having effect. Some of the farmers have commenced to prune their trees, to plow and cultivate their orchards, which for years have been in sod, and general rest is being taken in the work. Mr. W. F. Kidd, of Simcoe, who is in charge of the practical work in the orchards and to whose expert skill considerable of the success of the work is due, will remain in the district throughout the summer, going from farm to farm, talking over orchard matters and showing those farmers who wish to learn by actual demonstration how to prune and care for their orchards so that they may return greater profits.

METHODS OF MARKETING.

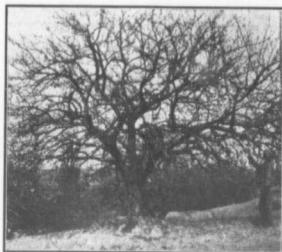
Remarkable as is the situation in regard to the orchards of the district under consideration, much of the situation is due to the methods of marketing that have been in vogue for many years. Some 25 years ago farmers in the district became convinced of the fact that Spys and Greenings were the best varieties of apples that could be grown. In fact, they were the only kind that could be sold and as a result the majority of the trees were grafted to these sorts. Buyers from a distance, eager to get the high quality fruit that can be grown in this northern fruit belt each year have gone into the district and bought the apples "so much for the orchard," the farmers not having realized the value of the crop. Hence the returns from the orchards were not such as to encourage farmers to give them better care, to inform themselves as to modern orchard practice, or to put the orchard into any shape whatever where they might have had a chance to demonstrate how profitable they could be made.

The time of awakening seems now to be at hand. It will be only a matter of a little time when these orchardists will become seised of the advantages of co-operative selling and will organize themselves so that they may reap the best returns from the sale of their apples by selling them through co-operative associations. Thus they will obtain prices commensurate with the high quality of the fruit they have to sell.—C. C. N.

Draft Horses as an Investment

R. M. Holby, Ontario Co., Ont.

Driving, or even general purpose horses are all right in their place; one or two are a convenience and almost a necessity on the average farm of 100 acres or more, but when it comes to raising horses for profit, the draft horse stands alone for a farmer's horse. After two years of age the draft horse will earn his feed, if necessary, and will sell for at least one-third more money than



Much too Thick in the Top

his lighter rival. This extra one-third is nearly all profit since the cost of raising the two classes is about the same.

There is perhaps a wider range of prices between draft and light horses than ever before, especially where weight and quality are available. If the last few years are any criterion, the discrimination in prices will continue to widen. Even farmers as well as city draymen are looking more and more for horses to draw heavier implements and heavier loads, thereby lessening the cost of hauling.

Recently I became possessor of a three-year-old filly bred from a French coach horse crossed on a general purpose mare. She was sound and a good mare of her kind and I sold her shortly after for \$135.00. In the same stable were four



Same Tree after Careful Pruning

These two illustrations and the one on the front cover, are all of the same tree in Mr. Owen's orchard, at Dunston, Ont. Mr. Kidd of Simcoe, appears in the foreground. Read the article on page 3. Photo by an Editor of Farm and Dairy.

Clydesdale foals, two from registered Canadian-bred mares. These two foals were purchased at weaning time for \$125.00 and \$150.00 each. The other two were from imported dams and the same sire. They would sell readily at \$175 each. Thus they would bring more money than the French colt rising three years. Good draft colts rising three years old from registered mares would be worth from \$200 to \$300, while an animal in good condition with weight and extra quality would be worth much more.

Money invested in well bred cattle, sheep or

swine will prove a good investment in the hands of business men; but I believe that the first thing to do along the line of stock improvement is to buy draft mares. Horses are a necessity on every farm. From \$150 to \$200 has to be invested in almost any three-year-old horse, sound and able to do his share of farm work. An extra investment of \$150 to \$200 will buy a registered draft mare of which any man may be proud, to say nothing of the added interest in farm life it would give the young folks. This mare will do her share of farm work and produce a good foal as well.

We believe that many farmers to-day pay more attention to increasing their bank account or to paying for land than to increasing the revenue-producing power of their farms. After careful thought, we are satisfied that a man will do better to invest his money in good stock than to put it into either banks or land. In other words, a farmer might better be a tenant, with first-class stock, kept in good condition, than to buy land with not much money to pay down and forever putting his money into the farm to save interest. Even when profit over the cost of feed is taken into consideration, we think the stock side of the question is away ahead. In the case of draft mares they will earn their feed, thereby greatly increasing the profit.

STOCK VS. LAND AS AN INVESTMENT.

Suppose a man buys 100 acres of land at \$6,000. Under average conditions, he could rent that land for \$900. The landlord would not receive five per cent. for his money after keeping up repairs. If half that money were invested in three draft mares at \$333-1-3 each or \$1,000 for the three, and in 10 pure bred dairy cows at \$200 or \$2,000, or a total of \$3,000, the income would be as follows: An average of two foals for three mares each year will not be too much to expect and from mares of this value, the foals should be worth at least \$125 each, making \$250 for the two. Deduct \$30 for service fees and there is \$220. After allowing \$25 for depreciation of value in the mare (which would be nothing up to nine years), you have \$170 or 17 per cent. on the \$1,000 invested, and the mares would do the farm work.

A sum, say \$200 each, in pure bred dairy cows should buy cows that would produce from 7,000 to 10,000 lbs. of milk, which would sell ordinarily for 1-4 cents a pound, or \$106 each for milk, while the pure bred calf would go a long way to paying for her board, which would be on an average \$40. After deducting a liberal amount for cost of milking and handling the product, it still leaves a big interest on the investment and dairy cattle are not the only kind that will make big interest.

SOME EXAMPLES.

Numerous instances can be given where draft mares have made big incomes. J. Stark, of Durham Co., Ont., has a mare from which he has sold \$1,500 worth of colts and has still three left. Mr. Wm. Pollock, of Ontario Co., Ont., a few years ago sold a Canadian-bred mare for \$250 when she was rising three-year-old. He then bought an imported mare in foal to McQueen for \$500. Neighbors thought he had lost his head, but he refused better than \$450 for this horse's foal before it was two years old and sold him after for a good sum at three-years-old. The next year she did not raise a foal but the following year raised a splendid horse foal which was sold this year at two years old for \$400. He now has a yearling filly, (full sister to last), and a horse foal this year by Acme, which if they were both sold would make a grand showing for this mare, and she is still worth her purchase price. Numerous instances could be given where mares have done much better, but the figures given can be reached by any farmer who will give his attention to the matter in hand and feed liberally when fitting for sale.

Perhaps what I have written will lead some

Farm and Dairy readers to serious thought along this line. They will see the great advantage of draft mares in connection with everyday farming. If they do, this article will have served its purpose.

More Work in Fewer Hours

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

Habit, rather than necessity, must account for the long hours of labor so common on the average farm. The large manufacturers of our cities, years ago, viewed with as much concern the short hours of labor as do we farmers to-day. Trade unions forced them to give shorter hours of labor.

What has been the result. The output of the factories has not been decreased. In fact, it has increased in many cases and that without additional men. Under the new order of things the factory operative accomplishes as much in eight or nine hours as he formerly did in ten or eleven. He worked more strenuously, made fewer mistakes and in every way became a more efficient employee.

This principle applies and works out equally as well in the country as in the cities. The work, it is true, will have to be planned with care so as to make the best use of the hours of labor, but when this is done the labor problem will solve itself.

I well remember my own experience when working as a hired man on somebody else's farm. The man I always did the most and the best work for was the man who worked short hours and had the work planned ahead. When extra hours were necessary I was always ready and willing to put them in for such a man. On the other hand, some employers kept me going from daylight till dark until I was utterly disgusted with the place, and there I could not keep an interest in my work no matter how hard I tried.

When farmers adopt the same methods with their labor that employers in the city have been forced to do, the labor question will soon be a dead issue.

Supplementary Feed for Milch Cows

Louis P. Hubbs, Prince Edward Co., Ont.

In order to get the best results from milch cows we have to provide the right kind of feed. Since we aim to make a profit out of the business, we have to produce a feed at a low cost. We find it necessary to feed grain in connection with this feed in order to keep our cows in the best possible condition to keep up the flow of milk when the prices are the highest, viz., from August on to winter.

We have a large run of low land for our cattle. We commence to feed them additional or supplementary feed as soon as red clover is large enough to cut, which is early in June. Clover will last until July, when we have peas and oats.

ENSILAGE FOR SUMMER FEED.

The very best feed we can get for the dry time of the summer is ensilage. Whenever we have had enough ensilage left over to feed during the dry season we have had no trouble in keeping up the flow of milk. The cows relish it fully as well as the corn when it is first large enough to feed. Second crop alfalfa fed in connection with the ensilage is another good feed. With ensilage and alfalfa, very little grain will be needed.

FEED IN THE STABLE.

Another good feed for late in the fall to feed in connection with ensilage or corn is millet or Hungarian grass. Either of these prove most helpful in keeping up the flow of milk.

We feed altogether in the stable and find that by using a truck wagon to draw the feed to the stable we can do the feeding without any great loss of time. Alfalfa should be wilted and partly cured before being fed, for if cattle eat too

much of it while green it is inclined to cause bloat or indigestion.

In connection with this supplementary feeding we are not going to get the best results unless the cattle are provided with plenty of good water. And they need salt every day. It is for the feeder to judge what salt cow needs. It is also necessary to protect our cattle from the horn flies. We have tried various preparations and find they all give relief; we have yet to find any the effect of which is permanent, but it pays to use them and in connection with clearing the flies they also clear the skin.

Milk and Cream for City Trade

R. W. Walker, Ontario Co., Ont.

The production of milk and cream for the city trade has in recent years become a business of very much importance. A number of years ago the retailing of milk in the city was carried on by numerous small milk dealers, who would buy their supply of milk from the producers, to be



An Excellent Growth of a Wonderful Crop

The illustration shows how alfalfa thrives in Peterboro Co., Ont. The field shown is a high stony hill, yet the crop, as may be seen, grows luxuriantly on it. Photo taken May 24th, 1910, by an Editor of Farm and Dairy, on Mr. S. Matchett's farm. Mr. Matchett may be seen to the right of the illustration. Mr. J. I. Brown, of Montreal, the poultry expert, who assisted in organizing the cooperative egg circles, appears to the left.

paid for on the 10th of each month. They would pay up fairly well perhaps for a month, then they would begin to fall behind with their pay, perhaps get behind two or three months or more, then some of them would sell out to some other party, and then they could not be found and the producer had to stand the loss as best he could. But the retail business has changed since that time. Now we have several large dairy companies in the retail business who have a very large amount of capital to back them, which makes it a safer business for the producer than it was formerly.

