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**The CANADIAN LAIRYMAN
AND
FARMING WORLD**

Headick, J. A. (Ed.)
Dept. of Agriculture

PETERBORO, ONT. OCTOBER 21, 1908



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This field is located near Armstrong, in the Okanagan Valley. It produced 20 tons of marketable cabbage per acre, and 14 tons 140 pounds of marketable potatoes per acre. No fertilizers were used. This shows the remarkable fertility of land in the valleys of the Pacific Province.

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is the only machine that can lay claim to being the best, and it must be, as thousands of users say so.

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Rural Mail Delivery

The rural mail delivery which is being put into effect along several stage routes in older Ontario is being inaugurated under the following conditions:

Any person living on or contiguous to a rural mail route and not within one-quarter mile of the corporate limits of any city, town or village, who desires his mail deposited at a given point on the line of the route by the mail courier may take advantage of the opportunity afforded. Such person shall provide and erect a box known as the "King Edward" mail box on the roadside, located in such a manner as to be reached by the courier without dismounting from his vehicle or horse. This box can only be obtained from the Post Office Department of Canada.

The price of the box, together with all the necessary fittings, except only the post on which it will be erected, cannot be determined at the present time, inasmuch as the price will vary materially depend on the number of boxes required. The Department is therefore, purchasing the boxes for the trial routes and charging them, leaving the price to be determined after it is seen what the full number of boxes required to equip the existing routes will be. Several thousand boxes have been ordered for the trial routes. One thing is absolutely certain, at whatever price they are supplied by the manufacturers the same price will be charged the patrons using the boxes.

The post to which the box is to be permanently attached, and which is to be provided by the patron, must be approximately four feet two inches above the road level, and must be erected upon the roadside so as to be conveniently reached by the courier without leaving his rig or dismounting from his horse. Each box must have conspicuously painted or stencilled upon it the name of the patron or owner.

Any person living off the line of travel of a rural mail courier is at liberty to purchase and erect one of these boxes at the cross-road or any other point on the courier's route for the reception of matter addressed to him or mailed by him as the case may be.

In addition to carrying the mail to the various post offices on his route the courier will, therefore, be required to receive from any postmaster on the route any mail matter that may be entrusted to him outside of the usual mail bag, and shall carry such mail to and deposit it in the proper rural mail box placed on the line of the route for this purpose. He will also be required to collect the mail from the rural mail boxes erected along this line of travel and to deposit the same in the next post office at which he arrives.

The services performed by the courier will be without charge to the persons sending or receiving mail, but the Department will allow the courier a fixed sum per annum for each box served by him on his route.

Rules of Dairy Herd Competition

As announced some time ago in these columns, the Dairymen's Association of Western Ontario will conduct a dairy herd competition open to patrons of cheese factories and creameries in Western Ontario. The prizes as mentioned before, are in two groups of five prizes each, one group for cheese factories and the other for creamery patrons. The association offers \$100 in cash prizes in addition to the two medals donated by Ryrrie Bros., Toronto.

In the cheese factory section, the prizes are (1) silver medal, and \$15 cash to the patron who furnishes the largest amount of milk per cow to any cheese factory in Western Ontario from May 1 to October 31, 1908; (2) \$15 cash; (3) \$10 cash; (4), \$6

cash; (5), \$4 cash. The prizes in the creamery sections are (1) a bronze medal and \$15 cash to the patron who furnishes the largest amount of butter fat per cow to any creamery in Western Ontario from May 1 to October 31, 1908; (2), \$15 cash; (3), \$10 cash; (4), \$6 cash; (5), \$4 cash.

No herd of fewer than eight cows will be allowed to compete in the competition. The figures upon which the awards will be placed must be taken from the factory or creamery or creamery books and the number of cows and the total and average amounts of milk or butter fat must be certified to by the cheese or butter-maker and the secretary of the cheese factory or creamery. The average amount of milk or butter fat per cow must be calculated on the basis of the total number of cows from which milk or cream is sent to the factory during a season of six months. No substitution of one cow for another will be allowed.

All applications must be in the secretary's hands on or before Nov. 30, 1908. They should be addressed to Frank Hens, Sec. Western Dairymen's Association, Toronto. Applications must be filled out and returned to the secretary by December 15th, after which the investigating committee will be sent to verify the statements. There will be no fee to enter the competition but every applicant must be a member of the Western Ontario Dairymen's Association, the fee for which is \$1.

The Case Against The Milk Producers

At a recent meeting of the Toronto Retail Milk Dealers' Association it was decided to press the case against the officers of the Toronto Milk Producers' Association who were charged recently with being an obstacle to the free trade because the farmers, who were members of the association, recently agreed upon a price at which they would sell their milk and refused to sell as individuals to the dealers at prices or under conditions not approved by the association. The Canadian Dairymen and Farming World is in receipt of a letter from one of the officers of the Milk Producers' Association stating that they do not expect that the dealers will press the case as in the preliminary proceedings that were held some time ago the dealers had made out a very poor case against the producers.

It is a poor rule that will not work both ways. For some years the members of the Retail Milk Dealers' Association of Toronto have held regular meetings and twice a year have agreed upon the prices that they would charge the milk consumers of Toronto for their milk. It would be an easy matter for some of the consumers to prosecute the members of the Milk Dealers' Association for combining on just the same grounds that the dealers are trying to prosecute the farmers. Their chances of success would be even better.

Even should the dealers succeed in gaining a decision against the Milk Producers, which is something that is not at all likely the producers would be able to form a company under conditions that would make it possible for practically all the producers to join, just as easily as they now join their association and for them then to sell their milk as a company. Under such conditions there could be no charge of combine and the producers would be even better organized than they are at present.

Rabbits Wanted.—A subscriber at Fort Elgin, Ont. who wants to know where he can get some young rabbits, well bred, is advised to write to R. Ballantyne, Bracebridge, Ont., or to R. G. Foster, 50 Saultier street, Toronto, Ont.

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The CANADIAN DAIRYMAN AND FARMING WORLD



Only \$1.00
a Year

AGRICULTURE, THE KEYSTONE OF CANADIAN PROSPERITY

VOL. XXVII.

FOR WEEK ENDING OCTOBER 21, 1908

No. 40

A JUDGE WHO IS A FARMER

HON. Justice R. C. Clute, although a judge in the Supreme Court of Ontario, believes that farming is the noblest profession of all. When court commences he has, of necessity, to attend that he may help to settle the disputes of his fellow men. When court closes he retires with pleasure to his farm at Aurora, Ont., some 25 miles north of Toronto, where he spends the greater part of his vacations. On this farm Justice Clute is trying some interesting experiments in agriculture.

Not having had the benefit of a practical training in agriculture Justice Clute has endeavored to equip himself to manage his farm successfully both by observation and by reading the books on agricultural subjects that have been written by the leading agriculture authorities of the continent. His library includes such books as Successful Agriculture, by Wm. Rennie, Sr., various works by the late Prof. Henry, of Wisconsin, Roberts of Cornell University, L. H. Bailey, Land Drainage, by Miles & Waring, Cattle Breeding and Management, by Warfield, and numerous books on Landscape Gardening.

In this way he has gained a fund of valuable information that thousands of successful farmers, who have spent their lives on their farms, might well wish to possess.

Sometime since, when Justice Clute found it necessary to do some underdraining on his farm, he first purchased three or four books dealing with underdraining. By reading them carefully he soon acquired a thorough knowledge of the principles of underdraining and thus was able to give some of the men on his farm information on the subject that was of great value to them. In the same way Justice Clute has studied the most modern methods of growing soiling crops, ventilating farm buildings and kindred subjects and now he is applying the information that he has thus acquired to good advantage in the management of his farm.

This farm was purchased in 1903. Previous to that period Justice Clute obtained considerable experience in farming through a large wheat farm that he owned in Southern Manitoba, from 1881 to 1897. During those years he met with the reverses that are always to be expected. Three different years he lost practically every crop on his farm. One year through hail, one year through drought, and a third year through an early frost. Even these reverses did not dampen his interest in agriculture.

FROM BEEF TO DAIRY CATTLE

When his present farm was purchased in 1903, he stocked it at first with some excellent pure-bred Shorthorn cattle. Shortly afterwards, when the price of beef gave indications of falling off, and the price of dairy products was advancing, and about the time the United States breeders succeeded in having restrictions placed on the importation of Canadian pure-bred cattle into the United States, Justice Clute concluded that in Ontario at least more money could be made in dairy cattle than in beef cattle. He, therefore, disposed of his Shorthorns and replaced them with Ayrshires, his foundation stock being secured from stock purchased of Mr. Wm. Stewart, the well known Ayrshire breeder at Menie.

Justice Clute believes that on his 110-acre farm he ought to be able to keep at least 30 milk cows and an equal number of young stock. He does not go as far as those who advocate the keeping of one cow to the acre. In order that 60 head of cattle may be kept on his farm he is gradually enriching his farm and introducing methods of management that he believes will enable him to accomplish his purpose. "I am very much impressed with the soiling system of feeding cattle," he told a representative of The Canadian Dairyman and Farming World, who spent an enjoyable day at his place recently. "I believe," he said, "that in many cases cows can be kept in the

stable during the hot summer months and fed on soiling crops more cheaply than they can be pastured. Breeding cattle should, however, be turned out at night as they need exercise and will do better if they get it at night. Some people claim that cows do not need exercise. I am persuaded however, that they do as they seem to enjoy getting out. It is a matter where we should consult the pleasure of the cows somewhat. During August, the cows were fed in the stable on alfalfa, when it was in proper condition and on corn cut fresh."

The farm comprises 110 acres of excellent land well watered, there being a running stream in every field. It is essentially a dairy farm. The stock comprise 41 head of cattle including 16 excellent Ayrshire milk cows, eight yearling heifers and a splendid three-year-old bull, violet's King of Burnside \$2,855, sired by Barchesky's King's Own, the champion Ayrshire bull of Canada during 1906, 1907 and 1908. There are 17 head of young stock.

RUN ON A PAVING BASIS

Unlike some wealthy people who have taken up farming more or less as a pleasure, Justice Clute is not expending any large sums of money in his farm operations. The buildings that were on the farm when he purchased it have been utilized. They have been improved in various ways, such as by the installation of a system of ventilation in the stables, the raising of the ceilings and the erection of a silo and milk house, but all in a manner within the reach of almost any ordinary farmer.

One thing Justice Clute believes in strongly and that is that the farm house and surroundings should be made as attractive as possible. His farm foreman has built a commodious verandah across the front of the house that is greatly enjoyed by the members of the family. There is a lawn at the front and on both sides of the house. A rustic gate, made out of cedar posts, has been erected at the entrance to the drive-way which

WE WANT A NEW NAME FOR OUR PAPER

We want to receive suggestions from our readers for a new name for our paper. The present name "The Canadian Dairyman and Farming World" is too long. It takes up too much room. It takes too long to speak it, and to write it.

Can you suggest a better name? We want a name that will be short and one that will stand for something. It must show, first and foremost, that this paper is devoted to the great farming interests. It must show, also, that it is devoted, as well, to the great dairy industry, the most important single line of industry in Canada. What can you suggest?

To the person who is the first to send us the name that is ultimately adopted we will pay \$3.00. All others who suggest the same name will have their subscriptions extended for two months. The only condition that we impose is that those who take part in this competition shall send us a short letter with the name they suggest, telling us why they prefer the name they submit. This competition will close on November 8th. Names submitted after that date will not be considered. Should any of our readers prefer to see the present name retained they are invited to write us to that effect, giving their reasons.

REASON FOR THE PRESENT NAME

The present name of the paper was adopted last winter when The Rural Publishing Company, Limited, purchased the two papers, The Canadian Dairyman and The Farming World, and united them in the present publication. The new name would have been introduced at that time but for the fact that the two papers were united immediately after their purchase was completed leaving no time in which to announce the adoption of a new name. It was decided, therefore, to retain, for the time being, the names of both old papers in order that the subscribers and advertisers of both papers might not be confused by too sudden a change.

Our subscribers are asked to bear in mind that while we are planning to change the present name of the paper no other change of any kind will be made except that the present features are to be strengthened and improved. In every other respect the paper will be conducted and managed just as at present. The new name will not be adopted until the first of next year.

Now! who will be the first to submit the winning name? Let us hear from you SOON.

THE RURAL PUBLISHING CO., LIMITED.

crosses a rustic bridge, also made out of cedar posts. Neither the gate nor the bridge are expensive and they could be duplicated by any farmer. Shrubs and flowers are being grown in a small plot at the back of the house and later will be so transplanted, that when they grow up they will serve to keep much of the view of the stables from the house.

Justice Clute is fortunate in that he has as manager of his farm Mr. Russell, who has had practical training as a farmer. The agreement with Justice Clute and Mr. Russell, reached when they commenced the joint management of the farm, is working satisfactorily. Justice Clute owns the farm and all its equipment, including the live stock. Mr. Russell has charge of the management of the farm, engages the help and takes this responsibility from Justice Clute. The profits from the farm are shared equally between them. If any of the farm implements have to be replaced they each bear their share of the cost. Both appear to be thoroughly satisfied with this arrangement and the farm shows the result of the careful management it is receiving.

"I study the books on agriculture and the experimental station bulletins," said Justice Clute, "and when I find information that I believe will be of value to us I wait until a rainy day comes, or some other good opportunity, and then Mr. Russell and I go over it together and decide just how much of it we can apply on the farm."

