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VOL. XXIX.

NUMBER 27.

# FARM AND DAIRY

## RURAL HOME

PETERBORO, ONT.

JULY 7,

1910.



A COW STABLE WHICH DIFFERS IN MANY RESPECTS FROM THE ORDINARY VARIETY

This novel illustration is that of a table set in the feed room of the cow stable of Mr. Charles Watson, York Co., Ont., on the occasion of a "Dairy Lunch" last spring. The clean, light, well-ventilated and wholesome room, characteristic of the stable, with the walls as pure and white as whitewash could make them, and with the brick floor spotlessly clean, made a unique place for a dairy lunch. Mr. Watson is a member of the Farmers' Dairy Company, of Toronto, in connection with which organization, this unique lunch was given.

See article on page 11.

DEVOTED TO  
BETTER FARMING AND  
CANADIAN COUNTRY LIFE

# BOWL SPINDLES

This is one of the most important parts of the Separator, and is a part that has, perhaps, given more trouble than any other. Any slight accident to the spindle generally disables the entire bowl, throwing it out of balance, and making it run rough and hard.

In the SELF-BALANCING "SIMPLEX" SEPARATOR the spindle is relieved of carrying the weight of the bowl, therefore, it is relieved of all the strain which spindles in other machines are subjected to. The only function of the spindle in the "SIMPLEX" is to drive the bowl. In other machines the spindle carries the weight of the bowl, and is subject to all the strains resulting from the high speed. In the "SIMPLEX" it is merely a means for conveying the driving power from the gearing to the bowl. This driving power on account of the high gearing, is very slight indeed.

The "SIMPLEX" spindle is made of a special high carbon steel. It is specially treated in the drop forging process, and straightened by hydraulic pressure, so as to make it as free from internal strains as possible. We use the same care with the spindles that we did formerly when they carried the weight of the bowl, so that there is a very large factor of safety in the spindles of the SELF-BALANCING "SIMPLEX." In the "SIMPLEX" the spindle instead of being one of the most important and sensitive parts of the bowl, becomes of secondary importance only, and is one of the great benefits derived from the SELF-CENTERING BEARINGS.

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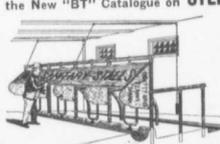


FIG. 200  
The "BT" Lifting Manger.

BEATTY BROS., Fergus, Canada, LITTER CARRIERS, HAY CARRIERS, ETC.

### Ontario Provincial Winter Fair

A meeting of the Executive Committee of the Ontario Provincial Winter Fair was held in Toronto on Tuesday, June 28th. It was decided to hold the next fair from December 5th to 9th, 1910, at Guelph. This means that the fair will open on Monday instead of Tuesday as formerly. Poultry exhibits must be in the building on Saturday previous to the opening, and the other exhibits must be in place by 10 o'clock on Monday morning. This will be the week following the International Show at Chicago so that animals can be shown at both exhibitions.

New classes have been added for Clydesdales, Shires, Standard Brod mares, ponies, Hackneys and a section for horses was added to the judging competition. Devons were struck off the prize list and separate classes were made for Herfords, Aberdeen Angus and Galloways.

The following judges were appointed. Clydesdales, Canadian-bred, Clydesdales and Shires, Shires and Draught horses—Hon. Robert Beith, Bowmanville, Peter Christie, Manchester; Edward Charlton, Duncfer; Hackneys, Dr. Quinn, Brampton, Dr. Rontledge, Lambeth; Standard Breds: Dr. J. G. Rutherford, Ottawa; Beef Cattle, Robert Miller, Stouffville, James Smith, Rockland; R. J. Mackie; Oshawa; Beef Carcasses, Prof. G. E. Day, Guelph; G. F. Morris, London, Shropshires, J. C. Duncan, Lewiston, N.Y.; Southdowns, Dorsets, Suffolks and Hampshires, W. H. Beattie, Wilton Grove; Cotswolds, Lincoln, Leicester; John Gardhouse, Highfield; James Douglas, Caledonia; Oxfords, J. E. Cousins, Harriston; Short Woolled Grades, J. C. Duncan, W. H. Beattie; Long Woolled Grades, John Gardhouse, James Douglas; Sheep Carcasses, Prof. G. E. Day, Geo. F. Morris; Dairy; Prof. H. A. Dean, Guelph; and Seeds: Prof. C. H. Zavitz, Guelph.

### Bees As Profit Makers

J. A. Arnold, Washington, D.C.

The average annual honey yield per colony for the entire country should be from 25 to 30 pounds of comb honey or 40 to 50 pounds of extracted honey. The money return to be obtained from this crop depends largely on the market and the methods of selling the honey. If sold direct to the consumer, extracted honey brings from 10 to 20 cents a pound, and comb honey from 15 to 25 cents a section. If sold to dealers, the price varies from six to 10 cents for extracted honey and from 10 to 15 cents for comb honey. All of these estimates depend largely on the quality and neatness of the product. From the gross return must be deducted from 50 cents to \$1 a colony for the expenses other than labor, including foundation, sections, occasional new frames and hives, and other incidentals, not, however, providing for increase.

These figures, however, are based on a system of good management. Bee keeping to be profitable requires hard work, knowledge and experience. Much study is required to insure success. It is unwise, therefore, for the average individual to undertake extensive bee keeping without considerable previous experience on a small scale, since there are so many more details which go to make up success in the work, such as the ways of bees, how to handle them, and what kind of equipment is best. Then begin on a small scale, make the bees pay for themselves and for all additional apparatus, as well as some profit, and let the business grow gradually.

### Coming Events

Portage la Prairie Exhibition, July 11-14, 1910.

Winnipeg Industrial Exhibition, July 13-23, 1910.

Exhibition, Highland and Agricultural Society of Scotland, Dumfries, Scotland, July 19 to 22, 1910.

Regina, Sask., Provincial, Aug. 2-5. Vancouver, Aug. 15-20.

Saskatoon Aug. 9-12. Edmonton, Aug. 23-30.

Sherbrooke, Que., Great Eastern, Aug. 27 to Sept. 1.

Sherbrooke, Que., Pomological Society (summer meeting), Aug. 30 to Sept. 1.

Toronto, Canadian National, Aug. 27 to Sept. 1.

Dominion Exhibition, St. John, N. B. Sept. 5-15, 1910.

Ottawa, Central Canada, Sept. 9-17. London, Ont., Western Fair, Sept. 9-21.

Charlottetown, P. E. I., Provincial, Sept. 20-24.

Halifax, N. S., Provincial Sept. 23 to Oct. 5.

Victoria, B. C., Sept. 27 to Oct. 1.

New Westminster, B. C., Provincial, Oct. 4-8.

Toronto, Ontario Horticultural, Nov. 15-19.

London, Eng., Royal Horticultural Show (for colonial-grown fruit and vegetables), Dec. 1-3.

Maritime Winter Fair, Amherst, N. S. Dec. 5-8, 1910.

Exhibition, Smithfield Club, at Royal Agricultural Hall, London, England, Dec. 5-9, 1910.

### Chicago Gets Dairy Show

The Fifth National Dairy Show will be held in the Chicago Coliseum, October 20th to 29th, 1910, instead of in Milwaukee, as previously announced. This action was taken at a meeting of the Board of Directors of the National Dairy Show Association while in Chicago, June 18th. After investigating every phase of the question and after considering how best to serve the varied interests of the show, not only from a financial standpoint, but from all others as well, the Directors voted to re-consider their previous action, and have entered into a contract with the Chicago Coliseum officials, and other business interests, to hold the 1910 Dairy Show at that city next October.

At no other time in the history of the National Dairy Show Association have conditions appeared so auspicious and the officials of the organizations so hopeful over the prospects for the next show. From now on, the work of planning details and organizing the different branches will be actively pushed.—H. E. Van Norman, Secretary and Manager, State College, Pa.

Every province in the Dominion has applied for space for a provincial exhibit at the year's Canadian National Exhibition and the result cannot fail to be the greatest display of the national resources of Canada ever placed on exhibition. It will be a great chance for Canadians as well as visitors from other countries to see just what each corner of the great Dominion depends on for future greatness. And the net result cannot fail to be a pleasant surprise to Canadians as well as outsiders.

With a horse prize list of \$13,000, every prominent breeder in Canada taking an active interest and the best horsemen of Britain coming across the ocean to do the judging, the horse show at the Canadian National Exhibition promises this year to eclipse anything in its history. No class of horse has been neglected from the pony to the champion. In addition to the regular prizes there are special prizes in a large number of classes, the show is being looked forward to by horsemen generally.

I enclose \$1 for my renewal to Farm and Dairy. I would not be without it for twice the subscription price.—T. J. Wilton, Middlesex Co., Ontario.

Issued  
Each Week

Vol. XXIX.

A Man of Year  
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# FARM AND DAIRY

## RURAL HOME

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Each Week

Only \$1.00  
a Year

Vol. XXIX.

FOR WEEK ENDING JULY 7, 1910.

No. 27

### SOME THINGS THAT MAKE FOR SUCCESS IN LIFE

A. Gifford, Grey Co., Ont.

#### A Man of Years Tells How He Made a Success of His Life.—Long Hours and Small Pay Were Not Taken into Consideration in His Early Days.—Plain Talks from the Soul of a Successful Man.

APPARENTLY the Farm and Dairy correspondent from Prince Edward Island, who wrote in a recent issue regarding the hours of labor on farms, thinks farmers have to work too long hours. This same idea, I am sorry to say, seems to have taken possession of too many young people on our farms. To me the question has been all my life, not how many hours I was working, but what was I accomplishing by my work. Very early in life I was taught always to have some worthy object in view and to bend all my energies to the attainment of that object. Probably I cannot better illustrate my views on this question of too many hours or urge better attention to the work we undertake in early life than by giving some of my experience covering over 70 years.

Through the death of my father, I, at the early age of three years, was left to the care of my mother. When 10 years old, I was employed during one fall with a farmer helping to pick apples, get up roots and take care of his clover seed.

One lesson my mother always taught me was that I should always do all I could at whatever work I was employed. When the fall work closed, the farmer for whom I had been working, as a result of my early training, was very anxious to keep me with him. I wished to go to school, however, and my mother wished me to do so; and I am thankful now that every wish of mother's was law to me then. I received only 10 cents a day and my board for my time with that farmer, but I learned a good many things.

#### SOME THINGS I LEARNED.

Among these I might mention one in particular. That was, that fruit raising was an important adjunct to farming. I found that my employer received \$2,500 for the fruit off his 12 acre orchard. I decided that an orchard would occupy a considerable part of the farm that I was bound some day to have.

At the age of 10, I went to work for the best farmer in our county, and though I have since visited many parts of Canada from Halifax in the east to Calgary and Edmonton in the west, including the various experimental farms, also the best farming districts in England, Scotland, and many parts of the United States, I have yet to see a better kept farm than the one where I was employed. Though hours were not counted and we were not supposed to be watching the sun from five a.m. until it reached the meridian or descended from that point to the horizon, yet there was a set time for every work and a set place for everything.

For my first six months (the summer), I received \$5.00 a month and board; for the next twelve months, \$4.00 a month and board; both bed and board were of the very best. At the end of each term, my employer, a broad Yorkshire man, handed me a gratuity, in the first case of \$3 extra and in the last case of \$5, with the remark, "Thou hast been a good hand; here is somewhat for thee." I imagine I see the grin on the faces of many present day farm boys at the idea of working 12 and often 15 hours a day in summer, and in winter tending a big stable full of fattening cattle from 6 a.m. until 9 p.m. for such pay as I received. Readers of this article should not forget, however, that for every dollar in cash I received, I learned what has been

faster than I had been doing and thus sooner reach my goal of a farm of my own, than I could were I to work as a laborer. I secured a situation as a public school teacher. Starting with a salary of \$240 a year, I received regular increases until, for my fifth year, I received \$300 and at its close was offered \$400 to continue. In school work as in other work, I found it did not pay to count hours, though there was then as now a six-hour limit for the work of a school day. Although the boys and girls were just as fond of play 50 years ago as they are to-day, I never found any difficulty in holding classes even up to six in the evening or getting them to meet at eight in the morning when we had any special matter in hand. The question will be asked, did not the pupils suffer in health from such long and close application? Never that I heard of. Many of them I know to-day are like myself alive, well and active, though far past middle life.

#### A LARGE SALARY DECLINED.

Though the offer of \$100 per annum for a country school was considered a very big salary 50 years ago, to accept it would have meant one year less on that farm I had always planned to have. I declined the offer, taking Horace Greeley's advice to go west. To-day I have one regret—that I did not go farther west, but that is too late to mend now. I did what I thought to be the best as I was still keeping that orchard in view and an orchard would be of little use except in a district where fruit was known to succeed.

At the age of 24, I had accomplished part of what I had planned; I had the makings—the foundation of a farm. All my savings with a mortgage on top of them were in it.

#### HOURS NOT CONSIDERED.

The question now was, not how many hours I should work in the day, but how to make in the shortest time, on that foundation, the farm I had planned for. Young men everywhere should ask their grey-haired sires that have made Ontario what it is to-day, how much of the work was done by counting hours or watching the sun through its daily course. They will find the answer in every case where they have succeeded, that it was by a total indifference to the hours of work. Hours of work were never thought of. Efforts were all directed to doing this, that or the other thing well and in the shortest possible time knowing that with each task completed, another was standing ready.

Your Prince Edward Island correspondent and Farm and Dairy readers will now be asking, did I succeed? My answer is yes, and I am satisfied. I have converted many acres of unproductive land into fruitful farms with comfortable buildings and attractive surroundings. I have raised a large family and have given them good educa-



A Neglected Orchard Typical of the Worst in the Georgian Bay District

It was just such an orchard as the one illustrated that was taken over for demonstration purposes at Cremore, Ont. It would seem almost impossible that such an orchard could be put into good condition. Such, however, is not the case, as the work already done in the demonstration orchards well shows. Photo by an Editor of Farm and Dairy.

worth hundreds of dollars to me since, and the few words of praise given in my employer's kindly dialect, were a tribute to my attention to his interests without regard to the hours employed, and I appreciated them, if for no other reason than that they pleased mother.

For the next three years, I worked with farmers by the day, or by the month, or by the job as opportunity offered, attending school whenever I had even a day off and learning all I could in other ways.

#### SCHOOL TEACHING VS MANUAL LABOR

When 18 years old, I succeeded in getting a second class teacher's certificate. At that time, I thought that by teaching I could secure money

tional opportunities with each one a fair start in the world. I have set them an example of strict temperance in all things and in moral living, which I am pleased to know they are all following. I find that I have a comfortable home still left for my old age with, I trust, sufficient to occasionally do a kind act and keep me from the house of refuge.

#### FRUITS OF EXPERIENCE.

Just here, I would like to say that the orchard I planned when 10 years old to have some day has materially helped me. Hard work and long hours when accompanied with a well regulated life in my experience I have found to be conducive to health and strength in old days, of which I am a living proof, for though past the allotted three score years and ten, I feel perfectly well and enjoy life and work as well as I ever did.

I fear that possibly you, Mr. Editor, and the young readers of Farm and Dairy, whom it is my object to benefit by convincing that to begin life by counting hours or watching time is a poor way to succeed, will think that there is too much egotism in this article. Every statement made, however, is a fact, and I believe represents the experience of thousands of the successful farmers of Ontario, in the essence, if not in the exact particulars, as herein given.

### Prevention of Cattle Tuberculosis in Denmark

At the British Congress on Tuberculosis held in London from July 22-26, 1901, Prof. Koch startled the scientific world by the assertion of his belief that bovine tuberculosis was not proved to be transmissible from animals to man. This statement led to the immediate appointment of a British Royal Commission to go carefully into the whole subject. The Commissioners presented a second interim report in January, 1907, and, as a result of experiments and investigations, they have concluded decisively that bovine tuberculosis is capable of causing tuberculous disease in the human subject and that cow's milk containing bovine tubercle bacilli is clearly a cause of fatal tuberculosis in man. With this report before them and also possessing evidence that milk came coming into the city contained living tubercle bacilli, the Health Committee of the Corporation of Birmingham, England, commissioned their Deputy Chairman (Mr. J. C. Dexter), the Medical Officer of Health (Dr. John Robertson), and the Veterinary Superintendent (Mr. John Malcolm, F.R.C.V.S.) to visit Denmark and report upon the isolation method devised by Prof. Bang, who is principal of the Copenhagen Veterinary College, for the freeing of Danish dairy herds from tuberculosis. On their return they presented to the Birmingham Health Committee a report in which the method employed by Prof. Bang is described and recommended for adoption in Great Britain.

#### THE BANG SYSTEM.

In connection with this disease Professor Bang relies upon segregation and isolation and not upon slaughter. Only cows with tuberculosis of the udder, and wasters, manifestly diseased, are slaughtered. His method depends upon (1) the use of tuberculin to diagnose the disease; (2) the complete separation of healthy animals from diseased; and (3) the gradual rearing up of a healthy non-infected stock to replace in due course the infected. It is stated that the result of the application of these measures during the past 16 or 17 years has been that between 600 and 700 herds of dairy cattle in Denmark have been freed or practically freed from tuberculosis.