LARGE PRODUCING COWS.

To produce milk of good quality and cheap enough to make it a paying business, we must select our cows from one of the large producing breeds of dairy cattle. We then must feed and care for them the very best we know how and see to it that we have an abundance of feed for the winter such as ensilage, or dead corn, also roots and hay, and feed a sufficient quantity of mixed grain meal and bran and oil cake meal, with a liberal supply of salt, which tends to keep the cows healthy and in thriving condition.

We aim to have a quantity of green feed on hand, such as oats and peas, also green corn, so that when the pasture begins to fail we can keep up the regular flow of milk by feeding green feed in the stable; later on in the fall we feed roots (mangels and greystones).

Our cows are supplied water from a flowing artesian well, which flows into the basins in front of the cows. These basins all have covers on them to keep chaff out. The cows lift the covers and drink all they want, and the cover closes again. We find by watering in the stable it adds much to the comfort of the cows, which aids them in producing more milk. Our experience teaches us

that cows producing heavily do not require to be turned out of the stable for exercise.

The watchword of every milk or cream producer should be *Cleanliness*. Cleanliness is imperative around the stables. The cowbells and dust that collect through the winter season should

How to Make the Orchard Pay

Enclosed is \$1.90 renewal for the most practical and interesting agricultural paper circulated in Canada—(Farm and Dairy) suited to our methods and seasons and full of the latest information on how to make the acres and orchards pay.—Barlow Cumberland, "Dunnain Farm," Durham Co., Ont.

Let all swept down from the ceiling and the walls and then all should be whitewashed all over with lime wash. We use a spray pump for the work, and whitewash the whole inside of the stable, stalls and managers included. We use plenty of dry lime in the gutters, which helps to keep the stables clean and sanitary.

It is the duty of each milker to brush and clean the cow's udder and flanks free and clean from dust and dirt before they start to milk. As soon as they finish milking a cow her milk is taken away at once to the milk room and strained through an ordinary strainer into a milk filter set on the shipping can. When we get sufficient milk in the can it is put into the cooling tank. The milk filter is made to hold about two gallons, the bottom is made to taper out to about four inches; then a fine wire strainer is soldered on; then another fine wire strainer is made to fit over this one and is held there by a screw clamp. We put a piece of absorbing cotton between these two strainers, and after the milk has all filtered through the cotton we take the strainers apart and take the cotton out, and put a new piece in, ready for the next milking.

If we are shipping sweet cream, we put the milk through the cream separator, as soon as milked; then cool the cream in the cooling tank, using ice in the water, the same as when cooling milk. The water runs into the cooling tank from the flowing well and by having a stream of cold water constantly running into the cooling tank and out again we do not require to use so much ice.

We ship our milk every morning. It leaves our station about 7.30 a. m. and arrives in the city of Toronto about 10 o'clock. In shipping sweet cream to the city it is best to send it every day, although it can be held to ship every other day by very careful cooling and the use of plenty of ice.

In the warm weather when shipping sweet cream it is necessary to use a jacket on the can, otherwise the can must be set in a deep tub for the purpose and packed with ice. If we are shipping churning cream we don't require to use ice.

How to Whitewash Stables

H. C. Clarke, Halton Co., Ont.

The stables should be well whitewashed once or twice during the summer. This can be done conveniently on a rainy day. With an ordinary spray pump a large stable should be whitewashed in a day with one man to pump and another to hold the nozzle. A little crude carbolic acid mixed with the wash, although slightly objectionable, because it gives a slightly yellow tinge to the lime, is a good disinfectant. Sweep down all cowbells and thoroughly scrape the dirt out of every corner, then spray thoroughly ceilings, walls and floors.

The wash has to be made thinner than when it is to be applied with a brush. Use good lime and strain it into the spray tank, otherwise the nozzle will be clogged by particles of solid matter.



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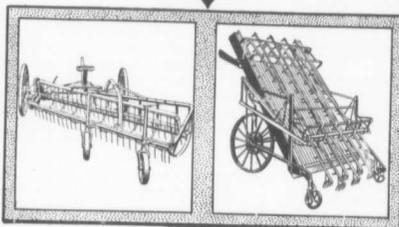
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Seasonable Hints on Swine

A. C. Calvill, Durham Co., Ont.

Having been engaged in the production of hogs all my life, to some extent, but more particularly and extensively during the past 15 years, I venture to offer a few seasonable hints as to my method of feeding and caring for pigs at this season of the year. I like to have all my breeding sows, as well as stock boars, out on a nice piece of clover as early as possible in the



Thrifty Pigs in an Outside Run

Pigs, like other stock, can make good use of a pasture lot during their early period of growth. Breeding stock are especially benefited by exercise and green feed.

spring. In this way their blood becomes thoroughly cleansed and takes on a healthy condition. Pasture and a very small amount of grain in addition will keep them in excellent condition, in fact, fit for exhibition purposes, provided they get a few weeks of special fitting later on. This treatment almost invariably brings excellent results at farrowing time in August, September and October, in the way of good-sized litters with good muscle, bone and strength.

Never house a brood sow or service boar continually if you wish good results.

Now is the time of the year when the wide-awake farmer will be preparing his land and sowing a small piece of rape for early fall feed, or a piece of white turnips, pumpkins or similar crops for early fall and, of course, the regular acreage of mangels for winter use has been sown and will now be ready for the scuffer and horse. Keep them clean and the ground well stirred and watch them grow with this supply of feed for summer, fall and winter.



Breaking on the Western Prairies

The illustration is that of a familiar scene in the newer sections of the western prairies. Mr. Bert Morrow and his outfit, Humboldt District, Sask., is here shown. He has been from Ontario five years.

less grain and consequently at a lower cost on such feeds than where an all-grain diet is used to produce pork.

A Real Mortgage Lifter

That there is no investment equal to drainage was the opinion expressed by F. W. H. Day of the Ontario Agricultural College in a recent lecture on drainage before the Zion Farmers' Club, Peterboro Co., Ont. The dairy cow has been called the mortgage lifter, but in the opinion of the speaker for that capacity, there was nothing like the drains. Results obtained by farmers in various parts of the province show an average increase of \$21.65 in a crop on drained land over that on undrained land. The policy of draining all the land was not advocated, but there are parts of all farms which require drainage. Drain-

ing will not cost over \$25 an acre, and once the drains are constructed they are practically permanent.

Some of the advantages of drainage, the speaker said, are: The removal of surplus water in the spring, the aeration of the soil, increased capillary capacity of the soil and a warmer soil. A drained soil will be from five to 10 degrees warmer in the spring than an undrained soil and is, therefore, a better seed bed.

In a drained soil, the water table is lowered immediately in the spring, giving the plants a chance to develop a strong, deep root system. They are then better provided with the means of obtaining both food and moisture during the dry parts of the summer.

The labor problem in many cases is the great objection to drainage. The ditching machine, however, promises to solve this problem so far as the drainage is concerned.

Three feet is the ideal depth for tile drainage. In light soil, the drains may be put four to six rods apart. They should be put closer in heavy soil, two rods apart in many cases being desirable. Great care should be taken in laying tiles, as any sag greatly hinders the effectiveness of the drain.

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June 23, 1910.

FARM AND DAIRY

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FARM MANAGEMENT

Late Soiling Crops

Our corn crop is not coming well. Part of it I have plowed up and wish to sow some crop in seed. Please let me know what would be best to sow—A. V. B., Stormon Co., Ont.

It is not yet too late to sow oats and rye or rye and peas to cut and feed green later on. About five pecks of peas and five pecks of oats to the acre should supply feed late in August.

Hungarian grass, which is one of the millets, sown at the rate of one bushel an acre about the first of July, or any time now, would perhaps be the most certain to give satisfactory results at this late date of seeding. It should be ready to harvest as a green crop later in August or early in September.

Cement for Stable Floor

Would you kindly tell me how many barrels of cement it would take to put a floor in a stable 60 ft. x 80 ft. Also the cost per sq. ft. for cement, and how to mix the same.—F. A. W., Ontario Co., Ont.

A concrete floor 60x80 for stable should be about four inches thick with one inch of finish. This will require 60 yards of gravel for bottom, 10 yards of sand for top finishing and at a proportion of one to eight. The bottom will require 58 barrels of cement and at two to one top finish the top will require about 60 barrels of cement. Cement will cost about \$1.50 a barrel.—H. Pockoc, Mgr. London Concrete Machinery Co.

What is to be Done to Avoid Dodder?

Though every precaution may have been taken to obtain dodder-free seed, a few seeds may have escaped notice and may therefore be present. Thus the clover or alfalfa field will be "spotted" with dodder. Root up everything on the "spots" and burn without moving, or remove and burn if there is no danger of scattering seed. Get far enough out from the borders of the "spots" to make sure that all the dodder is destroyed. Small pieces of plants left continue to grow.

Should a field have become generally infested, it is advisable to plow up the clover field before dodder seed is formed. Let the succeeding crop be a cultivated, non-leguminous one. Work out of the ground any dodder seed that may be there, by encouraging them to sprout, and killing the seedlings by cultivation. Should seed have matured before the crop can be plowed under, burn the crop over, then plow and follow with a cultivated crop.

Instead of either plowing or burning, shallow cultivation, followed by a cultivated crop kept thoroughly clean, may be resorted to. Here the plan is to cause the seeds to germinate and to destroy the seedlings. Any use desired may be made of the stand

Elm Grove Poultry Farm

Offers for sale 20 one year old Barred Rock hens at \$1.00 each; also 15 Rose Comb Brown Leghorns, \$1.00, and a number of one year old Rouen ducks, cheap.