LIKES ALFALFA

"I think that there is nothing that can be grown on a dairy farm to better advantage than alfalfa or lucerne. Four years ago we sowed 2½ acres of alfalfa. Notwithstanding the fact that it has not been given a good chance, inasmuch as the stock have been allowed to crop it down in the fall, it has produced splendid crops. Last fall I put about 60 pigs, young and old, on this alfalfa and it was astonishing how well they did. They all enjoyed it. This year we have cut 6½ tons of hay off that land and although it has been cut only a week it already has made wonderful growth. If the farmers of Canada fully understood the value of good drainage and alfalfa I believe that they could add 25 per cent. to the productiveness of their farms and that, I feel, is a low estimate.

"This year I have sowed eight additional acres of alfalfa and next year I will put in eight more. I want to grow 25 or 30 acres of alfalfa and the same acreage of corn. I am not keeping any hogs now and, therefore, do not require so much grain. Corn stands first as regards the quantity of feed that can be grown to the acre and lucerne is a close second. In fact I am not sure that lucerne does come second to corn as the more experience I have with it the better I like it. I have read a number of books relating to the growing of lucerne and the experience I have had with this crop bears out all that I have read."

A SPLENDID SILO

A silo that has been erected by Justice Clute is one of the best of the kind we have ever seen. It has been up for three years and is 14 x 30 feet. It is built on a cement foundation and cost complete \$214.00. This included the cost of hauling the gravel, the purchase of the lumber and the painting of the silo. Although it is a wood silo, no iron hoops were used. The frame-work consists of upright scantlings 2 x 4 inches set 14 inches apart. These scantlings are of different heights in order that the strain of supporting the structure may be divided. The lumber is a half inch thick by six inches wide, planed on one side. There is a double boarding on the inside and the outside is a clap-board finish. There is a dead air space between the lumber. "I consider this dead air space," said Justice Clute, "is of great importance as it assists materially in preserving the silage in good condition. It is most important also that in the construction of a silo only the best lumber shall be used. A few dollars spent in purchasing good lumber will prove a wise expenditure. It is well,

where possible, to secure boards free from knots. Where this cannot be done, when the knots come out they should be sealed over with tin."

Justice Clute purposes trying an interesting experiment. He is going to take his first crop of alfalfa and put it in the silo green that it may be used for summer feeding. Experiments of this kind have been tried by others with more or less success. He realizes that this system of feeding is still in its experimental stage but thinks that it is worth trying. This feed will be kept in a new silo that is being planned. For soiling crops, Justice Clute, grows nothing but corn and alfalfa.

The system of ventilation used in the cow stable is a combination of the Rutherford, King and cotton systems. Pipes in the form of the capital letter U run from the outside to the inside of the walls of the barn. From the outside they rise three or four feet above the ground and on the inside of the wall about five feet. The windows are so constructed that one foot, at the top of each window, is on hinges opening on the inside. Cotton is placed over these openings. When the wind is high the windows can be partially closed thus controlling the quantity of air admitted. Small openings in the ceiling let out the foul air. Justice Clute believes that if these outlets were carried down to near the floor it would be an improvement, as the warm air near the ceiling would not be allowed to escape and the impure air near the floor would be drawn off. The stable, he states, is never damp in winter nor is there ever any foul odor.

"Any farmer," said Justice Clute, "can put U pipes in new barns at a cost of not over 25c a pipe. Old barns can be fitted with a system of ventilation such as I have at a cost of not over \$5.00. There is absolutely no reason why every farmer should not have good ventilation in his stable. In the winter, on very windy days, when I find that the air is entering the stable too rapidly, I control it by throwing a piece of bagging or cloth over the intake pipes. In this way the air is then admitted at a normal rate."

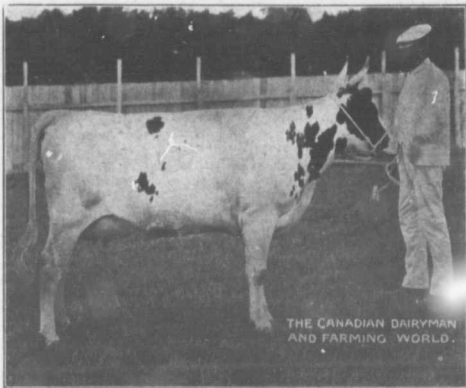
SHIPS HIS MILK

All the milk produced on the farm is sold to the City Dairy, Toronto. Justice Clute, holds some very strong views in regard to the decision in the milk award last year made at the time the Toronto milk producers went on strike for a higher price for their milk. He feels that the arbitrators did not understand the difficulties under which the farmers produced their milk. "The City Dairy," said Justice Clute, "by its published statements shows that after paying all expenses and good salaries it still gives its shareholders a dividend of 7 per cent. I would like to see the farmer, who after allowing himself, his wife, and his children a reasonable sum for their services, is making 7 per cent. interest out of his farm. I do not believe that there is a farmer who is doing it and it is because the farmers have to buy everything they need on the farm, their implements, their clothes, their building material, &c., the prices of which, in most cases, are set by the manufacturers by an agreement among themselves."

BETTER BREEDING METHODS NEEDED

Justice Clute is a great lover of good horses. He holds that indiscriminate breeding is causing the

farmers of Ontario an annual loss of millions of dollars. "Twenty years ago," said Justice Clute, "I advocated that the government should cooperate with the farmers by insisting that unsound stallions should not be allowed to travel the country and by assisting in introducing a better type of stallions. I am willing to give \$400 for a good combination horse that can be used for driving or the saddle. I have been looking for such a horse for several months, and have been unable to find one. Such animals would sell faster than they can be produced and yet very few of them are produced by farmers." Justice Clute is very



THE CANADIAN DAIRYMAN AND FARMING WORLD.

Southwick Meg. (Imp.)

1st in two-year-old class at the Sherbrooke and Ottawa Exhibitions, 1908. Owned by Hector Gordon, Howick, Que.

much in favor of the legislation being asked for by the Horse Breeders' Association of Ontario, mention of which has been made from time to time in these columns.

Among the improvements that have been made on the farm since Justice Clute took charge have been the construction of the barns, the erection of a commodious and well constructed milk house, and the installation of a system of watering the cows in the stable. The water is first filtered through a bed of sand before it enters the well. Considerable underdraining has been done.

In the course of conversation Justice Clute summed up his view of farming when he said: "It isn't the money you make out of it, but it is the doing of each farm operation to the best of your ability." Any farmer who would like to visit Justice Clute's farm may rest assured that he will receive a hearty welcome and that any information that can be furnished to him will be given gladly.—H. B. C.

The Potato Harvest

John Fister, Macdonald College, Que.

Now that the potato harvest is under way, great care should be taken to see that the crop is stored in a suitable place, especially when it is to be used for seed purposes. More depends on this than many of us realize. Too often, potatoes are put in cellars that are either too warm or too cold, with the result that their germinating power is greatly reduced.

In the spring, farmers break the sprouts off potatoes and plant the potatoes. They do not realize that these sprouts have taken considerable strength out of the potatoes. Later, when the potatoes do not do well, they wonder what the reason was and blame the weather, or something else that had had nothing to do with it.

WHEN TO DIG

Do not dig potatoes either too early or too late. If they are left out too late the frost will injure the germs in the seed potatoes and reduce their

yield the following year. A temperature of about 40 degrees should keep potatoes from sprouting and yet keep them in good condition. Potatoes that show signs of rotting should be separated from the rest.

DIGGING MACHINES

A farmer who grows only an acre or two of potatoes can make a splendid digger at but slight expense. Secure an old plow that has been cast aside. Take off the mould-board and attach the two handles to a standard. Get your blacksmith to make an attachment that will go on the sole of the plow and have four prongs, extending out behind the plow and slanting upwards with an elevation at the back of about eight inches. This will make an excellent and cheap potato digger.

Where potatoes are grown more extensively a more expensive digger will give better results. A digger with a large revolving wheel behind, that I have used has given me good satisfaction. It is not wise for the average farmer to buy very large diggers as they require too much horse power and they are too complicated. Two teams of horses are required to work them properly.

Preparing Colonies for Winter Quarters

W. J. Hollerman, Brant Co., Ont.

The time to prepare bees for winter quarters is now at hand. Next year's honey crop depends largely upon the condition in which bees emerge from their long confinement.

Each hive must have a queen at this season of the year. If a stock of bees is queenless when put away for the winter we are certain of losing it before next year's honey season. The quickest way to make sure a hive has a queen, is to pull out one or more of the centre combs from the brood chambers, and examine them. If eggs are laid uniformly in a cluster at the bottoms of some of the cells, we may be sure a queen has been present within at least three days. If no eggs are

located where buckwheat, goldenrod, etc., are to be found, the drones are allowed to run in much longer in the hive, than is generally the case. However, there is very little chance of suitable weather so late in the season.

REQUEENING THE COLONY

The beekeeper who depends largely upon his colonies for a living, either has young mated queens ready for just such an emergency, or has ordered a few from a queen-breeder, and introduces these into his hives. September is a good time of year to supply young mated queens to colonies, whether queenless or not. Queens may be obtained through referring to advertisements in any of the leading Bee Journals.

After we are assured that the hives have each a good laying queen, the next consideration, and probably one of as much importance, is to make sure that each colony has an abundance of fresh capped stores for winter consumption. Old honey should not be allowed to remain in the hives from year to year as there is a great danger, of a large percentage of pollen being in it and pollen is the chief cause of dysentery, and consequent loss of bees.

One of the worst enemies to wintering bees successfully, is honey dew. This is produced by a plant louse, which is often found upon the under side of oak leaves. When the louse has eaten its fill it squirts a drop of sweet liquid upon the leaves under it. Bees, probably attracted by the smell, gather this honey dew. Oak trees seem to be alive with bees, when much honey dew is present. Honey dew has a dark, almost sooty appearance, and when much is present most of the honey should be extracted and sugar syrup fed in place of it.

MAKING THE SYRUP

To make the syrup take two parts of granulated sugar to one part water, heat over a fire until the sugar is all dissolved. Then bring it to a boil. It should be kept from burning by frequent stirring. To feed the syrup, place a quilt over the tops of the combs in the brood-chambers, then place a super on top of this, and after turning one corner of the quilt back a couple of inches, set a pan of warm syrup in the super. Throw in some straw, or sticks of wood for the bees to stand on while they are taking the syrup. Cover the whole over with another cloth and then place the cover on the super. Be sure the super and brood-chamber fit tightly, as a crack large enough for the entrance of one bee may mean the loss of the entire colony through robbing.

An eight-frame colony of the Langstroth type should weigh at least 60 pounds, before being packed for the winter, whether wintered outside or in the cellar.

There are many arguments as to whether bees do better, in the cellar or packed in outer-cases. However, it is acknowledged that if they are to be packed outside in outer-cases, a thickness of from six to eight inches of forest leaves is necessary around the sides of the hive. An entrance should be kept by putting a bridge around and over the entrance, to allow a free passage of air

into the hive, and also to allow the bees to dispose of their dead as well as to take every opportunity to fly. The more flights the bees have during the winter and early spring, the less likely they are to have dysentery. It is well to have a straw mat, or a cushion packed with leaves, placed over the tops of the quilt over the combs; then the cover is put on top of this. The mat absorbs the moisture that condenses over the tops of the combs and keeps the bees dry and warm.

If possible the entrances should be turned toward the south. This is impossible when four hives are packed together, as a great many winter them. A sheltered place, where the snow does not drift in is a very suitable location for winter. g.

WINTERING IN THE CELLAR

A clean dry cellar where the temperature varies but slightly, and where the bees will be little disturbed, and kept dark, is a very suitable place to winter bees. It is less work to simply carry the hives into the cellar, remove the combs, place a straw mat or a cushion of shavings or leaves over the tops of the combs,—not removing the quilt, then pile them one above the other, leaving the covers off. The entrances of the hives must be kept free from dead bees. This may be done by very gently taking a wire or similar tool, and running it along in the entrance thus seeing that it is free from blockage. The temperature of the cellar should be kept about 42 degrees F. if possible. No light should be allowed to get into the cellar as the bees will fly to it and become lost. When cleaning entrances or in the cellar with the colonies, a candle should be used for illuminating purposes.

A Promising Improvement in Mangels

H. C. Duff, O. A. C., Guelph

The results of experiments at the Ontario Agricultural College, point towards the possibility of a farmer producing his own mangel seed with profit.

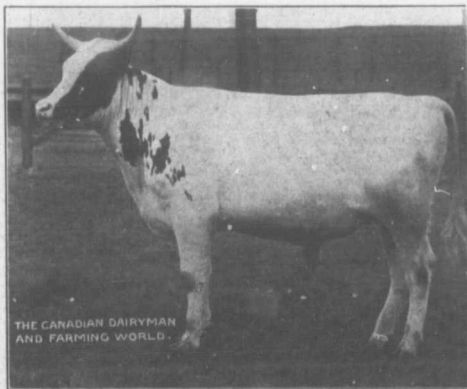
In the fall of 1906, a few desirable mangels were stored away at the college and were re-planted in the spring. From seed thus obtained, plots were sown in 1907, which gave yields ranging from 29 tons to 83.6 tons an acre. The three highest yields were 53.6, 50.9 and 49.2 tons an acre. For the same year the Yellow Leviathan which has proven to be the best yielding European variety, gave a yield of 39.7 tons an acre. Such a difference is striking, and should induce farmers to experiment in this direction.