The first step is the application of the tuberculin test and the separation of reactors or diseased animals from non-reactors or healthy animals. The two divisions are then kept rigorously apart, by removal of one set to another

farm, by keeping the two sets in separate fields or at different ends of the same field, or in buildings by the erection of wooden or brick partitions unprovided with doorways or other openings. In Denmark it is the custom to

### Will Describe New Ontario

The editorial representative of Farm and Dairy, who recently visited the day belt of New Ontario with the members of the Canadian Press Association, was so impressed with the possibilities of that great section of country, and with the development that is taking place there, that Farm and Dairy has since completed arrangements for the publication during the next two months of a series of articles describing conditions in New Ontario. An editorial representative of Farm and Dairy has left for the Temiscamingue district. During the next seven or eight weeks he will visit the various sections of the district where settlement is taking place. He will talk with the settlers, secure photographs of their homes, examine their crops, and find at first hand what the possibilities of the country are, as far as they can be ascertained at present. Each week Farm and Dairy will publish an article from him. Watch for these articles. The first will appear in next week's issue.

together cattle at grass, which lends itself to isolation of animals in the field.

#### REARING HEALTHY STOCK.

The next step is the rearing of healthy stock from infected parents. Prof. Bang accomplishes this by the removal of calves at birth from infected parents to a place free from infection, where they are fed on milk heated to 176° F.—sufficient to kill tubercle bacilli—receiving, however, immediately after birth, milk from healthy cows. The calves are tested with tuberculin, and subsequently the whole stock are tested half-yearly, all reactors being removed. When these measures have been efficiently maintained for two or three years real success is secured. Prof. Bang states, at comparatively little cost to the farmer; but the effective isolation by maintenance of the stock in two separate herds for several years does entail constant vigilance and much real work.

Instances are given in the report of notable success in dealing with tuberculous herds by this method. In the case of four herds under



A Lowly One to Breed From

The mare illustrated, Lady Mack, is the property of Mr. Chas. Watson, York Co., Ont. The interior of whose stable is featured on the front cover of Farm and Dairy this week. Lady Mack is four years old and registered. Mr. Watson is just starting to breed heavy horses, and he believes in starting right.

one ownership as many as 350 animals out of 448, or 78 per cent., reared in 1895. In 1908 the number of reactors was 19 out of 784, or 2.4 per cent. A herd of which 95 per cent. were tuberculous has within a few years by care and trouble but with little pecuniary expenditure, been entirely freed from disease. A herd of 208, of which 131 reared in 1892 and 44 out of 227

in 1899, consisted in 1902 of 244 animals all healthy. The whole of these cows came from the original stock and most of them were derived from tubercle-infected mothers.

The report describes the excellent regulations and precautions which are in force for the sale and delivery of milk in Danish urban centres. It is stated that many dairymen supplying towns have freed their herds from tuberculosis by adoption of the simple measures recommended by Prof. Bang. They are thus enabled to sell their milk as "baby milk" for the nursery, which by Government order must be the product of cows certified to be free from tuberculosis. The retail price of such milk is stated to be approximately twice that of ordinary milk.—Census and Statistics Monthly.

### Hints on Harvesting Aisake

Alex. Smith, Durham Co., Ont.

When harvesting our aisake crop, if we are short of help, I set two mowers going about four o'clock in the morning and swath it down until about ten o'clock; then discontinue the work until the next day. We also take advantage of a cloudy day should such come along.

In about two days after cutting, the time varying according to climatic conditions, the aisake should be ready to rake. We run the rake opposite to the way the mower was run in order to save the heads as much as possible from shelling. We just rake up enough of the crop that can be handled in the same day, then if it should rain, there is no difficulty in getting it dry without having to turn it.

### Plain Talks About Factory Milk Supply

George Rice, Oxford Co., Ont.

The weak part of the cheese business is the quality of the milk supplied. If 90 per cent. of the milk were good and 10 per cent. poor (I am referring to flavor), it would bring the whole vat down to near the quality of the poorest milk.

There has been practically nothing done to raise the quality of the milk. Of course, there is any amount of talk and lectures but that does little if any good at all, since the man who sends the poor milk to the factory is not likely to attend any meeting where he might hear such talk. If he did attend, he is not likely to be moved out of his rut by good advice. Notwithstanding the problem as it is to-day, the improvement of milk is the simplest thing in the world to do if gone at in the right way.

#### GOOD MILK AT CONDENSERS.

At Tillsonburg we have a condensery that receives All milk. Why do the cheese factories not receive the same kind of milk? The condensery people never have any meetings nor any one to talk to the patrons on the care of milk, care of cows, or any other subject? They have no use for "gab" feasts. When the condenser was opened there was a banquet and a ball, which, judging from the attendance, was more popular than a lecture. (Most married men can get a scolding at home).

The condensery people have one man whose duty it is to visit every patron and make sure that the conditions on the farm are right, and that proper care is taken of the milk. The inspector sees to it that the milk is kept in a proper place, away from all foul smells. He sees to it that in the winter time the stables are white-washed and kept clean.

Then, also, the company has a man whose duty it is to inspect the milk at the factory. They do not depend upon him alone, however, to be sure that the milk is right. They want to see under what conditions the milk is produced; and they have no trouble in getting all the good milk they need. Patrons cheerfully comply with all regulations which, though strict, are not hard to carry out.

All this precaution is found necessary, and that

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Some patrons have points, and have in

in a district where milk has been supplied to cheese factories for years. An individual cheese factory could not do this. If complaints were made by a cheese maker, and a patron asked to do this or that to improve conditions, he would tell the cheese maker to go to Halifax (or the other place that begins with the same letter) and he would send his milk to the next factory. Cheese factories are necessarily so close together that patrons are independent, and the poor patrons exhibit this characteristic to the greatest extent. The condenser is able to pay more for milk than these factories, and have a hold on the people in that way.

An inspector should be appointed for these factories, with authority to say that if certain conditions are not complied with and the milk properly taken care of then the milk cannot be sold or sent to any factory. This inspector would be quite independent of any factory. He would need to be a man of tact and firmness.

The inspector of the Tillsonburg condenser was

committee to look after the quality of the cheese. But that is found to be of little, if any, effect. People do not want to raise trouble with their neighbors, and this committee does not do anything. It is therefore a little worse than no provision at all, as the fact of there being such a committee relieves the cheese maker of the responsibility.

Measures that are good in effect are what is needed, not those that look good in theory. An inspector could cover a considerable territory. Cheese makers could give him a good idea as to who needed the most attention.

### Ditching by Means of Machinery

Walter Day, Lincoln Co., Ont.

The machine, known as the Buckeye Traction Ditcher, is built specially for digging trenches such as are necessary for farm drainage, and in the following paragraphs I will endeavor to compare its work with that done by hand labor.

In the past history of drainage there have been many acres of valuable farm land uselessly drained. This, of course, is due to lack of knowledge on the part of the farmer in grading the ditch bottom. A ditch bottom may be graded quite accurately by hand methods, but in the majority of cases it is not done nearly so accurately as the Buckeye Traction Ditcher will do it. The man who operates one of these machines has perfect control over it, and may grade the ditch bottom as true as a surveyor can set the grade stakes by which the machine is governed.

Drainage can be done with these machines in the spring when the ground is so wet that it would be impossible to do it by hand labor. The hand methods are so slow that the water flows into the trench, and makes it impossible to lay the tile, while the machine would dig the ditch much faster, and the tile can be laid and the trench filled in before the water would have time to percolate into the ditch.

#### COST OF DITCHING.

The cost of drainage varies greatly, depending upon the nature of the soil, but in all cases the machine work compares favorably with the manual labor, and in the majority of cases it is more economical. Only in one case can this work be done cheaper by hand labor, and that is where one or two men are employed at a given price per rod to dig in sandy soil. In this case the process of drainage would be very slow. I have had practical experience with hiring a large gang of men at a given wage per day, and I know that it cannot be done as cheaply in this way as by the machine.

The question may arise here, "How much cheaper will the machine do the work than it costs by manual labor?" Of course that depends on the goodwill of the man who owns the machine. The actual cost of the machine per day is: Cost of fuel (say \$1.75), cost of three men (say \$6.00), cost of oil (say 75c.), and breakages, which will amount to (say \$1.50), making a total cost of \$10.00 a day.

My machine has dug as much as 175 rods of trench in 10 hours, and made an average of 75

rods a day during last year. If we take that average and figure it out (\$10.00—75 rods), we will find the actual cost to be 13 1-3 cents a rod for digging. If the average cost for digging by manual labor is 30 cents a rod there would be quite a large working margin for the investor. But I do not consider this margin much too large, because these machines cost from \$1,800 to \$4,000 laid down in Ontario. Variation in price of machine is due to the different sizes of machines. If the actual cost of drainage by manual labor is less than 30 cents a rod then the less margin there will be for the man who owns the machine.

The work of the Buckeye Traction Ditcher is so much more convenient and faster than the manual labor, that the man who drains his farm with the machine will have net returns enough to pay the cost, long before the man who waits for manual labor has his drainage completed.

These machines will dig in any kind of soil, and have been known to dig across an old-fashioned log road, while the logs were still quite sound. But where the soil is very stony the work is slower, and the cost greater. With regard to clay and sand, there is very little difference in the speed of digging, so long as both are free from stones.

### The Advantages of Soiling

S. K. Thompson, Hants Co., N. S.

Perhaps the greatest argument in favour of soiling is that less land is required where those crops are made use of. The common estimate is that one acre of good soiling crops produces as much feed in the season as two and one half acres of good pasture. When the summer silo is used, and good crops of corn are secured, the difference between the two may be wider.

Besides the saving of money invested in land, there will also be a considerable saving in fencing when soiling is practised. The fencing bills on most farms amount to quite a large sum in the course of a few years. A greater variety of feed is available, and that good all the time in the case of soiling crops, which results in greater milk yields or greater gains in flesh as the case may be. On pastures much of the feed is wasted from being tramped over. Where soiling crops are fed, this waste is eliminated altogether and if the feed is of the right kind, is always palatable.

Another advantage of the practice of soiling which is beginning to appeal to many good dairymen, is that the cows can be kept in the stable during the heat of the day when the flies are bad, the cattle being turned out only at night.

The chief objection usually made to soiling is the increased labor of handling these crops. The real reason why soiling is not practised more extensively is of far greater import, but is seldom heard. It is that many of us lack practical knowledge in the handling of soiling crops. Once we find out the crops to grow, how to grow them, and how to feed them, any other objections will become of little importance.

It is in our own interests to study the subject of soiling crops and make at least a partial use of the soiling system. As the older parts of Canada become more thickly settled and land values advance to a point where our present extensive methods of farming cannot be carried on with profit, the practice of soiling the cattle in the summer months will become more and more common. We believe that in a few years soiling will be a common practice on all the dairy farms of the older provinces.

Bees returning to the hive with full loads of honey and no place to store it, begin to elaborate wax in their bodies and in order to find a new home wherein to bestow their honey and wax, create the swarming impulse.—Morley Pettit, Provincial Apiarist, Guelph, Ont.



A Recent Arrival on the Labor Market

The introduction into Ontario of the traction ditching machine is helping to solve the farm labor problem and thereby enable farmers to do more under-drainage in Lincoln County by Walter Day, a brother of Prof. W. H. Day, of the Guelph Agricultural College, and there is more work ahead of them than they can do. More are needed.

formerly a clerk in a grocery store. Previous to that he had been on the farm, and therefore had a good knowledge of the district. He has handled the work well.

An inspector as suggested should work in well with our cheese factory business. I believe that 90 per cent., at least, of the patrons of cheese factories would be glad to see an inspector appointed and effective methods put into practice to better the quality of milk received at factories. All intelligent patrons know that they are suffering a loss from indifferent and careless patrons. Protection from indifferent patrons is more necessary now than ever, since the cheese leaves the factory often nowadays when only three or four days old. The cheese makers, knowing that the cheese will be shipped early, need not be quite so careful when taking in the milk. The work of an inspector would result in higher averages with less milk required to make a pound of cheese.

If it is desired to stop the shipping of cheese while green, the practice should be prohibited. It should be made a misdemeanor to send cheese from the factory before it has reached a certain age. There is a chance to legislate on this matter. Talk is not enough. If it is desired to improve the quality of cheese, we must go right to the point that is causing the trouble—the milk supply.

#### INSPECTING MEASURES.

Some patrons have already recognised these points, and have in some instances appointed a

Warranted to Give Satisfaction.

# Gombault's Caustic Balsam



Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for Curb, Splint, Sweeney, Capote Hock, Strained Tendons, Founder, Wind, Pulls, and all lameness from Strains, Ringbones and other bony tumors. Cures all skin diseases of Horses, Thrush, Diptheria. Removes all Bunches from Horses and Cattle. As a Human Remedy for Rheumatism, Sprains, Sore Throat, etc. it is invaluable. Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid. With full directions for its use. If needed, a descriptive circular, testimonials, etc. Address The Lawrence-Williams Co., Toronto, Ont.

### Care of Work Horses

The greater part of the energy derived from feed is expended by the horse in doing work. A working horse does not lay on much fat but if he is properly fed he should maintain his weight. It is obvious that as soon as the work stops there is no need for more than enough feed to supply sufficient energy to maintain the bodily functions.

Feeding an idle horse heavily simply clogs the system with unused material, and, if long continued will produce any number of ill results. An idle horse needs no more than two quarts of oats at the most at a feed. In fact, fire teams receive along with hay at night, just what they will clean up. Fire horses are not required to do extremely heavy work and, as a rule, are rarely very often. So they are comparatively idle horses.

The farm team can easily be fed too much hay. God may not hurt them, but it is a sheer waste, to keep their managers continually crammed full. Boiled feed, or an occasional bran mash, with a handful of oil meal mixed in with it, will keep the system loosened up and promote a healthy digestion.

There is quite a pronounced lack

of unanimity of opinion with regard to how horses should be fed. There is no other animal on the farm that must be fed with so much judgment as the horse. With cattle, hogs or sheep a prescribed ration may be outlined and any person capable of following instructions can do the work. This is not the case to so large an extent with horses. Their feed must be regulated by the work done and when work stops the feed should certainly be reduced. On account of the difficulty of reducing the feed to a rule, there has not been so much experimental work done with this class of live stock as with the meat animals.

Old Country plowmen know about as much about what a work horse needs as any class of men. From November to April, when the work is as heavy as at any other time of the year, the nightly feed of boiled barley is considered as essential. Whether the teams require heavy feeding and they thrive on the barley once a day.

It is hard for us to get a better feed than oats, and it takes two horses and they require more than a gallon of this cereal at a feed. This amount of oats three times a day with a boiled feed at night once or twice a week should keep almost any team in good working condition.

### Grain Rations for Work Horses

There is no other grain so safe for horse feeding as the oat. This safety is due largely to the presence of the oat hull, which causes a given weight of grain to possess considerable bulk. Because of this there is less liability of mistake in measuring out the ration and furthermore the digestive tract under usual circumstances cannot hold a quantity of oat grains sufficient to produce serious disorders. Another distinct advantage of this grain as a feed for horses, is that when a nurtured oat horse shoves mottle to an extent which ordinarily cannot be reached by the use of any other feeding stuff.

Oats, however, are often an expensive horse feed and they can be substituted profitably to a greater or lesser extent with other grains and by-products. The Iowa Experiment Station has for the past two years carried out some experiments to determine the value of corn, oil meal, cotton seed meal and gluten feed in work horse rations. From the results obtained in these experiments, the following conclusions have been drawn:

1. The health, spirit, and endurance of work horses were the same when fed corn with a moderate amount of oil meal, or gluten feed in addition to the meal as when a corn and oats ration supplying a similar nutritive ratio.
2. The ration of corn and oil meal maintained the weight, and condition of the horses fully as well and with less expense than the one of similar nutritive value composed of corn and oats.
3. With corn at 50 cents a bushel, oats at 40 cents and oil meal at \$32 a ton, the average saving in the daily expense of feed for each work day amounted to 1.6 cents by the use of oil meal in the place of oats.
4. A brief test of ten days with gluten feed indicated that while it was capable of giving good results the ration containing it was not as palatable as the oil meal ration, and cost a trifle more than when gluten feed was worth \$28 a ton.
5. Cottonteed meal gave somewhat better results on the whole than oil meal. The ration containing it was fully as palatable and as efficient in maintaining the health and weight of the horses, it was less laxative, a little cheaper with cottonteed meal at \$30 a ton.
6. With corn at 50 cents a bushel

and oats at 40 cents, oil meal had a value of fully \$60 a ton for feeding to work horses, with cottonteed meal worth a trifle more still. At the usual prices of these feeds their use resulted in a substantial lowering of the cost of maintaining the horses.

### Dairy Calves After Milk Stage

D. H. Otis, Madison, Wis.

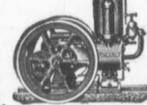
When the skim milk diet of the calf is stopped at any time from six to 12 months of age, it shows a pronounced tendency to become emaciated. The nitrogenous feed and its place should be taken by some nitrogenous grain or roughage. The tendency of the dairy calf to get too fat depends not only upon its temperament but also upon its feed. Avoid too much corn, or grain, oats and barley or alfalfa; for roughage, bright clover or oil-tin hay with corn silage to give succulence to keep the calf in a healthy, thrifty and growing condition. Under proper treatment the calf should continue to grow until four to six years old. Heavy work should be made to develop a large stomach and consequently large capacity; build muscle and good bone, but do not allow it to get too fat. The good dairy cow must be introduced to the elements of life. This she should learn to do while young. For this purpose roughage exercises the digestive apparatus more than concentrates. There are some who think alfalfa with corn silage or roots for succulence, no grain is necessary from the time the calf is weaned from skim milk until she drops her first calf. There are others, however, and probably these include the larger number of our progressive dairymen, who think a little grain should be given daily to keep her stomach accustomed to handling grain.

