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VOLUME XXVII

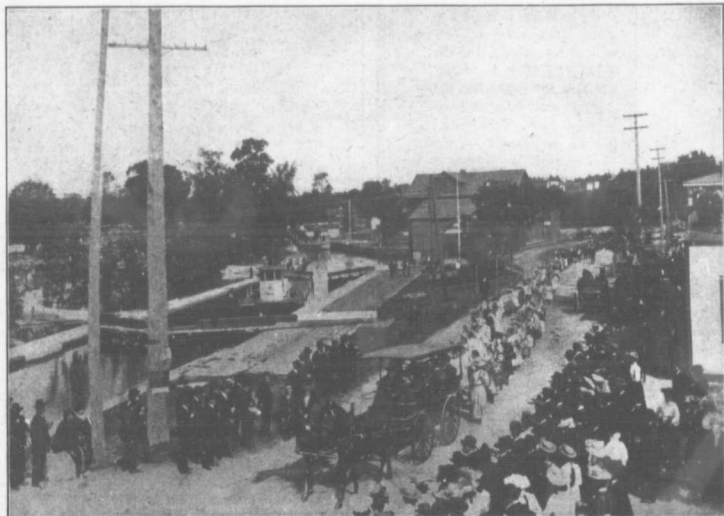
NUMBER 29

The CANADIAN DAIRYMAN AND FARMING WORLD

Best & Gold Scores
Competition Feb. 20
Agricultural Dept.

PETERBORO, ONT.

AUGUST 5, 1908



SCHOOL CHILDREN IN THE PROCESSION AT BOBCAYGEON FAIR, 1907

Exhibitions of Marching by School Children, preceded by a Procession through the Town to the Agricultural Grounds, is one of the Distinctive Features of this Fair. The Educational value of a Fair is most pronounced when considered in connection with the Children. They are more Susceptible to Teaching than are older people. Agricultural Societies should make greater use of Features of this nature at their Exhibitions

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BETTER FARMING AND
CANADIAN COUNTRY LIFE

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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.



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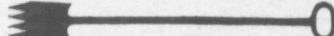
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How it Figures Out

Ed. The Dairyman and Farming World.—In yours of 22nd inst., is a letter from Mr. Sudlard, of Frontenac Co., Ont., on the way the farmers are assessed in Ontario, on their improvements. It might be interesting to your readers to know that more than a year ago, The Eastern Ontario Municipal Rights Association was formed at Ottawa, with R. B. Faith, editor of the Ottawa Valley Journal, as secretary, the object of which association is to bring pressure on the Ontario Government to get the assessment so amended as to exempt from taxation all improvements on farms. Premier Ross exempted from taxation all personal property on farms. It is now felt that the Whitney Government should go a step further and exempt all improvements on farms of any kind and every kind whatever, so that the unimproved farm will be assessed just as high as the improved farm, so that a wild farm will be assessed just as high as the farm all cleared and under cultivation.

Farmers must think over this matter and be able to defend their demands by arguments that can't be successfully refuted. It is going to be no summer holiday for farmers to get their improvements free from taxation. Let there be no mistake made on that point. When they ask for this just measure of relief they may expect to be bluffed, cajoled, bullied and told that they can't think. But this measure was one of the greatest God-sends the farmers could possibly secure. To let farmers think and ponder over these points that they can argue their case when talking to or writing to members of the Legislature, or to the Government.

LAND IS NOT OWNED

Land, the spot of earth, is not owned, but it is the lease or the patent, or title deed from the Government, that is owned. The term land means a part of nature. With the spot of earth there goes rain, sunshine, weather, etc. So land is not bought and sold like tea and sugar. The deed is a lease from the Government. But the improvements on land, the clearing, breaking, plowing, fencing, buildings, etc., are labor products, are destructible, are commodities, are riches or wealth. They are something that have a value according to the amount of labor and intelligence that produced them. Land is not a product of labor, neither is the value of land. So that farmers must distinguish clearly between property in land and property in improvements on land.

Now, what we want to get at is this: What is the value of an unimproved farm, wild, in the state that nature left it? It is easier to get at the value of improvements than at the value of the land. Suppose I own a wild 100 acres in the midst of a settlement, or near a settlement. Has it a value? What is its value? No wealth is being produced from it by labor, but yet it may be valuable.

SITUATION MAKES LAND VALUABLE

Let us see what makes it valuable. Is it not its situation? Is it near a school, church, road, town? These are the items that give it value. A place near town is more valuable than a place more distant; a place near a school more valuable than a place more distant. We are assuming, of course that the quality of the soil is the same as other soils around. Now, what we claim is, that all improvements should be free from taxation, and all farms rated or valued or assessed at their value outside of improvements. Is it morally wrong to tax an improved place more than the place that is not improved. Is taxa-

tion not a matter of morals? Should not the right thing to do be the best thing to do?

HAVE ALREADY PAID A TAX

Does not our conscience revolt at the idea of taxing or punishing a man for improving his place? Have not all improvements already paid an enormous federal tax in the shape of a tariff tax? On all the goods I eat, drink, wear, use, while clearing and improving, have I not already paid an enormous federal tax in the shape of the all the material, paint, hardware, etc., used while improving? And is it not criminal to tax me again, year after year, on those very same improvements on which I have already paid an enormous Federal tax? Really, Mr. Editor, I do not think that farmers have considered the enormity of the crime of taxing improvements, or the they would have risen in rebellion against it long ago.

"Interested Reader."

Our Front Cover

As the illustration, published on our front cover of last week's issue, showing the residence of Mr. Nathaniel Vermilyea, of Belleville, Ont., aroused considerable interest among our readers we give the following additional information concerning the place. The land cultivated by Mr. Vermilyea (some 500 acres) is a clay loam slightly undulating, and taking it all in all it is one of the best farms in Ontario. His system of farming is what might be designated "a mixed husbandry." The fruit and dairy features have a prominent place. The land, excepting 40 acres of bush, is entirely cleared and thoroughly drained, the high land by tile drains, open drains being used on the lower parts.

Forty milkers, chiefly Holstein grades, grace the spacious stables and extensive pasture fields. The milk from this herd is sent to a neighboring co-operative cheese factory during its season. In the winter time it is sold to the milkmen in the city. The very profitable and associate industry of dairying—the production of pigs—has a place upon this farm. About 180 pigs were turned off during the season. The bottom lands of this farm are unexcelled for the production of timothy. About 250 tons are produced annually. Three orchards are located on this farm, making altogether a total of about 1,000 trees. Northern Spys, Ben Davis, Russet and Colvert varieties predominate.

The residence is a fine one, and the barns and carriage house are among the best that we have seen. The grain crops grown are chiefly oats, barley, and fall wheat, great quantities of which are produced and fed upon the farm. Beautiful maple trees line the roads on both sides of the fences are first-class. The hired men are comfortably housed in pleasant cottages, painted with white and green and are surrounded with fine gardens and fruit trees. Mr. Vermilyea was born upon this farm which his father cleared from the virgin forest. He is much attached to it, and to his calling.

Note.—We would be pleased to receive photographs of the farm residences and buildings of our readers. If you have a good one send it to us at your earliest convenience. If not, could you not have one taken for this purpose?—Editor.

The second experimental farm in Saskatchewan is to be located at Rosethorn, in North Saskatchewan. The strong agricultural character of this district and the continued efforts of the Federal member, resulted in the Government picking on Rosethorn as the location for the farm.

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Each Week



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Only \$1.00
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AGRICULTURE, THE KEystone OF CANADIAN PROSPERITY

VOL. XXVIII.

FOR WEEK ENDING AUGUST 5, 1908

No. 29

APPLE GROWING NORTH OF LAKE ONTARIO

Alex. McNeill, Chief, Fruit Division, Ottawa

The Opportunities are Excellent—Suggestions for Bettering the Industry Based on Prevailing Conditions and Bad Practices.

THE counties from Halton to Hastings, bordering on Lake Ontario, are particularly well situated for the growing of winter apples. The business has been very profitable for a number of years, and many new orchards are being planted. Indeed, it is doubtful whether any other district of equal size has so many young orchards.

Unfortunately, with the multiplication of orchards has come the increase in orchard pests. Insects that were unknown, or that did little damage a few years ago, have become a serious menace to apple growing. The older orchards have given such good returns, and with so little labor, that apparently the owners did not need in former years to take much pains to combat these enemies. At the present time, at least fifteen per cent. of the older trees are dead or dying from causes which appear somewhat mysterious to the owners. Even the young orchard are defoliated, and are, therefore, stunted, with little attempt on the part of the owners to improve conditions. I visited many of these orchards recently, and found conditions exceedingly serious. The death of the older trees may be attributed to three or four causes, usually working in combination,



An "Old Timer" at Wicklow, Ont.

Trees forty feet apart, many of them forty feet high, and interlacing between rows. The difficulties of spraying such an orchard are apparent.

chief of which are winter killing, imperfect drainage, oyster-shell bark-louse, collar rot, and other forms of canker.

WINTER KILLING

Winter killing was quite common. Many of the older men said this was impossible, as they remembered winters much colder than any we have had lately, and the trees stood it all right; nevertheless, winter killing is doing a great deal

of damage among the orchards of this district.

That it should be more prevalent now than formerly must be attributed, in part to the adoption of clean culture, which is only one feature of what is really a much improved system of orchard practice. Formerly it was extremely rare to see an orchard not in sod. Recently cultivation has become the fashion, and the sod has been turned down in many an old orchard. The result is to be seen in the large number of winter-killed trees. The sod checked the growth early in the season, and thoroughly protected the roots, and thus prevent winter-killing. The clean culture not only exposed the roots, but induced a late and succulent growth of tissue in root and stem, that was more tender than that grown in sod. These orchardists made no mistake in cultivating their orchards. Most of them, however, have made a mistake in beginning the cultivation too late in the season. Many of them did not begin until the first and second week in June to plow their orchards, and these orchards were kept well cultivated throughout the summer. What should have been done was to work the orchards as early in the spring as possible, and cultivation should be stopped by the end of June, or not later than the middle of July, except in special cases. The protection which had been furnished to the roots by sod should be given in the form of a cover crop. Indeed, the two things, clean culture and cover crop, should invariably go together. Even without the cover crop, and making due allowance for winter-killing, clean culture has been a very great advantage. But all the advantages of the sod protection, and the increased vigor induced by cultivation, are secured by uniting the two, clean culture and cover crop.

UNDER-DRAINAGE

In the management of the soil of the orchard it is regrettable that so little under-draining is done. Many orchards are suffering severely for want of drainage, and it is noticeable that an undue proportion of the dead trees are to be found in the lowest portions of the orchard. It will take a great deal of missionary work to persuade many of the farmers that the best investment that they can make in their orchards is tile draining, except it may be a spray pump.

SPRAYING

Many of the farmers have made a commencement of spraying, but very few of them perform the operation intelligently. In the younger orchards there are two insects which cause very serious damage, namely, the bud moth and the cigar case bearer. I did not see a single young orchard that had been sprayed so as to destroy these two insects. The poisoned Bordeaux mixture should have been applied as soon as the leaf buds had begun to swell, and show the slightest portion of green, or even before this. In no part of Canada that I have visited did I

find the cigar case bearer and the bud moth worse than here. Many of the orchardists were only giving their first spraying on the 18th of June. It is needless to say that these men will be disappointed in their results. It will, indeed, do some good, but the injury from insects and



An Old Orchard in Colborne, Ont.

Picturesque, but not profitable. Many orchards of this nature are to be found in Ontario. They should be pruned close to the ground.

fungous diseases will usually be so great that many of the orchardists will be inclined to think that spraying is scarcely worth the trouble.

OYSTER-SHELL BARK-LOUSE

The oyster-shell bark-louse is responsible for the death of some of the trees, at least. Nevertheless, it is noticeable that the bark-louse is worse upon trees, the vitality of which has been lowered by other causes, such as want of drainage, winter injuries or canker. It is asserted by many that the lime treatment alone is not effective. Others have tried a solution of concentrated lye. In no case has it appeared that these treatments are sufficient alone. A few have sprayed with kerosene emulsion while the insects were running; but even this has not proved successful. Many have been experimenting with patent miscible oils, also without success. None, however, as far as I can learn, have tried the lime and sulphur mixture, and apparently this is the last resort.

MISTAKES IN PRUNING

A large number of the old orchards in this district are rapidly degenerating. Many, as the result of too little pruning, have grown long and straggling, interlacing at the tips, and with no bearing wood towards the centre of the tree. Having this form it is impossible to spray economically, not only on account of the height of the bearing wood, but because the interlacing branches prevent the spraying apparatus from passing easily from tree to tree.

RENOVATING OLD ORCHARDS

The question is frequently asked whether these old orchards can be renovated. In many cases

they can. Where the trunk and limbs of the tree are sound, there is no reason why a new growth should not be started on the lower portion of the limbs. This new growth can be induced by cutting back the ends of the lower limbs along with the thinning of the finer brush towards the outside of the tree. This would, of course, temporarily reduce the bearing area somewhat; nevertheless, the result in the end would be beneficial. The bearing area is seldom too large, but it is unevenly distributed over the whole tree. Usually in these old trees, it is confined to the tips of the limbs, where the fruit spurs are much too crowded. The effect of thinning the finer brush, and cutting back the larger limbs moderately, would be to induce the growth of suckers or water sprouts on the naked limbs towards the centre. One or more of these may be selected on each limb, and so pruned as to fill up the vacant space in the centre of the tree.

These water sprouts usually grow very vigorously the first year. A growth of three or four feet is not unusual. The spring of the second year, the new growth that best suited the purpose of filling the vacant space, should be selected, and all others cut off close to the main limb. One year old shoots left should be pruned

the tree fairly well filled with bearing wood. During this time the outside of the tree has been carefully thinned, but some bearing wood would have developed, and if this is pruned to correspond with the new wood induced in the centre of the tree, you have now a good bearing tree ready to renew its youth, the younger wood growing from the centre taking the place of the older wood towards the outside.

BAD NURSERY STOCK

In the young orchards it can be seen very distinctly that the farmers are not well informed in the quality of the stock. In one case I saw an orchard of twelve or fifteen acres in extent planted with trees which must have been stunted stock, six or seven years old, severely cut back in the nursery, and making a very poor showing after being planted a year in their permanent position in the orchard.

(Continued on page 5)

Sow Thistle

I have been interested in reading Mr. Brethen's article which appeared in your issue of July 29th, on this infestor of our fields—sow thistle.

The following plan has been adopted successfully by some farmers in the East:

Manure the land very heavily in the Spring; let the thistle grow till the first of June; when under the influence of the manure, it will have assumed a rapid and rank growth. Then plow it under with a broad plow; cultivate thoroughly with a rotary cultivator; then cross-cultivate with an ordinary harrow; plant to corn or potatoes, and cultivate often and thoroughly during the season. The result is, that with the heavy growth and the manure plowed under, the roots and weeds are thoroughly rotted and destroyed.

I am told that "twitch" or "quack" grass can be eradicated in the same way, providing that it is plowed in during the Fall instead of in the Spring.

Has anyone of your readers had this experience with "quack" grass? — "Farmer from the East."

The Draught Horse

To the breeder of high class draught horses there are two essentials of prime importance, viz: weight and quality. A horse that weighs under 1600 lbs. I care not how much quality he may possess, we have to strain a point to call him a draught horse at all. On the other hand a horse may weigh a ton, and if deficient in quality be only a poor kind of cart horse. Weight in an animal is easily determined by the weigh scales. The question of quality is much more difficult to decide, and is to a certain extent (even in the hands of an expert) a matter of opinion. However all horsemen are agreed as to most of the essential properties, such as a clean, flat hard bone, oblique pasterns, an absence of puffiness about the hocks, standing squarely on all feet. When in motion, a

free, prompt, springy gait, lifting the feet well up from the ground and extending them in a straight line. These qualities together with a rather clean cut head, broad between the eyes, with the latter organs large and bright and standing well out in the head, coupled with a well developed and symmetrical muscular system go far to produce what is termed quality in a horse.