Very few roots would be required to produce the quantity of mangel-seed sown by the average grower. One plant yields, under favorable conditions of soil, temperature, etc., a large amount of seed. The soil at the college is a clay loam but, from experience in growing sugar-beet seed, we believe that light soil forces the rapid formation of seed just as the girdling of an apple tree forces the rapid formation of fruit buds.

Most of our mangel seed is brought from European countries where the winters are free from heavy frosts. In such climates the roots are left in the soil during the winter months and accordingly little labor is involved in harvesting the seed. In our severe climate, mangels grown for seed must be stored away in the fall and re-planted in the spring. The extra labor involved is likely to prevent the production of Canadian seed for commercial purposes.

While the area of the turnip crop in Ontario, is almost 15,000 acres less this year than it was in 1906, it is significant that the area of mangels has varied very little in the same period. Being immune from such pests as the turnip louse and blight, mangels are growing in popularity with every prospect of becoming our main root crop. Consequently any improvement that can be made in the yield of the crop is worthy of attention.

Photographs and articles are always welcomed for publication in these columns.



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Morton Mains Southorpe (Imp.)

1st in Junior Yearling Class and Diploma for best Ayrshire male at Halifax, N. S., and St. John, N. B., exhibitions, 1908. Owned by C. A. Archibald, Truro, N. S.

present, but instead young grubs or capped brood are to be found, we may yet be fairly certain that the hive has a queen. In such a case she has probably stopped laying, owing to the lack of honey for brooding.

To the person who merely keeps a few colonies for his own table honey or a small quantity of marketable produce, requeening is an almost impossible proposition, for this season. If a comb of young brood and eggs is given the queenless colony, the young queen, taking three weeks to hatch from the egg stage, will arrive too late in the season to be properly mated, although in some

I. H. C.

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If you need a cream separator, call on the International local agent and talk the matter over with him. He will supply you with catalogs and full particulars. Or, if you prefer, write direct to the nearest office. You will be interested in securing a copy of "Development of the Cream Separator," or colored hanger which will be mailed on request.

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The Feeders' Corner

Pulped Apples for Cows

Would you kindly inform me through your paper regarding the feeding of pulped apples mixed with chopped grain to cows? Are they injurious, or are they productive of an increased supply of milk? What would be the probable quantity to feed? Some people claim apples decrease the flow of milk—G. B., Waterdown, Ont.

Apples can be fed with profit to dairy cows. Many are of the opinion that apples dry them up, as you state. If fed in too large quantities, this assertion is all too true. When fed judiciously, however, in moderate quantities, they are an excellent food. We have fed them for years and at one time fed large quantities of pumice from a cider mill. We had a good sized scoop shovel full to each cow twice a day. Having never weighed the quantity, it is difficult to state just what it would weigh. Any grain fed was mixed on top of the pulped apples in the manger. Of course it is not safe to feed whole apples, as there is danger of choking—J. C.

Early Feeding Pays

Ed, The Dairyman and Farming World—We believe in stabling our cows at night as early as it becomes cold or wet. When silage is plentiful, we commence feeding immediately from the silo. When the corn is scarce, we feed chaff and roots for a time in addition to a little meal composed of oats, barley and peas. In our experience, the early feeding of cows in the fall pays handsomely. Cows or any other stock should not be turned away hungry in the morning when the grass is frozen as they fall more in one week on such treatment than they will regain in a month.

Our ration is composed of silage, chaff, cut hay and straw fed twice a day. The meal is spread over in the manger. The silo is the only profitable way to feed cows. All our coarse grains are fed at home. Our cattle are allowed out each day for water and exercise. A sheltered yard is shed under the barn is provided for their convenience.—Walter Thompson, Halton Co., Ont.

The Proper Way to Milk

The operation which consists in milking, is as well known, a "rational message which has as its result the drawing from the cow's udder a far greater quantity of milk than that which it contained at the beginning of the operation. It is known says a writer in the "Moniteur" that the udder of a good cow contains, before milking, about 3½ pints of milk already formed, but that if milking be well carried out no less than 2½ to 3½ gallons may be secured. According to the experiments carried out by M. Lepontre, it is also known that the method of milking exercises considerable influence on the proportion of fatty matters contained in the milk.

The above authority has shown that this is due to the peripheral excitation of the nerves of secretion which, in their turn, by reflex action bring about far greater excitation of the granular cells. If we consider the usual way of milking, which consists in milking two quarters at the same time, we find that the effect produced is not the same for the whole period of milking. The milk from the first two quarters generally contains more fatty matters than that of the last two, and the richness of the milk will be enhanced if the milking be done diagonally instead of laterally.

This phenomenon is at least singular, even if it be not incomprehensible,

and it is explained by the fact that by milking diagonally excitation extends to all the nerves of the gland whilst, when the operation is done laterally, excitation is only produced on the side on which one operates. In every case the influence of the matter of milking on the proportion of fatty matters is demonstrated by the following experiment of M. Lepontre. The same cows were milked separately and at the same time by two different persons, who changed sides with each milking, and the milk coming from each side was kept distinct. One of the persons who operated merely exerted alternate pressure on the teat, whilst the other operated by longitudinal massage. The milk produced by this latter process was more fatty than the other, the difference being between 45 and 55 per cent. The way in which the cow is milked has therefore a great influence on the quality of the milk, and this influence can only be explained by the excitation produced.

The milk obtained at the beginning of the operation, consisting in the quantity of milk not as fatty as that at the end of the process. Until now this phenomenon was explained by the fact that slightly prolonged milking ended by detaching the particles of butter adhering to the coatings of the lactiferous vessels. This, however, is not the opinion of M. Lepontre, he observes that the operation is usually more vigorous at the end than at the beginning, and that consequently excitation must be stronger, and the reflex action greater on the mammillary tissues, thereby producing a lactiferous secretion richer in fatty matters.

Overhead Pipes for Water

A unique method of conveying water from the wind-mill to the barn was noticed recently by a representative of The Dairyman and Farming World, while visiting at the farm of Mr. Gordon Manhard of Manhard, in Leeds County, near Brockville. Instead of laying the pipes under the ground, as is commonly done, Mr. Manhard ran them up at the wind-mill 25 feet and from there direct to the barn. The distance from the wind-mill to the barn is 120 feet.

In order that the water might run through the pipes rapidly, the pipes were given a five-foot slant. The pipes have been up for four years, during which time they have given perfect satisfaction. Our representative asked Mr. Manhard how it was that the pipes, being exposed to the air, did not freeze in winter. Mr. Manhard explained that the water runs through the pipes so quickly into the tank in the barn that it does not have time to freeze.

"Or, you might have I had trouble from freezing," said Mr. Manhard; "in each case it was due to slight dews having been made in the pipes which allowed the water to settle. The pipes froze at those points. It was easy to tell where they had frozen. All I had to do was to take the pipes apart at that place and thaw them out. I have had a great many people visit my farm and nothing has attracted their attention more than this system of carrying water to the stable."

Feed More Roots.—The dairymen of Canada do not appreciate the value of roots as feed for dairy cattle. They are easy on the land, they are a good crop for cleaning the soil, and freeing it from weeds, and they leave the soil in better condition for the crops that are to follow—John Fisher, Mgr. MacDonald College Farm, Ste. Anne de Bellevue, Que.

We want a new name for The Canadian Dairyman and Farming World. Can you suggest one? Notice our announcement on Page 3.

Improving Western Wheat

Outstanding amongst the many recent evidences of Canada's rapid growth and development, is the rapid filling up of the west; the fast-growing acreage of wheat, oats, barley and flax, and the increasing power that that section is wielding in the affairs of the Dominion. The time was when "easterners regarded" the west as a sort of no man's land, and resented the efforts of the Dominion Government to exploit and develop it. That view has been relegated to oblivion, and it succeeded by the realization that much of the prosperity of the country as a whole depends on the west, on the wheat crop of which all eyes are turned at present. Westerners themselves realize that their country is preeminently a wheat-growing one, and acting on this, are doing much to increase the yield and improve the quality. To secure, good, clean seed, to encourage its more intensive use, and to foster more careful remunerative farming, competitions in standing fields of seed grain are held by the various agricultural societies, and are judged by competent men provided by the Seed Branch. The interest in the competitions is increasing from year to year. In 1906, when they were first estab-

other points, are expected to have a similar prize, in addition to those generally offered, and it is only a matter of a very short time, until most of the societies in the province will put on classes of this sort. When this condition of affairs is brought about, the improved cereal improvement will be *deca*.

A prize of this sort is especially valuable as it combines the best points of the seed in the province for the advancement of the grain in Saskatchewan to-day, the field competition and the seed fair. The strong point of the former is the ease with which the wheat's purity as to varieties can be estimated. This is especially true of Red Flax, amongst which bearded or foreign varieties can be readily detected. When examining the grain in the field an idea can also be formed as to its freedom from weeds, its uniformity, size of head, strength of straw, and other particulars used to make up the yield, and determine the quality. The great advantage of the seed fair is in having before one the harvested product. One can see how clean it is, and just how plump and well formed a very good idea of its fitness for milling or seed purposes. The one weak point is, however, the impossibility of accurately telling how pure it is as to variety. This is overcome when a class is put on for wheat that is entered in the field competition.

SEED FAIRS FLOURISHING

The prospect for an increase in the number of seed fairs in the province next winter are of the brightest. Three years ago, when they were first started, seven were held. The year following there were 21, and last winter 43 agricultural societies held them. During the coming winter it is expected that nearly every agricultural society will have its seed fair. There is throughout the west, but especially in Saskatchewan, a rapidly increasing realization of the need for and the value of good seed. We realize that it is the few extra bushels an acre that makes the profit; that it is the little extra care that secures the high grade and the remunerative price, and that it is the wheat a little better than the rest that gives Canada her present proud position as the home of the world's best hard wheat. Sound business principles prompt us to grow the best and true patriotism leaves us no other choice.—H. M.

Cow Pox

Cows have sores on their udders. Hard swellings that often appear in centre of swellings; this breast matter escapes, and a scab forms which, after a while, falls off, leaving a sore to appear, etc. My cows had a similar trouble last year.—E. A. P.

This is a cow pox. It is contagious. The contents of a udder squeezed from cow to cow by contact, the hand of the milker, etc. Isolate the diseased. The person who milks them should not touch the healthy cows without having changed his clothing and thoroughly disinfected his hands. Get an ointment of 4 drams boracic acid and 20 drops of quinine acid dissolved with 2 oz. vaseline and dress the sores spots 3 times daily with it.

Trouble Over Drainage

Ten years ago, A tile-drained a portion of his farm. Before doing so, he went and 20 drops of quinine acid dissolved with 2 oz. vaseline and dress the sores spots 3 times daily with it.

The contractor, a really clever fellow, and requested him to provide or pay for extra size tile in order to carry the surplus water from his farm, when he was ready to drain it. B claimed that he did not believe in drainage, and stated he would not provide the extra tile. He has now changed his mind and is tiling his farm with five-inch tile, making his outlet 13 rods back from the house on a large overflow. A has three-inch tile, which is large enough to carry the water from his farm to the outlet of the five-inch tile of B. In B's within his right in emptying 13 rods back in an open ditch

or can he be forced to carry his drainage water across A's farm?—A. N., Norfolk Co., Ont.

B has a right, so far as his neighbor A is concerned, to allow the surface water flowing through B's land to flow in and upon the land of A, but the law does not give him the right to accumulate surface water by means of tile drains and to discharge the same upon his neighbor's land, or to accumulate it in such a way upon his own land that it must from the necessity of things discharge itself in largely increased quantities upon the land of his neighbor.

The answer to Subscriber's question necessarily therefore is, that if B wishes to bring the water through particular tile drains to a particular portion of B's land so that it is an injury to A's land, A is entitled to take legal measures to restrain him.

Recipe for Whitewash

Would you kindly publish a good recipe for making a whitewash to be used for inside work, in cow stable and hen house? Would kalsomine make a better job?—E. A. Emblesville, Que.

The recipe that you request for whitewash to apply to the inside of a stable or hen house is as follows: Lime, 2 lbs.; water, 1 gallon; skim milk, 1 quart. Kalsomine would not make a satisfactory article for the purpose mentioned and would be too expensive.

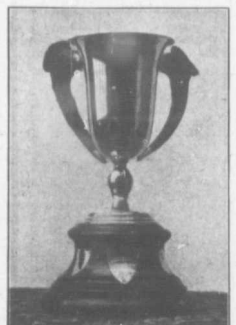
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R. P. Langford Cup

A \$50 silver cup presented to Wolseley Agricultural Society for Red Flax Wheat. In 1907, there were 31 competitions, with a total of 224 fields entered. The next year 38 societies took up the work and there were 298 fields entered, while this summer 45 societies out of the 65 in the province, held competitions. The Provincial Department of Agriculture makes a grant of \$100 for each competition of the sort, but, not content with this, many societies have increased the prize money out of their own pockets, and have held field competitions for both wheat and oats. In some cases as much as \$250 was offered in prizes.

SILVER CUPS OFFERED

An encouraging feature of the competitions is the interest that is being taken in them, not only by the farmers, but also by the townspeople. As an illustration of this the Wolseley Agricultural Society might be mentioned. Mr. R. P. Langford, of that town, has offered a \$50 silver cup to the wheat making the highest number of points counting those given it in the field competition, and those secured at the seed fair, the cup to become the property of the exhibitor who first wins it three times. The Moose Jaw Times has offered to the Moose Jaw Agricultural Society, a \$75 silver cup to be competed for under the same conditions. The Agricultural Club at Duck Lake, Davidson, Qu'Appelle and Indian Head, and

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HORTICULTURE

New Brunswick Fruit Notes

J. C. Gilman, York Co., N.B.

Apple picking is about done. With the exception of a high wind on October 2nd, the weather has been the finest, in a number of years, for harvesting. The result will be fruit handled in better condition and more satisfactory to all.