Size depends much upon heredity, but even more upon liberal and judicious feeding. It is impossible to starve good dairy qualities into a growing heifer, but many promising heifer has been starved into a poor cow.—Bulletin No. 152.

**Cold Storage.**—The management of the Western Fair, London, Ont., have for some years had under consideration the installing of a cold storage system in their already well equipped dairy building. But not until this year has the plan been adopted. Workmen are busy at the present time with this work and when the exhibition opens this year, exhibitors and visitors will find one of the best and most complete cold storage plants for cheese exhibits found anywhere. Five silver cups have been kindly donated toward the cheese department and one to the butter making competition, by Mr. Bollett, the cash prize offered, all of which should make the dairy building one of the most attractive places of this year's exhibition.

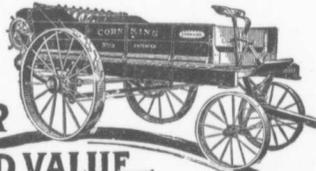
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## H C Spreaders

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These spreaders of the H C line have proved their value in actual operation in the hands of satisfied farmers everywhere. The 1910 patterns represent the development of study, experience and practical use. Their strength to withstand the hardest strains, their sure, steady, simple operation, their light draft—these features have been tested by us as well as by the farming world and found right.

Don't delay the day of realizing on the full value of every bushel of manure. Get a spreader now—and choose carefully. Buy the spreader of proved value—of uniform high quality. Buy the spreader that is built on the right principle, of the finest materials, by the highest class of skilled workmen, in the best manure spreader works in the world. If you do that, you will get an H C. No other spreaders have ever done the work as well, as quickly or as easily as the H C line. For no others are so good on any point of construction. You owe it to yourself to investigate the H C spreader that meets your needs.

H C spreaders are made in various sizes, from 30 bushels to 70 bushels capacity, and there is a style and size for every section and condition. Choose to suit your special requirements from the only complete line. Large spreaders for big operations—spreaders for orchards, vineyards—in fact, for every condition.

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## H C LINE

An Oxford farm for its farm

Mr. H. B.

found with and perhaps, the Holstein, Bollett, of C the Holstein, Maple Grove, lert, is situated near in the country. The level, rich section. A herd at one Maple Grove, introduced the country. Since been kept and



Subs The farm built and works the President of the first Holsteins in

numbering about bulls are kept in young sires may but the very best Mr. Bollett's are six and

The milk from cheese factory from During the winter home that Holsteins ery, thus they every month of the venience on a f Two silos are in one for winter an summer. Mr. Bollett herewith, it is 51 feet from the faces the south a one a hog pen, the house. The in they are, provide yard.

HOLSTEINS IN home that Holsteins deservedly popular to learn of the ti had to endure. As row Holstein b have from 1850 to the general develop through strong pre disfavor that they

**An Oxford County Farm**

Oxford County, Ont., has become famed for the wonderful annual output of its farms. The progressive spirit



Mr. H. Bollert

of its farmers and the fact that most of them are engaged in dairying are factors in the well deserved place held by this one of Ontario's foremost agricultural counties. Many herds of pure bred cattle are to be

found within the bounds of Oxford, and perhaps, one of the most noted is the Holstein herd owned by Mr. H. Bollert, of Cassel, who is president of the Holstein-Friesian Breeders Association of Canada.

Maple Grove, the home of Mr. Bollert, is situated in the German settlement in the north east part of the county. The farm consists of 100 acres of level, rich soil, characteristic of that herd at one time found favor at Maple Grove, but in 1883, Mr. Bollert introduced the first Holsteins into the county. Since then Holsteins have been kept and bred, the herd generally

given away. During that time Mr. Bollert sold Aaltje Poosh 4th for \$35, and Abberkerk Prince 2nd for \$12. This latter bull was the sire of Mercola 2nd, the cow which at four years old was afterwards sold for \$1,500; also Alta Poosh, a cow that until recently held the world's butter record for a heifer under three years old,—she also brought Mr. Rettie \$1,500.

**The Clover Hay Harvest**

Edward Dunford, Peterboro, Ont.

The main points to be observed in getting clover cured into a nice palatable hay are to cut it at the right time and cure it well without scorching. We aim to cut our clover crop when in full bloom and let it cure as far as possible by natural evaporation with the weather. When it is possible, however, we start the mower after the dew is off in the morning. The clover is allowed to lie in the swath until the afternoon, when it is raked and left in windrows all night. If the crop is very heavy, it will not be raked until the next morning. We let it dry in the windrows the next day and coil and haul in the afternoon.

We believe that clover cures better while lying in the windrows than in the swath and produces a much better hay. As we do not use a hay loader,

charcoal may be made, of which the hogs are very fond when it is mixed with salt and wood ashes. Almost any mixture of salt and wood ashes or charcoal is relished by hogs, and none of them should cause hogs harm. —W. F.

Skim Milk is a Cheap Feed for Calves but should be fed carefully for limited quantities and only while it is warm and sweet. Skim milk may form the principal diet of the calf for eight months or a year. Factory skim milk should always be pasteurized to avoid the spread of tuberculosis. The best skim milk is that which is fresh from

the separator and still warm. Experiments show that it is only one fourth as expensive to raise a calf on skim milk as whole milk. Two pounds grain with the proper amount of skim milk equals one pound of butter fat. Buttermilk or whey may profitably be fed to calves.—D. H. Otis, Madison, Wis.

Rain, we all know, hurts the hay crop, but more hay is injured in the average year by becoming bleached in the sun and having all the natural juices burnt out of it, than is injured by rain. Sun is necessary, but sun-burn is not.—R. E. Gunn, Mgr. Dunrobin Stock Farm, Ontario Co., Ont.

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**Needs No Painting**

**M**OST ready roofings require special painting and coating, and unless this is done regularly, you are sure to have leaks and trouble right along.

If you use Amatite, nothing of the sort is required. You will have real roof protection without painting of any kind.

Amatite is made to stay waterproof and give protection year after year, without any thought or care on your part.

**First**—Because it is waterproofed with Coal Tar Pitch.



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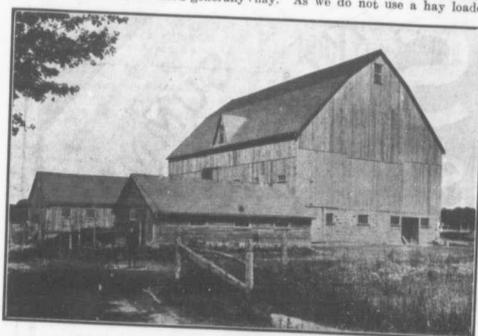
Amatite, owing to these features, is the most economical roofing made. Its first cost is low, and you are saved all future expense for repairs or paint because it will need neither.

If you haven't seen Amatite, write for a sample to-day. From it you will very quickly understand why it doesn't require painting; why it does not leak; and why it saves you money.

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**Substantial Up-to-date Farm Buildings on an Oxford County Farm**

The farm buildings at "Maple Grove," are here shown. Mr. H. Bollert, who owns and works the farm on which these buildings are located, and who is now the President of the Holstein-Friesian Breeders' Association of Canada, introduced the first Holsteins into Oxford Co., in 1883.

numbering about 30 head. Two stock bulls are kept in order that in-breeding, with its frequent change of expensive young sires may be avoided. None but the very best sires are used by Mr. Bollert; the two now in service are six and 10 years old respectively. The milk from the herd goes to the cheese factory from May to November. During the winter it is separated at home. The cream is sent to the creamery, thus there is ensured an income every month of the year—a great convenience on any farm.

Two silos are in use at Maple Grove, one for winter and a smaller one for summer. Mr. Bollert's barn as illustrated herewith is 22 x 74 feet. It is 51 feet from the ground floor. It faces the south and has two wings, one a hog pen, the other a chicken house. The buildings arranged as they are, provide a nicely sheltered yard.

**HOLSTEINS IN EARLIER DAYS.**  
Now that Holsteins have become so deservedly popular, it is interesting to learn of the time they formerly had to endure. As an instance of the how Holstein breeders had to do from 1800 to 1806, at the time of the general depression, Holsteins, through strong prejudice, fell so in disfavor that they could hardly be

we believe that throwing the hay into small coils, which many object to because of the extra labor involved, is actually a labor saving process as the hay can be pitched on to the wagon much faster from the coils than can be done from the windrows.

**Wood Ashes and Salt for Hogs**

Hogs relish greatly mixtures of wood ashes, charcoal, and salt. Such mixtures help in protecting a herd from worms, and quite likely the hog finds in these mixtures mineral salts which his system craves. At any rate, most experienced hog men keep such mixtures as wood ashes and salt on hand, and use them before their hogs.

A mixture which one experienced hog man gives consists of the following: Wood ashes, for parts; charcoal, four parts; salt, one part; and lime, one part. An excellent quality of charcoal may be made by digging by three feet deep by ten feet long, starting a fire in the bottom, and then adding corn cobs till the pit is full. When the cobs are well on fire the pit is covered with sheet iron or earth so that all the air is shut out. In a day or so the pit may be uncovered. In this way a fine grade of

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**Facts about**  
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**Insects a**  
A. B. Cordley

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**Elm Grove F**  
Offers fr. sale 50  
Rock hens at \$1.00  
Brown Lechorns, \$1.00  
one year old Rhode I  
J. N. RUTHERFORD, Box  
Telephone Bolton.

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**HORTICULTURE**

**Facts about Lead Arsenate**

Since lead arsenate is coming largely into use as an insecticide, a knowledge of the characteristics of this insecticide is necessary to all who propose to use it. There is no legal standard in Canada for the composition of lead arsenate. It is sold commercially in two forms, as a powder and as a paste. In the paste there may be as high as 49 per cent. of water. Therefore the content of arsenic is low and the preparation is not as valuable as when made in the dry form.

In bulletin No. 205 of the Dominion Department of Agriculture an analysis of 18 samples obtained from various parts of the country is given. The arsenic content varied from 29.9 to 12.44 per cent. At this rate, the best sample was worth more than twice as much as the second sample. From this wide variation in composition, the need of some Government standard is evident.

As the purchaser cannot be sure of the quality of the lead arsenate which he buys, it is advisable that he manufacture his lead arsenate at home. Furthermore homemade lead arsenate is much cheaper than the commercial article.

The formula recommended for homemade lead arsenate in Bulletin No. 151 of the Ontario Agricultural College is: Arsenate of soda, 10 oz.; acetate of lead, 24 oz.; water, 150 gallons. Dissolve the arsenate of soda and the acetate of lead separately and then pour in the required amount of water.

This spray is obtained much more cheaply than if the lead arsenate is bought direct, if the materials can be bought at a reasonable price, the insecticide will be as cheap or cheaper than Paris green.

**Insects and Insecticides**

A. B. Cordley, Oregon Experiment Station.

To understand the general principle which underlies the selection of the proper remedy to be used for any particular insect, one has only to know that practically all insects may be divided into two great groups.

Group I.—This includes all insects that have biting mouth parts—manch and other substances upon which they feed. Grasshoppers, caterpillars, cutting moth larvae, etc., are good examples of this group.

Group II.—This includes all insects with beak-like sucking mouth parts—haustellate insects—which pierce the plant or animal upon which they feed and suck up its juices or blood but neither chew nor swallow any of the structural tissues. The apple-aphid, woolly-aphid, hop-louse, green apple-aphid, black cherry-aphid, San Jose Scale, etc., are good examples of this group.

In general, insects which belong to Group I. may be poisoned by sprinkling or dusting the surface of the plant upon which they feed with some poisonous substance. Insecticides which belong to Group II. cannot be poisoned since they secure their food from beneath the surface and cannot be destroyed by gases, washes or other substances which act externally upon their bodies.

**Elm Grove Poultry Farm**

Offers for sale 30 one year old Barred Rock hens at \$1.00; also 15 one year old Brown Leghorns, \$1.00; and a number of one year old Bostons ducks, a number of J. M. RUTHERFORD, Box 65, Caledon E., Ont. Telephone Bolton.

All insecticide substances may therefore be arranged into two general groups.

Group I.—Food Poisons.—This group includes, principally, the various arsenicals, such as Paris green, London purple, Scheele's green, arsenate of soda, arsenate of lead, etc. These poisons are applied against insects which belong to Group I. and feed exposed upon the surface of plants, but are practically valueless against those of Group II.

Group II.—Contact Insecticides.—This group includes a great variety of substances which act externally upon the bodies of insects either as smothering them by closing their breathing pores, or to fill the air about them with poisonous gases, or simply as repellents.

Soap, sulphur, tobacco, insect powder, the lime-sulphur wash, petroleum, kerosene emulsion, crude resin washes, hydrocyanic acid gas, and carbon bisulphide are some of the most valuable insecticides, but many of these are also used against biting insects when for any reason it is undesirable to use poisons; or when it is impossible to apply poisons directly to the food supply, as in the case of insects which work beneath the surface of the soil, or borers or miners in wood, leaf or fruit or in stored products, or as animal parasites, or household pests.—Bulletin No. 108.

**POULTRY YARD**

**Sell Ducks at Ten Weeks**

J. J. Brown, Hockelga Co., Que.

Ducks have gotten for themselves reputations for their gluttony and at that account and owing to the indifferently manner in which they are ordinarily managed, they are not thought to be particularly profitable. Nor are they profitable unless properly managed.

The market duck, as ordinarily handled, is kept much too long. It should be sold when 10 weeks old. The general practice however, is to hatch them in the spring and keep them until 20 weeks or more of age. Managed owners long enough to eat up all the profit and then they must be sold for 10 weeks old. Kept until this latter age, they must go into cold storage.

Green ducks readily command 28 cents a pound when 10 weeks old at this season of the year. They should weigh five or six pounds or more each, and would retail at \$1.00 each. In the neighborhood of 90 cents to \$1.00 each. Marketed in the fall these same ducks could command only 80 cents or \$1.00 a pair which is considered a very fair price.

Every advantage should be taken of the ducks' propensity for feeding. They should be rushed along and disposed of at the proper season when they will realize the highest returns.

**Chicks Have Sore Eyes**

My chicks that were hatched out on June 6th have sore eyes. In the morning they cannot open them, and I have to drop water in the lids, which seem to be stuck together. I have fed them dry corn, but since the trouble appeared I have been feeding bran with corn meal, and feeding it wet. Please give cause and remedy.—H. T. S.

Your chickens probably have a slight case of conjunctivitis. Corn meal giving them the feed which you are giving them is not very suitable to young, growing chickens. Corn meal is too fattening and wet bran is too bulky to be properly handled by them. On no account should wet grains be fed to young chicks. A satisfactory mixture would be more satisfactory than the one you have been feeding. Mix sifted ground oats, cracked corn

and cracked wheat in equal proportions and feed dry.—J. J. B.

**Management of Turkeys**

Mrs. W. J. Lockman, Wentworth Co., Ont.

The turkey hen should be allowed to choose her own nest. If the nest is not in safe quarters, shut her up so that all her eggs may be gathered daily. Keep the eggs in a cool place. When ready to set dust the turkey with insect powder and spray the nest with three parts kerosene and one part crude carbolic acid.

When hatched allow the young turkeys to remain in the nest from 24 to 36 hours. When all are hatched remove the mother and young to a pen.

The pen I used when I was raising turkeys in considerable numbers was about 10 x 3 x 3 feet. The back and sides were of wire. The top projected out in front to give shelter from the rain and hot sun. The front was of slats which permitted the young turkeys to go out at will.

The first meal I set was a mixture of bread soaked in milk and squeezed out quite dry. Hard boiled eggs also were fed. The feed was given on a board outside of the pen, never in the pen. No more was given at a time than they would eat quickly. Onion tops and dandelion leaves cut fine are greatly relished by young turkeys. These were given occasionally. Curds mixed with shorts and a little sweet milk were fed after the turkeys were a few days old.

Young food should never be given to young turkeys. When they will eat it, give what screening once a day. I consider it far better to let the turkeys roam when they are 10 or 12 days old and the weather fine. I see to it, however, that they are in safe quarters over night. They will soon be able to find their own living. It is well to give an occasional feed of wheat to coax them home at night.

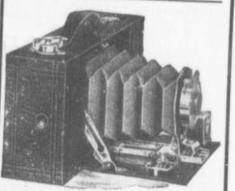
To the older turkeys, I feed wheat screenings, corn, ground oats and shorts mixed with milk or water. Give fresh water two or three times a day in clean dishes. Skim milk or butter milk may be given when it is available.

Whenever any of the turkeys begin to "droop" in the autumn I give them a small teaspoonful of oil followed by a liver pill the next day; scald the milk they drink and give only dry grain or dry bread crumbs. Repeat this dose every five or six days until well. I keep all sick birds isolated. When any die, I bury them deeply.

Heavy laying flocks can use oil, especially if they are confined. Add to their grain mash a handful of oil-meal for every 30 hens every other day and see how well the gloss of their plumage keeps up. A faded out plumage either indicates lack of oil in the system, heavy drain through laying or both.

The hen furnishes a manure rich in nitrogen, and to get the most benefit out of it there should also be applications of potash and phosphate. Wood ashes will supply the potash, but wood ashes and hen manure should never be mixed before potash, and can be mixed with the manure, it having a tendency to conserve the ammonia. Lime should never be mixed with the manure.

**They work like Kodaks.**



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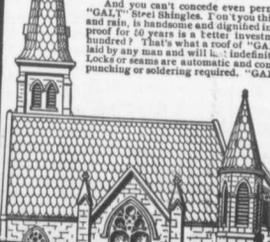
Brownie Cameras use the daylight loading film cartridges—just like a Kodak—are efficient, durable and practical little instruments. A Kodak can make good pictures with a Brownie without previous experience.