It has always been a matter of more or less difference of opinion as to whether weight or quality was the most important in a draught horse. The skillful breeder will always aim to get a happy blending of both. But while we cannot produce too heavy a horse, provided he has quality, care should be taken not to sacrifice quality for weight. I would use a sire of good quality weighing 1800 lbs. sooner than one that weighed a ton but was deficient in quality.

While high class draught horses are not confined to any one breed (for we have good and bad in all breeds) still as a rule where you find a really good horse he is a well bred animal, that is, he is a high grade or pure bred horse. So far as Ontario is concerned, the most popular breeds are the Clyde and Shire, especially the former. Breeders with grade mares of either of these breeds would make a mistake to mate them with a Percheron or Belgian or any other breed.—"Centaur."

Food Value of Milk and its Products

Geo. Rice, Oxford County, Ont.

Although milk has been used as food throughout all the ages, and most people use it from birth to old age, yet very little is understood by the average person as to the value of milk and milk products. Now that food values are increasing and that in some quarters the financial stringency is felt and less work is going on, the food value of milk should be better known. The greater use of milk would be a great saving to the consuming public. Greater attention is being paid to the producing of milk under conditions that will insure a pure product. The most effective way to bring about more up-to-date and progressive methods in handling milk to insure its purity and cleanliness, is to pay better prices for the milk. When it is suggested that we increase the price of milk, then there is a kick coming right away from the consumer, who probably does not know what value the milk is as a food.

Scientists tell us that a quart of milk is of equal food value to a pound of our best beef steak. Yet, at one city where beef steak retails at from 15c to 18c a lb, milk retails at six cents a quart, or actually three times less than one would pay for the same value of other food.

MILK MORE ECONOMIC THAN MEAT

The consumer kicks about paying more for milk giving as a reason that he has to pay so much for meat. If he is looking for an economical ration, why eat meat at all? Cheese can very well take the place of meat. In fact the old country laborers use cheese instead of meat. I have noticed some that come to this country still keep up the practice of cheese eating, and I have seen Englishmen's tables set with cheese in plenty, with no meat at all. If economy were desired that certainly was making for it, because a pound of cheese has the food value of more than three pounds of beef-steak. Besides it does not sell for any more than the beef-steak, even at retail prices, and if a man would be forehanded and go to the factory to buy cheese, he could get it practically at wholesale prices.

My attention has been drawn to this subject at this time on account of a letter appearing in a paper from a consumer of milk making a kick because he had to pay a retailer 6 cents a quart for milk. If there is any man who earns his money, surely it is the retailer of milk.



Institute Meeting in Wilbur Winter's Orchard, Wicklow, Ont.

Those in the illustration are: Back row, from the left: A. Waite, (partially showing), S. Jaycox, J. Davis, W. Gleason, D. Kerrighan, E. B. Rivett, Dept. of Agriculture, Toronto; M. J. Gillard, John Kellogg. Front row, from the left: Captain Brown, Dom. Fruit Inspector, R. J. Butherford, Dom. Fruit Inspector; H. Russell, C. E. Wilton, E. B. Hinshaw, F. J. Davey, Dom. Fruit Inspector, and W. Winter.

back to within four or five inches from the main limb. This would induce nearly all the buds upon the remaining stub to grow. Three or four of these would be selected and the remainder pinched out soon after growth began. By the end of the season the shoots left would usually make a growth, not as vigorous as the growth of the preceding year but still more vigorous than they would from the older branches. These again should be cut the following spring to the extent of one-half their growth. It is quite possible that, after this treatment, the fruit spurs will form on these side shoots, the end buds developing into wood growth. This wood growth should again be thinned to two or more shoots as the case may require, and cut back slightly the third season. The third season fruit spurs will develop on the one year old wood, and after this very little cutting back will be needed.

If the original sprouts have been judiciously selected, you have three years afterwards the cen-

I have had to do with the dairy business in about all of its phases, raising the cows that produce the milk, feeding them, milking them, making butter and cheese, and even selling milk to retailers. This latter is as near as I want to come to retailing milk. I have watched the retail business a good deal and see nothing attractive in it. On the face of it a retailer should make money. However, there are many bad debts and much slow money to collect. Whilst a man's credit might be very good, a man's cash is much more acceptable in the milk business, because the milk seller has to pay cash for his product. There is many a man who should know better, and who should pay up better, that keeps the milkman waiting for his money.

I have in mind one city man who is always kicking about the quality of milk. He was a member of the Board of Health, a member of the Town Council, and was forever making restrictive measures in regard to the delivery of milk to insure its purity and cleanliness. This is all very well in its way, but then if that same man would only pay for his milk and pay a decent price for it, he would be more likely to encourage the milkman to produce and handle the milk to better advantage. With more modern methods of delivery and handling milk, the cost is always increased, and there is no milkman but that under-

the nutriment of milk goes into the cheese, whereas butter is mostly fat, the casein and other valuable constituents being left in the skim milk. Fat is not food, casein is. Cheese is worth at least three times as much as meat, pound for pound. Once the habit of eating cheese has been acquired it is just as hard to do without it as it is to do without any other food. I have always of late years been used to cheese and I find that I get "cheese hungry" if I do not have it for a while. I would in fact as lief do without meat as cheese.

Handling Alfalfa with Hay Loader

Henry Glendinning, Victoria Co., Ont.

The weather during April was extremely hard on the alfalfa fields. It affected plants on the old fields much more than it did the newly seeded ones. However the first crop of alfalfa was a fair one. It was saved in excellent condition. The cut was later than usual and the second cutting will not be ready until about the 10th of August. It is a week ago good progress since the heavy rains of a neighboring ago.

This is the first year that we have saved the first cutting of alfalfa without coiling it. We cut it in the forenoon, tedded it a couple of times and then raked it into windrows the same day. It

most effective. Mr. Stevenson tells us that he derives great benefit from its use. This mixture will not keep the cattle absolutely free from flies, but the nuisance can be greatly abated by spraying regularly with it.

The Weed Problem

Geo. C. Smyth, Waterloo Co., Ont.

The danger we undergo from having new weeds introduced on our farms and the spread of those that have already made their appearance is not felt to the extent that the situation demands. Weeds are a serious hindrance to successful farming. They occupy space, deplete the land of valuable plant food and draw heavily on the soil moisture. They are despised plants, and because they have always had to struggle for an existence each one is possessed of some strong feature which enables it to thrive and reproduce itself under adverse circumstances.

A great deal can be done at this time of the year to prevent the further spread of many noxious weeds. A few hours spent with the mower and scythe will prevent many weeds from seeding. The early fall cultivation of land is very helpful in destroying many weeds. Cultivating grassy ground and exposing the roots of the grass to the frost is also very beneficial.

In the treatment of the different crops after harvest different methods have to be followed. For clover fields intended for seed, all weeds should be cut either with the scythe or spudded out, for these if allowed to go to seed will reduce the selling value of that seed from 50 cents to a dollar a bushel.

Sod that is grassy should be plowed early and rather lightly and worked well on top and left rather rough for the winter. If on heavy land it is as well to rib it up, thus letting the frost get all the action possible upon it. Stubble that has been seeded down and is somewhat weedy may be prevented from seeding by running the mower over it rather high so as not to injure the clover. Stubble ground may be cultivated up, thus starting many weed seeds germinating. For

stubble ground that is grassy, plow early and cultivate frequently, working the grass roots to the top. After such a practice you will find that you have gotten rid of a lot of grass and also that your ground is in number one shape for a spring crop. We will have to wake up to the importance of the weed question. Weeds are getting such a hold on the farms of this country that we will see the spectacle of men clearing their farms again. It is questionable if the clearing of weeds will be less arduous than the clearing of forests.

It has been estimated that on a 100 acre farm the absolute waste from weeds would amount to the produce of no less than five acres of fertile land. Do we realize this? And cannot the careless man who allows his farm to become a weed nursery for the locality, or the careless seedsmen who stocks a customer's farm with some dangerous weed pest, be made to feel that the injury they are inflicting upon others is in reality tantamount to robbery just as truly as watering or skimming milk or some other forms of wrong doing which are made amendable to law? Railway and municipal authorities all over Canada should wake up to the magnitude of the weed evil. Farmers' Institutes and the Seed Division of the Dominion Department of Agriculture should renew and continue their efforts to abate what is to-day probably the most alarming menace confronting agriculture.



Drawing in the first cutting of Alfalfa on Mr. Glendinning's Farm

Ordinarily it is not possible to harvest the first cutting of alfalfa with the aid of the hay loader. The alfalfa being very succulent at this time makes it necessary for the mower, Mr. Glendinning did not coil his first cutting but followed a system that enabled him to use his hay loader on it.

was allowed to lay in the windrows all of the next day, but it was tedded twice that day, the tedder being run lengthwise of the row. This tedding prevented the sun drying up the leaves too much and kept the row loose so that the wind can get through it. On the third day we used the hay loader to take it in. This method of handling the alfalfa saved considerable labor in coiling and pitching in the field. The weather was very fine at the time, thus enabling us to follow this plan.

For years past we have put the second and third cuttings into the barn by this method of procedure. But we always put it in the day after cutting. The weather at the time of the second cutting is usually fine and the ground is very dry and warm. Thus it cures rapidly.

Abating the Fly Nuisance

A considerable enquiry has been made regarding the mixture used by Mr. R. S. Stevenson of Ancaster, Ont. to protect cattle from the flies, as published in a recent article, we have obtained from Mr. Stevenson the formula of this mixture. It is as follows:—One-half pint Cook's disinfectant, one-quarter pint fish oil, mixed in two gallons of rain water.

It is necessary to spray the cattle every day with this mixture. After a time, the cow's hair becomes saturated with it; then it becomes the

stands handling milk in a manner that will insure its cleanliness and purity. The trouble is generally that the retailers are so poorly paid and so hard worked, that they have not the time to do all they would like to do, nor the money to install everything that they could wish for to produce the best article.

THE RETAILER'S TROUBLES

Surely a milkman should make some money. He certainly deserves to. He is out in the morning at four or five o'clock rain or shine. The consumer wants his milk, and no matter what the weather is or if the milkman is feeling right or not, he has got to hustle around. Any man who works every day of the week, and so early and so late as the milkmen have to, surely deserves more than an ordinary reward for his work. As it is the milkman's reward is often insufficient; this too when milk is selling at actually one-half to one-third less than its food value as compared with other food. If the papers would give more attention to the food value of milk and its products, and help the milkman to obtain better prices for his milk, they would be accomplishing much more in the way of sanitary methods and purer products than would be possible in any other way.

Cheese furnishes the consumer with the most nutriment for his money. Cheese has a much higher food value than butter. Practically all

A Comfortable Lead

Considerable commotion has been made of late in the agricultural press and elsewhere concerning Bontaje, the famous Holstein cow in the Dairy herd at the Ontario Agricultural College, Guelph. It has been stated that this cow giving 20,000 lbs. of milk did not give as big a profit over the food consumed as another cow in the same herd that gave only about half the amount of milk. The following statement giving the net profit above the cost of feed for the six leading cows in the college herd for last year has just been handed to The Canadian Dairyman and Farming World by Prof. G. E. Day: Bontaje, \$169.76; Adelaide Brook de Kol, \$61.61; Margaret Cornelius, \$54.91; Molly de Kol, \$53.20; Abby Mercena, \$51.48; Lady Rockwood, O. A. C., \$45.20.

The butterfat was valued at 25 cents a lb. and no allowance was made for skim milk. It will be seen from this that Bontaje has a comfortable lead on her competitors.

Must Go by Form

While speaking recently with a representative of the Canadian Dairyman and Farming World, who visited his place, Mr. R. F. Hicks of Newton Brook, stated that he did not agree with the views expressed by Mr. Geo. Rice of Tilsonburg, in the columns of The Canadian Dairyman last year, in regard to the judging of dairy cattle. In the article in question Mr. Rice took the stand that the only way to judge a good dairy cow was by its performance as shown by its milk records. Mr. Rice gave instances of animals that had won high honors in the show ring that were of little use at the pail, and mentioned other animals that were not a success in the show yards but which were great milk producers.

Mr. Hicks admitted that it is of great importance that the milk records of dairy animals shall be consulted. He pointed out, however, that in only a very few cases is it possible to see the milk records of the animals. "The great majority of the dairy cows of the country," said Mr. Hicks, "are

grades. Very few of their owners keep records of the milk produced by these cows. When a man wants to buy a dairy cow how then is he going to judge its value if he cannot see its milk record? The only thing he can do is to judge it by some other form. While there are exceptions where it is impossible to tell what a cow will do as a milker, I believe that there is a certain dairy form that we should look for when we purchase dairy cows and that in the great majority of cases when we get it we are not likely to be far astray."

A War on the Cattle Fly

A representative of The Dairyman and Farming World, while visiting recently in the vicinity of Hoard's Station, Menie and Campbellville, in Northumberland County, Ontario, found a large proportion of the farmers were using a fly poison on their cattle and horses with excellent results. The mixture used is the Dr. Williams' Fly Destroyer. It was first introduced into the section by Mr. Wm. Stewart, Jr., the well known breeder of Ayrshire cattle. Mr. Stewart was cutting his hay crop but stopped once to chat with our representative on this subject. While he talked it was noticed that his horses, a light pair of drivers, never swished their tails, although the day was hot and they were standing in the sun. Mr. Stewart explained that he had sprayed them with this mixture, and a large proportion of them he first came to use it.

"While exhibiting at the Toronto Exhibition," said Mr. Stewart, "a salesman of this mixture asked me for permission to spray my cows as he noticed that I had them blanketed to protect them from the flies. I had taken a kind of mixture myself until I had given up hope of finding any mixture that would be effective in keeping the flies off the stock and that would not have to be applied so often. I asked the salesman to allow him to spray my cattle but he was so persistent I finally gave him permission to spray my old bull. As soon as he did it I noticed that the flies left the animal and that his application seemed to give instant relief from the pests. I was so impressed with the results that I allowed the man to spray my cows also and I soon saw that they got the same relief. I took the blankets off every animal I kept then sprayed they did not have any trouble with flies.

HOW APPLIED.

"The mixture is applied by a spraying machine that can be purchased for about 50 cents. The cows are sprayed once a day and it takes only two or three minutes to go over a whole herd. When the cows are in the stable you will never see a tail switch when you go by and I am satisfied that they give much larger returns at the pail. At the Guelph College, where this mixture has been tried with success, Prof. Day reports that one gallon of it is sufficient to spray 350 cows. This means that the cost of applying the mixture is about one third of a cent a cow a day.

"I have been so impressed with the mixture that I now spray my horses with it and find that they obtain as much relief from its use as the cows do. The mixture removes the cows skin somewhat after it is applied, but as soon as their skin is washed this brown coating disappears. I told my neighbors that this mixture with the result that many of them are using it and they all seem to be as well pleased with it as I am. It is the best kind that I know of. I have ever used and if only for the comfort of the cows I think that every dairy farmer should use it or some other good mixture if they know of one."

Our representative visited the farms in the same section of Mr. Cleugh of

Campbellville and Mr. Alex. Hume of Menie. Mr. Cleugh stated that he considered that the money he had spent to purchase this fly mixture was one of the best investments he had ever made. "A lot of my neighbors have used it," he said, "and I am satisfied that it has saved both them and myself considerable money as my cows are giving more milk than they would have if we did not spray them with this mixture."

At Mr. Hume's farm our representative watched the spray being applied to his large herd of pure bred Ayrshire cows. It was noticed that as soon as the spray was applied, the flies commenced falling from the sides of the cattle until they fell on the ground dead. All the time the milking was in progress hardly a cow switched its tail. The mixture did not leave an unpleasant odor in the stable. During the day the two herd bulls, which were standing in the stable did not have any trouble with the flies although the day was a warm one. Mr. Hume seemed to be as favorably impressed with this mixture as was Mr. Stewart.

It is not the custom of The Dairyman and Farming World to mention mixtures of this kind in our reading columns, especially when they are not advertised in our paper. In this case, however, we found that the farmers were deriving so much benefit from the use of this mixture that we decided to mention the circumstances for the benefit of our readers.