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of clover on the ground, providing it is cut for hay, pastured or plowed under before the seed is formed. Stubble in the infested field must be plowed under without delay.

It should be distinctly understood that dodder is the worst plant enemy that alfalfa has, and that every effort should be made to guard against dodder infestation; in fact weeds of any description in alfalfa fields are decidedly detrimental to the production of the best crops.—G. M. Fries, Assistant in Agricultural Extension, Purdue Experimental Station.

A Slave to Poor Cows

W. J. Fraser, University of Illinois.

Americans do not take kindly to the idea of chains and slavery, but many a dairyman has unconsciously drifted into the condition of the man chained, not to a fellow-prisoner or to a post, but to common, altogether too common brute—a worthless, wilful cow.

He doesn't know where he is going; he simply follows the cow. That's how it happened to the man who was doing, nor what the cow was doing—rather what she want to do. In fact there's been altogether too little looking and doing in this man's business. The dairyman has blindly followed without figuring; he has worked hard with his hands but little with his head, pencil, and the dollars have come his way very reluctantly. And as for the cow, the only thing she has done right well—is the dairyman; she is "doing" him beautifully.

But don't mistake this cow for a rare specimen of an almost extinct family. On the contrary, she is very common and popular on all our prairies. When it comes to remorseless stealing of the bread from the mouths of the dairyman's family, her tribe may well be classed with the great business sharks that prey upon the people.

The dairyman who says that dairymen doesn't pay is ten to one boarding several cows of this kind in his herd. He is not exactly easy in his mind. That chain is heavy and tight, but he has carried it so long that he thinks that burdens belong with dairymen, or he lays the blame to ill luck or a poor price for milk; or perchance, he says he cannot afford to buy good cows, forgetting that he could less afford to keep poor or worthless ones.

Our Veterinary Adviser

FATAL DIARRHOEA IN COLT—Mare foaled May 5th. I applied a 10 per cent. solution of carbolic acid to navel. The colt was on its feet and smart in 20 minutes but after two and a half hours it did not nurse and I milked the mare and gave the colt the milk. The colt died. I did it. I gave it about one half pint of milk. Next morning the colt seemed all right, but before noon it took diarrhoea, and died before noon the next day. The liquid faeces were yellow and continued to escape for some time after death.—W. McC., Que.

Diarrhoea in foals when not promptly checked soon causes death. In some cases there is too great a percentage of fat in the mare's milk, but in many cases there is no appreciable cause for the diarrhoea. The most successful treatment is the administration to the colt of about two teaspoonful of laudanum in a little of the mare's milk every four hours until the diarrhoea ceases. While this is not always effective, it is quite probable it would have saved my colt's life.

FATALITY IN CALF—STIFF HEIFER—I bought a yearling heifer and a heifer calf. When three months old the latter became dull one day; her urine was very bloody and she was dead the next morning. We skinned her and found some lumps just beneath the skin, easily loosened from the flesh just like fish but very hard. Was this tuberculosis?

(2) The other heifer seems stiff in her fore legs. Is this symptomatic of tuberculosis?—J. S. Peterboro Co., Ont.

(1) The symptoms you describe do not indicate tuberculosis. The little tumors described do not simulate the tubercles of the disease. I am of the opinion she died from digestive and urinary trouble.

(2) Neither do the symptoms you describe in the heifer denote tuberculosis. I cannot say without further symptoms what causes the stiffness. It may be foul in the feet or rheumatic trouble. It is probable she will get better after being on grass for a time.

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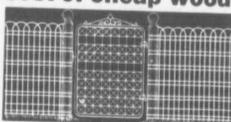
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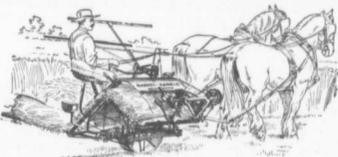
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AND RURAL HOME

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FARM AND DAIRY

PETERBORO, ONT.

VALUABLE EDUCATIONAL WORK

Educational work such as is being done in connection with the demonstration orchards in the Georgian Bay district is of the right kind. It gets close to the people and accomplishes results in a way not possible with years of teaching or lecturing from the press or platform. Seeing is believing. Orchardists in the township of Nottawasaga, Simcoe Co., Ont., have only themselves to blame if they do not take advantage to the fullest extent of the opportunity, which is now theirs, of learning how to prune, spray and cultivate their orchards after the most approved practice.

The results of the work now well under way in the district around Collingwood have a far-reaching interest. The problems confronting the farmers with orchards in that district are much the same, differing only in degree, with farmers in every other apple growing county of Ontario or of other provinces. It has been the general rule for apple trees to be neglected. Indifference on the part of their owners, lack of knowledge as to

how to prune, how to spray and lack of appreciation of the necessity of pruning, and spraying and of cultivating, only can account for the state in which so many orchards are to-day.

The apple growing business, it is true, has experienced many discouragements. The exceedingly low price that has been so general in years past for apples as they have been ordinarily marketed, the ravages of the codling worm, the attacks of scale insects, tent caterpillars, canker worms and the loss through fungus growths, individually and collectively have done their part towards discouraging many farmers of ever making much profit from their orchards. Results that have been obtained from farm orchards such as exist in Norfolk Co., Ont., and elsewhere, however, have demonstrated that money can be made from orchards, if they be of good commercial sorts, are properly cared for and the crop marketed to the best advantage. Two small orchards in Norfolk County returned the following profits last year: Thirty-five trees owned by Mr. E. Armstrong, Forestville, returned, not including culls, a net profit of \$386.94, the trees averaging slightly over five barrels a tree. One and one-half acres of orchard owned by Mr. F. Shearer, Victoria, in 1907 yielded 65 barrels, in 1908 100 barrels and in 1909 210 barrels of apples—a wonderful increase, the direct result from the extra care given. The net profit from this orchard was \$539.24 in 1909.

Owners of neglected orchards wherever they be should take notice of the profits being made from apple trees elsewhere. Orchards that have received little if any care and which seemingly are in a hopeless condition, provided the trees are of good commercial sorts and sound, can be made profitable. The wonders that renovation of the right kind can work in an apple orchard are little short of marvellous and such work is sure to bring large returns.

SILOS ARE PROFIT MAKERS

A chance to add 15 per cent. to the value of a crop at one operation seems too good to be true. This is an opportunity, however, which silos offer to dairy farmers. So important a factor has the silo become in the feeding of stock in Australia, the Government has lately decided to give aid to all farmers erecting silos. While such a policy would scarcely be advisable for Canada, the advantages of the silo are so decided and the returns so great, that no dairy farmer can afford to be without one.

Experimentations with careful experimenting have shown that there is at a conservative estimate 10 to 15 per cent. of added value in ensilage over corn fodder. Many feeders who have fed both ensilage and corn fodder would place the value of the ensilage much higher.

The strongest argument for silos is afforded by the men who use them. The best feeders all over the country advocate the use of ensilage. The best and most prosperous looking farmsteads have, almost invariably, one or more silos. The 15 per cent. of increase on the value of their corn crop

is the easiest money these men are making; often it has made the difference between profit and loss in their feeding operations.

Many silos will be built between now and the first of September. More will be built in the next few years. We ought all to get after that 15 per cent. of increased value, not next year or the year after, but this year.

LIVE STOCK AS AN INVESTMENT

It would seem that many of us lack an adequate appreciation of the possibilities of live stock as an investment. Money in the bank at three per cent. is safe, but it brings only a meagre return. Invested in good stock, which stock afterwards is to be well cared for, it will bring returns much in excess of what it would invested in land, stocks or banks.

There are many examples amongst successful stock breeders of this country of the wisdom of investing in good stock. Mr. Holby, of Ontario Co., Ont., writing elsewhere in this issue, asserts that a farmer might better be content with good stock kept in first class condition than buy land with not much money to pay down on it and be forever putting his money into the land to save interest. His article is worth careful thought.

It is doubtful if there is any more disheartening thing to face than a heavy mortgage on a block of land, the interest and principal of which must be met. While striving to keep down what seems to be apparently unnecessary expenses in order to meet the necessary obligations, the soil is robbed to the extent of its utmost immediate return, poor stock is kept and that in limited numbers, the farm equipment all round is stunted, long hours are worked, agricultural reading and the agricultural press must go without their proper place on that farm, and the result is that year by year, little progress is the result. Then the cry is heard that farming does not pay.

Too many have the cart before the horse in these matters. Better stock and better farm equipment should receive first attention; afterwards, the purchase of more land readily can be made with accumulated profits. Where the main emphasis is laid on good stock and up-to-date farm equipment there farm life is as it should be and prosperity reigns.

PARIS GREEN SUBSTITUTES

In spite of the numerous warnings of agricultural papers and experiment station reports, the sale of useless substitutes for Paris green continues to be large. Very few of these commercial preparations are economical; some are absolutely worthless. In practically all, the poisonous agent is white arsenic. This is also the poisoning agent in Paris green.

In Paris green however, there is over 56 per cent. white arsenic, while in some commercial mixtures there is less than one per cent. Bulk is gotten by the addition of sulphur, road-dust and numerous other materials of little value.

Figuring from analysis made of several mixtures at the Ontario Agricul-

tural College and valuing Paris green at 20 cents a pound, we find that an equal amount of white arsenic in "Black Death" costs \$3.86; in "Potato Bug Finish," \$1.56; in "Kno Bug," \$2.41, and so on down the list. The cheapest and least insecticides are the standard chemical compounds, such as Paris green and lead arsenate.

RUINING GOOD MEN

The temperance, social and moral reform committee recommended at the annual synod of the Diocese at Ottawa that the proper authorities should be requested to adopt more stringent regulations in regard to the restaurant and bar of the Dominion House of Commons, so as to prevent the consumption of intoxicating liquors there. Hon. Wilfrid Laurier will do well to pay heed to this request.

This bar has helped to ruin a number of men of great promise in public life. There are some members of Parliament who, when away from the restraints of home and with much idle time on their hands, get into the habit of patronizing this bar to excess. When constituents visit them in the Capital, they often think it necessary to be hospitable, in the customary manner. It is a disgrace to our country for this bar to be continued in the Parliament Buildings in conjunction with the House of Commons. The two do not harmonize. The bar should be abolished.