Full and early winter apples are a good medium crop, and there are some nice lots of later kinds. Prices are very good. Duchess are gone at \$1.00 to \$1.45. Wealthy, Dudley and Alexander are bringing from \$1.25 to \$2.00 in this market. Fameuse are selling from \$2.00 to \$3.20, with McIntosh \$1.00 better to private trade.

Where strawberry fields have received good care the plants have made good growth and will go into winter in good condition. Currant, gooseberry and raspberry bushes have also made good growth and look very promising for next season.

The Herbet raspberry is giving a good account of itself, coming through last winter alive to the tips and yielding a good crop of nice berries. It promises to be a valuable addition to the fruit gardens of the colder parts. We hope some one will give us a blackberry equally hardy and prolific.

Exhibition Dates Changed

The dates for the holding of the fifth annual Ontario Horticultural Exhibition have been moved forward one day, to enable the opening being held on the evening of Thanksgiving Day, Nov. 9. It is expected that the exhibition this year will eclipse any previous effort of the association and will be the largest exhibition of its kind ever held in America.

The exhibition has outgrown Massey Hall and will be held this year in the St. Lawrence Arena, King Street East, Toronto. This is the building that has so successfully accommodated the Horse Show, the Automobile Show, and various other large public functions. The exhibition will continue during the entire week. Each evening there will be a programme in which the regimental bands of Toronto will take part.

The entrance to the Arena and the Arena itself will be lavishly decorated with bay trees, plants, flowers, fruit and hunting. In fact it will be almost impossible to recognize the building after the decorators have finished their work. The Arena will be divided into four parts for the showing of flowers, fruit, vegetables, etc. These sections will be divided by colonnades and arches. The effect of the whole will be one of the most pleasing sights one can imagine. The decorated dining tables, set complete to seat eight persons, are expected to be one of the features of the exhibition. There is great interest among the Toronto decorators and caterers, to see who can set up the most artistic and correctly set dining table. This feature will attract thousands of ladies who are interested in matters of this nature. The whole building will be comfortably heated, and there will be seats for those who wish to sit and enjoy the music and the beautiful flowers.

Soil Moisture and Its Control

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

(Continued from last week)

In 1903, a severe and unusual drought prevailed at Ottawa during the spring and early summer months. It afforded an excellent opportunity to prosecute this research on the conservation of soil moisture. On 23, on adjoining plots, the moisture in the cultivated soil was 12.65 per cent.; in the soil under sod, 4.78 per

cent.—a difference equivalent to 180 tons of water per acre. The soil of the cultivated plot was quite moist to the touch and the trees did not wither or suffer; the soil under the sod was a powder, apparently dry, and the leaves of the trees had begun to wither and fall. Enough has been said, it will not be necessary to follow the results in detail throughout the season till the drought broke. They emphasize the very exhaustive character of soil as regards moisture and furnish proof of the immense value of cultivation in arresting the drying out of soils. Further, in another series of tests, it was pointed out the desirability of early turning under the corn crop and, if this is done by the plow, immediately working the soil with the cultivator in order to again set up capillary action with the underlying soil and creating an earth mulch to prevent surface evaporation.

Our experiment with Ottawa and Napan show that the practice of growing a grain crop in the orchard is to be condemned, for it makes an unusually large draft on the soil moisture at a time when the trees most require it. Trials were made with oats, winter rye and buckwheat. It will prove of interest to cite certain of the data we obtained. First, with regard to rye: During the first month of the investigation, May 9 to June 9, the growing rye reduced the water content of the soil 5.83 per cent., equivalent to a loss of 150 tons of water per acre of 14 inches, over and above that lost on the adjoining cultivated plot—and this in spite of the fact that during that period there had been 2½ inches of rain. By June 23, the percentage of moisture in the rye plot was still further reduced though the cultivated soil maintained its initial percentage. This continued until a determination made about the middle of July showed that one-third the water content in the rye plot compared with that of the cultivated soil. The data of the oat and buckwheat plots are of a similar nature, though in certain particulars, not quite so pronounced as those from the winter rye.

We also estimated the losses of soil moisture caused by growing a grain crop as compared with those resulting from the growth of the legume crops—clover and hairy vetch—and found in every instance that the soil bearing the grain crop suffered the greater loss. This is probably owing in a large measure not to greater transpiration, but to surface evaporation being more active in the grain covered soil; the soil carrying the clover and vetch is much shaded by their foliage, and thus evaporation is checked.

The effect of the various legume crops upon the soil moisture has been very fully studied. As it would be impossible now to recount all our experiments, I would present the following summary of the results obtained:

Soil moisture is retained by cultivation, is lost growing a crop. This is especially true of spring, summer and autumn and, consequently, in this system, we have a means of controlling the water supply of our orchard trees at all seasons during which it may affect their life or thrive.

The difference in the moisture content of the soils from adjoining plots, the one under cultivation, the other supporting a growing crop, is dependent upon several factors, and in no instance may vary from a few tons

to more than 200 tons per acre, in the surface 14 in. of soil.

The larger the rainfall the less the difference in moisture content of these two plots, and vice versa. Cultivation is all the more necessary with a restricted or limited rainfall.

The amount of transpiring surface or foliage evaporating at the loss of soil moisture; the larger the crop the more water it takes from the soil.

The character of the soil determines in some measure the amount of loss. If capillarity is easily set up in the undisturbed soil, viz., that which is bearing a crop, water escapes by surface evaporation at the rate of the loss. The shade afforded by a cover crop prevents in a degree surface evaporation.

Cutting the cover crop and using the material as a mulch, checks the loss of soil moisture. This allows, in some districts and on certain soils, growing the cover crop throughout the summer with a view to affecting the water supply of the trees.

National Apple Show

It is expected that the National Apple Show will be held in Spokane, Wash., Dec. 7-12, will be the greatest exhibition of its kind ever held in the world. The total value of premiums amounts to over \$30,000. The secretary is Mr. H. G. Neely of Spokane.

A premium of \$1,500 calls for a carload exhibit of 210 barrels or 630 50-pound boxes of one or more varieties. A premium of \$1,000 is offered for barrels of not more than two barrels, baskets or plates of one variety. The exhibitor of the largest apple of regular shape, with perfect stem and calyx and without disease or blemish, will receive a reproduction of the fruit in bronze heavily plated in gold and mounted on a silver pedestal representing Adam and Eve in the Garden of Eden.

Tests with Beans and Peas

H. S. Peart, Horticultural Experiment Station, Jordan Harbor, Ont.

At the beginning of our work with varieties of vegetables, we endeavored to secure the leading varieties that have been placed upon the market. Although we grew 104 varieties of beans and 109 varieties of peas, many are entirely useless. We would suggest the following, those being worthy of trial by our vegetable growers and kitchen gardeners.

Among the best early beans are Earliest Hopkins Red Valentine, Long Pod Forcer, Davis Kidney, Bountiful Bush, Early Red Valentine, Longfellow and New California Wax. Prolific German Wax, Dwarf Horticultural, Stringless Green Pod, Mighty Nice, Rennie's XXX Best Green, Imperial Golden Wax, Giant Stringless Green Pod, Early Red Valentine, ripen somewhat later, giving a succession of picking. Hodson's Wax was decidedly the heaviest cropper we had but New Pearl Wax, Black Wax, Refugee Improved and Large White Marrowfat are worthy of further trial for late crop.

The peas which we would recommend are as follows—Briggs' Extra Early, Rural New Yorker, He-Leon's Little Gem, First of All, Prolific Early Market and Rawson's Clipper. Medium Early, giving a succession of picking, Stratagem, Telegraph, Burpee's Profusion, Heroine, Horsford's Market Garden, Mammoth Melting Sugar, Burpee's Quantity, and Dwarf Gray Sugar. Late—Rennie's Queen Matchless, Early Dwarf, Bitter

Sugar, Bliss Everlasting, Long Island Mammoth, Black Eyed Marrowfat, Marblehead, Early Marrowfat, Prolific and Royal Dwarf White Marrowfat.

While there are a number of other varieties grown throughout the province, these are the ones that have proved to be the best with us this season. Growers should not form the opinion that we are recommending these varieties only. Further tests may show that some of the others may be superior to those mentioned.

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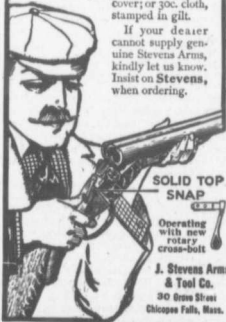
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"Guns and Gunning," by Dan Beard—all about hunting and shooting, game, the care of a gun, etc., will be sent, postpaid, for 25c. paper cover or 30c. cloth, stamped in gilt.

If your dealer cannot supply genuine Stevens guns, kindly let us know. Instruct on Stevens, when ordering.



HOW TO BUILD A GOOD FENCE

Everyone intending fence building should send for our folders on Erecting Fences. It's full of valuable information on fence building, tells how to erect fences, wire fencing, etc. It is sent free to those who send for it. It is a new wire and has an article quoted from Bulletin of U. S. Dept. of Agriculture on the conservation of soil moisture. On 23, on adjoining plots, the moisture in the cultivated soil was 12.65 per cent.; in the soil under sod, 4.78 per cent. It is desirable to mention the name of this publication when writing to advertisers



POULTRY YARD

A Record of Six Hundred Hens

A bulletin is just to hand from the West Virginia Agricultural Experiment Station giving one year's record of six hundred White Leghorn pullets. On the first of November they were put in a continuous curtain front house allowing a little over four square feet per hen. The average age was five months and the pullets weighed 2½ pounds each. Grain was fed in the litter, and a dry mash in the hopper. The mash was made up of a mixture of cornmeal, wheat, bran, wheat middlings, oil meal and beef scrap. In addition to this they were given grit, shell, green bone, and ensilage. The grain feed was mixed, chiefly wheat and corn. Wheat cost \$1.50 per hundred weight, and corn \$1.15. The total cost of feed for the six hundred hens for the year was \$334.50, or an average of 80 cents per head.

Fifty-four of the hens died, and their places were filled by others of the same age. The highest egg pro-

I have had no moisture in my poultry-house whatever.

The bottom of the house was first filled in with one foot of cobble stones. These were then covered with sandy loam which makes an ideal floor for fowl. The roosting quarters are all enclosed by burlap curtains in front and are lined up inside with tar paper and matched lumber. By a system of my own contrivances I can raise and lower all the six curtains in a moment by one lever. I use no artificial heat whatever in this poultry-house. We had the thermometer to register as low as 40 below zero last winter, yet I had not one frosted comb, and my fowl are nearly all of the single comb varieties.

For outside sheathing I used the Brantford Rubber Roofing, for both the sides and roof. Thus there is no possibility of a draught or leakage, and it makes a very warm building.

My hens layed well all last winter, beginning on the first day of November and never ceased to lay throughout the winter and spring. Every bird I had come through in perfect health and condition.

Late in October of 1907, I housed all my stock about 150 yearling hens and pullets. I have been breeding and culling for the past five years. As I have four varieties of fowl, I have div-

in the season the house can be put on the pasture field, the stable, the cornfield, etc., and by a judicious arrangement the bulk of the summer feed is obtained for the poultry, by taking them to the feed instead of hauling the feed to them. This system not only does away with the difficulty of keeping the poultry yard free from disease by changing the yard, but it enriches the farm by scattering the manure where it is most needed. If farmers kept two or more of these houses the hens could be put, say 25 in each for the winter, and when spring came and they were out on grass range they could be doubled up and the surplus house used for brooders and rearing the young stock during the summer. As the fall came round again the cockerels would be fed and marketed and the pullets allowed the house for winter quarters and so on. The system of feeding we use is very simple. During the summer, while on grass a hopper of grain is put in the house to which the hens have free access, they also have grit, shell and scraps before them. These hoppers require filling about once a week which is all the time spent in feeding. Though this grain is before them all the time it is the exception to see hens around the hopper when

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DOMINION AMMUNITION

you will find good and bad in it. In a flock of 225 hens, made up of four breeds, one half laid over 13,000 eggs, while the other half laid 5,000; this difference was not because of the breeds, for in one breed alone there was a flock that could be picked that averaged 140 eggs each, while another flock in the same pen averaged 14. So much difference within the breeds that I could not recommend any in particular. Be sure you get the right strain, or make it.—F. C. E.

Shipping Chicks

1. Which is the best way to ship chicks, live or dressed? 2. What breed do you prefer for fattening? 3. Is one pound wet good gain for a bird in a feeding cage? 4. Will salt in the feeding hurt the chicks? 5. Is peas a good fattening food?

1. If you have the proper means of cooking, do so. 2. Rocks or Wyandottes. 3. Yes. 4. No; a pinch of salt is relished, and is good for them. 5. As a mixture it does all right; alone, it makes a hard flesh that is not the best.—F. C. E.

A Poultry House That Has Given Good Results.

The photo, from which the illustration was taken, was first given in our Poultry House Photo competition last spring. The house is 60 feet by 12 feet. By means of muslin curtain ventilation it has been found possible to keep the walls free from moisture. Last fall the hens in the house began laying the first of November, and continued to lay throughout the winter although the temperature at times dropped to 40 degrees below zero. The house is owned by Mr. W. R. Kaiser, Leeds Co., Ont. See adjoining article.

duction was in March. The average was 113 eggs for the year. Selling at the retail market price for new-laid eggs they brought \$128.87. The expenditure was: Feed, \$534.50; labor \$120; dead fowls \$36; decreased value of stock, \$100; interest on investment, \$66; \$856.50, leaving a balance of \$602.28, or practically one dollar per hen.