Items of Interest

Mr. Dennis Callaghan of Reabro, was charged by a cow, and knocked down on a cement floor recently. He was seriously injured but succeeded in making his escape.

Seven sheep belonging to Mr. Samuel Mitchell, of Dundas, were struck by a train recently. All were killed. Some good mutton was afterwards secured by the farmers in the vicinity.

A farmer coming to town recently with a load of hogs had large pieces of broken ice in the bottom of the box. A little thoughtfulness of this kind is not only a momentary benefit, but is humane treatment and should be widely practiced.

Grant Center of Thomasburg, a lad 13 years old, was seriously injured while raking hay. The horse became frightened and ran away, throwing the boy into the rake. The boy's life was saved by the rake striking the fence which freed it from the running horse.

A serious condition of affairs has prevailed recently on "Glenavy Farm" in its 2nd conception of East York, about a mile and quarter east of Yonge St., Toronto, where within a few days no less than 350 hogs have died. The mortality was at first thought to be due to hog cholera, but this is not certain. The Provincial authorities are investigating the matter.

The Provincial Veterinarian, after making a careful investigation into the cause of cattle dying in the vicinity of Pontypool, Durham Co., Ont. said that the disease had arisen from the carcass of a diseased animal which lay exposed during the hot weather on the commons where other cattle pastured. Some hogs and a dog that had eaten of the carcass, died a few hours after their repast.

At a meeting of the Honey Exchange Committee of the Ontario Beekeepers' Association held recently in Toronto, the following prices were suggested for this year's production—No. 1, light, extra, 1 lb. for 15c to 16c a lb., (retail) 12½c to 15c a lb., No. 1, comb, (wholesale) \$1.50 to a doz., No. 2, comb (wholesale) \$1.50 to \$1.75 a doz. It is anticipated that there will be a medium production of both comb and extracted honey.

Warranted to Give Satisfaction.

Gombault's Caustic Balsam



Has Imitators But No Competitors.

A Safe, Speedy and Positive Cure for Cuts, Splints, Swells, Gapes, Heals, Strained Tendons, Bruises, Corns, Hoof Tuffs, and all lameness from Spavin, Stagnation, and other heavy lameness. Cures all skin diseases or Furunculosis, and other troubles. Removes all Runches from Horns or Cattle.

As a Human Remedy for Rheumatism, Sprains, Burns, Swellings, etc. Price \$1.00. Every bottle of Caustic Balsam sold in Vancouver is a guarantee of its purity. It is a pure, chargeless salt, with full directions on the wrapper. The proprietive districts, testimonials, and addresses. The Lawrence-Williams Co., Toronto, Ont.

Fat Milk and Fat Meat

Why should milk that contains much cream be accounted the best? Cream is only fat, and we do not rate the food value of meats solely by the amount of fat that they include. Dr. J. A. Gilbert, Portland, Oregon, writing in the Medical Record (New York) takes the view, this devotion to "rich" milk has no logical basis. In our earnest search after a fat milk, he says, we have probably gone too far. To quote from an editorial in The Hospital (London, Eng.) which notes Dr. Gilbert's opinion appreciatively: "The milk which is richest in cream is not therefore the most nutritious, for the very simple reason that a rich milk is less easily digested and absorbed than a milk in which the fat percentage is low. As far as its other constituents are concerned, a milk poor in fat is as valuable a food as a milk rich in fat. The fat percentage, the popular standard by which milk is judged, is most variable, while the proportions of the albuminoids, sugars and salts vary but little in the different qualities of milk. In other words, while the energy-producing and heat giving qualities of the several kinds of milk may be very great or little, the valuable protein ingredients, which go to the building up of the tissues—the prime property of any food remains very much the same in all varieties of cows' milk. Thus a "thin" milk is for all purposes, save for energy and heat production, as valuable a food as the so-called "rich" milk. Indeed, it is not infrequently happens, as the experimental feeding of young growing animals has shown, that a thin milk may prove, in the long run, more flesh forming than a rich milk, inasmuch as the former is less liable to induce gastro-enteric disorders."

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Black Watch The big black plug chewing tobacco.

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WELL DRILLING MACHINES

Over 19 sizes and styles, for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on skids. With engines or beam power. Strong and durable. At a moderate cost available in small lots. Send for catalogue.

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FOUNTAIN PEN FREE.

A 14 kt. Gold Fountain Pen will be given to any person who secures only one new subscription for The Canadian Dairyman and Farming World. These pens are guaranteed to give satisfaction. Try and win one.

WINDMILLS

Towers five feet apart and double braced

Grain Grinders
Pumps
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Gas and Gasoline Engines
Concrete Mixers

WRITE FOR CATALOGUES

GOOLD, SHAPLEY & MUIR CO., LIMITED
BRANTFORD, CANADA

Keeps them Off and Kills Them

Ed. The Dairyman a great many to sell. We have tried a great many so fly off of cattle. With one exception none of them proved satisfactory. A representative of the Dr. Williams Company proved to our entire satisfaction that their remedy would not only keep them off but would also kill them. This they guarantee to do or refund the purchase price.

We have used Dr. Williams' Fly and Insect Fly-destroyer for three years on our cattle and horses. We also use it for lice on stock of all kinds, in poultry houses, for bugs, cockroaches, buffalo moths, and, in fact, for every kind of vermin. It does its work thoroughly and quickly. It is put up in gallon, half gallon and quart tins. A gallon will spray 300 cows.

No man with stock can afford to do without it. One cannot afford to feed flies or lice on his stock. It is simply dollars and cents to him. We estimate that if a cow makes a gain of one pound a milking season means one pound a month or 360 pounds in six months. At the present price of cheese, this remedy will more than doubly pay for the outlay. It is only a matter of a few cents to make it to the applicator, and the increase of the whole herd for a season figures out to a big thing. Horses treated to this remedy work as quietly as if there were no flies about them, wherever the place where it is. It is also a good disinfectant and is harmless.—Wm. Stewart & Sons, Northumberland Co.

Periodic Ophthalmia

Colt has eye trouble. Sometimes one eye becomes affected, and later the other eye becomes sore. They run water, are intolerant to light and white clouds cover the eye.

This is a constitutional disease called "periodic or specific ophthalmia." If you can trace this colt's pedigree on both sides for generations, you will find that the progenitor, more or less remote, suffered from the same trouble. The attacks can be neither foreseen nor prevented, and in all probability the ultimate result will be total blindness from the attacks. All that can be done is treat each attack by placing the patient in a comfortable stall excluded from draughts, and strong light. Give a laxative of a pint of new linseed oil, bathe the eyes well three times daily with hot water, and after bathing put a few drops of the following lotion into each eye: viz., sulphur, zinc, 15 grains; fluid extract of belladonna, 30 drops; distilled water, 2 oz.

Provincial Prizes to be Offered

The increased number of societies which are taking part in the Standing Field Crop Competitions this year and the excellent results that have already accrued have been so marked that the Hon. Nelson Monteith, Minister of Agriculture, has consented to extend the competition still further by arranging to have the five prize winners in each of the different agricultural societies competing, enter into a provincial contest at the winter fairs at Guelph and Ottawa. Each exhibitor will be required to forward two bushels of the grain with which he takes a prize in the Standing Field Crop Competition, this year. The amounts offered in prizes at each of the above named Winter Fairs will be: 1st, \$35; 2nd, \$30; 3rd, \$20; 4th, \$10; 5th, \$5. All societies west of Toronto will compete at Guelph, and those east of Toronto at Ottawa. Each exhibitor will send his grain by express C.O.D., addressed to the superintendent of the fair at Guelph or Ottawa, and the transportation charges will be paid by the Department of Agriculture.

The grain winning the prizes at these winter fairs will become the prop-

erty of the Department, and will be used for experimental purposes. All grain exhibited, other than that taking prizes, will be sold by auction at 10 a. m., on the morning of the last day of the fair, and the proceeds remitted by the Department to the owners.

An affidavit must be furnished by each exhibitor at the time of making entry, certifying that all the grain exhibited by him was grown on the plot which was judged by the official sent by the department to judge the grain while standing in the field. Owing to the fact that there are not sufficient number of societies entered in other kinds of grain we are confining this competition at the Winter Fairs to oats.—Lockie Wilson, Superintendent of Fairs.

Remedy for Crows

Would you kindly publish in your column a good remedy for getting rid of crows?—H.C. F., Victoria, B.C.

Probably the best method of getting rid of crows in fields of corn or grain is as follows: Take one heaping teaspoonful of strychnine, dissolve in a pint of water, and dilute in sufficient water to cover about two gallons of corn in a pail. Leave soak 24 hours, then scatter on field being attacked by crows. If any poultry or pigeons are around, it would be well to confine them for a few days after the corn has been scattered over the field as it affects chickens and pigeons the same way as crows. If, however, alcohol is not available, then boiling of corn for a few minutes in a mixture of strychnine and water and afterwards allowing it to soak for 24 hours would prove satisfactory.—H. Grisdale, Agriculturist, Ottawa.

Bacillus of Typhoid in Ice

Is there any danger of one contracting typhoid fever, or other such disease, from using ice in drinks when the ice having been obtained from the river and stored for summer use?—A.S.M. Wood, Ottawa, Ont.

The most extensive experiments upon the effect of freezing, and other low temperatures, upon the vitality of the bacillus of typhoid fever, are those performed by W. T. Sedgwick, Professor of Biology in the Institute of Technology, Boston, and C. E. A. Winslow, of the same Institute. Their conclusions are as follows:

- (1) Less than 1 per cent. of the typhoid germs in water can survive 14 days of freezing.
- (2) During the first half hour of freezing a heavy reduction takes place, amounting to about 50 per cent. After this brief period of sudden reduction, the destruction of the germs proceeds regularly. As a function of time there is a steady increasing reduction, with slight variations as the time of freezing is prolonged. Even after twelve weeks some few typhoid bacilli are still living.
- (3) Different races of typhoid bacilli each have a power of resistance of their own. Some races quickly succumb to freezing, whereas others are much more resistant.
- (4) Thawing and re-freezing are somewhat more fatal than simple freezing, but even four consecutive freezings and thawings do not, however, suffice to kill all of the most resistant typhoid bacilli.

Reviewing the large number of experiments performed, as they come to the following conclusions concerning ice as a vehicle of infectious disease, with special reference to the problems of ice supply and the public health.

The main factor determining the reduction of germs in water is time; the time during which light, cold and poor food are allowed to act. In ice we have a long storage of at least weeks, and at best many months, in nature we should probably find that there was a reduction of over 99 per cent. of typhoid bacilli killed by

the freezing action. Under natural conditions, pathogenic germs in the most highly-polluted streams are comparatively few. Of these 1-10 of 1 per cent. may be present in ice derived therefrom, and even these scattered individuals are weakened by their sojourn under unfavorable conditions, and these few and weakened germs very likely could not produce many, if any, cases of typhoid fever, for vitality and virulence in disease bacteria are probably closely related.

With artificial ice it is consumed quickly. After manufacture, the possibility of purification by time, is excluded, and such ice might therefore conceivably be a menace to public health. With natural ice there must always remain a certain element of doubt. The thickness of a layer of ice is often increased by cutting holes in it and flooding that already formed with water. Ice thus formed might be cut at once and served within a week or two, and in such exceptional cases sufficient of the virus might persist to excite the malady. Such instances must be very exceptional and the general result of human experience, the absence of epidemics of typhoid traced conclusively to ice, and the fact that cities like New York and Lawrence, Massachusetts, have used the ice of polluted streams and have yet maintained low death rates from typhoid fever all tend to support the conclusion that ice can very rarely be the vehicle of typhoid fever. F. C. Harrison, Macdonald College, Quebec.

Tested Powder



The powder we put into Crow's shells is black powder especially made by the Hamilton Powder Co. The primers are made with the greatest care and are more sensitive than any other black powder primer on the market. Our system of tests makes our shells fire and hang-fires extremely rare.

For all makes of armor. Costs one-third to one-fifth less than best paying ammunition. Our guarantee puts all risk on the Dominion Cartridge Co., Ltd., Montreal.

DOMINION AMMUNITION

Likes His Hay Loader.—If I could not get another hay loader, I would not take \$50.00 for the one I now have. Pitching hay by hand is out of date. On a hot day like this I find that the hay loader can pitch hay a good deal easier than I can, or two men in this section of the country. When managed properly, the loader picks the hay up clean and leaves little work to be done cleaning up after it.—James Heslop, York Co., Ont.

Breeders' Directory

CARDS under this head inserted at the rate of \$6.00 a line a year. No card accepted under two lines, nor for less than six months.

SHEEP

- JNO. COUSINS & SONS**, Harrison, Ont., C.P.R. and G.T.R., Oxford Down Sheep, Short Horn Cattle, Yorkshire Swine, Stock for sale. 0-8-15.
- GEO. B. ARMSTRONG**, Bowhill Stock Farm, Teeswater, Ont., Leicester Breeding ewes. 0-8-15
- PETER ARKELL & SONS**, Teeswater, V.P. Oxford Down Sheep, Hampshire and breeding stock, imported and home-bred. 0-8-15
- THOS. ARKELL**, Teeswater, Ont., sta. C.P.R. & Midway, G.T.R. Choice breeding stock, Oxford Down Sheep. 0-8-15
- SAMUEL CUMROKE**, Eurobinda, Ont., importer and breeder of Dorset shags. B-13-15

CATTLE

- CHAS. GBOAT**, Brooklin, Ont., breeder of Clydesdale and Shorthorn, Gloucester, Mend. ewe-families. 0-9-15
- A. J. WATSON**, Castlereag, Ont., breeder of Scotch Short Horns. 9 young bulls for sale. 0-9-15
- A. P. POLLARD**, Shadaland Stock Farm, Canton, Ont., breeder of Shorthorn and Berkshire cattle. Young stock always for sale. Rural phone. 0-9-15
- BERTRAM HOSKIN** (M. Finlayson), Tamworth, Ont., breeder of Holstein Cattle, Tamworth Swine, High-class young stock for sale. Long distance phone. 0-9-15
- A. E. MEADOWS**, Port Hope, Ont., Short-horns, Matildas, Isabellas, Gloucester, Lady Ann families. Choice young stock for sale. 0-9-15
- JAS. ROBERTSON & SONS**, Willow Bank Farm, Milton, Ont., breeders of Shorthorn and Hereford cattle, imported and homebred. 0-10-15
- GEO. B. ARMSTRONG**, Bowhill Stock Farm, Teeswater, Ont., imported and homebred Shorthorns for sale. 0-9-15
- JOHN GARDHOUSE & SONS**, Highfield, Ont. See large ad. 0-9-28

SWINE

- P. O. COLLINS**, Howesville, Ont., breeder of Yorkshire Swine. Good young stock for sale. 0-8-08
- CRAS CURRIE**, Morrison, Ont., breeder of choice Tamworth Swine. Stock for sale. 0-8-15
- JOS. FEATHERSTONE & SON**, Streetsville, Ont. Large Yorkshire hogs for sale. B-1-02
- LORNE FOSTER**, "Glenhead Stock Farm," Myra, G.T.R. and C.P.R., breeder of Yorkshire Swine. Stock for sale. 0-8-15
- D. DOUGLAS & SONS**, Mitchell, Ont., breeders of Tamworth Swine, B. Turkeys, Toulouse, Orpington, Pekin Ducks and B. C. W. Leghorns. Correspondence invited. 0-9-15
- S. SNOWDEN**, Bowmanville, Ont., Box 36, Pike of Age English and Berkshire, B. Rocks, Light Brauns, and B. Leghorns, B. Rouen Ducks, W. Holland Turkeys. 0-11

STONE HOUSE STOCK FARM

Stock of all ages for sale, including choice young hogs. Enquiries promptly answered and satisfaction guaranteed. Hector Gordon, Bowick, Quebec.