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**Agents Wanted in Some Localities**

# FARM AND DAIRY

AND RURAL HOME

Published by The Rural Publishing Company, Limited.



1. FARM AND DAIRY is published every Thursday. It is the official organ of the British Columbia, Manitoba, Eastern and Western Ontario, and Bedford District, Quebec, Dairywomen's Associations, of the Canadian Holstein, Ayrshire, and Jersey Cattle Breeders' Associations.

2. SUBSCRIPTION PRICE, \$10 a year, strictly in advance. Great Britain, \$150 a year. For all countries, except Canada and Great Britain, add 50c for postage. A year's subscription fee for a club of two new subscribers.

3. REMITTANCES should be made by Post Office or Money Order, or Registered Letter. On all checks add 20 cents for exchange fee required at the banks.

4. CHANGE OF ADDRESS. — When a change of address is ordered, both the old and new address must be given.

5. ADVERTISING RATES quoted on application. Copy received by the Friday preceding the following week's issue.

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

## CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed \$300. The actual circulation of each issue, by the copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 500 to 1,000 copies. No subscriptions are accepted at less than the full subscription rates. Thus our mailing lists do not contain any dead circulation.

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

## OUR PROTECTIVE POLICY

We want the readers of Farm and Dairy to feel that they can deal with our advertisers with our assurance of our advertiser's reliability. We try to admit to our columns only the most reliable advertisers. Should any subscriber have cause to be dissatisfied with the treatment he receives from any of our advertisers, we will investigate the circumstances fully. Should we find reason to believe that any of our advertisers is unreliable, even in the slightest degree, we will discontinue immediately the publication of their advertisements. Should any circumstance warrant, we will expose them through the columns of the paper. Thus we will not only protect our readers, but our reputable advertisers as well. All that is necessary to entitle you to the benefit of this Protective Policy, is to include in all your letters to advertisers the words, "I saw your ad. in Farm and Dairy." Complaints should be sent us as soon as possible after reason for dissatisfaction has been found.

## FARM AND DAIRY

PETERBORO, ONT.

## JUDGES WHO CAN GIVE REASONS

Agricultural fairs are deserving of government support only in so far as they are educational. Great educational possibilities exist in all agricultural fairs, but it is well known to all that these possibilities are often left undeveloped. Almost, without exception, everyone who attends a fair is interested in live stock. Herein lies probably the greatest opportunity for educational work, and it devolves much responsibility on the part of those who act as judges.

The live stock judge, worthy of his appointment, should have such knowledge and experience as will enable him to place the awards according to present day demands, and what is looked for in a representative of the class of stock to be judged. He should be able to make such placings, and furthermore be able to tell the on-lookers, and at least the exhibitors, just why he made such placings. In other words, he should give reasons for every placing made, and give them in a way such as all who would may hear.

The expert judge system, as it ex-

ists in Ontario, has much to commend it. On the whole, satisfaction is given by the judges sent out by the Fairs and Exhibitions Branch of the Department of Agriculture. But a percentage of the men sent out each year as judges, while they may be capable of placing the awards, fall much short of living up to their obligations when it comes to giving reasons. Men capable of doing the work and telling why in an acceptable manner, are not overly numerous and are not hankering after appointments. There is yearly becoming an increasing number of such men available, however, and these men should be sought out for the work, and given circuits of greater length than has become the custom in Ontario in recent years.

The short courses in live stock and seed judging, which have been held in various sections of the province during the past few years, owe their popularity to the helpful nature of the instruction given. The fall fairs can be made to approximate these short courses in usefulness, if judges are sent out who can, and will, give reasons, and explain the merits of the individuals brought before them. With such men, there would be fewer mistakes in placings, and both exhibitors and spectators would have a better understanding as to the merits or defects of the stock before them.

## FARMERS LEARNING TOO MUCH?

Since launching its campaign early last winter in the interests of accurate cream testing, Farm and Dairy has received some very frank letters from creamery managers relative to the stand taken. Varied and various have been the charges made. These have run all the way from the contention that we took a narrow view of the situation, to the view that we were quite lacking in information regarding the matter in question. Others again, while inferring that Farm and Dairy was right in its contentions, stated frankly that we were telling the farmers too much. These latter claimed that as a class, farmers are of a very jealous disposition, and disposed, even when fairly generous, to grudge the other fellow his toll, be it great or small.

Farm and Dairy has always taken the stand, that the farmer cannot know too much about any business in which he is concerned, and in which he is a vital factor. It is because some farmers are not so well acquainted with certain problems in which they are directly interested as they should be, that Farm and Dairy has always endeavored to give, and will continue to give, the farmer all the light possible on such questions, and will not withhold anything that he should know.

Many farmers are kept in darkness as regards some phases of their business. This accounts for some of these qualities and characteristics which are sometimes attributed to them. Right is bound to prevail, and the creamery man, or any other man, who is counting on making profits from his business because of the lack of information on the part of those with

whom he does business, is taking a great risk. He may as well recognize this fact at once and seek to put his business on a firmer foundation, where it will be secure, notwithstanding any wind that blows.

## GIVE CO-OPERATION A FAIR TRIAL

Although the Co-operative Fresh Egg Circles around Peterboro are scarcely organized, their members having only started to ship their eggs, requests are being received already from other sections for aid in starting similar circles. Farmers all over Canada are watching this new co-operative movement with deep interest. This shows how important it is that each member of the Peterboro circles shall realize his or her responsibility in the matter of making the movement a success. This co-operative movement can succeed only through the members working hand in hand. They should see that the scheme is given a thorough trial.

Already the price of eggs has been marked up to 20 cents in Peterboro as the direct result of the movement. Should half of the members leave the circles for the city, where perhaps they might get the same price, it would leave the others in a position where the business could not be handled. Prices then would decline once more. Only as the eggs can be handled collectively and in quantities can the business be made worth while.

It must be recognized that the co-operative movement is responsible for the increased price, for there would be no such increased price had it not been for this movement. The high average price is what all are after and this can be gained and maintained only by working hand in hand together, members of each circle, and of all the circles, working harmoniously as one.

## QUEBEC NEEDS A GOOD FARM JOURNAL

Some months ago Farm and Dairy pointed out that the farmers of the Province of Quebec needed a strong agricultural paper published in French and conducted on the same basis as the farm journals printed so successfully in the other provinces of Canada. The only agricultural paper now published in Quebec is one issued under the auspices of the Provincial Government, which is published only once a month and which lacks many of the features of a live agricultural paper.

As long as the Quebec Government continues to publish this paper, no private company can hope to make a success of a farm paper in that field. Had the Government not been a factor in the situation there is reason to believe that one or two private companies would have started aggressive farm papers long ago.

Henri Bourassa, the leader of the Conservative Opposition in the Quebec Legislature, brought the matter up for consideration at the last session of the Quebec Legislature and showed clearly the need for a good agricultural paper and the mismanagement

connected with the existing publication. In this connection, Mr. Bourassa pointed out that farmers in the eastern townships, who were getting the Journal of Agriculture, found it advisable to subscribe for Farm and Dairy in addition, in order that they might be kept posted on agricultural matters.

If agriculture is to make the progress in the Province of Quebec that is desirable, it is necessary that the Province shall be supplied with one or more live agricultural publications. The matter is important, and it is to be hoped that the Government will recognize this and afford an opening for private enterprise to enter the field.

## A CONFERENCE NEEDED

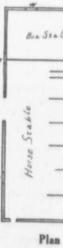
Now, that we know from the report of the Dominion Swine Commission that the Danish Government has done more for its farmers in the matter of encouraging the production of the best class of hogs as well as in their marketing than has ever been attempted by any of our Canadian Governments, Dominion or Provincial, the question confronts us, what are we going to do about it? Is the situation going to be allowed to remain as it is or are we going to make an effort to bring about the concerted action that is required to effect the improvements we now know to be necessary? Just now, while the price of hogs is high and farmers are rushing into the production of pork, the need for action may not seem so apparent as it did a year ago. We know from experience, however, that it will not be more than two or three years before prices will again decline, and we will again find our farmers giving up the production of hogs. The Danes have succeeded because they have stood by the business year in and year out. We will never hold our own in competition with them until we adopt the same policy.

If the report of the Swine Commission is to be of practical value, further action is necessary. We would like to see Hon. Sydney Fisher call a meeting of members of the Dominion Swine Breeders' Association, of our Canadian packers, officials of our experiment stations, and others who may be interested, with the object of getting them to consider and report on what they believe now needs to be done to bring about an improvement in existing conditions. Now, that our farmers have good reason to believe that our Canadian packers are not the unscrupulous financiers that they have been painted, such a meeting as we suggest would be likely to be more harmonious than any we have had in the past. We feel that further experiments in the production of hogs are necessary, and that the time is now ripe to bring about a concerted harmonious action on the part of all interested in the bacon trade of Canada. Until we effect a union of forces, such as exists to a large extent in Denmark, we need not expect to regain the ground we have already lost in the British market. The Dominion Government could well afford to meet the expenses connected with the holding of such a meeting as suggested, just

as it did with stock conference the past.

## A Well

Our front week, shows the farm stall farm, York the conveni may be g plan repro to Farm and his cattle, A stable is very have to carry ception of the very far from are watered (2) ps in differ the stable ar we may draw "The water with a gasoli is also used fo the barn. M before being a gasoline engi for cutting th the grain, p when we separ is used to tur "As will be our dairy is a room. We do now as it all



fraction to our Dairy Co., in

"Our dairy he part of which are working bred Holsteins, heifer calves head. We com foundation sto have been very good animals w records, as well cessful in the ago winning sec last year captu herd, besides t of individual fr

## Speaking Fa

Every little light which ap tone of the val the dairy farm letter is just re ment of Agric Mr. George Wis which reads as fol ary let to April ing nine cows a for cream sold! same period, w cows and sold

as it did with the fruit, dairy and live stock conferences it has arranged in the past.

**A Well Kept Farm Stable**

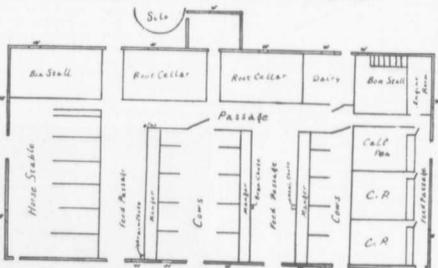
Our front cover illustration this week, shows a part of the interior of the farm stable on Mr. Chas. Watson's farm, York Co., Ont. Some idea of the convenient layout of this stable may be gained from a study of the plan reproduced herewith. Writing to Farm and Dairy of his stable and his cattle, Mr. Watson says: "Our stable is very convenient. We do not have to carry anything, with the exception of the ensilage and that is not very far from the cattle. The cattle are watered from individual basins. Cows in different convenient parts of the stable are available from which we may draw off water when needed. "The water for our stock is pumped with a gasoline engine. This engine is also used for all other work around the barn. Most of our feed is cut before being given to the cattle. The gasoline engine furnishes the power for cutting the feed and for grinding the grain, pulping the roots, and when we separate our milk, the engine is used to turn the separator. "As will be seen by the diagram, our dairy is situated near the engine room. We do not separate our milk now as it all goes, with much satis-

Further, we made butter this year for a household of nine persons; last year we bought our butter. These are actual facts. The only difference in feed from last year is that I have fed cows that winter, but I have sold cows that were poor ones, though one of them made a good showing the first six months of the year. The cows picked up wonderfully on a soiling crop in September. The returns show it and every animal went into winter quarters fat."

It will be noted that Mr. Wise, besides the butter used at home, made an extra hundred dollars in four months with a smaller herd. The cows are being selected; the records show which cows to keep and the fact that records are kept induces the owner to look after the herd better in every way. Cow testing pays.—C. F. W.

**The Digestion of the Horse**

Experience has shown that in order to have good digestion horses should be watered before instead of just after being fed grain. If large drafts of water are drunk, immediately after feeding, the grain in part at least, is washed from the stomach, where the digesting process begins, and in such instances there is frequently irritation, as well as loss of food in the process of digestion.



Plan of Stables in the Barn of Mr. Chas. Watson, York Co., Ont.

faction to ourselves, to the Farmers' Dairy Co., in Toronto.

"Our dairy herd consists of 20 head, part of which are pure bred Holsteins. We are working up a herd of pure bred Holsteins, and counting our heifer calves, it now numbers 16 head. We commenced with the best foundation stock we could get and have been very successful in getting good animals which are making good records, as well as being very successful in the show ring—two years ago winning second for our herd and last year capturing the first for our herd, besides winning a big majority of individual firsts."

**Speaking Facts about Cows**

Every little while facts come to light which speak in far-reaching tones of the value of cow testing to the dairy farmer. For instance, a letter is just received at the Department of Agriculture, Ottawa, from Mr. George Wise of Shelburne, Man., which reads as follows: "I am pleased that I was led to see what my cows are doing though now only just entering my second year of recording each cow's doings. I see there is a great difference in the returns from the creamery, and of course it is there we should find the change. Note the remarkable gain for the first four months of 1910. In 1909, from January 1st to April 30th, we were milking nine cows and received \$129.59 for cream sold! In 1910, during the same period, we milked only eight cows and sold cream for \$229.43.

The stomach of the horse is small and digestion is largely conducted by the intestines, otherwise, the horse would consume all the time in feeding. Heavy draft horses that perform slow work can be fed a greater percentage of roughage than horses used for speed contests. The former has more time to digest his rations, and the latter needs more concentrated food that is easily digested and quickly assimilated.

**Teaching Agriculture in Schools**

"Outlines of Agriculture in Rural Schools," is the title of a booklet by C. M. Evans, Director of Agriculture, Lennox College, Hopkinton, Iowa. As the name implies, it gives a suggestive outline of courses for teaching in schools. It is designed to help teachers who are not prepared to teach agriculture from the text book. Questions are suggested for asking the children who are supposed, in the scheme outlined by the author, to get the answers from their parents and other sources. In the words of the author, "This makes the teacher a director of agricultural study rather than a teacher of agriculture and places the burden of knowing the facts at the home end of the line."

Score cards are given for judging corn, potatoes, wheat, oats, butter, beef, cattle, dairy cattle, draught horses, swine and sheep.

We would not be without Farm and Dairy for anything, for it is so instructive about farm and dairy work.—Mrs. Wm. Priddle, Algoma District, Ont.



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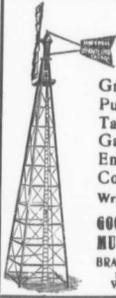
Get into line to-day. We will gladly send you samples free for distribution at your factory. A most liberal cash commission on each new subscription.

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**Creamery Department**

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

**Flavor Controlled by Culture\***  
G. G. Pablon, Chief Dairy Instructor, Kingston, Ont.

The flavor of butter under favorable conditions can be controlled largely by means of a culture. The butter under favorable conditions of cream ripening and manufacturing will have the flavor of the starter.

In preparing the starter it is advisable to start with a pure culture such as can be had from our dairy schools or from any of the dairy specialty houses. These cultures furnish pure seed (bacteria) that develop lactic acid. If one buys pure seed (pure culture) he should give that culture the lost care in order that it be kept pure.

Cans, 20 inches deep, are recommended as vessels suitable for the cultures. A wooden box equipped with steam and hot water attachments is recommended in which to keep the mother culture and cans of starter. The temperature can then be controlled from day to day.

**USE THE BEST MILK FOR STARTERS.**  
For the starter select the best milk from what comes to the factory. Do not rely on that which comes from the separators. The milk for the starter should be fresh and clean flavored. Heat this to 180 degrees; better to 190 degrees. Keep it at this temperature for one hour, then cool to 65 degrees and add the pure culture that you have purchased. If the culture is of the right type, the resulting starter will be a clean, sour tasting culture. If it is bitter, or rancid, or has some foreign flavor other than a clean sour flavor, the culture should not be used.

The first two or three cultures made from a pure culture may have an odor. It is better not to use a culture until after the third or fourth propagation. Once having the culture started, every effort should be made to keep the seed (culture) pure. Always select the best milk each day for the culture and heat it up to destroy other bacteria; then one is enabled to grow a clean crop (a desirable flavor). Clean ground-sterilized milk—is as much

\*Part of an address delivered before a gathering of dairymen at Peterboro.

needed as clean seed.

The milk for the culture after being heated to 180 degrees is cooled down to a temperature of 65 degrees in order to give a temperature favorable for the growth of the lactic acid bacteria contained in the culture. The bacteria will grow quickly at 90 degrees, but the culture would then be too hard and stiff and would not pour well and would be likely to give a mottled butter; so use a lower temperature, 80 or 65 degrees. The resulting culture will then be better and there will be less danger of other organisms being present.

The culture is prepared for a special purpose—to impart flavor to the butter. The rate at which it will work when added to the cream depends upon many conditions. There is great need of exact knowledge of the condition of the starter, and it should be uniform from day to day. The culture should be a clean sour in taste and smell, should pour well and be of a creamy consistency, should be about .7 in acidity. If higher than this in acid, it would be too sharp and the organisms would not be so active as in the milder culture. If the acidity gets up to .8 or .85, the lactic acid developed seems to act on the organisms—killing them—and hence there are not so many available to do the work when the culture is added to the cream. If the culture is uniform from day to day, it can be relied upon. It is well to test it daily for acid by means of the acidimeter.

**Location of the Separator**

E. F. Eaton, Colchester Co., N. S.  
The location of the separator is a very important element when it comes to producing cream of fine flavor. Cleanliness and convenience are the two factors to be considered in the location of the separator.