Get Knowledge

(Hoard's Dairyman)

Uncle Henry Wallace says in his Farmer:

"The farmer who thinks he knows it all, who believes that farming is a combination of luck, brute strength and awkwardness, can never make any progress, or at least can only make that slow progress which comes from his own hard-earned experience. The farmer who realizes that this is a big world and that agriculture is a great big science and a most comprehensive and far-reaching art, cannot be kept down."

The first farmer does all he can to keep himself down. Ignorance is weakness; knowledge is power. It is a fearful thing when a farmer does what he can to make himself weak among his fellow men. Yet we know hundreds of farmers who do that very thing. They spend no money, make no effort, to grow in knowledge. They have fat hogs and starved minds.

This is all the land. There is not a farmer in the world who can read but who can educate himself in a short time to understand the best agricultural literature. There are thousands of such farmers to-day who had only three months' winter schooling a year in a country school for a few years, but they kept their minds bright by constant reading of the best farm papers and books. To-day they are strong, successful farmers and leaders of men.

No man gets to this point, however, who thinks he knows more than other men around him. The Good Book says: "In a multitude of counselors there is safety." Nowhere does it say

that one man can know it all by himself.

We have too many farmers who have no hunger or thirst for knowledge. They want money had enough to work like slaves for it in a blind way, but not enough to think, read and study for it. It is just that lack of a desire for better farming knowledge that holds them down, and it always will hold them down. The farmer is no exception to other men. No man ever increased in fortune and the estimation of his fellow-men by reason of his lack of knowledge.

HORTICULTURE

Marketing the Strawberry Crop

S. K. Thompson, Kings Co., N.S.

Many farmers, who believe that a small strawberry plantation would add considerable to the revenue of the farm are deterred from starting a patch because they are at a distance from a good market. If they are near a rail-



Interested Farmers Learning How to Spray and How to Prune

In each of the six demonstration orchards in the Georgian Bay District, Ont., practical demonstrations were given for the benefit of those who wished to learn. The illustration shows those who attended the meeting in the orchard owned by Mr. W. Hamilton, Collingwood, Ont. Photo by I. F. Metaife.

road station there need be no trouble about the market. We are five miles from the station and 80 miles from our market, but we find a half acre of strawberries a very profitable investment.

We ship all our berries to the same merchant and we find this the most satisfactory way as our customers come to know the quality of our fruit. We pick the Leries in the morning and the ship in the afternoon. They are in the dealers' hands by night.

We sell two grades of fruit. The berries are graded in picking. Berries of fairly large size, regular in shape and neither green nor too ripe are classed as No. 1; these command three to five cents a box more than the No. 2 berries. We never put green berries or those over-ripe even in our No. 2 boxes. The very small berries are kept at home for preserving.

We ship in crates holding two dozen quart boxes. On each quart box is printed the name of our farm with the post office address. Customers now look for our trade mark and are willing to pay for what they know is certain to be good. Even when strawberries are most plentiful we have no trouble in disposing of ours at good prices.

We believe that any farmer who will take proper care in picking and grading his berries can do as well as we have done, but he must prove that he has the high class article before he can expect particular attention and special recognition for his fruit.

Renew your subscription now.

Profit in Co-operation

The Co-operative Fruit Growers of Ontario, who held their annual meeting in Toronto on June 14, handled for their members last year \$4,000 worth of goods such as spraying outfits, arsenicals, fungicides and fertilizers. The various associations were able to obtain goods of the best quality for the lowest possible price. It is probable that a very large supply trade will be worked up with the local associations.

It was decided to again issue a pamphlet giving the names of the various co-operative associations and distribute it in possible markets as in former years.

It was also decided to seek incorporation under provincial laws and plans were made whereby capital would be subscribed. The central association would sell for all local associations, an efficient manager being employed.

Mr. A. McNeill, Chief of the Fruit Division Ottawa, advised them to pay particular attention to the quality of their fruit and pack if they wished to establish a reputation for their goods. Associations have an extra good chance to pack well.

The growers present were very enthusiastic as to the future of the co-

operative movement and believed that little trouble would be experienced in disposing of good fruit, well packed.

Summer Spray Material

A large amount of fruit each year is seriously disfigured by Bordeaux rust. It is not advisable to use Bordeaux when the fruit is well advanced towards maturity on account of this injury. A fungicide recommended for late summer spraying is ammoniacal copper carbonate. This does not disfigure the fruit in any way and is an effective fungicide.

This spray material is made by dissolving five ounces of copper carbonate in three pints of ammonia (sp. gr. 26 Beaume) and diluting it in 45 gallons of water. Where a fancy grade of fruit is aimed at Bordeaux should not be used after the fruit has reached a fair size.

During the last three months there have been many inquiries regarding mixed grains for seeding purposes. Many farmers are trying mixed barley and oats, with varying results. In order to demonstrate the value of mixtures, we started a series of experiments, which caused much interest among visiting farmers. Of all mixtures, the Manchecuri barley and Daubney oats gave the greatest yield in bushels and weighed the heaviest per bushel. We are sure that in a short time grain mixtures will receive the attention which it deserves.



SCAT!
TO EVERYTHING ELSE

ONLY
DE LAVAL
Cream
Separators

ARE WORTH WHILE

Catalogue Free Agents Everywhere

THE DE LAVAL SEPARATOR CO.

175-177 William St.

MONTREAL

WINNIPEG

VANCOUVER

Cheese Makers
Attention

Are your patrons bringing you the best milk that they can? Does it satisfy you? Could it be improved? Educate your Patrons to give you the best milk obtainable. They can get this education through FARM AND DAIRY.

Every patron of your factory should be a subscriber to Farm and Dairy, the only dairy paper published in Canada. We are starting a summer campaign among the cheese makers and patrons, and desire every patron and maker in Ontario to become subscribers to Farm and Dairy.

Fine premiums, either cash or otherwise, for clubs of NEW subscribers. Sample copies sent to your patrons upon request. There is something in our Special Summer offer for every cheese maker in Ontario. Better write for particulars to:

CIRCULATION MANAGER,
FARM AND DAIRY
PETERBORO, ONT.

Quebec Cheese at Auction

A new departure in the cheese trade was the first sale of Quebec cheese held by public auction a week ago under the Government supervision on the Exchange of the Montreal Board of Trade, and these sales will take place from now on every Thursday of each week at 4.30 p. m. at the above exchange. The sale was conducted by Mr. A. Trudel, manager and salesman for the Co-operative Agriculture Society of these cheese makers in the province of Quebec.

The terms on which these sales will

THE IDEAL GREEN FEED SILO



Save your hay
Decrease Grain Bills
Produce More Milk
Make More Money

With one of our Silos you can do it. Thousands in use. Built in all sizes, and shipped complete. Send for Free Catalog.

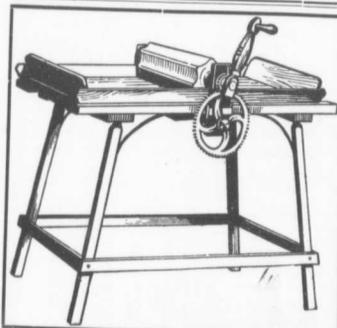
CANADIAN DAIRY SUPPLY CO. LIMITED
MONTREAL

NORTHERN ONTARIO

160 acres of land for the settlers in Northern Ontario. Situated south of the G. T. P. Transcontinental Railway, South of Winnipeg, and 800 miles nearer the seaboard. A rich and productive soil, covered with valuable timber, it is rapidly increasing in value.

For full information as to terms of sale, homestead regulations, and for special colonization rates to settlers, write to

D. SUTHERLAND
The Director of Colonization
PARLIAMENT BUILDINGS, TORONTO
OR TO
HON. J. S. DUFF
Minister of Agriculture



THE NATIONAL BUTTER WORKER

THE NATIONAL MFG. CO., Ltd. - Head Office, OTTAWA
FACTORIES:-Ottawa and Brockville BRANCHES:-Regina, Sask., Edmonton, Alta., Montreal, N.B.

Write to us for full particulars; we will gladly give information and send our Booklet Free on request

Le held are as follows: All cheese will be graded in three classes.

First grade—Will be all cheese scoring 95 points or over out of 100.

Third grade—Will be all cheese scoring less than 92 points.

Second grade—Will be all cheese scoring 92 points or over but under 95.

Culls—In all cases where bad culls appear in a lot, they may be separated therefrom and dealt with separately.

All cheese that are sour, bad stinkers or spongy, or having other defects as bad or worse than these will be classified as culls.

1. The buyer will pay a storage of two cents a box, the cost of weighing, and freight and cartage from factory shipping point, provided this freight and cartage does not exceed 15c a cwt., in which case the excess over 15c a cwt will be paid by the society.

All cheese will be sold to the highest bidder in open competition and the buyer must take all the cheese offered for sale before any offers will be accepted.

3. Bids will be asked for on all the cheese in each grade separately, and the buyer must take all the cheese offered in a grade.

4. All purchases must be paid for on the day following sale by accepted cheque, and before delivery order will be given. The society reserves the right to ask for a deposit of 10 per cent. margin at time of sale.

Invoices will be furnished by the society based on factorymen's weights and official weighers' certificate of test, but if errors are found in the factory statements, adjustment will be made to the correct basis afterwards.

The grading will be done by an official appointed by the department and his decisions will be final, and no right of rejection or reduction of price will be granted to the buyer.

The attendance at the first sale was large, all the leading exporting firms being represented and in consequence the bidding was brisk and the prices realized were considered very satisfactory by the manager of the society.

The offerings amounted to 1,312 boxes from factories extending from Ottawa to Lake St. Johns. Messrs. Lovell and Christmas bought 625 boxes of white at 10 1/2c, to 10 11/16c. Mr. George Hodge secured one lot of white of 160 boxes at 10 1/2c, and one lot of 57 boxes of colored at 10 11/16c, and Messrs. Gunn, Lennox & Co. bought 470 colored at 10 3/4c, to 10 9/16c.