SPRINGBUSH FARM BERRKISHES—Pigs of all ages from imported stock of the oldest breeding and individual excellence. Satisfaction guaranteed. JOHN ELLIOTT & SON, Hornby, P.O. Milton Stn., G.T.R. and C.P.R. -10-20

MISCELLANEOUS

- H. BARTLEY**, Kimbo P.O., Lincoln, Ont., breeder of new stock. Short-horns and Dorset Sheep. 0-9-11
- JAS. BOWMAN**, "Elm Park," Guelph, Ont., importer and breeder of Aberdeen Angus Cattle, Clydesdale Horses and Suffolk Sheep. Correspondence invited. 0-9-15
- Shires, Short-horns and Lincoln**
A grand assortment of Imp. Hares, Stallions and Fillies
Received from R. Moore & Sons. Now for sale at right prices. Choice lots of Shorthorns and Lincolns.
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Advertise your farms in our For Sale column.

HORTICULTURE

The Enrichment of the Orchard Soil

F. T. Shutt, M.A., Chemist, Dominion Experimental Farms.

Why should it be necessary to enrich the orchard soil? In the first place because there is an annual draft on the available soil plant food by the trees. We have done a considerable amount of work on the chemistry of the apple and I compute from our analysis that the following amounts of the essential elements of fertility are removed in ten years per acre, i.e., by 40 trees, when the orchard is in full bearing): Nitrogen, 600-650 lbs.; phosphoric acid, 135-150 lbs.; potash, 700-850 lbs. These amounts are distributed of course, between root, trunk, branches, twigs, leaves and fruit; a part is locked up in the wood of the tree, a part is lost in the leaves and fruit. Compared with other farm crops, the orchard is not exhaustive in the sense that that term is usually applied, but nevertheless our results show the necessity for a continual supply of plant food in an available form.

Some years ago we analysed four well known varieties of apples and from the data then obtained, and assuming a yield of 160 barrels per acre, I calculate that the amount of plant food removed in the fruit from this area, per annum, would be from 9 to 10 lbs. of nitrogen, 5 to 6 lbs. of phosphoric acid and 32 to 35 lbs. of potash. These amounts are by no means excessive.

We also analysed the leaves of the apple tree, collected in May and September. We found that, as the leaves ripened, there was a considerable removal of the plant food they contained to the wood so that the fallen autumn leaves are not as rich in potash and phosphoric acid as when they were younger. However, 1,000 lbs. of the leaves in September still green and containing a percentage of moisture, would contain nearly 9 lbs. of nitrogen, almost 2 lbs. of phosphoric acid, and approximately 4 lbs. of potash.

It has been estimated that in the fallen leaves per acre an annual loss may ensue of approximately 23 lbs. of nitrogen, 6 lbs. of phosphoric acid and 12 lbs. of potash. A part of this may, of course, be returned to the soil but, owing to high winds in the autumn, it is extremely doubtful if much of it gets back to where it came from, unless there is a cover as the soil is concerned, the plant crop to hold the flying leaves. So far food stored up in the wood and that in the fruit, and of course, be regarded as lost.

Without unduly lengthening this paper, I cannot discuss in any detail the losses of soil plant food in other ways. If the orchard is in the hay removal the exhaustion is greater than that incidental to the growth of the trees. If on the other hand, the soil is continuously under cultivation there necessarily follows a very considerable loss of nitrogen and destruction of humus. This fact we have established in the Experimental Farm laboratories. It is very evident, therefore, that under all ordinary conditions there must be a return of plant food if the orchard is to thrive. We think this in the majority of instances can be accomplished in the most economical and satisfactory way by the growth and turning under of one of the legumes. This class of plants might be known as nitrogen-collectors, for they are able through the agency of certain organisms (bacteria) that

reside on their roots to appropriate and build up into their tissues free nitrogen from the atmosphere.

F.O.E. Contracts for Apples

F. J. Carey, Dominion Fruit Inspector, Toronto

An important matter for the consideration of growers and dealers, is "sale contracts." Almost every contract made in the sale of apples last season was violated one way or another. It is true that the "money stringency" had considerable to do with the upsetting of contracts, but the fact remains that with contracts made as they were last year, it is little use in making a sale at all.

It is being advocated, and rightly, from ocean to ocean, that f.o.b. car sales as much as possible, is the proper way dispose of our fruit; and surely contracts can be made secure, so that our apples will stay sold when they are sold, whether the markets go up or down.

Apple Growing North of Lake Ontario

(Continued from page 1)

It is surprising how many farmers are yet unfamiliar with the Inspection and Sale Act, part IX (the Fruit Marks Act). A copy of this act will be sent to the applicant on application to the Fruit Division, Department of Agriculture, Ottawa. Until the farmer becomes familiar with this Act he is at the mercy of the buyers. They may carry a copy of it around with them and may read a part of it, but the apple grower is likely to be deceived if he does not get the Act himself and study it carefully. All contracts, wherever grades are mentioned, should read "Grade No. 1 and Grade No. 2 as defined by the Inspection and Sale Act, part IX." With this Act in his mind, the apple grower can make no mistake with reference to the marks that are required on all fruit packages.

One value of these orchard meetings such as were held in this district, is that they give an opportunity for clearing up erroneous impressions with reference to the Inspection and Sale Act. Briefly it may be noted that the Inspection and Sale Act asks only that the fruit be packed honestly, of the same quality from top to bottom, and that it be marked honestly, Grade No. 1 or Grade No. 2 as defined by the Act. There are few complications about it, and there is no reason why any grower should be led astray by designing buyers.

CO-OPERATION

There are very few co-operative associations in this district. They are being strongly opposed by the buyers of the less reputable sort. These buyers are not interested in securing a fair price for the fruit for the farmers, but are interested in making as big a profit as they possibly can. The larger buyers and real fruit merchants are in favor of co-operative associations, inasmuch as they enable them to get large quantities of fruit with greater assurance that the quality and marking are right. But many dealers of the "sharp" sort see in the co-operative associations only a number of

apple growers removed from the chance of being imposed upon by their fairly sales with reference to crops, prices and market conditions.

APPLE BUYERS

Not a few apple buyers attended these meetings. Some of them expressed their approval of the Inspection and Sale Act and co-operative selling. But the most of them found in the Inspection and Sale Act, and in the co-operative associations, a restriction upon their actions. The members of the co-operative associations could not be imposed upon. The manager, probably a smarter man than the buyer, looked after the market end of the business for the grower. Some of these dealers were opposed to the Inspection and Sale Act because it interfered with their buying orchards by the "lump." With the spread of knowledge and the help of co-operative associations, it is to be hoped that the apple industry will dispense with many of these disreputable apple buyers, and that the fruit may pass directly from the producer to the apple merchant who will forward it and distribute it, with as little expense as possible, to the customers at home and abroad.

RECOMMENDATIONS

Everywhere there is evidence that though orchards have been giving excellent returns, the orchardists are very poorly informed in their business. There is very much need of education and work throughout the whole of this district. By way of practical recommendation I would suggest:

1. That main line drains, at least, be run through the depression in the orchard. It could be much better if the whole ground were thoroughly under-drained, but if only the main drains were laid, it would improve matters very much.

2. That cultivation be commenced as soon as the frost is out of the ground, and the cover crop sown not later than the middle of July.

3. That all orchards, old and young, be sprayed at least three times with the poisoned Bordeaux mixture, the first spraying be done as soon as the first green is seen the second spraying as soon as the blossoms have fallen; and the third spraying ten days or two weeks later. Better still, spray first with lime and sulphur between March 20th and April 20th or not later than just before the buds swell, and then three times with the Bordeaux mixture as directed above. Either of these systems of spraying, even if followed mechanically, would hold in check nine-tenths of the insects and fungous diseases which infest the orchards.

4. That an improvement be made in the system of pruning which would keep the outside of the trees thinner, and would grow more new wood on the larger branches towards the centre of the tree.

5. That experiments be made in the low headed form of tree. This would have to be done consistently throughout the whole orchard, and the implements of culture would have to correspond to the low-headed form.

6. Organization among the apple growers, not only for the purpose of

selling their fruit, but for the purpose of buying supplies and for the purpose of rendering themselves in a measure independent of the itinerant apple buyer. The Inspection and Sale Act should be widely distributed and carefully read by every apple grower, otherwise a certain class of apple buyers are apt to make false representations to the financial loss of the growers. I was unable to find a single grower who had sold under a contract drawn up by himself. Where contracts were signed they were drawn up by the buyer and wholly in his interest. If a written contract accompanied every sale, with the stipulation that the grades No. 1 and No. 2 referred to in the contract would mean Grade No. 1 and Grade No. 2 as defined by the Inspection and Sale Act, much annoyance and serious financial loss would be avoided.

Articles in horticultural topics and photographs will be welcomed at all times for insertion in the columns of this department of The Canadian Dairyman and Farming World.

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POULTRY YARD

Preserving Eggs

Many people wish to preserve eggs for home consumption, so we give below a few methods which have proven sufficiently satisfactory to warrant their use: Eggs to be stored should come from hens that have no males running with them; should be perfectly fresh and clean, for filth of any kind adhering to the egg will prove the medium through which the other eggs will become tainted. A dry, moderately cool cellar is the best place to store them.

Water Glass—There is probably no method which is more simple and more effective in the preservation of eggs than by the use of water glass (sodium silicate). Take ten parts of water which has been previously boiled and add to it one pint of water glass. This may be placed in a jar or tub and the fresh eggs added from time to time, always being careful to have at least two inches of the solution over the eggs.

Lime Water—Another good preservative may be made as follows: 3 gallons of water, 1 lb. of salt and 1 1/2 pints of finely slacked lime. Mix thoroughly and allow the solution to stand a day or two and then remove the liquid by dipping or by means of a siphon. The clear liquid is then put into the vessel in which the eggs are to be kept, and the eggs added from time to time.

Bran and Salt—Either one of these methods is reliable, but it must always be remembered to have at least two inches of either the salt or bran above the top layer of eggs.

Cold Storage—This is doubtless the best method of all where it is possible, but owing to the limited number of storage plants throughout the country it will be necessary in many cases to resort to one of the previously mentioned methods.

The Dry Meal System

Hopper feeding is recommended by the Maine Experiment Station, and described in the report of the Massachusetts Station as follows: "When the cockerles are taken out for finishing, the pullets of the same age, are moved to the grassy range, still occupying the same portable houses in which they were raised. At this time the method of feeding is changed, and dry food is kept by them constantly in troughs with slatted sides and broad detachable roofs, so it may not be soiled or wasted. The troughs are from six to ten feet long, with the sides five inches high. The slatted sides are two inches apart and the troughs are sixteen inches high from floor to roof. The roofs project about two inches at the sides and effectually keep out the rain except when high winds prevail.

"The roof is easily removed by lifting one end and sliding it endwise on the opposite gable end, on which it rests. The trough can then be filled and the roof drawn back into place without lifting it. This arrangement is the best thus far found for saving food from waste and keeping it in good condition. When dry mash is used in it there may be considerable waste by the finer parts being blown away. When used for that purpose it is necessary to put it in a sheltered place out of the high winds. In separate compartments of the troughs, they are given cracked corn, whole wheat, oats, dry meal mixture, grit, dry cracked lone, oyster shell and charcoal." The dry meal is used in an up as follows: 3 parts good wheat bran and one part each,

middings, corn meal, gluten meal or brewers' grain, linseed meal and beef scraps. The troughs are located about the field in sufficient numbers to fully accommodate all the birds.

"The results of this method of feeding are satisfactory. The labor of feeding is far less than that required by any other method. The birds do not hang around the troughs and overeat, but help themselves, a little at a time, and range off, hunting, or playing and come back again, when so inclined, to the food supply at the troughs. There is no rushing or crowding about the attendant, as is usual at

feeding time, where large numbers are kept together.

"For the last eight years the first eggs have been laid when the pullets were from four months and ten days, to four months and twenty days old. There is some danger of the pullets getting developed and commencing laying too early for the best results, under this system of feeding. In order to prevent such conditions, the houses should not be located too close to each other, or to the feed troughs, and a large range should be given them so that they may be induced to work, which they will do if given the

opportunity, early after their removal to the fields. Should the birds show too great precocity, and that they are liable to commence laying in August, the supply of cracked corn and wheat in the feeding trough is reduced, or taken away altogether, which causes them to eat the oats and dry meal instead, and they continue to grow and develop without getting ripe too soon."

The Brooder is the safest place for early chicks. The hen, being anxious to take special care of her brood, often tries to scratch for feed when it is warm the chicks want.

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Happy Prospects. Denver is rubbing its eyes, striving itself in wonder, gazing in admiration at the great tracts flourishing into green and growing crops of alfalfa, corn, wheat and fruits, etc. (Explanation of cuts below.) White-faced farm houses, broad-gabled barns, bowing mangles, pink-blossomed orchards, dairy farms, wheat and corn fields greet gladdest eyes as ever stage, Campbell's "Soil Culture" is making wealth for Colorado farmers and manufacturers for merchant and implement makers for mail order concerns and local merchants.

"Young Man! Go West." said Horace Greeley. Within a decade or two there will be little "West" left. Hundreds of thousands have heeded the call of the early fifties. Thousands now are heeding our call.

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Buy with a few hundred dollars one of the cheap tracts now so generously offered. Start to be independent. Have a home of your own. Come! Breathe the lung-invigorating, health-giving ozone of Colorado. Enjoy the gladdening sunshine. Get more gladness out of life next to the soil. Plant trees, orchards, lawns, watch them grow as you nurse and tend them. Be free!

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Location. The Siltco Ranch is only 45 miles from Colorado Springs, 46 miles from Denver, 5 miles from two easily reached railroads—the Union Pacific and Rock Island. A new branch of the Rock Island has recently been surveyed straight thru' the property.

Crops. Alfalfa roots and grows rapidly, smothering up through its great "root pipes" the "sheet water" which underlies the Siltco Ranch. A 5000 acre overlay this great supply of moisture that comes as near as a feet to the surface. This is not a lake or open canal, but is the under-soaking of the melting snows from the "earth ridge" formed by the Eastern slope of the Rockies. This water is easily, in most places, reached by the average hand pump. Corn, wheat, sugar beets, oats, spuds, etc., potatoes, hay, fruits of all kinds, vegetables, grow readily under this system of Scientific Agriculture.

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Explanation of Cuts Below.

Photo at left. These are stacks of Alfalfa on the farm of D. J. Shearer. Photo at right. An enormous potato field—so acres—harvesting over 5000 lbs. to acre—2000 lbs. in all and sold on the ground for \$5000.00.

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PROFITABLE WHERE IT CAN BE GROWN

That fall wheat in limited quantities is a profitable crop where it can be grown successfully is abundantly proven by harvest reports that reach us from Western Ontario. Although in Ontario we cannot hope to compete with the West as a wheat producing country, we can grow wheat and grow it profitably.

Wheat, unlike some other grains, always has a ready sale awaiting it. True, the price fluctuates and is by no means as certain as it was of old. But with our modern facilities for handling crops, wheat can be produced at a very low cost. We frequently hear men sigh for the good old times when

wheat sold for a dollar or more. They do not realize that even with wheat at 75 cents a bushel they are better off than in olden times when wheat sold readily for a much higher price. Today, by doing away with the summer fallow, and the exhaustive preparation that at one time was thought necessary to obtain a crop of wheat, greater profits are possible. By making use of a clover seed, barley or oat stubble land, plowing such with two furrowed plows and utilizing fast working implements, it requires but little labor to get the crop in. With the self binder and its labor saving attachment, the sheaf carrier, by making use of unloading devices, and threshing by means of the modern improved threshers, the cost of producing wheat has been reduced to a minimum. A limited quantity of fall wheat fits in well with the other work of the farm, besides being one of the very best crops with which to seed down.

Fall wheat requires land that is well drained and thoroughly prepared. If stubble land is to be used it should be plowed early. It will then be settled and can be gotten into good tilth before sowing time. Barnyard manure can be used to good advantage on land intended for wheat. It should not be plowed under. Apply it as a top dressing. You will then reap a triple advantage. You will have a mulch that will conserve the moisture, the fertilizing value will be retained, and you will insure a good catch of clover the following spring should you sow it.