The feed bill seems lighter than it would be in Canada owing doubtless to their lack of winter. The temperature would go below zero in the houses at times. Free range was allowed almost continually, and traps were used, the hens were kept as near as possible like farmers' conditions.—F. C. E.

Good Results From a Poultry House

W. R. Kaiser, Leeds Co., Ont.

The illustration on this page is of a poultry-house I built last summer. It is 60 feet long by 12 feet wide. Each pen is suitable for about 30 or 25 hens. The house faces the south. The front, or south side consists of two-thirds glass. One upper sash in each pen is covered with cheese-cloth only for ventilation. On bright sunny days I take out two or more sashes completely. By following this method

ided my runway into four yards. I kept the fowl yarded only in the brooding season. After the brooding season is over I shut up all my male birds and allow the hens to run at large.

Colony Houses for Farmers

A house such as was shown in The Dairyman and Farming World a week or two ago has a few advantages for a farmer's standpoint that might be well to note. It is a simple house easy to construct, any man that can use a saw and hammer can build one. It is easy to keep clean. No drop board is used and it is cleaned out once a week during the summer and once a fortnight during the winter. There are no dark corners hard to get at and where the lice hide. These houses are sprayed with Zenoleum once a week in the warm weather and less often as it gets colder. Two boys will spray pump in a cart sprays these houses at the rate of a minute to the house. In the winter the colony house can be placed near the barn or feed house, where it will have shelter and be convenient, when spring comes it can be moved out to the orchard or any place where it is clean and dry and where green grass will be available for the hens. Later

they can be out on range, they would far rather pick up what they eat fresh from the field, but the hopper ensures a constant supply. In winter the hopper is filled with dry bran or meal, and dry grain is scattered in the litter once a day. No hot or wet mashens are fed, the work is light but the results so far are very satisfactory.

The Best Breed

I want to keep poultry and would like to know which is the best breed to keep.—J. McN., Ontario.

Depends on what you are after; if eggs alone, take one of the light breeds; if both eggs and meat, better take one of the American breeds. Even when you have picked out your breed,



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The Canadian Dairyman AND Farming World

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The paid-in-advance subscriptions to The Canadian Dairyman and Farming World exceed 10,000. The total circulation of each issue, including copies of the paper sent to subscribers who are but slightly in arrears, and sample copies, varies from 11,000 copies (never less than 10,000) to 15,000 copies. Subscriptions unless renewed are discontinued as they expire. No subscriptions are taken for less than the full subscription rates. Thus our mailing list does not contain any dead circulation. Sundry detailed statements of the circulation of the paper showing its distribution by countries and provinces, will be mailed free on request.

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THE CANADIAN DAIRYMAN AND FARMING WORLD
PETERBORO, ONT.

TORONTO OFFICE:

Room 306 Manning Chambers, 72 Queen
St. West, Toronto.

TOO MANY SOCIETIES

In view of the fact that the Ontario Association of Fairs and Exhibitions has decided to ask the Ontario Government to increase its yearly direct grant to the societies from \$70,000 to \$100,000 a year, or by over forty per cent., it is advisable that the whole question shall be looked into very thoroughly.

The first agricultural societies were formed over 100 years ago. Most of them were established in the days when most parts of the province were just emerging out of the woods and out of the wilderness. At that time there were few railroads and the common roads of the country were so bad it required a day to travel only a few miles. In those days the county or local fair was the great event of the year. The settlers used to throng to it from all directions. Many of them

took three days to attend the fair, including a day going and another returning. They attended largely with the object of meeting friends whom they were able to see about only once a year. The lack of railroads and the poor roads made it impossible for people to attend from any great distances. The result was that societies sprang up in all parts of the province until there were some 400 of them.

During the last thirty or forty years conditions have changed completely. The country has become gridironed with railroads. Immense swamps have been drained and millions of dollars have been spent improving our country roads. The result is that it is now easier and cheaper, owing to the low excursion rates given, to go 100 miles over the railroads, to attend our large exhibitions than it used to be to drive 35 miles to a local exhibition. For the most part, however, our small local societies continue to exist although the need for many of them has long since disappeared. There are many small exhibitions that are doing splendid work. There are others at which almost nothing but grade stock is shown. That stock, often, is of the most inferior character. The prize offered by the societies are so small that it does not pay either farmers or breeders to exhibit. They do not encourage improvement.

What we want is fewer but larger and better exhibitions. Ontario would be better off if it had about only one half the number of agricultural societies that now exist. Even then there would be about three exhibitions for each county. The remaining societies would then represent larger districts, they would—on the present appropriation—receive about double their present government grants, they would be able to offer larger prizes and there would be a general improvement in the character of the stock and articles shown. This would all tend to make the exhibitions of greater educational value.

Instead of increasing the total grant to the agricultural societies the government will do well to encourage the holding of fewer but larger and better exhibitions. Our agricultural societies now receive grants in proportion to the amounts they expend for agricultural purposes. At present, none are allowed to draw a grant exceeding \$800. By increasing the maximum grant to \$1,500 or \$2,000 it would enable our larger and better societies to expand and improve, and in this way the poorer societies would gradually die as they failed to do enough work to justify their existence.

KEEPING THE CATTLE CLEAN

Now that the stabling season is at hand, some effort should be put forth to keep milch cows in a clean sanitary condition. Much can be done towards this end by clipping the flanks of the cattle with a pair of horse clippers. The rough hair from the brush of the tail up should also be clipped off, as well as all tags and coarse hair on the udder.

Frequently the stalls are too long, thus catching the droppings and making it impossible to keep a cow properly bodded. In such cases, the time required to shorten these stalls

and make them more suitable for their occupants will be well repaid. It is not only unpleasant to see filthy dairy cattle but it is highly unsanitary as well, for much of it is bound to drop off during the process of milking.

The Ontario Government has employed its sanitary inspectors to inspect dairy stables and where the conditions are not what they should be, to take action to be remedied. We may as well recognize and meet the great need for properly caring for cattle in this respect. Then should an inspector drop in, there would be nothing to be sorry for. At the beginning of the season is the time to attend to this matter.

CERTIFICATES FOR MAKERS

In considering this topic the question naturally arises, what is to be done with the maker now managing a factory but who cannot qualify for a certificate? It would be a hardship to deprive a man of his livelihood and prevent him from pursuing his calling, and in which he may have spent many years of his life. Some allowance would have to be made to meet cases of this kind. In fact it is doubtful if any body of legislators could be induced to pass legislation that would prevent a man from pursuing a calling in which he has lawfully engaged for many years. An interim certificate might be granted and a chance given the maker to improve.

We question, however, if there are many makers in Ontario, who have been in the business for a number of years and who have risen to the status of managers who could not qualify for a certificate under a pretty stiff examination. With regard to the few who could not qualify, the situation would work its own cure. It would not be necessary to prevent such from making cheese. The very fact that they were not possessors of certificates would make factory-owners hesitate about engaging them and it would not be long until they were out of the business altogether and engaged in some other calling.

So far as apprentices are concerned a law compelling makers to secure certificates would not inflict any hardships on these even if it came into force at once. If they could not qualify this year they could next, and if there was no possibility of their ever being able to do so, the industry would gain a great deal more than they would lose by withholding a certificate altogether. The dairy schools are some of the best factories in the land are open to such, and they have every opportunity to perfect themselves in their chosen calling. It is different with a married man with a family, who has been managing a factory for a time. He may find it difficult to get away even for a few weeks to attend a dairy school. If he could afford the time he might not be able to find the means to do so. The very fact that he has been engaged in the business for some years, and is not able to qualify for a certificate, would be an indication that he has spent his time in some small out-of-date factory, where there is no money in the business for anybody. Great leniency will have to be exercised towards these in

any legislation looking to the establishment of a system of granting certificates.

But this is of minor importance as compared with the greater advantages to be derived from such legislation. As we pointed out in a previous issue, the position of makers generally would be greatly improved by the granting of certificates. Their calling would be on a higher plane, there would be less competition for better standard of wages would prevail. The factories as well as the makers would be benefited. It would be worth something to a factory to know that the man they engaged to manage the business was qualified for the work. Factories could afford to pay a higher rate for making under such guarantee as to the quality of the product to be made.

Nevertheless, the devising of a scheme for granting certificates requires careful consideration. The standard must not be so high that it will shut out capable men on some mere technicality. Then again it must not be so low as to make the certificates of little value for the purpose for which they are intended, that of raising the status of the cheese and butter-makers of this country. A start might be made by granting certificates to makers who could qualify, but not making it compulsory for factories to engage only men with certificates. After a year or two a further step might be taken and allow no one to manage a factory unless he possessed a certificate.

HOME-GROWN MANGEL SEED

Attention may profitably be directed to the experiments recently carried on by the Experimental Department of the Ontario Agricultural College in connection with home grown mangel seed. These experiments are of particular interest just now owing to the partial failure of the mangel crop this past season, which failure was attributed in many instances to the inferior grade of seed that was on the market last spring. Mangels are becoming more and more popular on account of their freedom from pests, and the great difficulty experienced, of late years, in growing a profitable crop of turnips due to plant lice, rot and blight, to which they are heir.

If it is possible to increase our yields of mangels over ten tons an acre by means of home-grown seed, as was done in the Experimental Department of the Ontario Agricultural College last past year, it surely would be worth while to produce and use such seed. Although the practice of growing the seed in this climate is attended with considerable extra labor, a single root under favorable conditions produces a large amount of seed. Thus it is possible for one to produce at least all the seed required for his own use.

Considering the growing importance of the mangel crop to our dairy interests as well as to other branches of the live stock industry, the possibility of improving the yields, by so simple a method as outlined on another page of this issue, is worthy of note. Those who are all extensively engaged in the production of mangels for their stocks would do well to save a few

choice specimens this fall with the object of producing seed next year for use the following season.

Eastern Townships, Quebec, Notes

This season has been an unusual one. A cold, wet April, suddenly burst into summer weather with the advent of May. Seeding was retarded until late in the month owing to excessive rains. There being a heavy rainfall in May, the land became wet and soggy. It was difficult to get on the low-lying lands. These were not seeded until the last days of May or first days of June. Much of the early grain was sown on a wet and impacted seed-bed. When the hot droughty days of June came this land became baked. Consequently, the early sown grain crop was lighter than that sown later on a better seed bed. The growth of vegetables in May was almost unparalleled, and there was promise of a bountiful hay crop. It was sadly checked, however, by the drought of June, for day after day the scorching sun, and dry hot winds broken only by one good shower, put all vegetation at a standstill. The pastures became brown and bare, especially in the western parts of the province, and dairymen had to resort to feeding their cows forage crops and grain feeds to maintain the milk flow. In the Eastern Townships proper, this was not so noticeable. No matter how little rain, the pastures are usually fresh and verdant owing to the moist nature of the soil.

FORAGE AND ROOT CROPS

Grain is not a staple crop with the Eastern Townships farmer. More attention is paid to the growing of forage and root crops, and these latter crops can grow to perfection. West of the Richelieu River, on the flat clay lands, more grain is grown, and a shorter crop rotation is practised. Were we to point to one weakness in the economy of the Eastern Townships farmer, it is, his too long "crop rotation." Perhaps lack of "crop rotation," would be more in order. Frequently we have seen fields that had been "down to grass" for ten years or more giving only a fair return which had a short "crop rotation" been followed, twice the amount would have been realized an acre. They are getting into a short rotation system, however, and the sooner the better for Quebec agriculture.

If the grain reaches 60 per cent. of a crop it is all that we need expect. The short straw, we expect a good quality, as it has been comparatively free from rust, except in a few low localities. A light hay crop, and a lighter grain crop, is the reward of the Quebec husbandman this season. The one redeeming crop and one the farmers have learned to value highly, is the corn crop. This is a bumper crop this season, and few failures are noticed. The writer has already seen samples that measured 15 feet of a stalk, with full ears. Previous to 1908 we could boast of many of these. This year again, a large number of new ones being erected, principally of the stave make. They will be filled to overflowing, as the corn acreage is about 100 per cent. more than in previous years. This will help the stockmen and dairymen out very materially.

DAIRYMEN FARRING WELL

The milk flow dropped quite perceptibly during the latter part of July. The frequent showers in July, however, freshened up the pastures. These and the forage crops fed brought the milk flow up to nearly normal. Good prices have been realized for dairy products, netting the creamery patrons from 85 to 87 cents

and cheese patrons from 92 to 97 cents a cwt. for their milk for the month of July.

Owing to many new shippers the Montreal milk supply has been well maintained all season, and it is only within the past few weeks that the milkmen have complained of a shortage. It is expected that winter prices of milk in the city will be about the same as last year, 22 cents a gallon delivered in the city. While prices of roughage will be lower it is expected the price of grain feeds will be as high, if not higher. The condensary at Huntingdon has handled a big lot of milk this summer. Their capacity of 50,000 lbs. per day has been pretty well taxed at times. They have a growing demand for their "Reindeer" brand of milk, and "Jersey" brand of condensed cream, and have difficulty in filling their orders.