The price paid for these cheese were equal to the highest paid at any market in Ontario on the same day, and

BUY THE CANADA MILK CAN

The Most Sanitary Milk Can Made



Seamless Body

Seamless Body

Holds eight gallons Imperial measure

The body is pressed out of one piece of 18 gauge steel plate—retained. It is entirely smooth on the inside. Has no seams or corners for dirt and sour milk to collect in.

Easily kept clean and sanitary.

The bottom is well protected by a heavy welded hoop which encircles the body at the top.

It is also fitted with a seamless cover which fits tight and flush with the top of the breast, preventing the milk from splashing around in transit, and supplied with massive wrought iron upright handles or malleable drop handles as desired.

CANADA MILK CANS are made by:

The Thos. Davidson Mfg. Company, Limited
Montreal & Winnipeg

And are Superior to any Foreign Milk Cans.

If your dealer does not Handle these Cans, write us direct. A Post Card will bring you full information.

higher than Brockville and the most of the other markets held in Ontario that

work. There were about 30 factories boarded, the bulk of them ranking as first class, the quality of these being strictly finest in every respect, and equal to the best of the Ontario.

The new movement is calculated to work the cheese makers of the province of Quebec up to a higher standard of excellence, and that they are capable of attaining it to a very high degree is manifested by the quality of the offerings at the sale.—W. R. L.

What Separator to Buy

Please find out from Mr. Fred Dean, Creamery Instructor, what make of separator is used at the Ontario Agricultural College creamery. Please answer through a few of my neighbors want to know the same thing.—G. P. Norfolk, Co. Ont.

The Dairy has now 15 different makes of hand separators all giving more or less good satisfaction. I would advise your correspondent to get a machine, on trial, that will skim a 30 per cent. cream leaving not more than .05 per cent. in the skim milk, is easy to operate and wash and so constructed that it is likely to be durable.—Fred Dean, Creamery Instructor, Guelph, Ont.

Farm and Dairy is the most practical paper on its lines that I have seen. Will you, therefore book me as a subscriber to it?—W. J. L. Hamilton, Nanaimo Co., B. C.

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IN Nature there is no blemish but the mind—none can be called deformed but the unkind.

—Shakespeare.

Mammy

By T. W. Hanks.

IT wasn't always a mean street. Indeed, in the days when the wealth and fashion of the city centered about Washington Square, and Brooklyn was known only as a place of green and fragrant mystery, it was a really reputable street—a narrow, sodate, well-groomed, self-respecting street, where trees grew and grass-plots flourished, and all the doors were brave with white paint and ponderous brass knockers.

But the march of progress had changed all that years and years ago. Factories crowded it in and soot and grime threatened to blot it out; the modest clerk and his family fled, and the day laborer and his took their place; the trees vanished and the grass-plots were trampled out of existence; the doorsteps chipped and crumbled; the chimneys bent—though too much smoking in early youth had undermined their constitutions; the brass knockers and the ornamental iron railings found their way to the junk-shop, and like an old, old man sapped of vitality and robbed of self-respect, the street ran down at heel and out at elbow and sank apathetically into the ranks of the bad-lands.

It was in the days of the street's gentility that Mammy first appeared there and awoke the ire of the scandalized neighborhood by taking a house near to the school, knocking its two basement windows into one and opening a little shop for the sale of home-made cakes and candies and marvelous little libbats that were whittled and rigged by Daddy's own clever hands.

The street didn't take kindly to them at first—indeed, when it condescended to allude to them at all it was as "those Wakelins" or "that man and woman who keep the shop"—but after a time public sentiment underwent a change. The little place was always so trim and tidy, Mammy's smile was always so sweet and alluring—and yet so sad, as though there were a recollection of rain behind the sunshine of it—her cakes and candies were always so pure and wholesome and she and daddy kept so much to themselves and raised such wonderful geraniums in their window-boxes that people began to take notice of them, then to let their children spend their pennies there, and, in the end, the whole neighborhood ceased to remember that there were any such people as John and Martha Wakelin and—beginning with the children, of course—grew to speak of them and to think of them as just Mammy and Daddy and to look upon them as part of the street's proud possessions.

They never spoke of their past, and there were no yellow press reports in those days to pry into people's lives

and pitchfork their private woes into public print; but it leaked out, somehow, that they had come from the South; that there had been a wayward son, who had forged, or robbed or done something desperate—just what, was never certain—and then ran away never to be heard of again; that Daddy and Mammy had sold the farm to pay back the money he had taken, and, not to be divided, had come to town and opened the little shop to keep soul and body together.

But the street of to-day knew nothing of that story; for the old friends and their children were gone, the school had gone, even Daddy had gone—into the peace and glory of a city where the streets never run down and the shadow of heartache never falls. And of the old quiet times of long ago nothing remained but the little shop, the blossoming window-boxes and smiling, patient old Mammy.

"And you'll be going soon, I suppose?" said Miss Scammers, the dressmaker, who lived on the corner and was the only one of the neighbors with whom Mammy could bring herself to enter into any terms of intimacy.

"Yes," replied Mammy, smiling back from the stove where she was making a fresh supply of butter-cootch. "Leastways I hope so, dear. I've got a most enough laid by, and I'm just a-longin' for the sight of country lanes, and green medders, and trees and things. You see, I was country-rix, dear," she added apologetically. "Tain't like as I was city born, same as you. Folks kinder has a hankerin' for home things when they gits old, and—besides I'll feel like I was nearer John. It's eight year since I took him out there—and I guess I won't feel so lonesome if I kin tend the flowers myself. And mebbe he'll sort of know it too, and feel as I was gittin' nearer together ag'in. Yes, I'll be goin' soon, I hope. But it's slow work—dreadful slow work. Trade ain't what it used to be, and rents and rations has gone up something scandalous.

"Why don't you buy your candies and cakes from the dealers, then, the same as other shops do, instead of making them yourself—it's less expensive and you make more profit, Mammy."

"Lands sakes, child! I jist couldn't. Why, I don't know what's in 'em. What with the colorin' matter in their furrs'—stuff them dealers put in the furrs'—There, I'd never have a wink o' sleep no nights if I sold things like that to children—and them a-trustin' me and payin' down their pennies, no; I'll stick to the old way. It sorter keeps my conscience clear."

Miss Scammers smiled tolerantly and gave her shoulders a twitch. She

wasn't in the least a dishonest person, but she lacked that finer, keener—the herald, would have said "absurd"—sense of honor which was so deeply rooted in Mammy.

"I don't see why," she said. "Everybody else does it, and so long as it ain't against no law why is it wrong? What's the sense of baking yourself alive over a cookstove and payin' double the price for your materials when them dealers it don't know no difference and would as leave have dealers' stuff as not?"

"Mebbe they would, mebbe they would; but I couldn't bring myself to give it to 'em, dear. They ain't like the children I used to have runnin' in and out in the old days, but, less their poor little hearts! they can't help that, and it would be kinder wicked of me to treat 'em any different. Dandelions is flowers jist the same as roses, dearie, and they ain't to blame 'cause the Lord's made 'em to bloom in alleysways instid of gardens."

"Mebbe they ain't," agreed Miss Scammers. "But I wouldn't care much about a bokay of dandelions."

"I wouldn't, myself, if I could git somethin' better, but sooner have 'em than no flowers at all," said Mammy with a sigh. "It's dreadful to be without 'em—specially if you've once had 'em—and watched 'em and tended 'em—and seen 'em—treat 'em and then—then they're took away from you. I know—I've been through it all, and I know."

"Have you?" said Miss Scammers, wonderingly. "I never heard. I thought there was never nobody but jist you and old Daddy. I never knowed you'd had a child. What was it?"

"Boy," replied Mammy very softly.

"I—I lost him years and years ago—twenty last June."

"You don't say! Why, he'd to be a man now and growed up, wouldn't he? What did he do, dearie, and—why, there's my Ragged Sailor comin' in! Excuse me a moment, won't you?"

It was a characteristic of Mammy that she named all her little customers after flowers—traced in their habits which rendered the appellations apt. For instance, the little red-headed girl from No. 45, who scratched the paint from the counter with her copper-toed shoes in trying to elevate her small person so she could see her purchase weighed, was always alluded to as the "Climbing Rose"; pug-nosed, self-assertive, brazen little Tommy Vally was always "there and lookin' in the window at this and that and bless the child! I never seen her. She's that Swedish widdler's little gal, you know—her as moved into No. 65 three months ago, and works in a laundry, I've hearn tell, but sakes alive! she's the shockin' 'est cough—it's dreadful to hear her when she goes by in the mornin'." That's her little gal, and I see less of her than of any other child in the neighborhood. She never says a word."

Miss Scammers' eyes traveled in the direction indicated. Outside, in the dim, uncertain light of the fast-closing day, a child was standing—a pale little girl, as she slipped in and hungry eyes set in pinched and serious faces, her pale hair braided in two little pigtails and a looped length of improvised skipping-rope on the pavement behind her. Her hands were tightly clasped on the edge of the shop window and she was staring with rapt gaze at the piece de resistance of Mammy's display.

"It was a limp-bodied, sawdust-stuffed thing with wax head, the whitest of blue eyes, the yellowest of pink hair and such a marvel of yellow sateen finery as only Mammy's own clever hands knew how to fashion from had a yard of material and two yards of imitation lace."

"Is there?" said Mammy, a startled note in her voice and a look of sudden apprehension on her face. "Sakes alive! I don't see how they can do it and keep it pure, Sailor. I make all mine, you know, and I'm awful careful that nothin' unwholesome goes in it."

"Well, her tastes jist as good and there's more of it," returned Ragged Sailor with youthful philosophy, "so what's the difference? Folks goes where they gits the most for their dough—see?"

"Yes," responded Mammy faintly and with a forced smile. "I can't let my custom be took away from me, kin I, Sailor? Twice as much, did I There, dear? And more peanuts in it? There, dear"—passing him over a double portion—"that's a good cent's worth, ain't it, now? And it's jist chunk full of peanuts."