We cannot expect produce good cream when the separator is placed directly in the stable. Under such conditions the parts of the separator are exposed to bad odors and collect bacteria-laden dust from the atmosphere.

One separator known to the writer is located in a cow stall. It is protected from dirt when not in use by being covered by an old horse blanket. Such conditions do not tend to produce a fine grade of cream.

A building separate from the barn altogether in which to place the separator is the ideal from the sanitary point of view. Too much time, however, would be required to carry the

**FLIES ARE DEADLY**

Keep Them From Your Stock

**COOPER'S FLY**

**KNOCKER**

Does this Safely and Cheaply

NO TROUBLE NO WASTE  
NO MILK TAINTED

SOLD BY ALL HARDWARE MEN  
and by  
G. A. GILLESPIE, PETERBORO, ONT.

milk to it, and the skim milk back again. A room in the barn closely partitioned off so that no bad odors can reach the machine will be the most convenient arrangement on the ordinary farm.

Have the floor of this separator room of cement and so arranged that it can be flushed out with a bucket or two of water after each time the separator is used. This room should be light and well ventilated.

If the cream is intended for a fancy retail trade and good prices are obtained, it will pay to have the separator located at some distance from



**SEPARATORS NEED A GOOD LOCATION**

The location of many hand cream separators is at fault. The location in the one here illustrated is about ideal. The cream separator should not be located in a place where it would not be fit and proper to keep any dairy utensils.

the stable. The extra price would make up for any inconvenience in handling the milk and skim milk.

**Dairy Instructors Meet**

The dairy instructors of Western Ontario met on June 10 at the Exeter Creamery owned and operated by Mr. J. H. Scott, president of the Dairymen Association of Western Ontario. Creamery problems were discussed and after a lunch served by Mrs. Scott, the instructors drove to the Winchelsea creamery owned by Mr. W. G. Mead.

An hour was spent here in inspecting the plant, examining the butter and discussing creamery problems.

The Centralia Creamery owned by Mr. Thos. Willis was next visited. The party consisted of: Jos. R. Burgess, Geo. M. MacKenzie, A. E. Gacev, R. H. Green, Geo. Travis, Fred Boges, Fred Dean, Mack Robertson, Jas. Boviston and Frank Hens.

**Cheese**

Makesure to this department matters relating suggest solutions for questions. Address letters to Creamery Department.

**How**

Would you department of the system the farm advice believe he could this connection Dear, Alta.

Eering's manufacture of in the cans milking. In v should be cool milk cans with and ice. A t cut in two will a special tank several cans is limited to advantages. Who could well water necessary, exc be kept over S the milk.

The cover sh cans, as soon as and left there will be no clott of the milk, and the can is in

It is advisab ing's and the same cans, but two milkings m rancid, the be cooled to 60 the two milkings arate cans, or is cooled to 75 milk need not degrees under o The morning's n when it is deliv and it should no in any case.

When the mi Sunday, it show gross or under.

A thermometer termine the tem the special dair wholly of glass, thermometers, the Dairy Divisi tin 22.

**Views of**

"During the p opened the door New Zealand through that door said A. Ayer

**FOR SALE AND**

**TWO CENTS A WO**

WANTED—Chesse son to sell subs Dairy, Peterboro, mission for each Write Circularize Dairy, Peterboro, for your patrons. application.

UP-TO-DATE Brick all supplies, except enough for the if sold before Aug Output expected Ben T. Farn and

WANTED—A first the balance of Marshall Bothwe

CHEESE MAKER four years' experi sobor. None other E. S. Phelps, Bir

FOR SALE—Iron P Ralls, Chain, Wir etc. all sizes, very stating what you Waste and Metal treat.

**Cheese Department**

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

**How to Keep Milk**

Would you kindly publish in the cheese department of Farm and Dairy, the details of the system of caring for milk on the farm advocated by Mr. Barr? I believe he conducted some experiments in this connection some time ago.—H. F. Reed, Deer, Alta.

Evening's milk intended for the manufacture of cheese should be placed in the cans as soon as possible after milking. In warm weather, the milk should be cooled by surrounding the milk cans with cold water, or water and ice. A tub made from a barrel cut in two will serve the purpose, or a special tank, may be made to hold several cans. If the supply of water is limited ice with cold water, will be an advantage. Where there is plenty of cold well water, ice is not absolutely necessary, except when the milk is to be kept over Sunday. Do not dip or pour the milk.

The cover should be placed on the cans as soon as the milking is finished and left there for the night. There will be no clotting cream on the surface of the milk when the milk is cooled and the can is covered.

It is advisable to deliver the evening's and the morning's milk in separate cans, but if for any reason the two milkings must be delivered in the same can, and the morning's milk is not cooled, the evening's milk should be cooled to 60 degrees or under. If the two milkings are delivered in separate cans, or if the morning's milk is cooled to 75 degrees, the evening's milk need not be cooled lower than 65 degrees under ordinary circumstances. The morning's milk need not be cooled when it is delivered in a separate can, and it should not be leaved or aerated in any case.

When the milk is to be kept over Sunday, it should be cooled to 50 degrees or under.

A thermometer should be used to determine the temperature. Use only the special dairy thermometers made wholly of glass, and known as "float" thermometers. G. H. Barr, Chief of the Dairy Division Office, in Bulletin 22.

**Views of an Exporter**

"During the past year Canada has opened the door for that new country, New Zealand and it has walked through that door in splendid shape," said A. A. Ayer, of Montreal, in an address.

**FOR SALE AND WANT ADVERTISING**

**TWO CENTS A WORD CASH ON ORDER**

**WANTED**—Cheese makers the coming season to sell subscriptions to Farm and Dairy, Peterboro, Ont. Good each commission for each subscription taken. Write Circulation Manager, Farm and Dairy, Peterboro, Ont. for sample copies for your patrons. Samples sent free on application.

**UP-TO-DATE** Brick Cheese Factory, and all supplies, except boxes, supplied to be enough for the season, six milk machines. If sold before August 1st, \$1250; bargain output expected to exceed fifty tons. Box T, Farm and Dairy.

**WANTED**—A first class cheesemaker for the balance of the season. Apply to Marshall Rothwell, Navan, Ont.

**CHEESE MAKER WANTED**—Three or four years' experience; good worker and energetic. None-otherwise need apply. Address, E. S. Phelps, Birmap, Ont.

**FOR SALE**—Iron Pipe, Pullers, Belting, Rails, Chain, Wire Fencing, Iron Posts, etc., all sizes, very cheap. Send for list, stating what you require. Imperial Waste and Metal Co., Queen St., Montreal.

address recently before the Brockville Cheese Board. "Their increase in output to England last year was 250,000 boxes. Canada's cheese, however, was worth half a cent a pound more than last year and it is up to the dairymen of this country to see that they maintain this price. During the past two years the dealers in England and Montreal had to do with almost no margin on account of the demands of the salesman and farmers of the country. If we don't want to stand in our own light we have got to make goods a little slower. You have been shipping them too green and they never cure out properly. It is in your own interests to discontinue this practice, and while you may get a quick dollar, you are playing into the other fellow's hands." Mr. Ayer strongly advised that farmers grade their cows if they are grading their cows it would be better than a great price.

**Dairying in Dundas Co., Ont.**

T. J. Ellis, Dairy Instructor, Chesterville.

One of the best and most progressive dairying localities in Eastern Ontario, having ideal conditions of soil, to produce as much, if not more, milk per square mile, than any other section in Ontario east of Kingston, and is that of Dundas county, for which I have the honor of being instructor. The soil throughout the county consists of a clay loam, and is adapted particularly to growing good grass, which is so very essential for the cheap production of milk.

The traveller on seeing the prosperity as evidenced by so many palatial residences, so many fine farm buildings, so many silos, so many fine herds of dairy cows, and the comfortable appearance that they were comfortably housed and well kept during the winter months, as are to be seen in Dundas county, could not help saying, surely this is a part where dairying is most progressive, and where tillers of the soil are an industrious people.

**MANY SMALL FACTORIES.**

Dundas county farmers demonstrate to any who may chance to take note of that they are making great strides in their methods of dairying. Yet after all with these admirable conditions of farm life, and with the rapid growth of the dairy industry in this section, there is still great room for improvement, especially along the manufacturing side of the industry. Cheese factories are very numerous and consequently many of them are not constructed as they should be. They are not a credit to the industry. With a few exceptions, however, all these factories, small and large, have been renovated during the past season in some way making great room for improvement. They are not all model places in themselves, they are in such a condition that the makers can keep them clean if they so desire.

Farmers who deliver their own milk. The instructor, therefore, has a good chance of seeing and talking personally to each and every one of them, and for throwing out hints as to the proper care of milk before delivery.

**MAKERS WELL EQUIPPED.**

The makers are, generally speaking, a very intelligent lot of fellows. As a result the quality and quantity of cheese is steadily increasing. The quality of cheese, so far as this I have seen is better than ever before in the history of the business. I hope to see this quality kept up throughout the entire year.

I would like to say to the makers, that it is quite possible for them to have a smaller lot of fat in the whey than there are having in many cases. I would suggest that they be careful not to use too much culture, and set a little sooner. By so doing there will be less loss of fat in the whey.

**Trade in Soft Cheese**

J. M. Musson, Leeds, England.

Attention which lately has been directed to the demand in this country for soft cheeses, may be of interest to the Canadian dairymen. The trade in soft cheese is chiefly confined to London and a few of the south coast watering places.

Most of the soft cheeses consumed in London—mainly comprising the varieties known as Camembert, Port l'Evêque, Port de Salut, Coulomier are imported from Normandy in France. It is very exceptional for these French varieties, when made in England, to come up to the same standard of excellence as those imported. The demand for the British-made varieties of soft cheeses, including the Cambrige, Colwick, and cream cheese, is very fluctuating, and the sale of these is almost solely confined to the summer time. It is still common for the majority of the people to regard the consumption of soft cheeses as a luxury, which, to a large extent accounts for the fluctuation in the sales.

**Advice to Makers**

Let us have a little more individualism and personality in our work. Many indeed are the successes we can earn if we accept and make use of the advantages that are ours. We should improve our personal appearance when at work, we should take advantage of the weather conditions and markets in the making of the most cheese that good quality will permit. We should have greater co-operation with dairy instructors, and we should improve the appearance and surroundings of our factory buildings. Make these places, that are so often recognized by their small, modes of neatness and purity. These things require but little time and labor, but they will do much to improve the man and the business and to elevate the profession in the eyes of the public.

**Dairy Notes**

L. Lalonde and F. Robinson, Papineauville, Que., pleaded guilty last week to a charge of "stuffing" 21 cheese wheels inferior or worthless curd. The charge was laid by Inspector Macpherson of the Dairy Commissioners' staff. The defendants were each fined \$25 and costs and there will be a large

loss on the cheese in addition. This is the second case which has come up under the law of 1907-08.

There is jealousy among some of the cheese factory owners over the establishment of the creamery at the Kingston Dairy School, and at the meeting of the Frontenac cheese board, on June 9th, a resolution was passed stating that the establishment of the creamery was working an injustice on the cheese factories. This resolution was sent to the county council. Councillor Rankin said that the Ontario Government had established the cold storage and creamery at a cost of \$4,000. It was for the education of the people, and should be encouraged. The resolution was rejected.

**Convicts Himself**

Put these common sense questions to any agent who tries to sell you a disk filled or other complicated cream separator. Say to him—  
(1) "Are those disks or other contraptions in your separator intended to help it skim?" The agent will have to say "Yes."  
(2) "Then you need such contraptions in your separator because it does not produce enough force enough to do the work properly without them?" The agent will have to say "Yes."  
(3) "Then a separator that does produce enough skimming force to do the work without disks or other contraptions must be a better and more modern machine than yours?" The agent will have to say "Yes" or else evade your question. The agent's own answers convict him of trying to sell an out-of-date machine.

**Sharples Dairy Tubular Cream Separators**

contains neither disks nor other contraptions, yet produces twice the skimming force, skims faster and twice as clean as the skimming force of the others. The World's Best. The manufacturer of Tubular Cream Separators is the only one in the world who makes them in his own factory. Sales everywhere. Most, if not all, other separators are made in England. Probably replace more common separators than any one maker of such machines.



Write for Catalog No. 253.

**THE SHARPLES SEPARATOR CO.**

TORONTO, ONT. WINNIPEG, MAN.

**CANADIAN NATIONAL EXHIBITION**  
**TORONTO**  
August 27th - 1910 - September 12th  
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**J. O. ORR, Manager, City Hall, Toronto**  
All Entries Close August 15th

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**on FARM and TOWN**  
**Telephones and Switchboards**  
Poles, Wire, Brackets, Insulators, Tools, Lightning Arresters, Ground Rods, Batteries, Insulated Wire, and everything necessary.  
**NO CHARGE** for our experts' visits of advice, drawings, explanations, and specifications, instructions, telling you in any language, conditions in a good but economical way and at a profitless loss.  
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**The Dominion Telephone Mfg Co., Ltd., Dept. D, Waterford, Ont., Canada.**



**CULTURE** is not an accident of birth although our surroundings advance or retard it; it is always a matter of individual education.

—Mabel.

## MISS SELINA LUE

A NOVEL OF GOOD CHEER. BY  
MARIA THOMPSON DAVISS

Copyright, 1909, The Bobbs-Merrill Company

"If grown-ups would just show one another's good luck, they could get a heap of satisfaction from it."

Miss Selina Lue.

MISS SELINA LUE! Oh—Oh—  
—ho, Miss Selina Lue! Boo—  
hoo—hoo—

"You, Bessie, honey, quit crying this minute and tell me what the matter is. Come here and let me see." And Miss Selina Lue made a grab for the grief-contorted youngster, who was dancing with excitement in the grocery door. "Now where is the place? Put your hand where you hurt if you can't say it!"

"Oh—ho—ho, 'tain't me a-tall! It's Ethel Maud, and she's sewed herself in the sewing-machine and pa's cussing something awful and ma's sick to her stomach. Please, ma'am, come quick and git her out!"

"Lands alive!" said Miss Selina Lue as she reached with one hand for a sunbonnet hanging on the wall and pulled the top on the pickle barrel with the other. "Miss Cynthia, honey, can't you stay here for a few minutes until I can send Mr. Dobbs back to the store? And whatever you do don't let anything happen to the babies in the soap-boxes. The red-headed Flarity twin has been trying to turn his head off all morning; watch him. Please hand me that turkey-tail duster hanging over there on the wall, while I straighten out my water waves. They ain't nothing like burnt feathers or hair to bring up them that's in a faint and I never go without 'em to burn." And after a quick glance into her bedroom mirror, Miss Selina Lue hurried down the street, leaving an uncertainty as to whether the turkey-tail or her own soft waves were to be sacrificed in the cause of resuscitation.

"Gracious me, Miss Selina Lue, who's hurt now?" called Mr. Kinney from her side door, standing with a hot flat-iron dangling from her hand. Mrs. Jim Peters also hailed from her kitchen window, but Miss Selina Lue kept sternly on her course, piloted by the sobbing but important Bessie.

In the first of the three rooms that formed the Dobbs residence Miss

Selina Lue found the pathetic figure of Ethel Maud hanging against the corner of the sewing machine while Mr. Dobbs, red and embarrassed, stood trembling by the window and the maternal relative of the young sufferer leaned against a chair, white and heaving.

At the sight of the deliverer, Ethel Maud gave a relieved whimper and her tousled head fell over on Miss Selina Lue's bosom, the depths of which were lacerated by more than the mere suffering of a pined finger, and which took sympathetic note of sweating, masculine misery and white-faced, inefficient mother-dutterings.

"Hurry on over to mind the store for me, Mr. Dobbs," she said with a kind glance at him. "I can git her loose in a minute. And, Miss' Dobbs, quick as you can, set the kettle on the stove in the kitchen for some water to take out the swell. We'll be ready as soon as you git back with it."

So vastly relieved, with one accord, the parents disappeared through opposite doors, thus leaving Miss Selina Lue with the limp and whimpering bag to hold.

"There, there, chickie-biddee," she crooned to the little white ear buried against her neck as she raised the arm and hand and with a quick, dexterous turn of the needle released the small pink thumb. "It ain't injured much. However did you come to sew your thumb?"

"We was trying to see what made the top of it go and she got in the way," volunteered Bessie, who was the only member of the family that had stood by the afflicted one. Although his distress had been genuine, there is an attraction to ten years in flowing blood, even though that same blood be consanguineous. "Shoo! that didn't bleed half as much as my toe did last week," he further remarked.

"It did! It did!" wailed the small sufferer, for the first time giving way to the to-be-expected lamentations of one injured. "Everybody stamps their toes but they didn't ever anybody get sewed up in a sewing-machine before."

Bessie was on the point of arguing

the question when he was overtaken by swift retribution for his seeming heartlessness in the shape of wet shoulders that spanked across his shoulders with a sting.

"Bessie Dobbs, I am ashamed of you fer your unfeelingness to your little sister," cried his mother, who stood in the doorway with a cracked, yellow bowl of hot water in one hand and the towel on the other. "You are just like all men folks, a-trying to make light of the sufferings of women which they can't none of you know nothing about. Men always look at women-trouble after the little end of the horn. There was Dobbs standing there a-cussing me 'cause my stonick turns at the sight of blood, and him the one to unsew his own children if so comes they need it." Mrs. Dobbs was still white about the mouth, and the tears were still undried on her red, round shiny cheeks. She sopped the water over Miss Selina Lue's shoulder and sussed out the little end of the pigtail plaits as she handed over the bowl with a smile.