We cannot boast this season of overflowing bars, yet we will have sufficient to meet the needs of man and beast. Even though not a full year, our farmers will be in a much better position financially than the artisan, and many of the urban population. The capital of "Old Quebec" province was the centre of attraction last summer—celebrating the Tercentenary—and can boast of having the greatest pageant ever seen on the American continent. This great event, we trust, will draw the different races into a closer bond of union, and lead our people to a higher degree of citizenship.—"Habitat."

A Pure Bred Pig For You

Many have won pigs as premiums for securing subscriptions to The Canadian Dairyman and Farming World. So can you. We will give a pure-bred Yorkshire, Berkshire or Tamworth pig, boar or sow, four to eight weeks old, with pedigree eligible for registration, to any person who will send us only SEVEN new year subscriptions to our paper. These pigs are the best that can be obtained from Canada's leading breeders. Every pig that we have sent out has given the best of satisfaction. We are sure that you also would be well satisfied with one of these premiums, and that you will feel well repaid for the time spent in securing the seven subscriptions.

OTHER PREMIUM OFFERS

If you do not care for live stock just now, perhaps you would like to win some of our other premiums. Notice our clock offer on the back cover of this issue. It will not take much of your spare time to secure only two new subscriptions for The Canadian Dairyman and Farming World. If you would like to see our list of household premiums, drop us a postal, and we will gladly send it to you, together with sample copies, and everything necessary to begin your subscription. The work on the farm is becoming slack. Take up this subscription work now; you will reap the benefit later!

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"The Canadian Dairyman and Farming World is a good practical farm paper. It does not talk over the heads of the farmers."—Mr. David Armstrong, Peterboro Co., Ont.

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Last year we disposed of a large number of Pure Bred Pigs to those who sent us lists of New Subscriptions. All were well pleased with the prizes they secured, and stated that they felt well repaid for the time spent in securing the Subscriptions.

THE CANADIAN DAIRYMAN AND FARMING WORLD is a splendid paper for which to canvass. It contains each week up-to-date, practical articles which appeal to EVERY FARMER. It is well illustrated. It contains an excellent Household Department. It's Market Reports are the best that can be secured. YOUR NEIGHBORS WILL BE INTERESTED IF YOU SHOW THEM A COPY. Get the Subscriptions of Seven and then secure one of our Pure Bred Pigs.

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THE CANADIAN DAIRYMAN AND FARMING WORLD
PETERBORO, ONT.

Creamery Department

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

Five Years Experience in Making Butter for Exhibitions

W. M. Waddell, O. A. C., Guelph, Ont.

During the last five years I have practised the following method in making butter for show purposes and I credit my success at the different exhibitions to doing so:

About one week before the exhibition date, the butter-maker should be on the alert for a nice cool night. If the necessary precautions have been taken in caring for the milk, the raw material delivered to the creamery the succeeding morning will be of a superior quality.

Every bit of machinery through or over which the milk has to run must be thoroughly cleaned and be germ free. It is advisable to start the separators and skim for eight or ten minutes before the cream is run into the separator for exhibition purposes. The separators should skim a 35 or 40 per cent. cream for the best results. The flushing should be done over night to run into the exhibition cream.

Immediately after skimming pasteurization should be commenced. The cream should be heated to 160 or 175 degrees F. and kept at this temperature for 20 minutes. During the pasteurization, the cream should be gently agitated so as to prevent a layer of nitrogenous matter from forming over the cream, also to secure a uniform pasteurization and no cooked flavor.

This process of butter-making may be successfully followed in a creamery where there is neither a pasteurizer nor a cooler. The pasteurization and cooling may take place in the cream vat. Steam connections can easily be made to the cream vat by the aid of a steam hose. Cooling may be effected by the addition of plenty of ice (around the cream) and constant stirring. Ice should never be put into the cream.

When pasteurization is completed, the hot water should be run off, and pulverized or finely broken ice and cold water should be put in its place. A little salt placed upon the ice mill will quicken the cooling process. The cream ought to be cooled to 44 or 46 degrees F. Stirring should be continued so that the cream will be of a uniform thickness and temperature. After the cream has stood at a low temperature for three or four hours, or even over night, churning operations may be started.

Before transferring the cream from the vat to the churn about 20 per cent. of a good clean sweet culture, showing an acidity anywhere from .5 to .75 should be added. This insures the desired flavor and aroma.

The temperature of the cream will be 48 or 50 degrees F. after the addition of the culture which ought to be within the range of 60 and 65 degrees F. The churning should be finished within 30 or 45 minutes, all depending

upon the speed of the churn; the temperature and richness of the cream and the season of the year.

Just at that point when "breaking" begins it is well to add a pail of cold brine, which helps the particles of butter to adhere.

The churn should never be allowed to revolve after the granules are the size of wheat grains. The butter-milk should be drawn off immediately and the butter permitted to drain for 10 minutes. The butter should now be sprayed with fresh well-water at a temperature about 20 degrees higher than the churning temperature. When the spray runs off fairly run down the tap should be closed and more water than there is butter-milk should be added. To wash the butter the churn should be revolved at high speed from eight to fourteen times. As soon as allowed the wash water should be washed to run off and the butter permitted to drain again for 10 or 15 minutes.

Salting and working are the next steps. If the butter is for a salid case or for a salid case with a combined churn and worker will be sufficient. If the butter is to be salted it should be worked anywhere from 15 to 20 minutes as judgment demands.

The packages in which the exhibit is to be made should be neat, clean and attractive. Success is obtainable if the prize list calls for a solid package the firkin, crock or box should be filled as near to the top as possible. Points are taken off when a box is improperly packed. Double linings should always be used. All box-linings should be soaked in a strong brine solution for at least 12 hours.

The butter should be placed in cold storage as soon as possible after manufacturing. It is best to arrange the date of making so that you have not more than one week between manufacturing and scoring.

NOTE.—It might be well to point out that there is a very successful competitor in butter exhibitions in this and other countries. For three years previous to going to the O. A. C. exhibition at Guelph, Ontario, at the Western Dairyman's Association Exhibitions. He has taken first and second prizes at Toronto, London, and Ottawa. At Toronto this year his butter scored only one-quarter of a point below the butter that won the trophy. In point of fact Mr. Waddell's butter was higher in quality, but through some cause the box was broken on top and the judge scored the butter down on finish. In 1907, Mr. Waddell won the gold medal at Ottawa. This year he entered the lists with American makers at the New York State Fair at Syracuse. There were seven entries in the class. Mr. Waddell's butter was the only Canadian exhibit and won the first prize of \$30. At Syracuse also, the Misses Joyce and Colquhoun, showed in the women's class and carried off the first and second prizes. Canadian butter-makers evidently are capable of holding their own with the best.—Editor.

Making Prize Creamery Butter

Ed., The Dairyman and Farming World.—I, a patron of the cream-haulers, stating that we were going to make butter for the show, and asking them to take every precaution and to send in as sweet cream as possible. These instructions were carried out very well by the patrons, but the weather being very warm, the cream arrived in a rather sour condition.

Upon arrival at the factory the cream was pasteurized at 160 degrees and immediately cooled to 56 degrees. About 20 per cent. of good culture was at once added to the cream kept over the night at the above temperature. The cream was churned at 54 degrees and

the butter came in about 30 minutes. The butter was washed once with water at 50 degrees and then worked and salted in the usual manner.

I might say that the same method was adopted last year when I captured the trophy with a score of 97½ points. My score this year was 96½.—R. M. Player, Bruce Co., Ont.

The Skimming Station System Advocated

The Editor Dairyman and Farming World.—There is no reason why the skimming station system could not be adopted and carried out successfully in some parts of the 3,745,574 square miles of Canada. With a view to improvement in quality, it must be admitted by all that this is the system to be preferred. No doubt the cream gathering system could be made just as good as the farmers would take a little more care of their cream. In many instances, the cream is delivered every second day only, or once a week. In the latter case the result that when it reaches the factory it is found to be inferior in quality and in my opinion, it is impossible to treat it scientifically so as to be able to make a sound-keeping butter. Of course, in districts where the roads are in a bad condition, or where the distance from the factory or skimming station is too great for the hauling of milk, farmers are justified in adopting the principle of home separation.

The skimming station system is an important factor in the production of butter in New Zealand, some parts of Australia, and in the Republic of Argentina. I may point out, however, that none of these countries are pasteurizing their cream; they owe much of their success to the freezing principle. For the success of both systems a factory of modern description is required. The proper application of science is the key, and also practical and scientific management. Therefore, I take this opportunity to impress upon those who wish to enter into the industry, the importance of starting all new business, if possible, on the skimming station system.—Geo. Nielson, York Co., Ont.

How the "Trophy" Butter was Made

Ed., The Dairyman and Farming World.—I exhibited at the Toronto Exhibition this year and won several prizes, among them the silver cup trophy, awarded for the highest scoring butter. The butter exhibited was made from whole milk, but by two different processes for the different sections. The butter made by each process scored an equal number of points.

In the first process the milk of the previous night was brought into the factory with the morning's milk and separated. The milk was tested at about 50 per cent. fat. The cream was at once pasteurized to 145 degrees and immediately cooled to below 50 degrees. Sufficient pure culture ferment was added to bring it to an acidity of .35 in 24 hours, when it was churned. Churning occupied about one hour. Two per cent. of salt was used.

In the second process the butter was made by the sweet cream method formulated by J. D. Leclair, General Inspector of Syndicated Creameries in Quebec, and Superintendent of the Provincial Dairy School at St. Hyacinthe. The milk was separated giving a cream with 52 per cent. butter fat and pasteurized at 140 degrees. The cream was cooled at once to 45 degrees and churned at 50 degrees after reaching that temperature. The acidity of the cream at churning was .11. Pure culture ferment was added to the cream at once and the butter worked over the following formula: Acidity of pure culture, 1; acidity of cream,

If you should ask prize Butter-Makers what salt they use — they would say, "Windsor." For Windsor is the choice of Canadian dairymen everywhere. Ask your grocer.

Windsor Dairy Salt

1.4; percentage of pure culture used, 2. The temperature of the cream after adding the pure culture and at the commencement of churning was 45 degrees. The time of churning was 45 minutes and 2 per cent. of salt was used.

The latter process makes a very mild butter, but pronounced in flavor than that made by the former one. It is also of better keeping quality.—J. H. Leclair, Foster, Que.

Can you suggest a new and better name for The Canadian Dairyman and Farming World? If so, do so and win a prize. Notice our announcement on Page 3.

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MUST SELL—Good brick creamery in Western Ontario, doing good business, \$12,000, Box '8' Canadian Dairyman. B 112

FOR SALE—Two DeLaval Cream Separators—500 and 600 pounds capacity. Have had and used in work Republic of Argentina. I may point out, however, that none of these countries are pasteurizing their cream; they owe much of their success to the freezing principle. For the success of both systems a factory of modern description is required. The proper application of science is the key, and also practical and scientific management. Therefore, I take this opportunity to impress upon those who wish to enter into the industry, the importance of starting all new business, if possible, on the skimming station system.—Geo. Nielson, York Co., Ont.

CHEESE FACTORY FOR SALE. Tenders will be received by the undersigned up till Thursday, the 25th day of October, 1908, for the purchase of the Ellice and Logan Cheese and Butter Company's factory and plant, including a good new dwelling house and a number of milk-wagon platforms, situated on lot 28, con. 9, Ellice. The above factory is in first-class running order, in a good locality, and well patronized, making from 70 to 80 tons of cheese per season. There is also on the premises a never-failing well of good spring water. The highest and only tested milk in the new Original cost, \$100.00 and \$125.00. Bargain at \$55 and \$60. Remember Ellice are the Laval Cream Separators, the very best kind. Reason for sale, am not now in farm. Address: W. E. C., Canadian Dairyman, Peterboro, Ont. E-1028

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Cheese Department

Makers desirous 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.

Some Factories Closed for the Season

Reports from Eastern Ontario indicate a large falling off in the make of cheese. Several small factories have closed for the season, the supply of milk not being large enough to keep them running. It looks now as if the Canadian Dairyman and Farming World's estimate of 200,000 boxes as the shortage in this season's make as compared with that of 1907 would be far off the mark. At present prices for cheese this will mean a loss to the farmers of Canada of \$2,000,000.

A peculiar feature of the situation is that the price of cheese is not as high, by half a cent a pound, as it was the last week of August, before the dry season began, and this is the season when September cheese, usually the highest priced cheese of the year, is being marketed. It can only be accounted for by the fact that the trade in England has refused to follow the advance in price of a month or two ago. Receipts begin to show a large falling off and it looks as if the market should take a sharp turn upward very shortly.

Chief Instructor Publow reports the quality of the cheese being made this fall as being very fine. It usually is at this season as conditions are favorable for making cheese of the finest quality. There is, however, not the striking difference between summer and fall cheese there was a few years back. The quality is more uniform throughout the season, and the summer make is gradually being brought up to the standard of the finest September. For this work of the instructors is responsible. As patrons learn to look after the milk the cheese of any month will gradually approach the quality of the best. There is more uniformity not only in the quality of cheese made in different factories, but in the quality made any time during the season.

Cost Nothing as Compared with the Benefits

Editor, The Canadian Dairyman and Farming World.—In regard to pasteurizing whey, I am only too glad to give my experience. This is our first year in pasteurizing. We have been sending some of the whey back to the patrons for about seven years. Last season it all went back and we did not pasteurize it. We were very much troubled with "yeasty" or bitter flavor. Our patrons were very dissatisfied with the conditions of the whey, the acid being very hard on the cans and the cream would not mix, some would get none and others all of it.