"You're easy," said Ragged Sailor, flicking the copper across the counter and going out. But the point of the remark was lost on Mammy. Indeed, it is doubtful if she would have understood it at any time; but just now her mind was troubled, and she stood looking in a seared way at the hole this generous cent's worth had made in her freshly made supply of peanut taffy.

"Did you hear what he said? It's awful, ain't it?" she said in a seared voice as Miss Scammers came out of the back room and joined her. "If I lose my custom now I don't know what I shall do, dear. You see, I'm to go into an Old Ladies' Home out there in Greentown. I'm to pay three hundred dollars down and that's to keep me till I die, and—I've got thirty-six dollars to make my trouble and kin go. It's hard enough to save as it is, but I have to give double quantity—"

"You won't," interposed Miss Scammers. "I don't you mind him, Mammy. With all that there ain't no candy shop round in the next street. And I'm goin' to tell that little rascal I've told you so, too. He jist told that lie to get you to give him more."

"Times is changed and children is changed," said Mammy dolefully. "I'll be glad to git away, Miss Scammers—I'll be dreadful glad to git away. I guess it's a little better the times—a little too old-fashioned for this street, nowadays. Tain't like it used to be—tain't a bit like it used to be, and—I'm jist a-pinin' for the trees and the grass and the quiet little spot where John's-a-waitin' all alone. And quick as ever I kin save up them thirty-six dollars—Well, deary me! there's that poor little Lily-of-the-Valley been a-comin' there and lookin' in the window at this and that and bless the child! I never seen her. She's that Swedish widdler's little gal, you know—her as moved into No. 65 three months ago, and works in a laundry, I've hearn tell, but sakes alive! she's the shockin' 'est cough—it's dreadful to hear her when she goes by in the mornin'." That's her little gal, and I see less of her than of any other child in the neighborhood. She never says a word."

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(To be continued next week.)

The School House, Is It Ideal?

Mrs. Jennie Mulder,
Maconville College, Que.
(Continued from last week)

VENTILATION OF SCHOOLS.

In school, when you think of it, the hours are short, the years pass quickly, and there is much to compass. Even the best teachers can do little more than create a love of learning, but even with a good teacher, and the bright pupils sometimes the physical conditions, lighting, heating, ventilating are such as to hinder progress.

We go to sleep in church if the air is bad, or yawn, and lose all attention. If this is so with adults, much more is it the case with untrained children. Bad air makes restless boys, restless boys make an irritable teacher, an irritable teacher makes a boy want to act very badly, thus completing and continuing the process.

It is a false economy that saves on the ventilating system, and weakens

organ, the lungs, must receive air that has already been in some other lung before, though that other may be diseased.

Because of the danger from dust and all forms of uncleanness the cleaning of a schoolroom should receive a great deal of attention. We would think our houses vilely kept if swept once a day and cleaned only once a year, and why should our children spend the vital impressionable period of their life, for five-sevenths of the time, amid conditions that no careful housewife would tolerate? (To be concluded next week)

The Home Refrigerator

Our illustration shows a roomy, up-to-date home refrigerator, with the ice chamber at the top of the refrigerator. This is as it should be. The ice chamber should always be on top of the provision compartment, for the same reason that a furnace must be in the basement of a house to heat



Good Types of Country Schools

Styles of architecture that differ from the ordinary box and roof belfry. It may cost a little more to build such houses; the educational possibilities of the children.

Of recent discoveries in pathology, none has opened up so great a field as the discovery of germ life, and though we have gone so far in the path of investigation, our daily life does not keep pace with our knowledge. A great enemy to women is dust, and we are at a loss at times to know where the dust comes from. Some of it we undoubtedly carry in from the street on our clothes, some of it comes from the movement of our ordinary work, is stirred up as we walk or sit from the floor or furnishings, some comes from the circulation of air which is rarely free from some dust particles, and some dust is from the waste products that are being thrown off all the time, through the agency of the skin, which is one of the most important of our excretory organs.

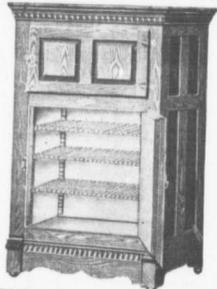
If you want to wash rapidly in this process, take a bath and a good rub, and a few hours after rub your arm with a piece of black cloth and you will notice a fine white dust comes off on the cloth. This process is continuous, and this dust from our bodies enters the air of the room we live in, and in a school of say 40 children, the air must receive a great deal of this continually.

If the ventilation is defective, if a constant flow of fresh pure air is not coming in to supply the bad air, then it takes only a short time for the room to become heavy, and if it is in the winter, and a fire is on in a stove, there is a smell of burning that is better burning is really the overheating of the organic matter in the air. I think it was Mark Twain who said, in speaking of this difficulty, that in the matter of ventilation we had no selection sometimes had to breathe. We had been breathed before, and had not the power to choose the air that ever came to us.

We would look with horror upon the suggestion to chew anything that had been chewed before, but the delicate

the ordinary box and roof belfry. It may be they are worth more to the community.

the house. Many refrigerators have ice in the side of the cooling room, the cold air coming in at the bottom and being expected to rise. Cold air will not rise any more than warm air will fall. Besides, the ice must be on the top and the construction be such as will deposit the warm foul air on top



Exterior of an up-to-date and roomy refrigerator. See method of circulation described in June 9th issue of Farm and Dairy.

of the ice, so that the ice will chill the foul air, and cause it to fall back to the provision room, through the ice. This passing of the foul air through the ice and running water will carry off all impurities in the running water, and leave the air when it returns above to the ice chamber, pure and wholesome. These are points to be remembered when purchasing or building a refrigerator, either for the house or creamery.

Note the rules for care and construction of ice boxes and refrigerators published in this department in the June 9th issue.

Are you watching our Summer Premium Talks opposite editorial here. Some of them are sure to interest you.

THE COOK'S CORNER

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

DANDELION GREENS.

Pick and wash 1 pk. dandelion greens. Parboil and drain, then cook in very little salted water until tender. Drain and chop fine. Cut 3 or 4 slices of bacon in small dice, dry slowly till all fat is extracted, then add ½ cup vinegar. Let boil and pour over greens. Salt to taste and garnish with hard-boiled eggs.

TOMATO TOAST.

Toast and butter as many slices of bread as you have persons to serve. Season tomatoes well and pour hot over the hot toast. Place a poached egg over each slice and serve at once.

CHICKEN DUMPLINGS.

Mince remnants of cold chicken, add seasoning and liquor from the boiled chicken. Let this boil gently, then thicken with 1 tablesp. flour. Afterward add 1 well-beaten egg, and when thick pour out to cool. Flour the hands

and shape this chicken mince into balls. Roll in cracker dust, dip in beaten egg, then roll in bread crumbs, and fry in hot lard.

SALT PORK STEW.

Cover with cold water a piece of pork not too fat and simmer 2 hours or more, according to size. Then add sliced onions and potatoes, boil other ½ hour, and then drip in some dumplings. Cover closely and boil continuously for 15 minutes. Serve at once, or the dumplings will become soggy.

QUICK DUMPLINGS.

To 2 cups flour add salt and 2 teasp. baking powder and stir up with milk to make a soft biscuit dough. Cut in pieces of uniform size, or cut off spoonfuls and drop in boiling soup, allowing them to rest on top of meat. Do not crowd in more than can come to the surface. Cover closely and boil uninterruptedly 10 to 15 minutes.

OYSTER SAUSAGES.

To 1 cup boiled chicken or veal, minced fine, add 1 cup bread crumbs, 1 oz. suet, chopped fine, about 30 oysters, chopped, and 1 egg. Season with pepper, salt, mace and a little cayenne pepper. Shape into balls, roll in egg and bread crumbs and fry. Serve with a brown gravy.

HECLA FURNACE

Has 30 Years Experience Behind It

Invaluable experience to you, who are going to buy a furnace this year.

20 years ago, we invented and patented the most important improvement made in furnace construction—our now famous FUSED JOINTS.

These joints mean an absolutely gas, dust and smoke proof furnace.

Then we adapted the FUSED JOINTS to the firepot and fused 97 steel ribs into the castiron, thus increasing the radiating surface three times that of any other firepot. An accurate three years test, proved that the "Hecla" Steel Ribbed Firepot saves one ton of coal in seven.

We learned that a steel combustion chamber was not durable. By experimenting, we found that an all-castiron chamber would last longer than a steel one.

We can help you, too, in planning the right heating for your home. Our book will tell you. Write for free copy.

CLARE BROS. & CO. LIMITED
PRESTON, Ont.



The Upward Look

Christians should be Happy

Rejoice in the Lord always; and again I say, Rejoice!—Philippians, 4, 1.

Rejoice evermore.—1 Thessalonians, 5.16.

Christians should be the happiest people on earth. We should be full and overflowing with happiness. If we are not there is something wrong with our religion. It does not matter what troubles we may have, if we have true faith in God we will realize that even our troubles are blessings in disguise. There is a Divine purpose behind them. It should be our effort to read that purpose. By doing so we will be drawn closer to God. In this way we will find how true it is that "all things"—not just the pleasant but the unpleasant as well—"work together for good to them that love God." (Romans 8.28.)

"The Little Remnant," writes Lillian Whiting, "comes when one can as sincerely thank God for pain as for joy; when, after long groping in the darkness, clinging indeed to his faith in God, he suddenly realizes how a great sorrow has wrought in him a great result."

"It has been well said that 'earthly cares are a heavenly discipline.' If you write the author of 'A Christian's Secret of a Happy Life,' "but they are even something better than discipline—they are God's chariots sent to take the soul to its high places of triumph. They do not look like chariots. They look instead like enemies, sufferings, trials, defeats, misunderstandings, disappointments, unkindnesses. They look like juggernaut cars of misery and wretchedness, which are only waiting to roll over us and crush us into the earth. But could we see them as they really are, we should recognize them as chariots of triumph in which we may ride to those very heights of victory for which our souls have longed and praying. The juggernaut car is the visible thing; the chariot of God is the invisible.