"There, there, Miss' Dobbs, you know they ain't a mite of harm in Mr. Dobbs, and as for cussing, look like that sinful habit is all the let-off a man have got while the woman can break up dishes, slam the stove-lids, spank the children, and make herself a cup of tea to soothe her nerves, and nobody even knows she's upset."

"That's all very well for a woman that's as free as you is, Miss Selina Lue; but a married woman has feelings you can't never understand, and one of 'em is a cussing husband."

"That's so, and I reckon I can't hardly sense your feelings in that case, but if I had a married, and he had a-felt a cause fer cussing—There now, she's done drowe off with the soothing of the hot water! Open my bag there and git me that old linen handkerchief tore'd into strips. Don't take this for no-say-thing, and I'll fix it again in the morning." Miss Selina Lue laid the relaxed little figure on the bed without causing a tremor of the white eyelids.

"Law, Miss Selina Lue it do seem a shame you ain't got ten of your own, you are that kinder hovering-like with them. I shore an sorry for you," said the grateful mother as she jabbed in the dart of her sympathy with an amber.

"Well, I don't know but it's best as it is," answered Miss Selina Lue with spirit, "fer you are all so good about letting me help with your'n. People kinder grow along towards what they think about; and as I think bal-y-denting a good part of the day, come night I feel like I was the mother of twenty. Mind not to take off that rag until I see you."

In a few minutes Miss Selina Lue departed and attempted to hasten down the street, but was interrupted at every turn, it seemed. On the corner she met Mr. Dobbs, whose steps were faltering toward home.

"Miss Selina Lue," he said sheepishly, with his face turned away from her. "If it ain't a-been Ben, now, could'er—done it, but the little 'un—I—I—"

"Mr. Dobbs, I respect you fer your feelings fer I seen the thought ter help were in your mind, but Ethel Maud is a misery little thing as would be hard for a man to handle. She is asleep, and I expect Miss' Dobbs have got your dinner ready by now."

"I thank you, Miss Selina Lue, ma'am, and I do say as how you be the master hand with the young 'uns. I was jest a-telling Miss Cynthia, who is a-waiting to see you, that it do seem a mite better."

Miss Selina Lue's progress down the street was resumed before Mr. Dobbs had exactly formulated the regrets he wished to express, but whose nature Miss Selina Lue inferred from experience.

But her hurried return to her own affairs was not to be permitted by the anxious neighbors along the path of

duty which she had trod so excitedly with Bessie Dobbs an hour before. Mrs. Kinney had been sitting on the hot stove of curiosity, and her face was determined and her voice was something as she hailed from her stoop.

"Wait a minute, Miss Selina Lue, can't you? Whatever was the matter with the Dobbses?" she said, draping herself over the pickle barrel as she had come to hear the news if it took all morning and all the backbone she possessed to extract it.

"It was a bad accident, but it might be worse if she had 'er run it in her eye, though that would be hard for her to do unless it had been something like a hunting needle. A thumb ain't so much use except in peeling potatoes and such, as a sort-of balance-wheel for the rest of the hand," answered Miss Selina Lue, commencing in the dramatic part of the tale without any unnecessary preamble.

"Now, ain't that like Mary Ellen Dobbs? I never seen such a person fer keerlessness. It's a wonder she ain't did it before. It will be powerful and I asked her to be without a thumb when it comes to going to meeting in a genteel way with gloves—"

"It was Ethel Maud, Miss' Kinney"

"Ethel Maud? Who ever heard of a child injuring her mother? Miss Selina Lue, she must have the rabies. Maybe she was bit by a mad dog when her mother hit her. I reckon I better call all children on the street till I see what happens."

"Miss' Kinney, n-a-am, please wait till I tell you the straight of it. Ethel Maud sewed her thumb in the sewing-machine and she ain't hurried bad at all. In a day or two—"

"Well, Miss Selina Lue, I take it hard indeed that you let me go so upset and fer trouble of one of my neighbors that ain't a-trying to do. I never expected no such treatment from you that I call—"

"Mrs. Kinney put her apron to her eyes and began to snifle.

"Oh, Miss' Kinney, honey," pleaded Miss Selina Lue, with an eager pat on the heaving shoulder, "I wouldn't hurt your feelings fer worlds. Now, who but you kinder heave so kind and thought up all them afflictions for the Dobbses?"

"That's jest it," sobbed the friendly one; "I takes more interest in my friends' doings than I do in my own, and I don't believe they appreciate it like they oughter, neither. Sometimes they are so cold to me when I ask questions jest outen sympathy."

"Yes, they do Miss' Kinney, honey, and ain't you got to lookin' your friends, which is a poor thing for anybody to do. When you want to sympathize with me I am always glad to git it and consider it a blessed thing to see Mr. Dobbs, who's so good not. Sympathy is jest the pure joy of the heart squeezed out for a friend."

"That's like you, Miss Selina Lue, a-patching up people's hurt feelings like a kind of sewing-machine and rags. I was a-saying to Mr. Kinney last night, when he went and got that cough medicine for Luella from you, that it's a plumb shame you ain't got a route, or dozen husbands, and children-of-Oh you must go? Please ma'am, don't forget to make me another mess of that medicine; she do cough so, come night."

The harem of her grocery door, her neglected business and the shade of her own hack-berry tree which hung over the front stoop of the store lay in the sight of Miss Selina Lue, when another child's hand, from the other side of the street, Mr. Jim Peters, shining face nodded at the window as she held up a small white bundle and beckoned by waving a tiny red and white nature. Miss Selina Lue, and within two days Miss Selina Lue and her both gittin' downright hurt with you," she said. Mrs. John Peters was very,

very young was a mite of a Jim, Jim, in fact he was with more citizenship state of I quired by they acqui on which flannels

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## The Home

an

S. B. Shaw

There seen general public in the coun the great se careful observ

Cleanliness is It is possible run a small over a kitchen, both economic and vegetable glass jars or cheaper than in the form goods, and general qua duct can be a

Minute form bacteria, are untold number the water we eat are teem

bacteria are cause of the of the various a time, part of complete steriliz more than encl sterilized in sealed air-tight to heat of suff nature, long c bacteria, are to spoil. Steri complished by water. There a

very young; Jim was also young and was a nductor on the "Lectric," and Jim, Junior, was the youngest of all; in fact was such a youngness that he was still blushing into fiery red with mortification over his recent citizenship. Mrs. Jim was in that state of beatitude which is only acquired by very young things when they acquire other still younger things on which to experiment in the way of flannels and pins and so forth.

"Don't you think he has grown?" she demanded. "He will be four weeks old to-morrow and I have promised Jim to take him for a ride on the ten-forty car. He wants to show him to Mr. Hill, the moorman. Poo-man, he hasn't been nariel yet and we feel sorry for him! Jim said last night, when I let him hold the baby while I got supper, that he jett couldn't help but wish that Mr. Hill could have something to live for. And I told him as that was the best the way I felt about you, Miss Seliny Lue. It do seem that if ever a woman—Oh, please don't hurry, I want you to see his feet when they have grown, and I think if you could see how I spell he might smile like he did this morning!"

"Did he show any signs of colic last night, like the squirrings, and drawing up of his knees?" "Oh, no, ma'am! I put the flannel band you sent over right on and Jim said never was such a person as you for knowing what to do with a pain in a baby. People might think you had half a—Oh, good-by—good-by, if you must go! Look, he is kissing his hand to you!" and Mrs. Jim Peters watched her guest out of the gate dreamily. "My! I clean forgot to ask what was the matter with the Dolbess," she woke up and exclaimed to herself. (Continued next week.)

**The Home Canning of Fruits and Vegetables**

S. B. Shaw, Agricultural College, North Carolina.

There seems to be a belief by the general public that there is something in the commercial canning process. The great secret of this process is a careful observance of two things—*Cleanliness and Complete Sterilization.* It is possible for every housewife to run a small canning factory in her own kitchen, and on the farm this is both economical and desirable. Fruits and vegetables can be "put up" in glass jars or tin cans at home much cheaper than they can be purchased in the form of commercially canned goods, and the flavor and general quality of the home-made product can be made superior to the product of the average factory.

**STERILIZATION.** Minute particles of life, which we call bacteria, are present everywhere in untold numbers. The air we breathe, the water we drink, and the food we eat are teeming with them. These

by which this can be done. While the parent bacteria can be killed at the temperature of boiling water, their spores retain their vitality for a long time even at that temperature. In large commercial factories, sterilization is accomplished by subjecting the cans containing the various products to steam under pressure. By this process the temperature is raised to a degree higher than both bacteria and spores at the same time. Smaller factories and the different home-canning

the slow-growing and more mature ones. Fruits and vegetables are in better condition if gathered in the early morning while the dew is still on them. If it is not convenient to attend to the canning just at this time, put the fruit or vegetables in a cool place where they will not wither, but will keep fresh and crisp until ready for use. It is not advisable, however, to delay the canning too long, as both fruit and vegetables lose some of their best qualities when kept for a length of time.



Neat and Comfortable and in Every Sense a Real Home

The home of Mr. H. Bolbert, Oxford Co., Ont., is here shown. Mr. and Mrs. Bolbert may be seen to the left. Note the article and the illustrations elsewhere in this issue concerning Mr. Bolbert and his farm.

outfits usually make use of the "open-kettle" process. Here the cans are submerged in boiling water and kept at that temperature for a time sufficient to destroy bacteria and spores. The third process, known as fractional sterilization, is that of keeping cans or jars in boiling water for a specified time upon each of two or three consecutive days.

The process of boiling upon consecutive days is the safest method and is much to be preferred in home canning. The first day's boiling kills practically all the bacteria, but does not kill the spores. As soon as the jars or cans cool, these spores develop and a new lot of bacteria begin their destructive work on the contents. The second day's boiling kills this new lot of bacteria before they have had time to produce spores. Boiling the third day is not always necessary, but it is advisable in order to be sure that the sterilization is complete.

**SELECTION AND PREPARATION OF FRUIT AND VEGETABLES.** The quality of any canned product is largely dependent upon its condition when first packed. The products

Fruits and vegetables to be canned are prepared in exactly the same way as they should be previous to cooking or serving for immediate use. All bruised and rotten places should be cut out and all stems, leaves and other kinds of trash removed. See that everything is clean and washed thoroughly in fresh water before being placed in the jars or cans. These should also have been well washed and made perfectly clean. Do not attempt to can decayed or dirty fruits and vegetables. Have everything clean and fresh.

**GLASS JARS.**

For strictly home purposes, glass jars are more satisfactory and are decidedly more economical than tin cans, although both may be used. The initial expense of glass is greater than that of tin, but with reasonable care, glass will last an indefinite length of time. Glass jars can be used over and over again with perfect safety, but tin should never be used the second time. Tin is more or less soluble in fruit and vegetable juices. While the amount of tin dissolved under ordinary conditions is too small to be at all injurious, still it has been enough to

make the can unfit for use the second time.

There are numerous kinds of glass jars on the market, many of them having certain distinct points of advantage. See Fig. 1. The jar most commonly used is the ordinary screw-top type. See Fig. 1, Nos. 4 and 7. Although they are cheap in price, it is thought they do successful canning without them on account of the difficulty in sealing them air tight during the processing or cooking. The tops are usually metal with a porcelain lining, but may become loosened and come out, thereby making the top unsatisfactory for use. Jars of this type can best be used for rich preserves, jams and jellies where complete sterilization is not of so much importance as it is with canned fruits or vegetables. Fig. 1, Nos. 2 and 5, shows two jars with improved screw-tops. These jars have a glass or porcelain top which is held in place by a metal band that screws down over the neck of the jar. This is a decided improvement on the old-style screw-top.

The most satisfactory types of jars for general use are those shown in Fig. 2. This shows the original "Lightning Patent" small-mouth jar with glass top held in place by a wire spring; the "Safety-valve" type jar with similar top held in place by a lacquered metal band fitted with a spring and lever; and the improved wide-mouth "Lightning Patent" type jar with glass top held in place by a simple wire spring. The "Safety-valve" type jars are used by some commercial packers in canning the extra-fancy grades of fruit and vegetables. The wide mouth of the improved jar is a decided advantage when canning whole fruits or vegetables. Although jars of the types illustrated are a little more expensive, much more satisfactory and successful work can be done with them than with those having screw-tops. When buying jars get as good a grade as can be afforded. The best quality usually retails at from \$1 to \$1.25 per dozen. The first expense may be somewhat high but with reasonable care good jars should last many years.

**RUBBERS.**

The various types of jars are fitted with rubber rings on which the tops rest when in place. Rings are used to aid in sealing the jars and keeping them air-tight. After the contents of a jar have been sterilized, it is necessary that the jar be kept air-tight so that whatever is enclosed may remain sterile and free from the action of bacteria. Do not use rubbers' cooking time. The first season's cooking usually destroys the life or elasticity of the rubber. For this reason it is important that good fresh rubbers be used as those used one season cannot be depended upon to make air-tight seals the second time. In buying rubbers, as in buying jars, get a good grade. (Continued next week.)

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

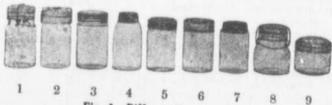


Fig. 1—Different Types of Jars

bacteria are practically the cause of the "spoiling" or fermenting of the various fruits and vegetables. All forms of bacteria are killed by complete sterilization. This is nothing more than enclosing the products to be sterilized in jars or cans that can be sealed air-tight and submitting them to heat of sufficient temperature for a time, long enough to destroy the bacteria that cause the raw material to spoil. Sterilization is readily accomplished by the use of boiling water. There are three different ways

to be canned, the various utensils used, the cans or jars and the entire surroundings cannot be too clean. Cleanliness is half the secret of making canning a success.

In selecting fruit, use only those specimens that are well grown, ripe, but firm. Do not use overripe specimens, as they are usually too soft and mellow to can nicely. When choosing vegetables, select those that are young and have made a rapid growth. As a rule, young, quick-growing vegetables are superior in flavor and texture to

**CARY FIRE PROOF SAFES**  
AND  
**VAULT DOORS**  
ALL SIZES

**FORD & FEATHERSTONE**  
HAMILTON, ONT.

W. J. SHERWOOD,

Representative.

## The Upward Look

### Is God in Everything?

Were a good fairy to visit us unexpectedly some time when we were troubled and despairing, and offer to give us a magic talisman through which we could acquire the power to transform all the events and incidents of our lives into pleasures and causes for joy, how gladly would we accept the offer. How pleased we would be to feel that thereafter we need have no more worry or anxiety, as by one touch of our wand even our troubles would be converted into causes for rejoicing. And surely, much of the pleasure we would thus derive would have its source in the thought of the happiness we would thus be able to bring into the lives of the dear ones around us. How happy we would endeavor to make them.

Most of us, at some time or other in our lives, perhaps often, have felt such a wish rising up in our hearts. How remarkable it is, therefore, that although not a mere fairy but—One infinitely greater, God Himself, has made such an offer to us, and is still making it. We have refused to listen to it, or to believe that it could be true.

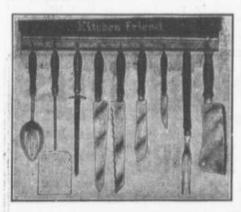
Our troubles and heartaches arise from the fact that we do not see God in all things. The people around us are often unkind, unsympathetic and exacting in their demands upon us. We feel that the ease and freedom from care enjoyed by others are denied to us. In our hearts we wonder why. We may even feel, without actually voicing the thought, that really there is little use in our trusting in God to make things come out right, for as sure as we do the people around us will say, or do things, that will upset all our plans and destroy all our secret aspirations. Why then waste time in vain attempts to attain the impossible when failure is so sure to be the ultimate result?

It is when we think these thoughts that we are refusing to accept the magic talisman that God is holding out to us. We feel that God's promises of help are too good to be true and, therefore, we refuse to accept them. We do not see that good gifts, gifts direct from God, are concealed in the very troubles that threaten to crush us, and thus we fail to grasp and hold fast to the magic wand of faith, which has the power to convert these trials and disappointments into causes for joy and thanksgiving.

As soon as we can see our Father in everything we find that life is beautiful.

### 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 be yours then how easily this can be done. Address Circulation Manager, Farm and Dairy, Peterboro, Ont.

coming one long thanksgiving. A rest enters our hearts that is unspeakeable. With it comes an uplift, even a gaiety of spirit, that transforms our lives. Soon we find that the little things that used to so sting and annoy us have lost their power to wound and hurt. We simply rise above them.

The fact is, God is in everything. The whole teaching of scripture asserts and implies this. The very hairs of our head are all numbered. We are not to be careful about anything because our father cares for us. We are not to be afraid of man, for he is on our side. No one can be against us, because He is for us. When we pass through the rivers, they shall not overflow us, and when we walk through the fire, we shall not be burned because He will be with us. He shuts the mouths of lions, that they cannot hurt us. "He delivereth and rescueth us." "He maketh the devices of people of none effect."

It is this very God who is declared to be "our refuge and strength, a very present help in time of trouble." "Because thou hast made the Lord, which is my refuge, and the most High, thy habitation; there shall be no evil befall thee, neither shall any plague come nigh thy dwelling. For He shall give His angels charge over thee, to keep thee in all thy ways." "Be content, therefore, with such things as ye have; for He hath said, I will never leave thee nor forsake thee." "So that we may boldly say, 'The Lord and I will not fear what man shall do unto me.'"