This season we are pasteurizing the whey and our patrons are well satisfied with it. We are trying to do the best in the best possible way. We get each day's whey away the following day before the new whey is ready. Just as soon as the new whey starts to run off the vats we start the pump to elevate it to the upper tank. We then turn on the steam just enough to heat it as fast as the whey is elevated.

Heated at this stage the whey is almost as sweet as the next morning as when drawn from the vats. We heat it to 150 degrees. The tank is covered and the whey the next morning goes into the cans in about 30 to 40 degrees. Everything is in solution. There is no cream. We stir the whey several times during loading by turning on the steam.

Our patrons say that the cans are much easier washed and we know the tanks are nothing to clean as com-

pared with what they were last season. As regards the bitter flavor we have been entirely free from it so far this year and we are delighted with that part of it.

I believe pasteurizing the whey will pay in the saving in the cans alone, apart from its better feeding value. Pasteurizing saves the sugar and also the fat and each patron gets exactly the same quality of whey.

In regard to the care of the milk on the farm there has been great improvement. But there is still a great deal to be done, as we get too much acidity milk during the hot weather. This is a loss to the patrons, as it takes much more milk to lb of cheese when the milk works too fast.

I have given you in a rambling way what our experience has been with pasteurizing whey. I believe it is the only proper way to send whey back to the farms from the factory. It takes a lot of steam but the cost is nothing as compared with the results gained. Wm. A. Bothwell, Cheesemaker, Strathallan Factory, Oxford, Ont.

The Home Cheese Trade—No. 5

In closing this discussion on the home cheese trade a reference to the fancy brands of cheese made in Canada may not be out of place. These fancy brands are more numerous than there were a few years ago. There must be a demand for them at profitable prices for the manufacturer would not be continued. They are, however, as we have stated in previous issues, a luxury and bought mostly by the well-to-do, who like something out of the ordinary.

It is just a question whether there are not as many of these fancy brands being made and in sufficient quantities to supply the market there is for them. True, our cities are growing and the number of people who can afford luxuries, increasing every year. But are they increasing fast enough and are they now in sufficient numbers to warrant any extended effort on the part of our dairymen to take up this part of the market? We doubt it very much. It would not take very much enlargement on the present output to overstock the home market, and unless there was an outlet elsewhere the article would be a drag. For the present at least it will pay the rank and file of our dairymen to confine their attention to making the regular cheese. Here it is felt that Canada has been very successful in and practically controls the world's trade in Cheddar cheese to-day. It would not be good business to give up a good thing for something less stable, though possibly returning a larger profit to the manufacturer, who can make for his product. However, a fancy brand that will appeal to the more well-to-do of our people and command ready sale is a money-maker. There are, however, and have the means and facilities for placing it on the market in good shape, nor little risk of a failure. But capital, business experience and plenty of advertising are necessary to success, no matter how good the brand. For this reason the average cheese factory had better let well enough alone.

Of the fancy brands of cheese made in Canada, MacLaren's "Imperial" and Miller's "Paragon" are the best known. It is nearly twenty years since these two brands first entered the market, both appearing about the same time. The process of manufacture has never been made public and it is not known just how it is done. They are cream cheese put up in jars, which, as compared with what the ordinary cheese sells for, bring fancy prices. This brand of cheese is now sold in prints, like butter, only of different sizes. This method was adopted to lessen the cost. The fancy jars, in which the cheese had been sold are costly and increased the price to the consumer very much.

MacLaren's "Imperial" Cheese has had a very successful career. It is

as well, if not better known outside of Canada than in it. It's largest market is in the United States, where a factory is in operation for its manufacture. It is found in almost every civilized country the world over, and a trade has been established that is likely to continue so long as the quality is maintained at a high standard. Travellers speak of seeing it on the bill of fare on railway dining cars, and in first-class hotels in Europe, Australia and other countries. It is perhaps the best advertised and the best known of any food product made in Canada. The originator of the brand was Mr. A. F. MacLaren, M. P., Stratford, Ont. That it is so widely known to-day is largely because of his personality and his splendid advertising ability, though the article itself was of a kind that would appeal to the class of customers it sought for. Mr. MacLaren retired from active connection with the business a few years ago. While a large and profitable business has been built up for this brand of cheese, it has been at the expense of more time and money than the ordinary individual could give to it.

There is, and there always will be a limited demand in this country for foreign branded cheeses, such as Roquefort, Edam, and the like. There are people who buy this cheese because it comes from a foreign country.

Perhaps if they knew more about the conditions under which some of it is produced, their taste for it might wane. The MacLaren "Imperial" Cheese people now put up a brand of Cheddar cheese in jars, that appears to meet with ready sale. Other foreign brands could be produced here in like manner, but it is very doubtful, without one who is specially engaged in this line of work, whether it would be profitable. The demand, as we have already said, for this kind of cheese, is limited and the risk would be attached to a venture in a field where competition is strong, considering the extent of the market. Some fancy brand made to sell at a price within reach of the many might be made to go, but considerable capital would be required to carry the enterprise until the market was established. The ordinary factoryman is not in a position to do this but he can by supplying a better quality and better matured Cheddar cheese greatly increase the market for this product.

A dairymen's convention will be held in Chicago during the National Dairy Show which takes place Dec. 2-10, inclusive. Subjects of national importance will be dealt with by men well capable of doing so. These subjects will be of the highest interest to dairy farmers.

Can you suggest a new and better name for The Canadian Dairyman and Farming World? If so, do so and win a prize. Notice our announcement on Page 3.

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—Purington.

A Hallow'en Festival

By Virginia Frederic

ONCE a year, on the night of the last day of October, all maidens have an opportunity to look into the future and to ascertain their prospects in the matrimonial line. On that occasion, during the mysterious hours of Hallow'en, the powers of the spirit world are in control of things, spooks of all kinds are abroad, and witches go flying through the air on broomsticks, scattering good and bad fortunes.

Some clever girls, who thought that the witch with her cat and broom had become rather hackneyed, decided that they would give a Hallow'en party of a different kind.

As a color scheme they chose the red of apples, the yellow of corn, and the varied coloring of autumn leaves.

Invitations were sent out on post-cards—each different—showing owls, cats, leaves, grapes, corn, etc. The girls wore white dresses with red or yellow sashes.

On the night of the party, the home of the hostess was lighted by candles, covered by shades of red and green autumn leaves. Each person was given an ear of corn and a picnic plate, decorated; she was then told to shell the corn and count the kernels. A memorandum was kept of the numbers; and all the plates of corn were emptied into an immense wooden bowl decorated with autumn leaves. All the guests were asked to guess the number of kernels in the bowl, and two prizes were given to the man and girl making the closest guess. The man was given a shaving-paper case showing an ear of corn, and the lucky girl was remembered by a photograph frame also decorated in corn. As a means of finding partners for the evening, real autumn leaves had been gathered, and on the back of each was glued a slip of paper with a rhyme or fortune; duplicates were made, and the fortunes for the men were put in a bag of red tissue-paper, and for the girls in a bag of yellow; these were suspended from a door frame and a blindfolded girl struck one open, scattering the leaves for the girls to gather. The other was opened by a man in the same way, and the guests matched fortunes to find partners.

In one corner of the room an apple tree was represented by two step-ladders covered with green boughs, and suspended in these were red ap-

ples, to each apple being attached a souvenir of the evening. The apples were arranged so that the gifts did not show. After the autumn leaves had been gathered and partners found, the guests stopped at the apple tree, where two old fortune-tellers read their future from their palms, and bestowed on each an apple with its accompanying gift. They began all



kinds of apple games. If a girl wishes to ascertain some facts about the man she is to marry, she must conform to the rules of magic. For instance, in trying to learn the true lover's name, it is absolutely necessary to begin peeling the apple at the end opposite the stem. The peel must be taken off in one continuous ribbon, while the maiden employing the charm utters not a single word, but thinks all the



Biting at the Apple Suspended by a Cord.

time of the young man she likes best. Then she must whirl the strip of peel three times around her head, and let it fall upon the floor behind her; the apple paring will assume the form of the first letter of the name of her future husband. The seeds of an apple, of course, vary in number, and hence the opportunity for speculation. As she counts them the maiden recites: "One, I love; two, I love," etc.

If there is an open fire, much fun will be found in toasting apples and marshmallows over the glowing coals, while a good story-teller closes the evening with ghost stories.

The Menu.

Witches' Brew Broomsticks
Turkey in Magic Rings
Salad Served in Apple Cups
Nut Wafers
Cream Crescent Hallow'en Cake
Coffee Bonbons Nuts

The brew was bouillon, served with brown and white bread sandwiches, cut broom shape. Breast of turkey was served in a ring of cranberry jelly. The salad was made of celery, apples, nuts, raisins, and mayonnaise served in scooped-out apples. Pis-

Leaf Blotter.—This blotter, of green blotting-paper, nine by eleven inches, has mounted on it three leaves, cut from leather in shades of tan and green; the edges and outlines are burned and it is laced together by thongs of leather.



Bobbing for Apples in Pan of Water.

tachio and vanilla cream was sliced and cut into crescents. The Hallow'en cake was brought in with red candles burning on it, and on the platter surrounding the cake was burning brandy, in which large raisins were scattered. As it passed around, each guest tried to secure a raisin out of the flame. This is called "snap dragon" and the raisin grasped from the flame is supposed to bring good luck.

Favors and Prizes.

Cigar Case.—Tan leather forms this simple case—it is decorated with a monk's head, and bears the quotation: "It's better to smoke here than hereafter."

Match Case.—A cat head is cut from sand paper and glued, as a flap, to a little pocket for matches. Tan leather is used for the case, the edges being stitched by machine.

Whisk-Broom Holder.—The rope is

Candle Shades.—The candle shades for decorating the rooms are made of cardboard and tissue paper. The foundation of the candle shade is cardboard or white Bristol board; it may be covered with dull red and green maple leaves of tissue paper in autumnal tints.

Key Rack.—A seven-inch wood part covered with tan leather, a cat's face is burned on it and hooks are screwed in at intervals. It is suspended by leather thongs and tassels.

[See next page for illustrations of articles described above.]

A Barn Party for All Hallow'en

The night before All Saints' Day is the most sacred to midnight revels and rollicking fun of any day in the calendar for young folk. All the sprites of mischief are at liberty at nightfall, and their spirit is contagious. A crowd of girls wishing to entertain on this night lent themselves to the inspiration of the time, and as a result gave an opportunity for a frolic which stays long in the memory of those who were fortunate enough to be present.

The guests who were the men, were summoned by invitations printed upon corn husks, to appear promptly at the stroke of eight at the door of a new hay barn that had just been completed, on the edge of the town. The husks were rolled and tied with a twist of corn silk.

The next few days were busy ones, for the girls scoured the country for autumn leaves, pumpkins and corn stalks. When they stood back and viewed their finished work, the result was eminently satisfactory.

The side walls were banked with shocks of corn placed at intervals, as in a field, and at their base jack-o'-lanterns lay about, as if still on the vine. The ceilings were hung with festoons of red and yellow ears of corn. Large branches of gorgeously hued autumn leaves lent a touch of color in every available space.



In a far corner of the loft was a black draped gipsy tent containing a tripod and kettle; within, an artistically garbed gipsy maiden idled fortimes by cards and real palms. At the top of the tent a box with a moon cut in its side and covered with yellow paper shone down upon each who sought to know his fate. Just before

leaving the tent each man must look over his shoulder at the moon and learn the name of his future wife. As John Jones looked at the moon, a card was slipped into his hand bearing the name, "Mrs. John Jones."

When the men approached the barn they were met by pairs of silent ghosts in sheets and pillow cases, and conducted to the barn. Here twenty more ghosts, all just alike, received them in absolute silence. This feature, of course, was a surprise to the



Key-Rack, Twin-Ball Bag and Owl Shaving Case.

men, and they were completely mystified as to "who's who?" and "what's what?" After some twenty minutes spent in vain guesses, a tall witch in a red robe, appeared, and handed each man a paper bag containing twenty-five peanuts. Then, one by one, the sheeted figures were placed upon a block, and auctioned off for the first dance to the highest bidder, only peanuts being accepted as legal tender.



Maple Leaf Lamp Shade

The fun ran high until all were auctioned off. Silence was maintained on the part of the girls until after the dance, in spite of all efforts of their partners to make them talk. When the sheets and pillow cases came off the surprises were genuine.

Immediately programmes decorated with candles and pumpkins done in

water colors were passed. They were filled out as for a dance, the first one being the old Virginia reel. Three "gentlemen of color," with banjos and a violin, furnished the music.

The tunes were all old stand-by's, such as "Money Musk" and "The Arkansas Traveler." When partners were sought for the second number, there came another surprise. The girls led the way to the loft. Here were tubs of apples to bob for, apples suspended on strings to try your teeth on and heaps of apples to pare and test the future by casting the unbroken paring over the left shoulder, beholding it coil into the initial of one's future mate.

Dances and old time games occupied the next three numbers. All were then seated in convenient corners on the stairs and floors, and little baskets made from purple egg-plant and filled with cracked nuts were passed. Each basket contained an English walnut, which when cracked revealed a fortune written on very thin paper that had been concealed within the shell. Bright new horse shoe nails were used as nut picks. More dances and games of olden times filled out the programme.

When supper time came it was announced that the next number was not upon the programme, and would be lady's choice. At a signal the girls rushed to the end of the loft, where a mass of yellow tissue-paper chrysanthemums had been banked: each took two, and pinned one upon the gaiter she desired for her partner at supper. It was great fun to see the anxious look on the men's faces before they were chosen. The girls purposely deliberated before this choice, "just to let them see how it felt for once."