"The King of Syria came up against the man of God with horses and chariots that could be seen by every eye, but God had chariots that could be seen by none save the eye of faith. The servant of the prophet could see only the outward and visible; and he cried, as so many have done since:

'Alas, my Master! how shall we do?' But the prophet himself sat calmly within his house without fear, because his eyes were open to see the invisible; and all he asked for his servant was, 'Lord, I pray thee open his eyes that he may see.' (2 Kings, 6.13, 18.)

"This is the prayer we need to pray for ourselves and for one another, 'Lord, open our eyes that we may see,' for the world all around us, as well as around the prophet, is full of God's horses and chariots, waiting to carry us to places of glorious victory. And



Clifton A. Temple, of Fitch Bay, Que.

Only nine years old, and the owner and winner of a pure bred Farm and Dairy pig, his return for a club of nine new subscribers.

when our eyes are thus opened, we shall see in all the events of life, whether great or small, whether joyful or sad, a "chariot" for our souls.

"Everything that comes to us becomes a chariot the moment we treat it as such, and on the other hand, even the smallest trials may be a juggernaut car to crush us into misery or despair if we so consider them. It lies with each of us to choose which they shall be. If all depends, not upon what these events are, but upon how we take them."

"If we will but remember this assurance, "For not the Lord thy God will hold thy right hand saying unto thee, Fear not, I will help thee" (Isaiah, 41.3), we will arise triumphant over all our troubles, disappointments and perplexities instead of weakly giving up and saying that we must be resigned to the will of God. God's will is that the very best things possible shall happen to us. That is why we should "Rejoice evermore" and rise triumphant in the arms of faith.—I. H. N.

Clifton and His Pet Pig

"These new subscribers I secured for Farm and Dairy all like the paper very much.

I will be ten years old on June 22. I weigh 90 lbs., height 4 ft. 9 in. I have no pets but my Farm and Dairy pig. I like her very much. I have seven calves to feed every morning

and night. I give them litter. I get up every morning at a quarter to six and put the cows away to pasture, then come back and feed my calves and pig.

My school closed the first week in May. I am in the fourth grade. My subjects are reading, spelling, writing, arithmetic, geography, grammar, history and French. Now my school is closed, I am taking music lessons.

For my playmates I have a little farm of my own near father's also with horses and cattle in abundance.

"The nearest large city is Sherbrooke, about 16 or 18 miles from here. Standed Plain is 10 miles from here, Fitch Bay is two and a half miles. That is where I go to take my music lessons. I have no small brothers or sisters. I have three brothers that are grown up and one is at home."—Clifton A. Temple, Que.

Record of Canned Fruit

Tack a sheet of paper to the inside of the fruit-cupboard door. On this write the number of cans of each kind of fruit you put away. Keep a small pencil hanging at the top of the sheet of paper, and each time you remove a can, mark it off. You can see at a glance what fruit you have on hand without moving the jars about, as the following will show:

29 Blackberries 11111 11111 1

12 Cherries 11111 1

16 Peaches 11111 11111 1

8 Plums 111

12 Tomatoes 11111 111

Our New Serial Story

In the July 7th issue of Farm and Dairy will appear the first installment of our new serial story, entitled "Miss Seilma Lue." We are fortunate in being able to give our readers such a bright clean and interesting story. It is not only a delightful story, but it is a good woman's palm of life. The story is written by Miss Maria Thompson Davies, and introduces us to a most magnetic woman. The story is something after the order of "Mrs. Wiggs of the Cabbage Patch," and is one that we feel will interest and entertain all our readers. It is well illustrated. Watch for its appearance in the first issue in July. Better renew your subscription so as not to miss any installments of this new serial story.

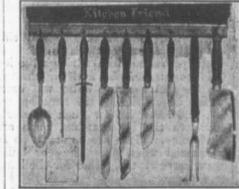
Have you forgotten to renew your subscription to Farm and Dairy?

FOR SALE

For \$20.00, I can sell you the best automatic lift drop head Sewing Machine. For particulars apply to W. B. ROBERTS, Sparta, Ont.

Woman's Kitchen Friend

This kitchen rack should be in every woman's home. You cannot afford to do your work another day without it. All the articles shown are household con-



veniences. Handles are black, and well finished. All regulation size and length. You can have this FREE, for a club of two new subscribers to Farm and Dairy, at \$1 each. Get the boys and girls to work securing two of your neighbors to subscribe. It will surprise you how easily this can be done. Address Circulation Manager, Farm and Dairy, Peterboro, Ont.

The Sewing Room

Patterns 10 each. Order by number and size. If for children give age. If for adults, give bust measure for waists, and waist measure for skirts. Address all orders to the Pattern Department.

WORK APRON 655.

The work apron that includes generous pockets is the practical one and this model in addition to that advantage is shapely and becoming at the same time that it is exceedingly useful. The straps are crossed at the back and buttoned into place at the shoulder, so that it takes but a moment either to put it on or take it off.

Material required for medium size is 2 yds. 24 or 27, 3 yds. 36 in. wide.

The pattern is cut in three sizes, small, medium, large, and will be mailed for 10 cts.

EMPIRE NIGHT GOWN 653

The night gown cut low at the neck and made with short sleeves, is the best liked for warm weather wear. This model is delicate and charming yet perfectly simple. The trimming is arranged to give the Empire effect, which is becoming and attractive and does not involve any additional labor, for the gown is a plain gathered at the upper edge.

Material required for medium size is 7 yds. 24 or 27, 4 yds. 36 in. wide, with 1 1/2 yds. of insertion, 3 yds. of heading,

and 3 yds. of edging. The pattern is cut in three sizes, small, medium and large, and will be mailed for 10 cts.

HOUSE JACKET 643

Morning jackets made with percale are favorites, for they mean snugness and becoming flare as well as comfort. This one includes a square yoke, percale and trimming of embroidery, but while such trimming means an elaborate effect with very little labor, it is not necessary, for the entire jacket could be made of plain material and trimmed or finished in any way to suit the fancy.

Material required for medium size is 2 yds. 24 or 27, 2 yds. 33 or 1 yds. 44 in. wide, 5 yds. of embroidery 8 yds. in. wide, 2 yds. of heading. The pattern is cut for a 32, 34, 36, 38, and 40 in. bust, and will be mailed for 10 cts.

POINTED TUNIC SKIRT 646

Every variation of the tunic skirt is fashionable, but this pointed one is peculiarly smart and attractive. It gives becoming lines to the figure and is adapted to a great many materials.

Material required for medium size is 6 1/2 yds. of bordered material 31 in. wide, with 1 yd. for the gored portion.

The pattern is cut for a 22, 24, 26, 28 and 30 in. waist, and will be mailed for 10 cts.



The music in your soul can all be expressed with a

New Scale Williams Player Piano

This marvelous musical instrument saves you the years of practice—the sudden expense of training the fingers to strike the keys of a piano correctly.

The New Scale Williams Player Piano does the merely mechanical part of piano playing.

Let us tell you the beauty of the music you can express as you will. You can really "put your whole soul" into some with the New Scale Williams Player Piano.

There is no need to register, and we will send these Player Pianos on approval—send me the terms enclosed. Write us.

The Williams Piano Co. Limited, - Ottawa, Ont.

BRANCH OFFICES:

Winnipeg, Man., 323 Portage Ave.
 Montreal, Que., 733 1/2, Canal St. W.,
 London, Ont., 261 Dundas St.

117A

MARKET REVIEW AND FORECAST

Toronto, Monday, June 20th.—There are many conflicting reports regarding the present state of the crop throughout Canada, although if the Government and Canadian Pacific Railway's reports are to be taken as a criterion, there is nothing in the situation to cause alarm. The C. P. R.'s report says that from 19 sections, only four are unfavorable, and that the weather generally is favorable, and the growth rapid. There is evidently great need of rain in some sections, but there is hardly enough drought to warrant the fears of some of the more pessimistic observers. From the older provinces, encouraging reports continue to be sent in, warranting the belief that under ordinary conditions of weather and temperature, the present season should be a fairly prosperous one.

Flotations of companies and mergers of big concerns still continue, the latest being the amalgamation of the well known firms of W. A. Murray & Co., and John Kay & Co., of this city. It is believed that the capitalization of these two companies will be not less than \$3,000,000, and that the public will be invited to take a certain portion of the shares.

Money remains easy. Call money in Toronto is 5% per cent.

WHEAT

The latest advices from across the border note a marked improvement in the condition of the wheat crop. The varied changes in the weather, coupled with unfavorable reports from a few sections of

the Northwest, have conducted to raise quotations, although not up to last week's figures. The harvest has started in Texas and Oklahoma, and an abundant crop seems to be assured. July wheat closed at Chicago on Thursday, at 92c; September at 90c, and December at 91c. All the continental exchanges, with the exception of Berlin, showed a slightly upward tendency.

Local dealers quote No. 1, Northern, 95c; No. 2, 5c; a bush, lake ports; No. 2, Ontario mixed winter wheat, 90c to 91c out-

To Our Readers

On account of considerable advertising for insertion in this issue coming to hand after a large portion of the paper had gone to press when it was too late to enlarge the paper, the crowding out of reading matter was unavoidable.

side. On the farmers' market, fall wheat is selling at 92c to 95c, and goose wheat at 90c a bushel.

COARSE GRAINS

All the coarse grains with the exception of oats remain stationary at last week's quotations. Local dealers give the following prices: Canada Western oats, No. 2, 35c; No. 3, 34c a bush, lake ports; No. 2, Ontario white, 32c to 33c outside; 36c a bush, on track, Toronto. American corn, No. 2, 67c; Canadian corn, 61c to 62c a bush, Toronto freights; barley, No. 2, 52c a bush, outside; Manitoba barley, 45c a bush, on track lake ports; peas, 70c to 71c; buckwheat, 50c outside; rye, 67c to 68c a bush.

On the farmers' market, oats are quoted at 37c to 38c a bush; peas, 70c; barley, 46c; buckwheat, 53, and rye, 54c a bush. Montreal dealers quote as follows: No. 2, Canadian westerns, 36c to 36c in store; No. 3, 35c to 35c; No. 2, Ontario, 35c; No. 3, 34c a bush; corn, 62c; peas, 70c to 70c; barley, No. 3, 48c; No. 4, 44c; buckwheat, 54c a bush.