Nothing else but seeing God in everything, will make us loving and patient with those persons or things who annoy and trouble us. Nothing else will completely put an end to all murmuring or rebelling thoughts. Christians often feel at liberty to murmur against most and almost circumstances, when they would not dare to murmur against God. Therefore, this way of seeing things makes it impossible for us ever to murmur. "The life radiant," writes Julian Whiting, "is that transfiguration of the ordinary daily events and circumstances, which lifts them to the spiritual plane and sees them as the signs and indications of the divine leading. We may all live this life. If we are not doing so, the responsibility rests with us, not with God, who all the time is offering us the help and strength and comfort and power we need. It is ours for the asking and for the taking.—I. H. N."

### Education of our Girls

A most enthusiastic convention of the east and west Victoria Women's Institute was held recently at Lindsay, Ont. The principal speaker of the day was Dr. Annie Macdonald of Aylmer. Dr. Backus took for her subject the "Education of Our Girls," and gave a most able and rousing address along these lines.

Owing to lack of space, we only give a few extracts from this most able address.

What men want, and what we want is good, educated women. The wife must be educated to guide the precious child through the rocks and shoals which beset it, and as a ship has to be piloted through the shoals and rocks by an experienced and educated pilot, so has the child in infancy to be guided by an educated mother. If the pilot were not educated on the whereabouts of shoals, and the right channel, where would his ship go to? What we need today is the education of women.

The great foundation of a girl's education is and must be laid in the home. They should be kept in close touch with Nature, and they must learn, for it is no gift of Nature. More time should be spent to teach them. Every girl in farm school should be taught about the horses, cattle and other animals around them, how to

hitch and unhitch a horse, milk a cow, etc. All these teach her how to act and think quickly. In case of an emergency the girl should be prepared for these things. Girls should be taught the use of their muscles. This should be another feature of their education, self reliance honor, self respect and truth. Our girl has to be taught a little knowledge of law, management of estate, to know something of documents before signing them. Give girls as much knowledge as it is possible. A girl is as a rule born brave, and the pages of the history of early Canada are filled with the brilliant deeds of women. Girls should be taught to be brave. I beg of you to give your girl a chance, and give her a thorough knowledge of the financial partnership and matrimonial affairs.

### A Good Way to Dry Apples

(An Ontario Housewife)

The most general method adopted in drying apples is after they are pared, to cut them in slices and spread them on cloths, tables or boards and dry them outdoors. In clear and dry weather this is, perhaps, the most expeditious and best way; but in cloudy and stormy weather this way is attended with much inconvenience, and sometimes loss, in consequence of the apples rotting before they dry. To some extent they may be dried in this way in the house, although this also is attended with much inconvenience.

The best method is to use frames. These combine the most advantages with the least inconvenience of any way, and can be used with equal advantage either in drying in the house or out in the sun. In pleasant weather the frames can be set outdoors against the side of the building, or any other support, and nights, or cloudy and stormy days, they can be brought into the house and set against the side of the room near the stove or fireplace.

My frames are made in the following manner: Two strips of board, 7 ft. long, 2 or 2½ in. wide—two strips 3 ft. long, 1½ in. wide, the whole in. thick. Nail the short strips across the ends of the long ones and it makes a frame 7 x 3 ft. which is a convenient size for all purposes. On one of the long strips nails are driven 3 in. apart, extending from the top to the bottom.

After the apples are pared they are quartered and cored, and with a needle and twine, or a stout thread, strung into lengths long enough to reach twice across the frame. The ends of the twine are then tied together, and the strings hung on the nails across the frame. The apples will soon dry, so that the strings can be doubled and the apples and fresh ones put in their places. As fast as the apples become sufficiently dry they can be taken from the strings and the same strings used to dry more on. If large apples are used to dry they can be cut in smaller pieces. Pears and quinces and other fruits that can be strung may also be dried in this way. It is said that dried fruit put away with a little sasaparilla bark, about a handful to a bushel of fruit, will protect the fruit from those troublesome little insects which so often destroy hundreds of bushels in a season.

### Labor Saving Contest

Many interesting and instructive letters are being received in our Labor Saving Contest. If you have not yet sent in your letter, write it soon. Any illustrations of your pet labor saving device will most welcome. They add much to the value of your letter. Read the announcement of the Contest in June 2nd issue of Farm and Dairy. It should interest you.

Renew your subscription now.

## The Sewing Room

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

### COSTUME FOR MISSES AND SMALL WOMEN 6644

Simple dresses made in shirt waist style but with waist and skirt joined by means of a button. This one is simple and altogether desirable, while it will be found available for almost all seasons materials.

Material required for medium size is 7½ yds. 34 or 37, 5½ 44 in. wide, ½ yd. 27 for collar and cuffs.

Waist material, 1 yd. 14, 16, and 18 str., and will be mailed for 10 cts.

### HOUSE GOWN OR WRAPPER 6659.

The simple house gown is closed at the left of the front, giving suggestion of Russian, is greatly in vogue. This one is simple yet smart and altogether satisfactory. The blouse and skirt are cut in one, making a one-piece gown and giving a neat, made invisibly or with buttons and catchalls, they can be liked. Material required for medium size is 10 yds. 34 or 37, 5½ 44 in. wide with ¾ yd. of handker. The pattern is cut for a 34, 36, 38, 40, 42

and 44 in. bust, and will be mailed for 10 cts.

### BLOUSE OR SHIRT WAIST 6388.

Such a simple yet becoming blouse as this is welcome at all seasons but especially so just now. This model is an exceptionally becoming one, the blouse and skirt are cut on the shoulders providing just the necessary fulness.

Material required for medium size is 4½ yds. 21 or 24, ¾ yds. 32 or 34, ¾ yds. 44 in. wide. The pattern is cut for a 34, 36, 38, 40, 42 and 44 in. bust, and will be mailed for 10 cts.

### BLOUSE OR SHIRT WAIST 6571

The shirt waist with a yoke over the back that is extended to conceal the shoulder seams is a favorite. This one can be either tucked or gathered at the fronts to provide becoming fulness which the yoke can be used or omitted, made straight or with pocketing. The sewing device will most welcome.

Material required for medium size, 5½ yds. 21 or 24, ¾ yds. 32 or 34, ¾ yds. 44 in. wide.

The pattern is cut for a 32, 34, 36, 38, 40, 42 in. bust, and will be mailed for 10 cts.



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**OUR FARMERS' CLUB**  
Contributions invited.

**PRINCE EDWARD ISLAND**

**KINGS CO., P. E. I.**  
**CARDIGAN BRIDES.**—Prospects for the hay crop are good. Grain crops are looking fine. We have had heavy rains lately. Weather has been very cool the past month for this time of the year. Farmers' turnips are coming nicely. Horses are in good demand and bring high prices.—H. P.

**ONTARIO**

**HASTINGS CO., ONT.**  
**SIDNEY CROSSING.**—Pastures are very good but rain is badly needed, and the grass week having been very hot, and the past is becoming parched. Crops are in good condition. Wheat and barley are looking fine. There was a bright prospect for an abundance of cherries and gages, but the dry weather has so affected them that the crop will be small and not a fair variety at that. Strawberries have been abundant this year, but the dry weather is also telling on them, and the yield is not so soon, the strawberry season is over. Oats are selling for 40c to 50c a bush; barley, 55c to 60c a bush; peas, 70c to 75c a bush; beans, 19c to 20c; burdock, 10c to 12c a bush; 12c to 12½c a lb; hens, \$1.20 to \$1.50 a pair.—J. K.

**HALLIBURTON CO., ONT.**

**KINMOUNT.**—The hot, dry weather still continues. It has been 30 to 30 degrees in the shade. The growth of grass is checked. Barley is well out in head, with short straw. The old meadows are better than last year. John Long of Durham, has sold several Hereford bulls around here. He has shipped three carloads of cattle, paying from \$25 to \$30 per head. Other buyers are offering from \$175 to \$4 a cwt for cattle to be delivered during October; \$5.50 for lambs. Millfeed

**NORTHERN ONTARIO**

100 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

**MONEY IN DITCHING**



Every farmer and thresherman knows the value of a time-saving machine like a harvester. We want YOU to know the Money-Making qualities of the  
**Buckeye Tractor Ditcher**  
It cuts 100 to 150 rods per day, and saves 25 to 50 per cent. of the cost of hand work. Are you interested— anxious to earn more money?  
Write TO-DAY for Catalog "G". Remember the FIRST man in your vicinity to use a BUCKEYE will make the BIGGEST profits. Address

Sales Department  
**The Buckeye Tractor Ditcher Co.**  
FINDLAY, OHIO, U.S.A.

See Article on Page 5 This Issue

is cheaper than it has been for some years. The high price for pigs has encouraged a number of the farmers to feed pigs for the fall market. Potatoes, corn and other crops are doing well. If the rain comes in time the strawberry crop will be good.—Th. T.

**WELLAND CO., ONT.**

**NETHERBY.**—Crops are doing fine so far, but rains are beginning to need a shower of rain to help them along. Apples are going to be a good crop, but cherries are not so good as was expected. J. W. Y.

**SIMCOE CO., ONT.**

**STAYNER'S.**—This is the centre of a fruit-strawberries, currants, etc.—are heavily laden, while raspberries are the small present filled with a splendid yield. The action of the Agricultural Department in establishing demonstration orchards, where pruning, spraying, etc., is done by experts, is benefiting the crop greatly.—T. G.

**WELLINGTON CO., ONT.**

**ELORA.**—Excursions to the Ontario Agricultural College have been running for a week past, and the interest in this useful institution is growing. A larger number than usual for Royal City last week. The president continues to give sound, practical advice from the platform during the luncheon and the different professors continue this practical form of address to visitors through the experimental plots, live stock, dairy and poultry departments. Stock of all kinds in the country, and in good order. The selling off of young and immature stock would seem like a grave mistake on the part of the farmer, and would a greater shortage of young cattle shipped to-day, which while excellent, looks like the goose that lays the golden egg.—G. V.

**BRANT CO., ONT.**

**FALKLAND.**—Hay is a fine crop. Hay is well under way. Alfalfa, where it came through the winter all right, is a heavy crop. Blue grass is its worst enemy. Red clover is growing nicely. White drought last fall considerably, and is very patchy. Grain crops are suffering from the dry weather. Corn has made a fair start and is growing nicely. Wheat, grubs and cutworms have injured the mangels and corn in many places. Some farmers did not obtain very good seed corn, and had to plant the second time. Butter and eggs are both plentiful at present. Alfalfa is growing nicely. Strawberries are yielding well, although rain is needed many places. Apples will be a good crop.—L. T.

**NORFOLK CO., ONT.**

**SOUTH WALSINGHAM.**—The dogs are still tied and muzzled. Some farmers talk of going into sheep raising more extensively than before, believing it to be one of the most paying branches in mixed farming if the wolverine and in the vicinity are kept away. The dog nuisance, has certainly done a great drawback to the sheep industry in this province. Good fat, beef cattle are out of the reach of

the local butcher. The grand feature in farming today is the splendid prices the farmer is receiving for his produce. He doesn't stop to ask the question, "Does farming pay?" He knows it does.—B. B.

**PERTH CO., ONT.**

**ST. MARTY'S.** A greater area was seeded to alfalfa this spring. Alfalfa has suffered the least of any crop from the cold season and present indications for a splendid yield. The unsettled weather for a while being paid to this year. The turnips are all sown. The mangels and corn are doing well, though some of the scuffer has been started to work for the cultivator. The unsettled weather lately has given farmers time to do fencing and draining and a great number have been using their time to advantage.—H. B. W.

**GOSSIP**

**THE FIELD CROPS OF CANADA**

Ottawa, June 10th.—The Census and Statistics Office has to-day issued a report on the estimated area and condition of the principal field crops of Canada at the end of May, based on the reports of a large staff of correspondents.

The area under wheat is put down at 707,200 acres, which is 45,100 acres more than last year, and its per cent. of a standard crop is 67.65, which is 5.50 higher than last year. Spring wheat is given an area of 5,857,500 acres, and its condition compared with the end of May last year is 91.49 to 92.15. Oats, which has an area of 9,864,100 acres, is 561,500 acres more than last year, and its condition at the end of May was 83.8. The area of barley is 1,624,200 acres, or 35,500 acres more than last year, and its condition is reported at 92.94, compared with 91.49 last year. The rest crop continues to decrease, but its condition is about the same as a year ago. Peas, with 386,100 acres, is less than last year by 7,200 acres, and its condition is 81.01, as compared with 90.53 last year. The area of mixed grasses is 475,700 acres, or 6,400 acres less than last year, and their condition at the end of May was 94.72, compared with 91.71 last year. The area in hay and clover is given as 2,355,400 acres, which is 365,100 acres more than last year, and the condition is 97.4 or 7.28 more than in 1909.

The area of all these field crops is reported at 20,554,200 acres, which is 2,359,300 acres more than last year. The largest increase has taken place in wheat, which now has reached 9,234,000 acres. In 1909 it was 7,790,400 acres, and in 1908 it was 6,610,300 acres, which is a gain in two years of 2,624,000 acres, or an increase of 40 per cent. The provinces of Manitoba, Saskatchewan and Alberta increased their area in wheat from 2,952,400 acres in 1906 to 3,941,569 acres in 1909, and 3,355,400 acres in 1909. The area of the provinces sown to wheat, oats and barley, was 3,491,411 acres in 1908; it increased to 6,069,889 acres, and this year it is 13,899,300 acres. Ontario shows an increase in fall wheat from 581,100 to 692,200 acres, and in oats from 1,472,200 to 1,272,000 acres. In Quebec the increase in oats is from 1,574,100 to 1,249,600 acres; Manitoba from 1,300,000 to 1,451,000 acres; Saskatchewan from 1,587,000 to 1,973,000 acres; and Alberta from 820,000 to 974,000 acres.

The condition of pastures is over 100 in the Maritime Provinces and Quebec. It is 95.60 in Ontario; 89 in British Columbia, and around 80 in Manitoba, Saskatchewan and Alberta. Alfalfa is growing in favor in all the provinces, but especially in Ontario, where a large number of correspondents report upon the increased areas in this crop. The effects of late frosts have been felt in many places and injury has been done to fruits and tender vegetables in some localities, but generally the prevailing low temperatures of April and May have strengthened the field crops, and have left them better able to withstand the attack of winter frosts, and re-seeding and replanting have been less necessary than in former years.

**GOOD PRICES FOR JERSEY CATTLE**

One of the most successful sales in the history of Jersey cattle in the Western States took place recently on the farm of Mr. H. West, at Seapooos, Oregon. Mr. West was disposing his herd of high class cattle and long prices were given for some of the best specimens at the auction. The previous show yard record of

this herd had much to do with the success of the sale. The entire herd of 74 cattle brought an average of \$20. The highest price was given for the splendid young bull, Buena Vista 24th, 79655, who was bought by Mr. E. Pottette, of Dunsmuir, Wash., for \$1,000. The next highest price was realized for Mrs. N. H. Locke, of Lockford, Cal., for \$705. Many other high prices were paid at this sale.

I am renewing my subscription for Farm and Dairy. I would miss it very much now.—Wm. Smith, Simcoe Co., Ont.

**Sound as a Dollar**

That's the only way you can afford to keep them, because any lameness means less work and less profit to you.  
Spavin, Splint, Curb, Sweeney, Ringbone, Swelling or Lameness need not prevent your horses from working. Simply use Kendall's Spavin Cure.

It works while the horse works—takes away the pain—reduces swellings—makes legs and joints sound and strong—leaves no scars or white hairs because it does not blister.

**Kendall's Spavin Cure**

has been the horseman's standby for 40 years and is used all over the world.

Burns, Ont. Sept. 10th, 1909.  
"I have used Kendall's Spavin Cure and it cures Old Shobbers Cane."

WILLIAM H. DOUD,  
Keep your horses sound as a dollar. Get Kendall's today and you will have it tomorrow if needed. It's a bottle—6 for \$5.

When you buy, ask for free copy of our book "A Treatise On The Horse" or write us  
51  
Dr. B. J. KENDALL CO., Essexburg Falls, W. V.

**EASTLAKE**

**STEEL SHINGLES**

**FIRE, LIGHTNING, RUST AND STORM PROOF**

Shrove, Ont., April 10th, 1909  
"We have handled your 1200 Steel Shingles for many years. They have been on the Commercial Fire Insurance Co. buildings of this town for 18 years. We re-plating have been continuing for the past 25 years, and they have always been first-class material, and have never required any repairs."  
Wm. H. BRID,  
Wholesale and Hardware Merchants.

Write for Booklet.  
**The Metallic Roofing Co.**  
Limited, Manufacturers  
**TORONTO & WINNIPEG**

**ABSORBINE**

Will reduce Inflammation, swollen Tendons, Ligaments, Muscles and Stop Pain from Splints, Side Bone or Bone Spavin No matter how bad gone. Horses can be used. Horse Book 2 D free. 62.5¢ a bottle all delivered.

**ABSORBINE** is for market. It is a Natural, Strained Pure Ligaments, Enlarged glands, veins or muscles—absorbs all—will be in. Stock Price.

W. F. YOUNG, P.O.F., 123 Temple St., Springfield, Mass. L.R.A.H. Ltd., Montreal, Canada Agents.

**LOUDEN'S HAY TOOLS**

Have been in use for more than forty years. Each year the demand for them has grown until they are now used from coast to coast, and the best advertisement other makers use for their goods is that they are

**AS GOOD AS LOUDEN'S**

We manage however to keep the lead we have always had and to manufacture the best line of Hay Tools ever offered to the Farmer. This is one of the 13 different Hay Carriers we make.

Write for catalogue and prices to

Cutter for Self Track  
**LOUDEN MACHINERY CO., Guelph, Ont.**

MANUFACTURERS OF  
Hay Tools, Barn Door Hangers, Feed and Litter Carriers, Cow Stalls and Stanchions, etc.