There is a great difference in the yielding power of different varieties. Never be satisfied with anything but the best. Any extra return that can be obtained from sowing heavier yielding varieties is generally clear profit. Get the variety that will do best in your locality. Then stay by that variety, until you are convinced that there is something better. If a particular variety has been yielding phenomenally for a succession of years, get it; but first make sure that it has held its record for more than one year and that the apparent high yield is not due to an over-rich field or to some particular attention that it has received. Many farmers have come to grief on this point. A variety of fall wheat must be able to withstand a rigorous winter as well as other adversities that it may have to suffer, such as rust and lodging, and in some cases sprouting. Generally speaking it is safer to select a red wheat, such as usually harder than the white wheats, and weighs better per bushel, though, as a rule it does not yield so heavily. With a hard red wheat the danger of sprouting in the shock is largely done away with.

It is one thing to grow a crop of wheat. It is quite another thing to market it to the best advantage. Were we prophets, marketing would be an easy matter. The writer has frequently known men to hold their wheat for a big price after being offered a good figure, only to take much less at a later date, besides having to team it in a busy season. The selling of wheat must be always more or less

of a speculation. In the long run however, it is rarely safe to sell shortly after the crop is threshed, and the market has become established. It is rare that little is gained by holding wheat till the following spring. Any apparent gain is largely offset by the consequent losses of storing.

A PLEA FOR SHORTER HOURS

Despite the great advances that have been made in agriculture as well as in rural life, we still hear complaints of the hardships, the drudgery, and the long hours that seem inseparable from life upon the farm. Especially at this season of the year when everything is on a rush, and labor is none too plentiful, it appears that we must put in longer hours than we would like. Such seems to be the inevitable. But is not much of it of our own making? Did we give our work more forethought and have it better planned could we not accomplish more than we are doing and do it in shorter hours, and thereby have more time for recreation or to rest our weary bodies for the work of the following day? This can be answered in the affirmative by all progressive farmers.

Recently while going through the country at twilight, we came upon a farmer in a hay-field, comfortably seated on a hayrake, contentedly smoking his pipe. This man was wasting time. Being interested, we took occasion to watch him. For a long time afterwards our friend was still seated in this position and not attending to his work. Suddenly as if inspired, he started his outfit and resumed his task, though, by that time, it had become almost too dark to see. This instance is rather the exception than the rule. Nevertheless, do we not catch ourselves at times napping at our work? Do we ever stop to figure out what five or ten minutes rest taken frequently amounts to during the space of one short day, and for six days in the week? These are questions that we can very well ask ourselves, and then, having calculated the waste time spent, take it from our working hours, and use that time in some sort of recreation where it would be appreciated, rather than losing it in snatches throughout the day.

The human frame in general can stand only a certain amount of work. It has been our experience that where the longest hours are put in it does not follow that the most work is done. Often it is the reverse. With the work well planned in advance, the shorter day will see an equal or greater amount of work accomplished, the men and horses will be better able to do their work, more time will be available for recreation, our finances will be little if any impaired, possibly increased, there will be less heard of the drudgery of farming, and we will live happier lives. With such conditions existing people will come to see farm life as the only true life; and that return to the soil for which we all yearn will steadily take place.

REPAIR BREAKS ON THE FARM

Many of us do not realize the full value of making minor repairs to our machinery and implements upon the farm. By having to drive to town to get repairs, one loses much valuable time, besides paying the mechanic two or three prices for what he could just as well do himself. The time has arrived when small repairs must be made at home if one would reap the fullest returns from his labor.

Many of us have provided ourselves with the tools necessary for these repairs. Others year after year persist in borrowing such from a convenient neighbor or driving off to town to get the broken parts repaired, while in the meantime the crops are becoming overripe, or are being unduly exposed to the elements. Had provision been made for making repairs at home the work would have been greatly facilitated, besides making a direct saving of time and money.

It costs but little to install the few tools that will answer for ordinary purposes. With a hand-saw, a rip-saw, bits of various sizes, a brace, chisels, nails, and a selection of varying sizes of carriage bolts, it is wonderful the repairs that can be made on ordinary breaks.

If we have been caught this season without the necessary kit for making the repairs that were sorely needed and which cost us loss of time as well as our good hard money, let us provide for such emergencies in the future. There should be no excuse for any farmer driving off to town to have his hay rake repaired, a new stick put into his hay tedder, a pole applied, or to get a bolt to take the place of one which was lost or broken. Be prepared for any contingencies of this nature and you will have no cause to regret it.

So far as lies within our power, we try to admit to the advertising columns of The Canadian Dairymen and Farming World the advertisements of those firms only that we know to be reliable. Our protective policy, which is calculated to safeguard the interests of our readers, is published on the first column of this page. Read this over carefully. When writing to advertisers, always mention that you saw their advertisement in The Canadian Dairymen and Farming World. Then you will reap the full benefit of our protective policy.

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If the date on the address label of your paper reads August 28, it means that your subscription has expired, and should be renewed at once. Prompt attention to this will prevent your missing a copy. Owing to rearrangement of our mailing list, subscribers will confer a favor by promptly notifying us of failure to receive the paper, or of a wrong date inserted on the label. The Publishers, Canadian Dairymen and Farming World.

Cut the Grain on the Green Side

With a short hay crop in many sections, dairymen are again "up against" the proposition of providing a cheap roughage to feed their stock during the coming winter. There are those who have already provided for this contingency by planting an additional few acres of corn. Others may depend on alfalfa where this can be grown. But a great many will either have to reduce their herds this fall or purchase rough feeds. To the latter we would say, look after the grain crop. In order to make the most out of the situation the crop of straw must enter largely into the dietary of our stock, especially that of the dry cows and heifers. While we do not believe that the feed of these animals should consist wholly of straw, yet we are convinced from past experience, that a large percentage of straw may be used in compounding an economical, yet wholesome ration.

Straw chaffed and used in conjunction with ensilage, turnips or mangolds, the whole mixed together and allowed to stand for 12 to 24 hours before being fed, makes a palatable and nutritious ration on which stock does remarkably well. We have gotten splendid results with this mixed ration fed twice daily to our milking cows when supplemented by a small amount of clover or mixed hay and a light grain ration. Corn silage largely entered into this mixture. In the absence of silage or roots some have had good results in feeding a ration of straw by using the refuse of sugar beet factories, soaking it in water for a few hours, then mixing with the cut straw, or even scattered on the long straw. One chief factor to be taken into consideration in the feeding of straw, is to feed something with it that will act as a laxative. Straw is rather binding in its nature. When fed alone the bowels do not perform their normal function, therefore the animal degenerates and loses flesh quickly. This will not be the case if some succulent or laxative food is fed in conjunction with the straw.

But there is straw, and straw. In order to get the best results from feeding straw, the grain must be cut on the green side; in fact, quite green. Before the green tinge has quite left the field, get the binder to work. Stock at once. Allow free access of sunshine and air to the sheaves. The ripening process will then, continue, and a choice quality of grain and a superior quality of straw for feeding purposes will be the result. I have often heard the remark by some passer by "— is a fool to cut his grain so green, he will lose half of the grain; I believe in letting mine ripen." Yes, and for sooth, this critic will allow his grain to ripen, and yes, over-ripen, and loses by shelling, the best kernels of grain, as all the heaviest drop off before he gets it into the wagon, while the straw is a little better than woody fibre. Such men as this critic, (and we have plenty of them), are the ones who believe in a ration wholly of straw for their cows during the winter season. These men as well, who own the "3000" lb. cows. When cut on the green side there is still sufficient nutriment in the stalk to complete the ripening process and the cellular matter in the stalk, in which is the nutriment, has not yet turned to woody fibre. Consequently it has a considerable value for feeding purposes and it is relished by all classes of stock.

In Scotland, straw enters largely into the dietary of the live stock, in conjunction with turnips and mangolds. Horses, cattle and sheep are to partake of this ration, and where do they raise better stock? It may be the Canadian farmers have

yet to learn the feeding value of straw, of good early cut straw. This was demonstrated last winter through those sections where the hay crop was short in 1907. Large quantities of roughage had to be purchased, and many dairymen supplying milk for the Montreal market used straw largely in the ration with ensilage. By increasing the grain ration about two pounds a day per cow in full milk, good results were secured, and the cows were brought through the winter in good condition. Cut the grain on the green side and you will not regret it this coming winter.—W. F. S.

What is a Good Average?

At Ste. Emelie, Que., in June, 142 cows gave an average yield of 546 lbs. milk 3.5 test, 29.9 lb. fat. The best herd average was 631 lbs. milk 3.8 test, 24.3 lbs. fat. The highest yield of any one cow was 1030 lb. milk testing 3.5. The poorest herd was one of 13 cows that averaged only 399 lb. milk and 16 lb. fat. If the 13 cows in this herd had given only enough milk extra to bring them up to the average yield of the 142 cows in the association they would have given enough milk in the month to make an extra 182 lbs. of cheese worth \$20.00. That would not be much improvement to ask just to bring them up to the average, not the best herd; and if the cows are such that they cannot be made to yield an average quantity, should they be kept?

At Warawau, Ont., in June, 118 cows gave an average yield of 529 lb. milk 3.3 test, 29.9 lb. fat. The best herd average was 1042 lb. milk, 32.3 lb. fat from a herd of 26 cows. This association record is in rather sharp contrast to the one above, and indicates the great differences that exist between the results obtained in different sections of the country. Stated in another form, if the Ste. Emelie cows were so good milkers as those at Warawau, they would have given an extra weight of 54,340 pounds during the month.—C. F. W.

A Real Live Bargain

Bargains are sought after by all, at all times of the year. We are always eager to hear of real bargains and to tell our neighbors of them so that they may take advantage of them as well as ourselves. Have you ever paid any attention to the bargains offered by The Canadian Dairymen and Farming World? We offer you many cash prizes, as well as prize winning stock, and all we ask in return is some of your spare time, which many of us are so liable to waste without second thought. New subscriptions are of value to us. We hope some of our prizes may be of value to you.

Many people, when you approach them on this subject, will put you off with the answer "I have no money just now." Do not take this as a final answer but make an appointment for some future call. "To keep everlastingly at it," is the secret of the success of many of the world's best men. If you see the value of an undoubtedly receive, then in answer to your proposal, do not ask your prospective subscriber to take the paper immediately. Talk up the good points of The Canadian Dairymen and Farming World, give him one or two sample copies and leave him in a pleasant humor, to think them over for a few days. Then, when you call again, he will at least be glad to see you and you will have a better chance of success.

A good agricultural paper is of value to every farmer and one, or more should be found in every farm house. Systematic reading is of value, not much to be said in this regard, but better that he go on hand, as in helping him to do much more impor-



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tant work. One of the reasons why a young farmer does not always readily see the value of much reading is that he is apt to look at it from a thoroughly practical standpoint and is not quick to appreciate the worth of things that are not immediately available as means of advancement.

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"In answer to your advertisement in The Canadian Dairymen and Farming World, enclosed you will find the names of seven new subscribers and \$7.00, for which you will send me a pure bred Yorkshire Boar."—Mr. Wm. Stratton, York Co., Ont.

Creamery Department

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

Some Advice to Butter Makers

Butter-makers should aim above all things to keep their creameries neat and clean in every respect. It is surprising what an effect this will have upon patrons visiting the creamery. They will go away feeling that the maker is endeavoring to do his part, and that it is up to them to do theirs. Patrons should be encouraged to visit the clean and neatly kept creamery. It is an object lesson that will remain with them.

There is an object lesson in the dirty and badly kept creamery also; but it is of a different kind. It would be better if patrons kept away from such, though if they act upon what they saw a change of makers might result and new and better conditions follow. The butter-makers should aim to keep their creameries in such condition that it will be an object lesson of the right kind to their patrons at all times.

Makers should also visit their patrons. Both the visitor and the one visited will be benefited. Such visits are best made about milking time. Suggestions as to the care of the cream can be made without giving offence. Last spring an enterprising Wisconsin maker visited all his patrons. He contrived to be at their farms about the milking hour. He took along with him samples of washing powder and also scrubbing brushes. He explained the use of the powder and gave suggestions as to being clean about the milking and caring for the milk and cream. He asked his patrons to white-wash their stables, to have them well-ventilated, to let in plenty of sunlight, and to keep only cows that would give a good return. He asked for their co-operation in making good butter, and stated that if he were assured of that they could depend on him to do his best in turning out a good quality of butter. He reported afterwards that his instructions were received as a usual thing with great interest and that an improvement resulted along many of the lines advocated. The quality of the raw material received at his creamery was very much better after his visits.

There is an object lesson in this for Canadian makers. At the cream gathering creamery patrons live sometimes at long distances from the creamery, and it may not be possible to visit them very often. But it should be done as often as the maker finds time and opportunity. If every creamery patron could be visited once a year, and given instructions as to the care of his cream, it would go a long way towards improving the quality of our butter. It will pay creamery owners when engaging a maker to arrange for this visiting to be done. They could afford to pay a little more for making rather than not have it done.

Will Visit the West

Dairy Commissioner Buddick will make an extended tour of the West this summer, going through to the coast. He will make a study of dairying conditions and the progress the industry has made since his last trip a few years back. The educational work in dairying in the West is now being done by the provinces. Any assistance Mr. Buddick may be able to render will be chiefly in connection with the marketing and handling of the product. There are possibilities in the development of a trade in Canadian butter with the far

East that should not be overlooked, though the demands of the home market in the west just now prevent any energetic effort in this direction.

Notes from Eden Creamery

Ed. The Dairyman and Farming World:—Our make of butter for this season has been very satisfactory considering the condition of the cows when they went out to grass. The great shortage of feed caused the cows to go out in very poor condition, and in spite of an abundance of pasture the cows are not up to their usual average in milk. The recent fine rains have checked the very marked decrease which had set in during the early part of July. We hope to see the make hold up well throughout this month. The strong demand for "Eden" butter has kept our storage room practically empty. We are trying every means to improve the quality of our product, and we are aided in this respect by our inspector, Mr. J. Stonehouse, who suggested in the early part of the season that we provide the cream waggons with canvas covers to throw over the cans. We find that they have aided very materially in improving the quality of the cream. They keep the mud and dust off the cans and hold the temperature of the cream down by at least four degrees. I would strongly ad-

vise the use of these covers by those who are not using any protection for their cans. They most assuredly tend towards a better grade of butter.—B. J. Payne, Butter-Maker, Ontario Co., Ont.

Buttermilk a Microbe Killer

It is said that the best cure for the "blues" is buttermilk. If so there is a need for it larger than many people imagine. Bad temper and that distressing complaint known as melancholy are said to be caused by a microbe. Buttermilk is fatal to this particular bacillus. It drowns out or paralyzes it with its pungent acids. So when the "blues" come on and you feel like abusing the dog, quit coffee, tea and all kinds of intoxicants and drink buttermilk.

Dairymen all over Ontario, but especially the members of the Western Ontario Dairymen's Association, will deeply sympathize with the Misses Mary and Agnes Morrison, of Newry, in their recent great bereavement, being deprived of their mother and elder brother in little more than two weeks. On the 6th of July their mother, Mrs. John Morrison, breathed her last. She was a woman of much character, sterling and upright, and exerted a wide influence for good in a quiet way. Then on July 22nd, after a long and painful illness, their

brother John passed away. He was very well known in North Perth, and although a blacksmith himself, he was for many years, and up to the time of his death, secretary of the Elms Agricultural Society. The Misses Morrison are now the only members of the family living in the old home, the others being married and living at a distance.



Be Prepared for Emergencies.

If you live in a small village or country district, you will appreciate the value of a telephone.

Haven't there been times when you would have given a good deal to communicate with a friend?

Or, perhaps you needed the services of a doctor, in a hurry, but had no way of communicating with him, at once.

The minutes seemed like hours, didn't they, when you've had to suffer while the doctor was being sent for?

Have one of our telephones placed in your house and so be prepared to summon the doctor at a moment's notice.

A short delay in getting a doctor may mean life or death, so why take chances, why not be prepared for any emergency?

Suppose a fire should occur or burglars break in and your wife and children were alone, what protection would they have if there was no telephone in the house?

But a telephone is something you can't take chances with.

You must have one that you can absolutely depend upon.