POTATOES AND BEANS

Prices are getting firmer in regard to potatoes, and Delaware are quoted at 50c to 55c a bag. Ontarios are also in the market again and are selling at 40c to 45c

a bag in car lots.

On the farmers' market, potatoes are selling at 50c to 60c a bag. There is no change in the price of beans, primes being quoted at \$2.10 to \$2.30 and three pound pickers at about the same figure.

WOOL

Prices for wool remain unchanged from last week's quotations, being as follows: Washed fleeces, 18c to 20c a lb., unwashed fleeces, 15c a lb. In Quebec province the woolen mills are doing a good business and advance orders for knitted goods denote encouraging activity.

EGGS AND POULTRY

The demand for eggs has fallen off somewhat and this coupled with the fact that tremendous supplies are coming into the market, has served to keep prices stationary. Dealers quote case lots at 19c a dozen. On the farmers' market, eggs are selling at from 24c to 25c a dozen.

It is noticeable that the movement inaugurated by Farm and Dairy in regard to the formation of egg circles, is bearing fruit, and that creameries in one or two places are considering the advisability of starting them in connection with their business.

Prices of poultry in the local market are as follows:

In Montreal there is a slightly lower price quoted by dealers in eggs, straight receipts netting 18c, whilst selected lots are quoted at 21c a dozen. Prices for poultry in Toronto are as follows: Spring chickens, dressed, 40c; turkeys, 15c to 17c; ducks and geese, 15c; old fowl, 16c a lb.

HIDES

Dealers make the following quotations for hides: No. 1, inspected steer and cow hides, 10c; No. 2, 9c; No. 3, 8 1/2c a lb. Calfskins, 14c; sheepskins, \$1.25 to \$1.35; tallow, 5 1/2c to 6 1/2c a lb.

At country points, the following prices are being paid by dealers: Beef hides, 9 1/2c to 9c a lb; calfskins, 15c to 16c; sheepskins, \$1.10 to \$1.15; lambskins, 20c to 30c; horsehides, \$2.75 to \$3 for No. 1 quality; horsehair, 20c to 25c a lb.

Montreal dealers quote as follows for hides: No. 1, inspected beef hides, 12c; No. 2, 11c a lb; calfskins, 17c; lambskins, 20c each.

MILL FEEDS

Local dealers quote the price of mill feeds as follows: Manitoba bran, \$19 a ton; shorts, \$20 a ton on track, Toronto. Ontario bran, \$19, and shorts, \$21 a ton on track, Toronto.

The Montreal trade is dull and prices remain nominal. Manitoba bran, \$18, and shorts, \$20 a ton, in bags. Ontario bran, \$19, and shorts, \$21 a ton, in bags.

DAIRY PRODUCTS

There is nothing of moment to chronicle in the present condition of the butter and cheese market. Receipts of both commodities continue to pour into the market, and local dealers make the following quotations: Creamery prints, 22c; dairy prints, 18c to 19c; separator prints, 20c; and ordinary quality, 15c to 16c a lb. On the farmers' market, choice dairy butter is selling at 24c to 25c a lb., and inferior quality at 20c to 21c a lb. In Montreal the finest creamery is quoted by dealers at 23c to 23 1/2c a lb.

On the Toronto market new cheese is quoted at 11 1/2c and twin at 12c a lb; old cheese, 12 1/2c to 12c a lb. Montreal quotations for cheese are, white cheese, 11c to 11 1/2c a lb; cologne cheese, 10 1/2c to 11c a lb.

HORSE MARKET.

Dealing in horses has been a little brisker during the week, as many farmers are finding, as we foretold some time ago



Kills Bone Spavin
Rich Valley, Alta, May 20th, 1909
"I have used your Spavin Cure for a long time and would not be without it. Have killed a Bone Spavin by its use."

That tells the whole story. And hundreds of thousands have had the same experience in the past 60 years.

For Spavin, Ringbone, Carb, Splint, Swellings and all Lameness,

Kendall's Spavin Cure cures the trouble—makes the horse sound and well—and saves money for the owner because it removes the cause of the trouble.

Keep a bottle always at hand—\$1.00 for 85. Good for man and beast. Ask your dealer for free copy of our book "A Treatise On The Horse's Feet."

DR. B. J. KENDALL CO., Enosburg Falls, Vt.

PERFECT EQUIPMENTS FOR BARN

The Loudon Junior and the Loudon Hay Carriers

are the best and most reliable Carriers manufactured in Canada. Note in the Loudon Junior Carrier how compact it is, and see how the wide-fairing mouth assures the safe locking of the Fork Pulley. We make 13 different Hay Carriers. For particulars re prices, etc., write to

LOUDON MACHINERY CO., Guelph, Ont.
MANUFACTURERS OF
Hay Tools and other Barn and Stable Fittings

PETER HAMILTON MOWERS

possess surpassing merit and remain unexcelled. Their compactness and simplicity of structure are apparent. We invite the closest examination and comparison. A maximum of durability, convenience and efficiency with a minimum of machinery.

The Main Frame is strong and holds all shafts and gears in perfect mesh. The gears are powerful and well protected. No lost motion. The main wheels are broad and high. The Foot Lift is easily operated and effective. The Draft is direct to the Cutting Bar. The Cutting Bar is rigid and can easily be realigned, or the knife recut if necessary.

Be Sure and See the Peter Hamilton Agent before Buying

THE PETER HAMILTON CO., Limited - Peterborough, Ont.

that I work, lowering horses, coral p... \$100 to vicab...
A few brouc... time... and th... treat... mats... the pr... level... high... some... cwt. T... at 89 f... ered... by loca... Choice... 25 to 35... Butch... um, 86... cows, c... Feeds... to 84;... Mitch... 82c to... calves... Sheep... 84; Jam... Hogs... cwt... The T... den... 70s to 74... MO... Montre... ket for... with su... the dea... cwt. fo... towards... creas... and pric... of the o... on-quar... are look... tepts ar... The de... quotation... through... cwt. fo... EXPLO... Montreal... a full in... brick tra... well adv... that pric... bring on... gain. 7... this was... where I... day, and... offerings... price rul... kets in... well sell... we are b... British i... a good si... is calcula... until it... GRA... RET... Between... to Detro... Niagara... Good G... Return... NORTH... Sailing... SARNIA... and DU... Wednesd... Only the... steamers... Sailing... E. m. and... Wednesd... and GEO... Informa... Agents, o... nia or Col...

Write to Alfred Rogers for free facts about cement's value to you



No special timbering is necessary when cement is used to modernize the interior of a dairy barn.

You can be sure of a better price for your milk if your cows are housed in a cleanly interior like this one here.



HERE is your opportunity to get, for nothing, the inside truths about cement—how little it costs compared with lumber—how to use it so you will be satisfied with the result—where to buy it—what kind to buy. I will tell you all you want to know about cement, and I will not charge you one cent for telling you. Learn all about cement free. Write me now.



All silos are good; but a stave silo is something to bother over from the first day you use it.

Concrete silos may seem hard to build; but they are easier to construct than any other kind whatever.



Cement is Easily Handled

There is nothing intricate nor difficult about handling cement. Write me, and I will show you just how to mix and use concrete (which means a mixture of cement, sand and broken stone). If you are "handy" at all, you can quickly learn how to build almost anything with cement—from a fence-post to a cattle-barn. I will tell you how to go about renovating your house, wagon-shed, barn—any building on your place. And I will save you money, too. Yet you need pay me nothing at all for my helpful advice.

Fireproof and Decay-Proof

Fire cannot destroy a concreted surface. Decay does not affect it. Structures exist to-day, in Great Britain, Italy and elsewhere, that were built of cement more than two thousand years ago. Dampness cannot penetrate a concrete wall. It is an armor against heat and against cold—so a building even thinly overcoated with the right kind of cement is warmer in winter and much cooler in summer than even a solid stone building can be. Yet its cost is trifling.

My Knowledge Freely
At Your Service

This advertisement is intended simply to educate you about cement, to tell you a few facts about the building material every farm ought to use for almost any purpose lumber is used for now. I offer you my expert advice and instruction entirely free of cost or obligation to you. You are welcome to it.

Won't you write me before
you build?



It 'takes it out' of hens to have to live in frame houses through our bitter winters. House them right.

You can get bigger returns for the outlay from a cement-concrete poultry-house than you perhaps now imagine.



Cement Cheaper Than Lumber

Even in first cost, a concrete house, barn, henhouse, shed—or any other structure—is actually cheaper than a cheap lumber construction. In the long run cement is ever so much cheaper—because it needs no repairs—you don't have to paint it—it just lasts and lasts, and does not deteriorate from age or from any other cause. You will be mighty well satisfied with anything you build of cement, whether it's a mansion or a watering-trough for the cattle.

Skilled Labor Rarely Needed

Moreover, it is seldom necessary to hire high-paid mechanics to do any cement work you want done. The probability is that I can quickly teach you how to do the work yourself, with no outlay for skilled labor. Get the right cement—I will tell you about that, too. Use common sense and follow my plain-English instructions, and I can almost guarantee a satisfactory job on anything you want to use cement concrete for. Just write me and get the facts.

Inform Yourself Upon
Cement—Do It Now

Simply tell me your name and address, and give me an idea of what you might possibly use cement for. I will do all the rest—inform you fully upon this important money-saving, satisfaction-giving building material. You can have all the facts freely. Don't hesitate to write me because you are not quite ready to build. You will be ready some day.

Ask me now for the facts
you ought to know.

FREE Instruction on How to Build Any of these Farm Necessities:

SILOS CORN CRIBS
COW SHEDS STABLES
WATERING TROUGHS CESSPOOLS
SLOP TANKS ICE HOUSES
BOX STALLS CISTERNS
BARN FLOORS FEEDING YARDS
DAIRY BARN POULTRY-HOUSES
And Many Other Farm Structures

JUST WRITE AND ASK ME

ALFRED ROGERS THE
CEMENT MAN

315 ELIAS ROGERS BUILDING
TORONTO, ONTARIO