**Peerless Lawn Fence**

Is Strong and Attractive. All the wires are uniformly crimped, large gauge, steel spring wire, heavily galvanized and coated with white enamel paint. Never rust, never rattle, improve your property with a Peerless Fence. Cheap at wood and more handsome and durable. Also full line of farm and poultry fence and, etc. Write for information.  
**THE BANWELL HOXIE WIRE FENCE CO., Ltd.**  
Dept. H, Hamilton, Ont., Winnipeg, Man.

**MARKET REVIEW AND FORECAST**

Toronto, Monday, July 4th. — It would be foolish to blind one's eyes to the fact that the continued drought is creating the utmost uneasiness. Reports from the Northwest have, however, been latterly more encouraging, as copious rains have fallen pretty generally over all the provinces. Rains have also fallen around the north shore of Lake Superior, and probably before these lines are in print the long continued drought will have culminated in good rainfall through Eastern Canada. Competent authorities in the west, however, declare that even under the most favorable conditions owing to the great setback caused by the dry weather, nothing like the bountiful crop of last year need be looked for. In Manitoba, Premier Roblin declares that only half a crop will be harvested.

Stocks have been affected to some extent by the adverse crop reports. In the face of these gloomy apprehensions, it is encouraging to read that Sir Edmund Walker, the general manager of the Bank of Commerce, states that there is no likelihood of tight money in the immediate future. Call money in Toronto rules at 5% per cent.

**WHEAT**

Unfavorable crop reports have had a disastrous effect on stocks in Wall street.

The damage is probably overestimated, and the fact that prices in Chicago declined two cents in the face of the adverse reports, shows that there is a strong feeling that the rumors are exaggerated. July wheat closed at last advices at 99¢ at Chicago; September, \$1.00, and December at \$1.05. Local dealers quote No. 1, Northern, \$1.07; No. 2, \$1.05, and No. 3, \$1.03, at lake ports; No. 2, Ontario winter wheat, 94¢ to 95¢ outside. On the farmers' market, #1 wheat sells at \$1 to \$1.02, and goose wheat at 90¢ to 95¢ a bush.

**COARSE GRAINS**

There is not a great deal doing in the selling of grain, owing to the uncertainty of the market. The following quotations are made by local dealers. American corn, No. 2, 66¢; Canadian corn, 62¢ to 65¢. Toronto receipts: Canadian western oats, No. 2, 38¢; No. 3, 37¢, immediate shipment; Ontario, No. 2, white, 35¢ to 36¢ outside; 80¢ on track. Toronto, peas, 70¢ to 71¢; barley, 51¢ to 52¢; rye, 67¢ to 68¢; buckwheat, 51¢ a bush. On the farmers' market, all sell at 30¢ to 35¢ peas, 70¢; barley, 48¢; rye, 70¢, and buckwheat, 51¢ a bush.

The following are Montreal wholesale prices: Barley, 51¢ to 49¢; corn, American, 64¢ to 65¢; Canadian western oats, 36¢ to 37½¢.

**POTATOES AND BEANS**

The large crop of old potatoes is having a demoralizing effect on the sale of the new crop in Illinois. Old potatoes are quoted locally at 51¢ to 60¢ a bag, out of store. There are no deliveries on the market. New American potatoes are selling at \$2.20 to \$3 a barrel. Old potatoes in Chicago are actually selling at the present time for 12¢ to 15¢ a bush.

On the farmers' market, potatoes are selling at 60¢ to 70¢ a bag. In Montreal potatoes in car lots are selling at 45¢ to 50¢ a bag. The local trade in beans is quiet; the stocks are limited, and the prices remain unchanged, being \$2 to \$2.10 for primes, and \$2.20 for three pound pickers. Montreal prices for three pound pickers are \$1.95 to \$2 a bush.

**WOOL**

Quotations for wool remain unchanged. Washed fleeces, 19¢ to 20¢ lb.; unwashed fleeces, 15¢ to 17¢; rejects, 15¢ a lb.

**HIDES**

There is a slight tendency upwards in some classes of hides. Quotations by local dealers are: inspected steer and cow hides, 36¢ to 38¢ a lb.; bull hides, 36¢ a lb.; calf skins, 15¢ to 14¢; sheepskins, \$1.25 to \$1.35; lamb skins, 30¢ to 30¢; horse hair, 81¢.

horse hides, \$2.50 to \$2.75; tallow, No. 1 quality, 6¢ to 6½¢ a lb. Dealers are paying at country points: beef hides, cut to \$6 to \$7½; horse hides, \$2.75 to \$3; calfskins 12¢ to 15¢; sheepskins, \$1 to \$1.25; lambskins, 15¢ to 30¢, according to quality; horse hair, 30¢ to 35¢ a lb.

**EGGS AND POULTRY**

It is to be assumed that there are no commensurate quantities engaged in hatching eggs on the same principle as a doctor who has just been indicted in the United States on a charge of selling doctored eggs. There are no reports of formaldehyde, and were absolutely rotten and unfit for human consumption. The volume of business on the market is large but the hot weather is keeping prices steady at 19¢ to 19½¢ a dozen in case lots. On the farmers' market, new-laid eggs are selling at 25¢ to 27¢ a dozen.

In Montreal, selected stock is selling at 21¢ a dozen, and straight receipts at 17¢ to 18¢ a dozen. Toronto dealers quote poultry as follows: Turkeys, 18¢ to 20¢; spring chickens, 30¢ to 35¢ lb. dressed; 10 to 12 lbs. broilers, 15¢ to 16¢ a lb.; alives; ducks, \$1.80 to \$2 a pair.

**HAY AND STRAW**

Quotations for hay and straw are unchanged. Dealers quote No. 1 timothy, \$14 to \$15 a ton; No. 2, \$13 to \$14 a ton; straw is quoted at 87 to 87.50 a ton. On the farmers' market choice timothy is selling for \$18 to \$21 a ton; straw in bundles, \$13.50 to \$15, and loose straw, 88¢ to \$9 a ton.

In Montreal, dealers quote No. 1 hay, \$15 to \$15.75; No. 2, \$13.50 to \$14; clover mixed, \$11 to \$11.50 a ton.

**MILL FEEDS**

There is no change in the price of mill-feeds. Manitoba bran is quoted at \$18 a ton; shorts, \$23 a ton on track. Toronto, Ontario bran, \$19 a ton; shorts, \$21 a ton, on track, Toronto.

Montreal prices are: Manitoba bran, \$18; shorts, \$21 a ton; Ontario bran, \$18.50 to \$19; shorts, \$21 to \$21.50 a ton.

**FRUIT AND VEGETABLES**

There is a glut of strawberries and cherries on the wholesale market. Strawberries are sold at 82¢ a ton for cherries, a basket, 75¢ to \$1.25; peas, 80¢ to 85¢ a basket; asparagus, \$1 a basket; beets (dressed), \$2.25 to \$2.50; \$2.25 to \$2.50 a hamper; carrots (dozen), 40¢.

On the farmers' market, lettuce is selling at 16¢ to 18¢ a bush; cauliflower, 20¢ each; rhubarb 5¢ to 10¢; parsnips, 20¢ to 25¢ a peck; green peas, 30¢ a measure.

**DAIRY PRODUCTS**

There is a steady demand for the higher grades of butter, and prices are well maintained. Creamery prices are quoted by wholesalers at 23¢ to 24¢ a lb.; choice dairy prints, 19¢ to 20¢; ordinary quality, 15¢ to 16¢. Retail prices are 22¢ to 24¢ a lb. On the farmers' market, choice dairy butter is selling at 22¢ to 24¢ a lb., and ordinary butter at 18¢ to 21¢ a lb. In Montreal best creamery butter is quoted by dealers at 22¢ a lb.

There is a great amount of cheese coming into the local market and prices rule at 11½¢ for large and 11¼¢ for twins; old cheese, 12½¢ a lb.

In Montreal, western cheese is quoted by dealers at 11¢; eastern, 10½¢ to 10¾¢ a lb.

**HORSE MARKET.**

Trade is still quiet in the horse market, although there are occasional glimpses of an awakening. There is not likely to be much done until the farmers are through with their harvesting. Prices are: rule high, \$1.50 to \$2.00; medium, \$1.25 to \$1.50; light, \$1.00 to \$1.25; heavy draft horses, \$2.25 to \$3.25; medium, \$1.60 to \$2.00; agricultural and general purpose horses, \$1.50 to \$2.25; expressers, \$1.60 to \$2.20; drivers, \$1.80 to \$2.50; service able sound horses, \$4.00 to \$10.00.

**LIVE STOCK.**

The hot weather has certainly been having an effect on prices for stock during the past week. The demand for butcher cattle was distinctly weak in comparison with the week immediately preceding. There has been a marked shrinkage in values of milk cows. The chief feature, however, has been the large numbers of sheep and lambs placed on sale, which

tended to be quoted 25¢ a Hog remain in lowing country.

Export Cattle, 86.25 to a cwt. Butcher cuts to 85¢; ordinaries' cows, 80¢ a cwt. Heavy feeders to 84¢ a cwt. Stockers—a cwt.

Milk cows 80¢ calves, \$1.50 Sheep—Ewes, lambs, \$2.50 to Hogs—f.o.b., 5¢ The Trade Board cables: 76

**MONTEREAL**

This week's steady wing prices were 510 for cars. Towards over, the received were forced down of late. The price, Dressed at \$13 to \$13.50 a barrel stock.

**EXPORT BUTTER**

Montreal, July 6. There has been a decline this week as well as forced down. The price 10½¢ was more doing steady. The market of the sold at 10½¢.

The general export which did not all Cable adv Great Britain of English cheese

terferes very im Canadian, and a Canadian cheese the stock of it is steadily accepted a dampening effect ally, and unless again during the we may see still the country.

This week's re were smaller than and it is quiet of this season's are in for steady now on. It looks will not be any if as large. The make of to date is greater led at times cents are gradu down and prices kept ruled from 1 lb. lower than 1910. There is a good poise, and also a this week's shipments 2,000 packages.

**CHEESE**

Kemptville, June of which 500 sold \$1. Havelthorpe, of finest sold at London, Ont., J. Ed. No sales; J. Cowanville, Quebec cheese sold at Stirling, June 2 sold at 10¢. Campbellford, J. Ed. all sold at 10¢. Madoc, June 29, sold at 10 3/4¢. Woodstock, June and 1955 colored. Tweed, June 29, all sold at 10¢. Belleville, June Sales, 1000 at 10 1/2¢; more returned 9 1/4¢. Brookville, June colored offered; 45 sold at 10 1/2¢. Ottawa, June 30, ored offered; 260 at 10 1/2¢. Iroquois, June 3 white cheese offered 11-16¢. The rest at Kingston, June colored cheese offered up at 10 1/4¢ to 10 1/2¢. Alexandria, June all white, sold at 10 1/2¢.

**BREEDERS' DIRECTORY**

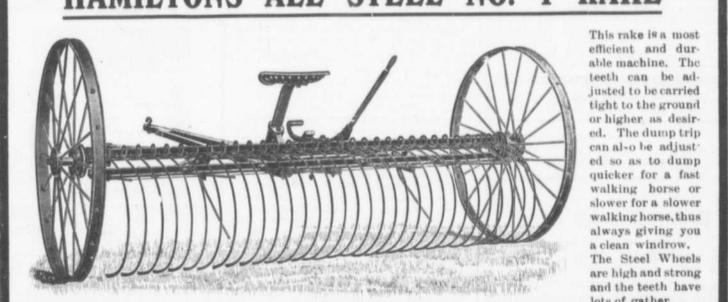
Cards under this head inserted at the rate of \$4.00 a line per year. No card accepted under two lines, nor for less than six months, or 26 insertions during twelve months.

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# PEDLARIZE FOR FIRE-PREVENTION

**BE READY** for fire, by all means. Provide every possible means for putting it out. Equip your house, your barn, all your buildings, with water-buckets, chemical extinguishers—hose and water pressure if possible. **But pay even more attention to fire-prevention!** Build, or remodel the buildings you have, in such a way that fire will have the least chance to harm them. **Lessen your fire risk**—especially if you live in a frame house.

## The Average Frame House Is A Fire-Trap

Fire did \$50,000 damage in Canada every day of 1900! More than sixty per cent. of that great loss was on frame buildings! Naturally. For, even in the cities, with their up-to-date fire-fighting outfits, firemen count the ordinary frame house a "goner" once the flames get a real start. The frame-house on fire is tinder-box—its inmates are lucky to escape with their lives—even in the cities. How are you fixed today to fight fire in your dwelling—in your barn?—in your wagon-shed? If fire started in your kitchen late tonight, would you and your folks get out alive?

If your barn caught, would your stock be saved? And, even if you were lucky and only the buildings suffered, would insurance repay you for your losses? You risk a very great deal if you live in a frame house, or if you have anything valuable in a frame barn. Yet you can do much to prevent fire. And you can, easily and cheaply, practically isolate every room in your house so perfectly that—if fire does start in any room—the fire can be confined to that room alone. Pedlarizing will do that, and more.

## Pedlarizing Reduces Fire Risk Fully 80 Per Cent.

"Pedlarizing" is sheathing any building, inside and out, with **Fireproof sheet steel**—in the several forms illustrated by the pictures here. For the roof, **Oshawa Steel Shingles**, guaranteed to make a good roof for 25 years or a new roof free. For the outer walls, **Pedlar Steel Siding**—surfaced to imitate brick, cut stone, dressed stone, etc. For the ceilings and sidewalls of the interior, **Pedlar Art Steel**—more than 2,000 beautifully embossed patterns. A balloon frame of cheap lumber, with the necessary trim, flooring, and some

furring, and these Pedlarizing materials, make a sturdier, handsomer house than any frame building ever was; and make the building **eighty per cent. less liable to fire damage** than the usual type of brick building. Such a structure is practically fireproof. There is nothing about it to burn except the furnishings, floors and doors. Yet such a building is most economical in first cost—and cheaper than even a brick building in final cost, because it will outlast one.

## Fire-Prevention By Pedlarizing Costs But Little

Whether you are erecting a new house or barn, or you think of repairing an old one, you will do well to inquire well into this Pedlarizing proposition. Consult with us first, and then with your builder or architect. Hold no prejudice against sheet steel for interior finish because it is comparatively new; don't think there is anything cheap-looking about Pedlar Siding for outer walls, don't imagine wood-shingles are cheaper than Oshawa Steel Shingles. Let us tell you the reasons for your choosing this practical, most economical and most effective way to prevent fire and to minimize fire-damage to the lowest degree. Let us

make it plain to you that many of the so-called "fire-proof" buildings in the big cities are not so well-guarded against fire as a frame-skeleton plated with Pedlar steel in the way we have outlined here. Any fire-insurance agent will inform you on the difference in the rate as between a frame house and a Pedlarized house. You will then see that this one item alone saves a good slice of the cost of Pedlarizing. Yet such a construction as we have suggested above is actually cheaper by twenty per cent. than an ordinary frame building! Nor does it require experts to erect it. **Consult us for full details. Write us to-day.**

## Pedlarizing Does Much MORE Than Fire-Proof

**Protects against dampness** Pedlarized buildings are wholly free from dampness. The inner walls will not "sweat," because there is a dead-air space between them and the Pedlar Siding of the outer walls. And this same dead-air space, formed by the studding, makes a perfect barrier to dampness penetrating from the outside. Oshawa-shingled roofs are rain-tight, as well as fire-proof and lightning-proof, and they are so ventilated that although water-tight (guaranteed for 25 years) they will not sweat on the under-side as common shingles must.

**Keeps out the cold** Cattle thrive better in Pedlarized barns. You save on feed, too, by Pedlarizing; for the stock do not have to eat so much for bodily warmth's sake. You see, Pedlarized buildings are easier to keep warm in winter. The shee above steel that armors them against fire also helps bar out the cold. Pedlarizing makes houses wind-tight. In fuel saved alone you regain your outlay.

### Shields from the heat

And, in summer's blazing sun, you will find the interior of a Pedlarized building cooler than any brick house in your neighborhood. Roof, walls and ceilings of heavy sheet steel bar the entry of the heat. **Cooler in summer; warmer in winter; dry at all seasons**—this is what Pedlarizing does for houses, barns, any building.

### Makes houses sanitary

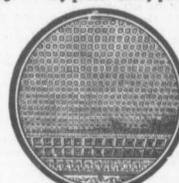
And it does more. For Pedlar Art Steel Ceilings and Side Walls—beautifully embossed in deep, richly-ornamental patterns, can be decorated in any color scheme you prefer; and yet these ceilings and walls, without a crevice or a seam to harbor dirt, dust, germs or vermin, can be washed as you would wash a pane of glass! If there has been disease in a Pedlarized room, the whole interior can be scrubbed with antiseptics and made really sanitary. Any room in a Pedlarized house can be kept clean with the least effort. Pedlarizing makes buildings healthful—as well as fireproof, damp-proof, warmer in winter, cooler in summer.



Oshawa Shingles protect any roof perfectly. Good for 100 years. Guaranteed for 25 years. Cost little.



Pedlar Steel Siding armors a building against fire and wet. Handsome enough for any place. Many patterns.



Pedlar Art Steel Ceilings adorn and protect. Cannot crack. Seams invisible. Hundreds of new styles ready.



Pedlar Art Steel Side Walls are sanitary. Washable. Beautiful to look at. Easily put on. Fireproof.



THESE pictures but faintly suggest the merits of my Pedlarizing Specialties. Please send for full details.

G. H. Pedlar

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