Send us your address and we will tell you all about a reliable telephone that is easily installed at a small cost.

Northern Electric & M'fg. Co., Ltd.

Montreal and Winnipeg.

No. 303

Use address near, at you.

See Our Exhibit in the Process and Implement Building at the Toronto Fair

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 your letters to The Cheese Maker's Department.

Develop the Home Market for Cheese

Canadians are cheese-makers, not cheese-eaters. A very small percentage of the cheese we produce is consumed at home, though the amount is increasing each year. In any case the home consumption of cheese is away below what it should be, and what it might be, if more attention were given to catering to the home demand. Our dairymen have paid little or no attention to the home market. It has been largely used as the dumping ground for "culls." Upon the unsuspecting patron has been loaded the "rejected," and what he could or would not take has been palmed off on the storekeeper in neighboring towns and villages. With hundreds of factories producing occasional batches of "culls," and which were gotten rid of in this way, the supply of inferior stuff loaded on to the local market was by no means small. Conditions have, however, improved in recent years. Fewer "culls" are being made, and consequently the local consumer is getting better cheese for his own use. In the large cities, such as Toronto and Montreal, where large quantities are consumed, the trade is looked after by jobbers, who buy the season's output of a factory or two. Often, too,

FOUNTAIN PEN FREE.

A 14 kt. Gold Fountain Pen will be given to any person who secures only one new subscription for The Canadian Dairyman and Farming World. These pens are guaranteed to give satisfaction. Try and win one.

FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD, CASH WITH ORDER

CHEESE FACTORY FOR SALE.—Known as "Honey Grove" near Poole, twenty miles from Stratford. Capacity, one hundred tons. Good house and hog pens in connection. For further information apply to, ALEX. F. CLARK, Poole, Ont.

FOR SALE.—Newry cheese factory. Situated in first-class locality; good dwelling house and four acre land. Made in 1907, 70 tons. Terms made known on application. MARY AND AGNES MORRISON, Newry F. O., Atwood Station, Ont. E. 8-25

OWNERS OF CHEESE FACTORIES AND CREAMERIES desiring to make direct shipments to Great Britain, will have an opportunity of meeting a large British importer in July. Further particulars may be obtained by writing Box F, Canadian Dairyman and Farming World. D. H.

LOVELL & CHRISTMAS

WEST SMITHFIELD

AND

TOOLEY ST., LONDON,
LIVERPOOL and MAN-
CHESTER, ENGLAND

MONTREAL - CANADA

Our British facilities give us an unexcelled opportunity to pay

HIGHEST PRICES

FOR

BUTTER and CHEESE

cheese rejected by the exporter, will be bought by the jobber for local use at considerable reduction in price. Thus it is, in one way or another, the inferior stuff, that will not pass muster for the home trade, that finds its way to the local market.

Under these conditions, is it any wonder that Canadians are not large consumers of cheese? They do not know what, first-class, well-cured cheese is. What they buy for cheese is often nothing more than old curd. It is dry, leathery, unpalatable, and, what is worse, indigestible. There is nothing in it to attract or to create a desire for more. People buy it because they think cheese is required to complete the bill of fare, and not because it will contribute anything to the nutritive value of the meal. Even if a well cured cheese is found on the local market, it frequently has some foreign flavor, that has been accentuated in the curing, making it anything but inviting. The person buying such cheese for well-cured stock, and prefers the less cured article, in which bad flavors have not had a chance to develop. It is far from being what well-made, well-cured, pure-flavored, finely-textured cheese ought to be. The average consumer, even in the larger centres like Toronto, does not know what a well-cured, is not impressed with its quality, and prefers the quality he has to choose from, he wonders how it is the Englishman has such a fondness for Canadian cheese. It is seldom that he comes across a cheese that will create a strong desire for more of the same kind. He complains to the grocer that the last cheese was not to his liking. The grocer has something else to offer. The consumer tries it, with no better success, other than that he has got something different, but no better, and so it goes. There is no uniformity of quality, foreign flavors of all kinds are met with, and, for the most part, the cheese is uncured and unpalatable.

There has been, as we have already stated, some improvement in recent years, and the local market is getting a better quality of cheese than it did ten years ago. This has not been because any special effort has been made to cater to this trade, but because the general quality of the product in the country has greatly improved. The work of the instructors is decreasing the number of "culls" and there are fewer cheese rejected by the buyers. And thus, it might be said, in spite of the dairymen, the Canadian consumer is getting a better quality of cheese. The effect has been to greatly increase the home consumption of cheese. Mr. J. A. Ruddick, Dairy Commissioner, in his evidence before the Agricultural Committee of the House of Commons recently, stated that the decrease in exports could be accounted for to a large extent by the increase in the local demand for cheese. If, therefore, so much can be accomplished by a general improvement in quality, what might not be done by giving some special attention to the needs of the home market. Ways and means of doing this will be discussed in later issues.

Dairying in Hastings and Prince Edward Counties

A couple of weeks ago several dairy instructors of New York State visited Prince Edward and Hastings counties, to make a study of dairying conditions, and the methods of instruction followed in Ontario. In company with Chief Instructor Pablow, they visited a number of cheese factories in that district, and, needless to say, were very favorably impressed with what they saw. Mr. W. W. Hall, of Watertown, N. Y., one of the delegation, in a letter to the

Watertown, N. Y., Times, gives a full account of the trip. Some extracts from this letter are of interest to our readers:

Mr. Hall makes special reference to the good roads in these counties, which are always kept in good repair. Speaking of the farms, he says:

"The farms are under a high state of cultivation, and at present they are harvesting a fine crop of hay, with great prospects for a large yield of oats, barley and wheat, with the corn crop in a flourishing condition. The occupant of the farms is, in nearly every case, the owner, and the buildings would warrant one in thinking that his finances are in a healthy condition, as the houses are in many instances built of brick, the barns are new, and of the latest and most convenient plans, with all of the modern appliances attached. The lawns are well kept, as a rule, and flower beds adorn their front yards. There certainly must exist a fertility in the soil to produce such results."

In regard to dairying, Mr. Hall writes in glowing terms of the manner in which patron, maker and instructor co-operate to produce the very best quality. Chief Instructor Pablow's ability and work are spoken of in the highest terms. At every factory visited, his last words to the maker were: "Make none poorer than these, and as much better as you can."

CURING ROOMS

"It has been found by both scientific and practical demonstration

that cheese taken from the press should after 24 hours old, be placed in a temperature not to exceed 60 degrees, and that the temperature must remain constant if best texture and flavor are to be secured. At Mountain View an ice house is constructed adjoining the curing room, and filled with ice. The walls are filled with shavings, so that no sawdust or other material need come in contact with the ice. Intakes are made through the wall to the curing room about a foot from the floor, where the cold air, fresh from the ice enters. Five or six outlets above, under the ceiling, are provided for the warm air to enter the ice room again, providing a circulation of dry cool air all of the time, night and day, without regard to the atmospheric conditions outside. It is inexpensive, as the patrons, who are the owners, build and fill the ice houses themselves. This process is called 'cool curing.' Better results follow than is the case when cheese is kept just above the freezing point."

Altogether, Mr. Hall's letter is very flattering as regards agriculture and dairying in Prince Edward and Hastings counties. The farm homes, he says, compare favorably with the homes in the country towns of Belleville and Picton. These homes have been built, equipped, and are being maintained by the well-managed cheese factories in the district, where only the finest full cream cheese are made. The present generation is developing a rich heritage for their children, whose future is secured.

THIS IS THE SHEET METAL AGE

All that is necessary to make a factory, warehouse, barn, shed or outbuilding of any description, wind, water, fire and lightning proof is to cover it with

Galt Corrugated Sheets

Made of the finest corrugating iron procurable; they will give at least fifty years satisfactory service.

Corrugations are not rolled, after the usual method. They are pressed, one corrugation at a time. This assures perfect uniformity—an accurate fit at both side and end laps.

Where warmth is a secondary consideration to fire, lightning and storm proof qualities, three-fourths of the wood sheathing may be saved, besides the lessened cost of the lighter frame which can be used.

Saving on lumber and labor brings cost of a building protected with Galt Corrugated Galvanized Sheets as low as if built entirely of wood.

Galvanized or painted, whichever you prefer.

Our Catalogue with complete information free on request.

The Galt Art Metal Co. LIMITED
GALT, ONTARIO



Our Duty

THIS truth comes to me more and more, the longer we live: that on what field, or in what uniform, or with what aims we do our duty, matters very little, or even what our duty is, great or small, splendid or obscure. Only to find our duty certainly, and somewhere and somehow to do it faithfully, makes us good, strong, happy and useful men, and turns our lives into some feeble echo of the life of God.

Phillips Brooks.

The Battle

By James Oppenheim.

D. R. MORRIS EAST returned home at eleven p. m. "Home" was a fourth of the ground floor in an East Broadway tenement. He found his wife in his office—the front room—sorting papers at his desk beneath the brilliant blaze of a Welbach light. She wheeled in the revolving chair to get his kiss.

"Are you tired, Morris?" she asked. Her face was unusually thoughtful.

"Why—anything wrong, Nell?" He dropped wearily into a large, soft armchair.

"Nothing wrong," she said slowly, "except that you are tired—" and then she added wistfully, "but are you too tired?"

He smiled.

"Not too tired, little wife. Swing out on me."

She drew her chair nearer his. Her hands were full of papers.

"I've been reckoning all evening," she said, slowly, as he fondled her free hand, "and it's terrible."

"I know," he acknowledged sympathetically. "It is awful. I'm a wretch."

"But you really are, Morris," she said, softly touching her lips to his hand. "You've worn my husband out, and worried his wife to pieces, and we are getting poorer every day. Now listen," she went on. "How much rent do we pay?" And then she added in an undertone, "I know it's mean of me to bother you."

He smiled.

"Thirty-five dollars a month. What else?"

"Five dollars a month for gas," she went on with slow deliberation; "five dollars for laundry; forty-five dollars for table; twelve dollars for help—how much is that?"

"Guess!" he exclaimed, his eyes twinkling.

"Don't, Morris," she cried, inwardly hurt. "You must think of money to-night. You must."

"Poor little wife," he exclaimed remorsefully. "I always put the whole burden on you, how much is it?"

She looked at him gravely.

"It's one hundred and two dollars."

He whistled.

"Think of it," she went on. "And between us we need five dollars a week for little things—that's twenty dollars a month—three hundred dollars a

year for clothes—twenty-five dollars more a month. Altogether," she said, very soberly, emphatically, "one hundred and forty-seven dollars a month. And that doesn't count going to the theatre, and presents to our relatives, and vacation money, and dentist's bills, and things for your office, and

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"Wait," she said, "that's what you earned,—but you didn't get that." Three months back ninety-five dollars were paid in; two months back, exactly one hundred; last month exactly eighty; this month—so far—twenty-five dollars. But you'll get more, of course."

"Well, what have you to say?" she demanded. She seemed to be greatly troubled.

"H'm. That's pretty bad. How much have we drawn from the bank?" "Three hundred and sixty-five dollars. In other words we're running eighty dollars behind each month."

She sat back. They were silent for a full minute.

The world outside and above them—the night and the human beings asleep in it—was intensely silent. Their nicked alarm clock throbbled as if it had palpitation of the heart. The white light fell sideways on their faces, making them stand out in vivid relief—they were two very fine faces, the woman's oval-shaped and olive tinted, with large, dark eyes and soft rolling hair; the man's strong and dark and determined, his firm lips without moustache, his hair bushy and black.

In the silence, the light seemed to sleep upon them, pervading the room with a weird atmosphere—thick and full of the feel of home. Every motion then was full of meaning, the slight puff of the pipe, the quiver of the hands, the vibration of their breathing. So thickly charged was the air that Morris almost hesitated to whisper.

"Oh, Nell," he said at length, "it is better to be with you. I love you so tremendously."

"It's wonderful," she breathed



Watching the Little Sufferer

quickly. They caught the meaning in each others' eyes and became steeped in happiness. It was good for them to sit there, in their home, late at night, and know each other's presence.

"But, Morris," she said at length, smiling, "won't you worry a little? We must, we must. Don't you see it's impossible?"

He tried hard to see.

"Is anything impossible to my little manager?"

She forced a frown.

"Now, no more of that," she said sternly. "Listen, dear. Please listen sensibly. Here's the whole secret of it—you have a perverted sense of duty. What could you ever have done if your father hadn't left you four thousand dollars after he saw you through college and the hospital? Morris, if you

quit charity, and set yourself to it, you could earn a decent living."

"Charity?" His eyebrows went up. "Yes, charity," she continued with great emphasis. "You had me come down here with you—why? To make money? You know you didn't, dear. You thought you owed a service to your own people, and—and—she made a grimace—they seem to think so too. Why, they've been sponging on you."

"Sponging?" He knit his forehead. "Yes—sponging. Haven't I seen it a thousand times?" She was fully aroused now. "You only charge fifty cents a piece for the office patients, and time and again I've heard some old schnorrer (spongers) say, 'Ach gentlemen, dear gentlemen, Doktor, you would to please wait. Ich habe kein geld (I have no money).'"

Her imitation was so lively with such life-like grimaces and gestures, that he laughed uproariously.

"Do that again!" he commanded.

She seemed a little angry.

"And what do you do?" she continued, ignorant.

"Why you put him on the shoulder and say, 'Never mind—Understand!'"

He laughed uncontrollably.

"You actress!" he mocked.

"Now, Morris, that won't do! The whole neighborhood is fleeing you. And, worst of all, it is wearing us both out—these incessant calls, these bad hours, these money troubles, this

overwork of these vile people."

He stopped smoking; he suddenly felt how tired and worn he was.

"It's true, Nell," he said bitterly.

"I'm tired to death—work, work, work—all work and no life."

"That's it!" she exclaimed. "All work and no life! This isn't life, to be on a never stopping treadmill! It's a deadly grind—it's killing all the good there is in us! What will we be in five years? And is it doing any good? Do you think that you, single-handed, can accomplish anything in this square-mile sore-spot? Why, you don't do anything! You can't change conditions—or human nature."

His face looked white and dejected.

"I've felt that lately, too," he said slowly. "I've been going through a reaction. Oh, I'm sick—sick—sick of all—the nauseous crowds, the dirty streets, the stinking tenements, the grind. I guess, after all," he added, weighing each word, "if a fellow looks out for his wife, and brings up a family decently, and does his duty towards his relatives and friends, and does his work thoroughly, and votes with a clean conscience, he's doing the State a better service than to neglect these and potter away at the infinite, eternal disease."

"Oh, you're right! Thank God you say that!" she cried fervently.

"Oh, Nell," he burst out suddenly. "If we could only get away from it all—get out to clear skies and clean meadows—and home—and find peace! Peace! That's what we need! Peace! This clamor and rush and excitement drain a man's very soul. It is—it is killing us!"

She suddenly looked radiantly happy.

"I wanted you to say that ever since you came home! I knew you felt that way. Now, listen," she went on excitedly. "Just this evening a letter came from Minnie—Minnie Shanks—you know her—she moved up to Hartley, Connecticut, a couple of years ago and I've written her often. Listen—oh this is great news!"

She pulled out a letter and he sat forward as she read it.

"DEAR LITTLE NELL:

"Here's some good news for you—our little Nell. Now don't be shocked, little Nell—I mean good news for you! You see we was the only doctor for miles around, and he made a fortune—or rather a fortune fell into

his lap—for all he had to do was to sit at home and wait until people got sick. Then he hitched up his horse and buggy—and later his automobile—on a pleasant drive. It didn't matter whether he killed people or cured them—he was a Trust. Now here's a proposition. I guarantee that if you and your handsome husband cut out all now-right now, the field will be yours. Your husband can't help making money. Of course, even if there were competition, he's no darkly handsome man, but I would still prefer him. But there isn't competition, and there won't be—I'll see to that. So he can step into a fortune. Make him come; do make him come. You are simply stuck in the mud where you are; you can't even imagine what country life means—how glorious, sane, sweet, complete it is! You're bound to be happy here—think of it!—ten acres of ground, a dear little cottage, fresh vegetables, delightful woods and brooks, beautiful days, stormy or clear, plenty of books, and lovely neighbors who are never in a hurry and are always so happy. Besides, the Doctor is so highly respected. He's the first man in the county; his word is law.

"Now think the minute you get this and act quickly. The least delay may spoil all. You must come."

YOUR LOVING MINNIE.

(To be continued.)

Asked and Answered

Readers are asked to send any questions they desire to this column. The editor will reply as early as possible. All communications should be addressed to the Editor, Canadian Dairyman and Farming World, Peterboro, Ont.

How can I remove grass stains from white lawn—Guskie Stewart, Leeds Co., Ont.

Use common cooking molasses is good for this purpose. Cover the spot and leave the molasses on an hour or so. Wash in the usual way. A second application may be necessary. Javelle water would also remove stain. It can be procured from any druggist, and is cheap.

I cannot get my cream to whip. I have tried putting it on ice for a time before whipping but it will not good—Jane Austin, Frontenac Co., Ont.

Probably the cream is too fresh. It should stand for some time before it will whip. While you are whipping keep it in a cool place. It is a good idea to have the bowl containing the cream in another dish in which there is some cracked ice, if you have ice at hand.

How can I use with variety salt mackerel, halibut and salmon—Mrs. T. Long, New Brunswick.

Salted mackerel should lie in cold water over night to freshen; salmon, being thicker, needs to stand in the cold water from 36 to 48 hours. Then cover with lukewarm water, and let heat gradually to the boiling point; then at once remove to a cooler part of the range and let stand, where the water is kept just below the boiling point, about half an hour. Serve with plain, boiled potatoes and egg or pickle sauce.

The wire basket is a saver of time and strength. The fruit to be peeled is put into the basket, which is lowered into a deep kettle partially filled with boiling water. After a few minutes the basket is lifted from the boiling water, plunged for a moment into cold water, and the fruit is ready to have the skin drawn off.

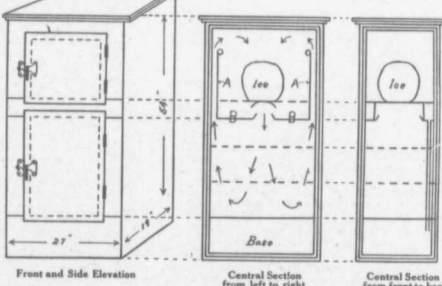
When mixing flour for thickening add a pinch of salt to the flour before mixing with water, and it mixes much more smoothly, without lumps.

A Kitchen Refrigerator

Prof. W. H. Day, O.A.C., Guelph

How to construct a kitchen refrigerator can best be answered by use of a drawing. The left figure in the cut below shows the outward appearance and also gives dimensions taken from a refrigerator large enough for a family of five or six. The doors are flanged as shown by dotted lines, and the latch should be so arranged as to keep the door jammed tight shut. The door to the ice-box is sometimes put in at the top, instead of the front, but with the door in the top the ice is often accidentally let slip, injuring the box.

The central figure is a section from left to right. It shows the refrigerator to be composed of an ice box above, a storage chamber with two shelves and a base. BB shows a large galvanized iron tray with a large piece cut out of the centre. This tray rests on two cleats, one on the back wall and one on the front, but does not touch the side walls. AA is a pan below, or into the side of the tray BB, are of galvanized iron. They fasten around two rods crossing from front to back near the top of the ice box. The ice rests on an open bench of galvanized iron which stands in the tray BB, and is arranged with a canopy below it so that none of the ice water can drip through the opening in BB, but must fall into the tray itself. From the tray a tube (see right-hand figure in cut) is led down the back of the storage chamber and out through the floor. Through this tube the water runs down into a pan below, or into a funnel which may be fitted with a tube so as to carry the water away.



The principle is as follows: The colder air around the ice sinks through the open bench on which the ice rests and passes down into the storage room through the opening in BB. The warmer air from the storage room ascends between AA and the wall, strikes the top of the ice box and is deflected down to the ice, where it is cooled and again passes down. The arrow shows the air circulation.

The efficiency of a refrigerator depends to a very great extent on the construction of the walls. Two thicknesses of board with water-proof paper between, and a lining of galvanized iron would be fairly effective, the iron being used for sanitary effect. Some reputable firms advertise their refrigerator as composed as follows: 1. Outside case, oak or ash, 2. Water-proof paper, 3. Air space, 4. Water-proof paper, 5. Mineral wool, glass fibre in a thin mat, 6. Water-proof paper, 7. Zinc case, and 8. Inside lining, galvanized iron or other material. Such a wall would be 2 1/2 to 3 inches thick.

Have you secured any of our premiums yet? Write us for particulars.

Never Go Empty-Handed

That is what mother used to say to me many times when I was a child. If I was going upstairs, I must look about me, and see if there wasn't something downstairs that belonged upstairs that I could carry up and put into its place; and so on from one part of the house to another.

She always said that it would be a great help in one's housekeeping, and saved lots of unnecessary steps, if people would just remember that little rule, and although I fail in many ways to practice all the good things she taught me I have often found myself saying to the children as they help about the house: "Never go empty-handed."

Children have such a wonderfully unconscious way of walking right over things instead of picking them up, and restoring them to their proper places.

So I shall often repeat the little rule to them, partly to help them, and partly to relieve my own feelings at their carelessness, and if they do not always obey the injunction now while they are young, they may in after years remember it as one of mother's helpful rules.—Georgia A. Chapman, Peterboro Co., Ont.

Simple Living Best

We often talk of simplicity as a time saver. In no department of the home work can it be so well applied as in cooking. The simple foods are the most healthful. I cannot give any set rules for a bill of fare. Serve good, simple and nutritious food prepared. Do not spoil a good dinner.

selves, and in after years they will bless you for so doing.

We will take into consideration the washing and ironing. An Institute speaker suggested Tuesday as the best day for washing. Others I prefer Monday. Do not think of preparing an elaborate dinner on that day. Aim to have cold meat, which can be school. Have the children prepare the vegetables before going to school. Get everything into ship-shape, so that it will not take much of your time to get up a comfortable meal.

Use all the labor saving devices you can. A washing machine, clothes wringer, and others, you can procure. By putting a spoonful of powdered borax or ammonia in the boiler with the white clothes, it will aid in cleansing very much.

In ironing do not waste time on such articles as will do as well without. Sheets taken off the line, folded neatly and hung upon the clothes rack will look as well as if you had spent ever so much time going over them with an iron. Some recommend a mangle for certain articles, but I have never used one, so cannot speak from experience.

In making the children's clothes, if time is limited, do not waste it in the first place by putting on frills and flounces, and, in the second, by having the same to iron every week. Aim at simplicity in dress.

Contrive your work well. Work well planned is half done. Aim to have all done in the forenoon, the afternoon you will have for sewing and social observances, and in surely you will be able to sandwich in one institute meeting every week.

Premium Books Free

As some of our readers may be glad to earn one or two reliable books, in return for very little work, we make the following offer: You send us one new subscription at \$1 a year, or renew your own subscription at once, for one year, we will send you one of the following books, free of cost:

- Poultry Pocket Money, The Window Flower Garden, Diseases of Poultry, The Book of Birds, Poultry Feeding and Fattening, Bookkeeping for Farmers, Canning and Preserving, Home Candy Making, The Model Cook or the Canadian Housewife, a monthly magazine on flower, fruit and vegetable growing, which would come to your home once a month for a year. Which book shall we send you for your renewal or only one new subscription?

Ten leaves should never be used for sweeping purposes until they have been well rinsed in several changes of water. This succeeds in extracting any remaining coloring matter, which would otherwise have an effect of staining the wool of the carpet.

PLAN YOUR LIVING

Time is the most important factor in housework. Let the housewife have a time table, and adhere to it as strictly as possible. Did you ever time yourself to do a piece of work? For instance, how long would it take you to make the bed, sweep and dust the room? If not, you will be surprised how much time you can waste. Do not dilly-dally over your work. Find out how long it will take you to do it, and go to work, as if you meant it. Then, again, train the children to help you; give each one some task to do, and see that they do it; even the very smallest ones can do something, and in this way teach them self reliance. Do not wear yourself out waiting upon them. Teach them to depend upon them-

Your Little Girl Can Do The Washing
WITH THE
"New Century" Washing Machine
It's far easier than churning or rubbing-soap work. Just turn the handle and the clothes and clothes are washed—snowy white. Has a tub for rinsing and the clothes the water to drain right into the tub. Price delivered at any railway station in Ontario on a money order. Our booklet tells how to turn wash day into child's play. Write for free copy. 83
Doverell Mfg. Co. Limited, Hamilton, Ont.

THE COOK'S CORNER

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

INDIVIDUAL CHERRY SHORTCAKES

Make a rich biscuit dough and cut out rounds the size of small sandwiches. Bake in a quick oven. When done split and batter quickly. Cover one-half of each cake with fine ripe cherries, stoned and sweetened. Put on the other half of the biscuit and cover the top with cherries. Heat whipped cream over all and serve at once. These are delicious.

PRESERVED CHERRIES

Select large, ripe, sound cherries; stem, wash and dry them. Allow 1 lb sugar to 1 lb. fruit. Let the sugar and cherries stand in layers for a few hours, then simmer very gently in a kettle, until the cherries are clear and the syrup is rich and thick. Seal boiling hot. In stoning cherries always be careful to save all the juice.

SPICED CHERRIES

Choose large cherries, ripe, but not soft. Stem, wash and pit them. To every 4 lbs. fruit allow 4 lbs. sugar, 1 cup vinegar, 1 tablespoonful cinnamon and 1 teaspoonful whole cloves. Chop the spices in a muslin bag and put them with the sugar, vinegar, and 1 cherry stone, on to boil. Boil slowly for 15 minutes. Add the cherries and let simmer until the syrup is rich and thick. Seal. These are delicious with game and cold meats.

CHERRY JAM

Stem, wash and pit the cherries, heat gently, mix them slightly to extract the juice. To each lb. of pulp add $\frac{1}{2}$ lb. granulated sugar, bring slowly to the boiling point, and simmer for 20 minutes. Skim, put into jam pots, and seal in about 24 hours cover and put away.

CURRENT PIE

To 1 cup sugar add $\frac{1}{2}$ cup flour and a pinch of salt, mix well, and then beat in the yolks of 2 eggs diluted with 2 tablespoonfuls water or milk. To this mixture add 1 cup washed and drained ripe currants, and bake in one crust. When done cool and cover with the beaten egg whites, sweetened and flavored with 1 tablespoonful powdered sugar and 1 teaspoonful lemon or vanilla essence. Return to the oven a few minutes until delicately browned.

Mince the left-overs of any sort of meat, season highly, put a tablespoonful on a four-inch square of pastry rolled thin, fold, making a three-cornered turnover, and fry in deep fat.

If a handful of salt is put on the bottom of the oven and pans when baking gingerbread or any cake easily burned, it will prevent its burning.

ELECTROLYSIS

says THE LANCET (London) and the premier medical journal, "is the only known means which can destroy hair without risk of serious consequences. For 16 years we have employed electrolysis to destroy

SUPERFLUOUS HAIR
Moles, Warts, Red Veins, etc., and have been successful. If afflicted consult during the Exposition for treatment. Booklet "E" describes the treatment fully. It's free. We treat all skin, scalp & complexion troubles, corns, bunions, etc.

NISCOPT DERMATOLOGICAL INSTITUTE
63 COLLEGE STREET, TORONTO, ONT.
ESTABLISHED 1902

A Work Bag Apron



THAT dainty aprons make valuable accessories to the toilet is an accepted fact and here is one that would be charming for the needlework purpose of protecting the gown and of serving as a receptacle for work. It is just a bag drawn up by ribbon strings, and tied about the waist it is an apron with a bag at the lower portion while when closed it is just a bag drawn up by ribbon strings.

In the illustration it is made of fine white lawn but it is pretty in dotted Swiss and similar materials while it also is very charming made of simple silks, such as Batavia, India and similar sorts, both plain colors and figured effects being liked in silk as well as in cotton fabrics. Japanese silk with a design of cherry blossoms would be charming, or it would be far simpler Dresden dimity. The apron is made in one piece. There is a hem at the lower edge and there is a tuck midway of its length. The lower edge is turned up to meet this tuck and the ends are joined, while ribbon is inserted in the hem and in the tuck which serves as a draw string. There is a belt attached to the upper edge with ribbon ties at the back.

Mrs. Dean's Ironing Auxiliary

One morning I ran in to see my good friend, Mrs. Dean. I always learn something, when I go there. This time she was ironing her linen dress skirt with a tape measure at hand, which she used repeatedly.

That tape measure I could not understand, so finally Mrs. Dean said with a smile: "I want it any length. I want it short this time for a picnic." Again replying to my inquiring look, she explained that while away on a visit she saw a sign on some city laundry which read, "Linen Skirts Ironed Any Length." She went in to satisfy her curiosity, and learned that when damp a linen skirt may be stretched several inches either lengthwise or crosswise, by taking advantage of this, a careful ironer may literally iron one almost any length.

That reminded me of how often a linen skirt is stretched out of shape and proper length by careless ironing, as many of us know to our sorrow.

But since then I have made use of the tape measure when ironing such skirts, and the result has been most satisfactory. I have never experimented with anything else that way but mean to try other things sometime.—Country Girl.

Easy to Secure

"I received the nice eat cutter about a week ago, that you sent me for securing three new yearly subscribers to The Canadian Dairyman and Farming World. I think it was well worth trying for, as it was very easy to secure three new subscribers for your paper. I wish The Canadian Dairyman and Farming World much success." —Hilton Gallagher, Ontario.

Raw eggs beaten up in a little warm water and sweetened to taste, are much lighter and more digestible than when taken in milk. When taken in warm milk they are exceedingly nourishing, but for a delicate stomach not so digestible.

A Jelly Bag

To make a flannel straining bag, take a square piece of flannel, $\frac{1}{2}$ yd. square is a good size), fold it to make a three cornered bag, stitch one of the sides, cut the top square across, bind the opening with strong, broad tape, stitch on this binding four tapes with which to tie the bag to a frame.

To use this bag, tie it to a strong frame or to the backs of two kitchen chairs. If the chairs are used, place some heavy articles in them; or the bag may hang on a pole (a broom



handle) which rests on the backs of the chairs. A high stool turned upside down makes a good support for the bag, then pour in the fruit juice which will pass through comparatively clear. Before it is used the bag should be washed and boiled in clear water.

Making Lemonade

There is nothing more refreshing on a hot day than a long drink of cool lemonade, but however anxious the housewife may be to serve this beverage, she very often does not have the necessary ingredients on hand, or she may not like to leave her guests to prepare it. It is just for this reason that the syrup that may be prepared by the following recipe is one of the greatest of household conveniences: Extract the juice from 12 lemons; grate the rind of 6 of the lemons and add it to the juice. Let the mixture stand for 12 hours. Then make a thick syrup of granulated sugar and water, using about 6 lbs. of sugar and just as little water as possible, as the syrup must be thick and smooth. When it has cooled strain the lemon juice into it; bottle in glass, being certain that the tops are secure and airtight.

Morning Prayer

The day returns and brings us the perils of a morning's labors and duties. Help us to play the man, help us to perform them with laughter and kind faces, let cheerfulness abound with industry. Give us to go blithely on our way all the day; bring us to our resting beds weary and content and undishonored; and grant us in the end the gift of sleep.—R. L. Stevenson.

Baby's Own Soap

Best for baby, best for you.

Refuse imitations.

Albert Soaps Ltd. Mfrs., Montreal.

Try "Albort"
Talc—Violet
Scented and
Antiseptic.

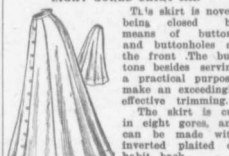
The Sewing Room

Patterns 10 cents 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 Pattern Department.

Fashions for Fall

Have you patronized our pattern department lately? Watch our pattern column for up-to-date and stylish fall styles. Our patterns are reliable and seasonable. They have given good service to a large number of women this year. Why not try ordering one or two and give them a trial? If you desire patterns of anything in particular that are not illustrated in the Pattern Column, send our household editor a post card telling your wishes. They will be promptly attended to. All patterns, ten cents each.

EIGHT GORED SKIRT 2885.



The skirt is novel, being closed by means of buttons and buttonholes at the front. The buttons besides serving for fastenings also make an exceedingly effective trimming. The skirt is cut in eight gores, and can be made with inverted plaited or habit back.

Material required for medium size is 10 yds. 34, 8 $\frac{1}{2}$ yds. 32, or 8 $\frac{1}{2}$ yds. 34 in wide. The pattern is cut in sizes for 22, 24, 26, 28, 30, and 32 in waist measure, and will be mailed on receipt of 10 cents.



Box-plaited House Jacket 2818. Simple house jacket in demand for they fill a definite, practical need. This one is laid in becoming box plait, and is attractive at the same time and involves very little labor. Material required for the medium size is 4 $\frac{1}{2}$ yds. 27, 3 $\frac{1}{2}$ yds. 32, or 2 $\frac{1}{2}$ yds. 44 in wide. The pattern 2818 is cut for a 32, 34, 36, 38, 40 and 42 in bust and will be mailed on receipt of 10 cents.



Girl's Dress, 2728. Here is a dress that can be made either with the square Dutch neck, or high and finished with a standing collar. There are buttons at the shoulders that give needed fullness and breadth. Material required for medium size (10 years) is 4 $\frac{1}{2}$ yds. 27, 3 $\frac{1}{2}$ yds. 32, or 2 $\frac{1}{2}$ yds. 44 in wide with 2 yds. of wide and 20 yds. of narrow braid. The pattern is cut in sizes of 6, 8, 10, and 12 years, and will be mailed on receipt of 10 cents.

Treat your friends for what you know them to be, regard no surfaces. Consider not what they did, but what they intended.

Do not discharge in haste the arrow which can never return; it is easy to destroy happiness; most difficult to restore it.

A man's own good breeding is the best security against other people's manners.

COUNTRY NOTES AND PRICES

CARLETON CO., ONT.

MERIVALE.—Pastures are in poor condition... MERIVALE.—Pastures are in poor condition...

PRINCE EDWARD CO., ONT.

ALBANY.—Prince Edward county has passed through what might be called a freak season... ALBANY.—Prince Edward county has passed through what might be called a freak season...

HASTINGS CO., ONT.

CANFIPION.—Although the hay crop remains extraordinarily well in the early part of the season... CANFIPION.—Although the hay crop remains extraordinarily well in the early part of the season...

DURHAM CO., ONT.

Has only an average crop but was well saved... DURHAM CO., ONT. Has only an average crop but was well saved...

ous yet with frequent applications of the best water... The prospects for this year are rather small...

The fruit crop is not heavy... The wheat crop is not heavy... The fruit crop is not heavy...

HALIBURTON CO., ONT.

Hay is over. The crop was heavier than last year... HALIBURTON CO., ONT. Hay is over. The crop was heavier than last year...

VICTORIA CO., ONT.

MANILLA.—The weather in April was the hardest upon the young plants of red clover... MANILLA.—The weather in April was the hardest upon the young plants of red clover...

ONTARIO CO., ONT.

TAUNTON.—The much needed rain of the 17th... TAUNTON.—The much needed rain of the 17th...

CLARK.—Fall wheat is not grown to any extent... CLARK.—Fall wheat is not grown to any extent...

Hay is well saved... Hay is well saved...

NORTHUMBERLAND CO., ONT.

HARWOOD.—Farmers are in the midst of haying... HARWOOD.—Farmers are in the midst of haying...

PETERBORO CO., ONT.

WARAW.—The late rains were a veritable Godsend... WARAW.—The late rains were a veritable Godsend...

LAKELUIST.

—Crops are favorable... Travellers tell us that they are about as good as this year's crops... LAKELUIST. —Crops are favorable...

WATWORTH CO., ONT.

THOY.—The recent rains and the warm murky weather that followed for two or three days... THOY.—The recent rains and the warm murky weather that followed for two or three days...

been good. Have done no sowing yet, though we have fed a little bran to the best cows... H. H.

A movement that is rapidly gaining ground in the vicinity of Montreal... the shipping of butter and cheese to be sold by representatives of the manufacturer to the exporters... A movement that is rapidly gaining ground in the vicinity of Montreal...

CANADIAN AYRSHIRE BREEDERS' ASSOCIATION

President—R. E. Ness, Howick, Que. Vice-President—W. W. Ballantyn, Stratford, Ont. Secretary-Treasurer—W. F. Stephen, Huntington, Que. Monthly fee, \$2.00 per annum... CANADIAN AYRSHIRE BREEDERS' ASSOCIATION

Rates for recording pedigrees:

To members, animals under two years of age, \$2.00 each. To non-members, animals under two years of age, \$5.00 each. To members, animals over two years of age, \$2.00 each. To non-members, animals over two years of age, \$5.00 each. Rates for recording pedigrees:

SYSTEMATIC BOOKS FOR FARMERS

A Book which will enable the Farmer to keep an accurate account of his business... No man with several thousands of dollars invested in his business can afford to be ignorant of the principles of book-keeping... SYSTEMATIC BOOKS FOR FARMERS

BOOK DEPARTMENT THE CANADIAN DAIRYMAN AND FARMING WORLD PETERBOROUGH, CANADA

\$5 to \$6 a ewt. Lambs are quoted sold at Buffalo at \$5 to \$6; yearlings, \$4.75 to \$5.25; wethers \$4.25 to \$4.50, and ewes, \$4.75 to \$4 a ewt.

There has been no change in prices for hogs, though at the beginning of the week lower prices were looked for. Selects were quoted on Th'rsday at \$5.50 and lights \$6.65 fed and watered at the market. At Buffalo heavy, and mixed are quoted at \$6.50 to \$7.00; Yorks, \$6.50 to \$7, and dairies at \$6.50 to \$6.90 a cwt.

THIS WEEK'S HOG PRICES

At writing, the William Davies Company, Toronto, had not decided what their exact price for hogs would be this week. It is probable that it will be \$6.50 f.o.b. at country points. The buying just now is for September bacon market, and as the usual fall slump in the price of bacon begins about that time packers are preparing for it. When poultry and game become plentiful in the British market, the demand for bacon falls off somewhat. The supply of hogs just now is about normal.

PETERBORO HOG MARKET

Peterboro, Ont., August 1, 1908.—The market is very weak. Cables from the Old Country and the United States have caused this. The deliveries of Danish hogs on the English market are very heavy. The deliveries of hogs in Canada are light and it is only this that is holding the market where it is. As soon as the deliveries become larger prices will drop. The George Matthews Company quote the following prices for this week's shipments: f.o.b. country points, \$6.50 a cwt; delivered at abattoir, \$6.65.

MONTRAL HOG MARKET

Montreal, Saturday, August 1.—The market for live hogs is quiet and unchanged from last week, and prices have ruled for this week's offerings at about \$7.25 a cwt. for selected lots weighed off cars. The tone is strong and any increase in the demand, or falling off in the supplies, would tend to higher prices.

EXPORT BUTTER AND CHEESE

Montreal, Saturday, August 1.—We have here a good trade being in dressed hogs, and fresh-billed abattoir stock is selling at from \$19 to \$19.25 a 100 lb.

Export Butter and Cheese
Montreal, Saturday, August 1.—We have here a good trade being in dressed hogs, and fresh-billed abattoir stock is selling at from \$19 to \$19.25 a 100 lb.

of cheese in Canada is short, and there is not the slightest prospect of its being made up now, and this no doubt accounts for the high prices that have been ruling of late. A large proportion of the purchases at present are being put in cold storage on British account and this no doubt accounts for the comparatively small shipments going forward. The receipts continue steady and totalled this week about 80,000 boxes. This is considerably less than last year, but about the same as last week, and the week before. Whether or not prices will remain steady at their present rates depends altogether upon the demand from England. There does not seem to be any prospect of a serious set back. There appears to be a serious set back. There appears to be a serious set back. There appears to be a serious set back.

MONTRAL PRODUCE TRADE
Montreal, Saturday, August 1.—Butter.—There is a steady trade in butter, and prices are practically unchanged from those current last week. Choice prints are quoted at 25c, and middling quality quoted at 24½c. Ordinary finest is quoted at 23c and under finest at 22c to 23½c, according to quality. Dairy butter is quoted all the way from 22c to 25c.

CHEESE.—There is a good demand for cheese from the local trade. Prices range from 12½c to 14c according to quality and age.
Eggs.—There is the market for eggs is steady, and prices unchanged from last week. We quote select sets at 50c and No. 1 stock at 30c, although there are some dealers asking one cent a dozen more money.

Gossip

The president of the Canadian Hereford Breeder's Association, J. A. Gowlock, of Forest, has returned from a visit to Western Canada, during which he met the Hon. Wm. Mackenzie King at Regina exhibitions. He states that the stock exhibits at these fairs were as fine as can be seen at almost any fair in Ontario. Mr. Gowlock advises eastern breeders that when shipping pure bred stock to the west, to be sure and get their money before they ship, unless they know the men they are dealing with, for if notes are accepted in payment they may prove to be a good "Crop", he reports, are looking fine.

That live stock requires a certain amount of salt is unquestionable, but in the manner of feeding it there can be considerable improvement. Most breeders are content to throw a lump of rock salt on the ground, or in the feed

box, allowing the animal to lick up almost as much dirt as salt. A more sanitary method of feeding salt is being introduced among the breeders of Canada by the Salt Specialty Company. Their method of feeding the salt is by placing a salt cake in a stone-ware feeder, which allows the animal to obtain the salt free from dirt. The cake is made of over 99 per cent. pure salt, pressed together by hydraulic power. This compound when placed in the feeder, which is located within easy reach of the animal, allows them to obtain salt whenever they desire it.

The Whitten, Drummond Company, of Toronto, are supplying the breeders throughout Canada.

HOLSTEINS

We must sell at least 25 cows and heifers at once, to make room for the natural increase of our herd. This is a chance of a lifetime to the breeder who also has a few young bulls, Pontiac Farms, Imp., son of Henderson DeKok, the world's greatest sire, head of herd home and see them.

H. E. GEORGE
CRAMPTON, ONT.
Putnam St., 1½ miles—C.P.R. 3-4-09

HOLSTEIN BULL CALVES FOR SALE

one month to nine months old, bred from the stock of W. Richardson of Caledonia, and J. W. Clemons, of St. George. Price reasonable.

JOHN MACKENZIE,
E 612 Willowdale, Ont.

SUNNDALE HOLSTEINS

Bred calves from 1 to 4 months old, sire by Dutchland Sir Hengerville Maple Drott, he is imported from the celebrated Field herd, champion herd of the world, sired by Pietrie Hengerville out DeKok, the best bull of the world. He is the only sire that has 20 daughters that only over 30 the butter in 7 days officially. Price reasonable.

A. D. FOSTER,
E 6-4-28-09 Bloomfield.

HOLSTEINS

I have only three sons of Brightest Canary to offer for sale. Speak quick if you want one.

GORDON H. MANHARD
Leeds Co., Ont.
E 5-5-09

NEIL SANGSTER

OBMTOWN, QUE.
Breeder of Holstein-Friesian cattle of high-class merit. Young stock of both sexes for sale. Write for prices 6-4-29-09

A. C. HALLMAN, Breslau, Ont.
E 6-4-29-09 Waterloo Co., Ont.

FOR SALE—One Holstein Bull, eighteen months old, of Dekol and Merceon breeding. Samuel Lemon, Lynden, Ont. 8-4-09

FOR SALE, CHOICE SELECTION SHROPSHIRE EWES AND RAM LAMBS

Can supply rams or trios not skin. Short-horn, French, all ages, and 12 months old bull calf, bred by George Johnston, Champlain, sire by Brilliant Star (Imp.) 0-6-35.

A very choice red calf, also Berkshire pig, and fat-tailed sow, ready for September delivery. Price reasonable.
WM. A. WALLACE,
E 6-0-08 Osgoode Station, C. P. R., Kars P. O., Ont.

E. O. CLIFFORD, "The Maple," Oshawa, Ont. Breeder of Herefords. Stock for sale. Long distance phone. 6-10-15

AYRSHIRES

SPRINCFIELD AYRSHIRES
Imported and home bred stock of all ages for sale. See our stock at the leading shows this fall. Write for prices.
ROBT. HUNTER & SONS
Masville, Ont.
Long distance phone. E 5-4-09

Ayrshire on St. Marguerite Farm
Have been selected from the best milking strains in Scotland, are large showy and male, with great milking ability. A number of young bulls for sale ranging from 2 years to several months. Also Tamworth pigs and Shropshire Sheep. Write for prices.
P. A. GOUIN, Proprietor,
E 12-9-08 Three Rivers, Que.

HUME FARM AYRSHIRES

Our 1908 importation has landed, consisting in females of 3 year old, 1 year olds, yearlings and calves. In bulls yearlings, and calves, dams record up to 1,100 lbs and 160 lbs. Also a few choice calves from our own Record of Merit sires and dams. Female, any desired age, either Imp. or home bred. Dams and see our herd. Phone in residence, Hilda Station, O.T.R. 6-2-08

ALEX. HUME & CO.,
Menie, P. O. E 12-9-08

NEIDPATH AYRSHIRES

Bull calves dropped this spring. By imported Bull. First prize Toronto, Ottawa, and Halifax. Long distance phone. 6-4-09

W. W. BALLANTYNE,
Stratford, Ont.

SPRINGBROOK AYRSHIRES

are noted for being large producers of milk, testing high in butter fat, and of all ages for sale. A few choice bull calves of 1908 now ready to ship. Price low. Write or call on
W. F. STEPHEN,
Huntingdon, Que.
E 4-4-09

STONECROFT STOCK FARM

Harold M. Morgan, prop. See Anne de Belleville. Choice young heifers, Bulls and Heifers for sale. Yorkshire pig, and Imported Hires and Canada, Figs and March Hires. Large selection. Highest weight. Write for prices.

E 5-30-09 E. W. BJORKELAND, Manager.

THE SUNNY SIDE HEREFORDS

FOR SALE—A choice herd of 10 heifers and 8 bulls, from 10 to 24 months old, at bargain prices. Also a few cows with calf by side, and bred again, can be spared.
M. H. O'NEIL
Lucan Sts. Southgate P.O.

THE HONESTA'D HERD OF ABERDEEN ANGUS CATTLE.

Present offerings: 4 months old bull, sire Toronto champion, also cows and heifers of the choicest breeding. Must be sold to make room, at prices that will surpass you.
WM. ISCHE, Proprietor
Sebringville, Ont.
E 6-2

Salem Herd of Shorthorns

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	Date Met/g	Boarded	Lowest Price	Highest Price	Boarded	Lowest Price	Highest Price
London	July 25	176	few sales	11 1-16	670	few sales	11 1-16
Strling	" 28	880		11 1-16			
Maced	" 29	758		11 15-16	1,185	11 15-16	11 1-16
Alexandria	" 30	825	11 13-16	12 1-16			
Belleville	" 30	2,480	11 15-16	12 1-16	235	12 1-16	12 1-16
Brockville	" 30	1,865		12 1-16	1,800	12 1-16	12 1-16
Kingston	" 30	393	12 1-16	3-10	478	12 1-16	3-10
Russel	" 30	340		12 1-16	50		12 1-16
Frank's Hill	" 31	1,541		12 1-16			
Winchester	" 30	749		12 1-16			
Corwall	" 31	887		12 1-16	437		12 1-16
Lister	" 31	3,069		12 1-16	170		12 1-16
Napanee	" 31	735		12 1-16	430		12 1-16
Ottawa	" 31	698		12 1-16	400		3-10
Peterborough	" 31	1,000		12 1-16			
Pictou	" 31	845	cool cured	12 1-16	1,005	ordinary	12 1-16

		Quebec
St. Hyacinthe	July 25	450
Covansville	" 25	400
Shedbrook	" 27	91
Victoriaville	" 31	4 cars

		New York
Watertown	July 25	9,000
Canton	" 25	2,000

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