Supper was served in the carriage room. A long table in the centre of the room was spread with baskets made from large pumpkins filled with well-sugared doughnuts, pumpkin pies and all the harvest fruits; baskets made from gourds were filled with molasses taffy pulled until it was creamy golden. Coffee was served,

and in either corner a time-blacked keg of sweet cider was on tap.

Once more the banjos sounded, and the strains of "Home, Sweet Home," called us to a farewell waltz.

This entertainment was an unusual success, and all that it required was a little time from each girl. We all helped decorate the lawn the day before and put the last touches on the morning before the affair, so we were free by noon of that day. Two girls who were artistically inclined painted the programmes, two more made and ar-



Whisk-Broom Holder, Apple Stamp

ranged the egg-plant baskets, and another couple made the walnut fortunes. The rest all worked on the chrysanthemums. A committee of three had charge of the general arrangements that night, to see that all went well.

The cost of our festivities was very slight. Our decorations were all donated. The feasts of corn were returned. Our musicians charged us a dollar each. The paper for the chrysanthemums and incidentals came to three dollars, and the supper, apples, nuts, etc., included, came to fifteen dollars, thus making a total of twenty-one dollars for the entertainment of forty people.

A Sensible Hall Stand

Here is a sensible device for the hall, and one that is not beyond the ability of the home wood worker. This stand has hooks at each side to hang coats and wraps upon. It may well have two or three half way down, as well as at the top, to hang children's garments upon.

The umbrella holder has a drawer for a base, which is lined with galvanized iron, so that the water from wet umbrellas can be emptied out in a moment. Any tin-smith will make a tight lining of this sort. Above is a hat closet, for both men's and women's hats, since these are much better kept on shelves, shut away from dust, than upon hooks, where their weight soon pulls them out of shape. The whole case is so plain in treatment that it is readily made, and yet is of such artistic proportions that it will be an ornament to the hall. Use hand-sanding of grained wood and finish with an oil polish. The front of the closet door in the cut shows a looking glass which will be found a great convenience. In fact the closet door is simply a framed looking glass, with of course a wood backing on the inside. If a beveled edge glass can be afforded, it will greatly add to the beauty of the whole.—Blanche White, Hastings, Co., Ont.



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63 COLLEGE STREET, TORONTO, 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 soon 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.

DATE CAKES

One cup of flour, 1 cup of rolled oats, 2 tablespoons of brown sugar, 2 teaspoons of baking powder, and half pound of dripping, lard or butter, milk to roll out, cut in small squares or round with cake cutter, put dates between and bake in slow oven.

LEMON CAKE

Half cup of butter, 3 cups of sugar, 1 cup of milk, whites of 4 eggs, 2 teaspoons of baking powder, rind and juice of 1 lemon, 3 cups of flour. Icing: Twelve tablespoons of pulverized sugar, whites of 3 eggs, grated rind and juice of 1 lemon.

LAVER CARE

Two eggs, $\frac{1}{2}$ cup white sugar, 3 tablespoons butter, small $\frac{1}{2}$ cup sweet milk, 2 teaspoons baking powder, 1 good cup flour, flavor with vanilla. Cream Filling: One cup milk, 1 teaspoon corn starch, 1 egg, 1 tablespoon sugar. Boil and flavor with vanilla.

SALMON SOUP

Heat a quart of milk in a double boiler with a slice of onion and thicken with 1 tablespoon of flour creamed into 1 of butter. Add a teaspoon of salt, a speck of cayenne and half a can of salmon which has been chopped very fine. Serve when thoroughly hot.

CHICKEN SOUP

Always save the bones, shreds of meat and the gravy from stewed chicken for the soup kettle. If the

fowl is baked, add the bits of dressing for seasoning. Crack the large bones, pour over a sufficient quantity of cold water and place it on the back of the range where it can simmer gently for three or four hours. Season with salt, pepper, sage and butter. Just before serving, remove the bones, strain, add a pint of rich milk and a very little thickening. Turkey soup made in this manner is delicious.

MEATLESS VEGETABLE SOUP

Chop 3 carrots, 3 turnips and 3 onions fine and simmer 30 minutes in 3 quarts of boiling water. Then add a pint of stewed tomatoes, a small cabbage chopped fine and a bunch of herbs. Boil the soup 20 minutes, strain and add pepper and salt to taste, 1 teaspoon of sugar, 1 half cup of sweet cream and 1 tablespoon of flour stirred into two tablespoons of flour. Allow it to boil up and serve. A dash of cayenne pepper improves the flavor.

About Potatoes

Potatoes are at their best in the fall and keep well through the winter. By spring the starch is partially changed to dextrin, giving the potatoes a sweetness, and when cooked a waxiness, and when cooked a waxiness. The same change takes place when potatoes are frozen. Potatoes keep best in a cool, dry cellar, in barrels or piled in a bin. When sprouts appear on potatoes they should be removed as they receive their nourishment from the starch, and thus take from the value of the vegetable.

New potatoes may be compared to unripe fruit, the starch grains not having reached maturity; therefore, they should be excluded from the dietaries of children and invalids.

Potatoes are most easily digested when baked in a hot oven with their

jackets on. As soon as they are taken from the oven the skins should be ruptured, thus allowing the steam to escape, preventing the potatoes from becoming soggy.

Bank For All

One little girl we know has started to save her pennies in our little bank. Who else will join the list? During the winter months, when there are so many extra tasks to be done by the boys and girls on the farm, odd pennies now and then can be picked up and saved for use next summer. Our older boys and girls will be able to save more money, perhaps than their younger brothers and sisters. Why not secure for us two new subscribers for our paper for



one year at \$1.00 each, and obtain as a premium one of the little banks illustrated herewith?

This little bank is in the shape of a basket, and holds 300 ten cent pieces; the first ten cent piece locks the bank and it cannot be opened then until fifty ten cent pieces, or \$5 has been put in the bank. Only ten cent pieces are supposed to be put in the bank, and each one as it is deposited, registers the amount of money on the cover of the bank. The fiftieth ten cent piece when it is put in the bank unlocks it and the \$5 can then be taken out and put in the big bank, or used as desired. If it is wished to leave all the money in the bank until it is full, the fifty-first ten cent piece will lock the bank again. We can sell these banks only as a premium.

Try and secure for us two new subscribers and start a bank account for yourself. You will be surprised how fast it will grow.

To destroy worms in flower pots stick a quantity of sulphur matches head downward in the mould and then water the plant. The matches will soon poison the worms.

The Sewing Room

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



6082 Boy's Russian Blouse Suit, 4 to 8 years.

6081 Fancy Tucked Blouse, 32 to 42 bust.



60 9 Nine Gored Skirt, 22 to 32 waist.

6080 Infant's Petticoat, One Size.



6083 Girl's Over Dress, 9 to 14 years.

6086 Long or Short Skirt, small 32 or 31, Medium 36 or 30, Large 40 or 42 bust.

Improved Roller Gair

OF THE

"Puritan"

Reacting Washing Machine

This special feature alone, makes the "Puritan" the easiest running washing machine made. And the "Puritan" has several other improvements that are almost as important, to the woman who is going to use the "Puritan".



"Favorite" Churn

Is the favorite. There are more "Favorite" churns sold in Canada than all other makes combined. Patent foot and lever drive. Made in 8 sizes to churn from $\frac{1}{2}$ to 30 gallons of cream.

If your dealer does not handle these household favorites, write us.

DAVID MAXWELL & SONS

St. Mary's Cms.

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



"Black Knight" Stove Polish

does away with all the dirty work of keeping stoves clean. No mixing—no hard rubbing. "Black Knight" is always ready to use—shines quick as a wink—and puts on a bright, black polish that the hottest fire can't burn off. Equally good for Stoves, Pipes, Grates and Ironwork.

If you can't get "Black Knight" in your neighborhood, send name of dealer and the for full catalogue.

The F. F. DALLEY CO LIMITED

HAMILTON Ont 10

BABY'S OWN SOAP

Imparts a

Fragrance

and softness to the skin unobtainable by other means.

Best for Baby, Best for You.

ALBERT SOAPS, LTD.

MONTREAL



Keep a stock of paper napkins in the house, and see how much they will save washing out cloth. The cheapest grade of paper napkins can be bought for ten cents or less, a hundred. Keep some in a convenient place and use them for polishing lamp chimneys and windows, rubbing grease off the dishes before putting the dishes into the hot water, and for wiping dust off the shelves.

One way to hang them, when very dusty is to hang them on the clothes line and wash them thoroughly with the garden hose. They should be dried flat on the grass, as they will pull out of shape if left on the line. If you object to washing them try brushing them with a whisk-broom dipped in gasoline, after they have been beaten. Be sure to do this outdoors.

Write us for list of Household Premiums. It will interest you.

COUNTRY NOTES AND PRICES

FRONTENAC CO., ONT.

GANANOQUE - The pastures are dried up and farmers have started feeding already. The milk supply is reported to be only two thirds of normal at this time last year. The potato crop and the corn crop is all harvested in good condition. The weather has been very dry and cattle are suffering from want of water. Hogs, 1 lb. a lb. of lamb, 15c; veal, 10c to 15c; chickens, 60c a pair; turkeys, 1.00 a pair; 84c each; springers, 64c; potatoes, 81c a bag; fresh eggs, 15c a dozen; creamery butter, 30c a lb.; tub, 25c; colored cheese 15c retail; timothy hay, 81c a ton, bran, 42c; oats, 40c a bushel; S. J. L.

PRINCE EDWARD CO., ONT.

HILLIER - We are having ideal October weather. The dry season was broken by a rain on the 25th of September followed in a few days by a heavy frost which finished the tomato crop for the canning factories. As the yield of tomatoes was enormous a great many farmers turned their cows in for a feed. The result was an increase in the milk supply. The cows are harvested potatoes and apples. The potato crop is fine; the tubers are large and of a fine quality. The farmers who had frost on their crops at this busy season with auction sales, political meetings, and meetings in connection with the election and institute meetings. Plowing is backward, yet all seem to be busy, some being plow, others plowing and buying, others remodeling what they have. The pumpkin crop, a very important one, has not yet been found to be a failure. The joy bringing in the great loads, storing away the extra fine ones for pumpkin pie. Now and then a farmer, as in the case of Hallow'ens, surely we have had a bountiful harvest; with what grateful hearts we should raise the flag of victory. W. A. F.

HASTINGS CO., ONT.

TURBIEP - Grain is yielding well. The dry weather prevailing throughout the summer made it an ideal time for threshing. Weed seeds were unusually abundant, the grain fields seeming to have been unusually moist. Most of the farmers report that oats are the principal crop grown here, but peas are an important crop and usually do well. The corn crop is a general failure throughout this district. This has been a bad year for potatoes and onions. The weather has been very dry and crops here. Plowing is general but some say it is still too dry to plow. There was a poor catch of timothy and clover, especially the former, but there is a sign of improvement since the rain at the end of September. Pastures and meadows are looking better to the ranchmen due to the great deal of damage in some sections, many farmers being obliged to cut crops green to save them. W. R. W.

THE RIDGE - The farmers have their potatoes all out now, and report a fair crop, few in a hill, but what there is are a good size and of good quality. Corn is all cut and was the best crop ever raised here. We have had no fine showers of rain which has helped along the grain. The ground is just nice for plowing. The frost hurts a lot of the corn, and consequently some of the farmers will be short of feed. Others have feed to spare. It will be as high in price as last year. - A. C.

NORTHUMBERLAND CO., ONT.

WICKLOW - Farmers in general have since the rain turning out the best of their time in plowing, trying to make up for the time lost on account of dry weather. Apples are turning out to be lighter than was anticipated. On the afternoon of the 2nd inst., a barn belonging to Mr. J. Hannon, situated near the farm of Henry Clark, was, with its contents, consumed by fire from the threshing engine. The barn contained the following machinery, a quantity of grain and several hogs. Much sympathy is felt for Mr. Hannon as he is a well-to-do farmer and is nearly over. From reports it appears that although we have had times in the number of showers and the quality of articles shown, were fully up to former years. - E. H.

DURHAM CO., ONT.

BLACKSTONE - We are having dry weather again and although plowing is progressing a good rain would be a great help. It has been a very fall and the fall crops such as corn, buckwheat and clover, all of which are pretty well housed under good conditions. The weather is very bad. Cattle generally will be to the stables in this condition.

Potatoes are all harvested and on the whole are an average crop. A great many patches of turnips do not look very well. The tops being very dry and the roots patches, although covered with the louse, are keeping quite green. On the whole the turnips are a fair crop. The weather is very doubtful whether they will keep well. - J. F.

VICTORIA CO., ONT.

WOODVILLE - Dry weather is still prevailing. It is not so dry as on the rest of the crop; plowing is very hard. The farmers that have threshed report a very good crop of wheat, but the corn is very dry, with some of it going as high as eight bushels to the acre, and although the market is not as good as it has been it is still a paying crop. - J. E.

MARIPOSA - Farmers are busy plowing and taking up their manure. The plowing goes hard although it is better than it was at the beginning of the season. With the early start we get most of the farmers will be finished early. The mangolds are a good crop; potatoes are splendid, but turnips are going to be our lightest crop. They promised splendid a month ago but since then they have been attacked by the turnip root rot. A number of the farmers are cutting the tops off, hoping to prevent the rot from coming on. The almond crop and farmers who had frost on their crops at this busy season with auction sales, political meetings, and meetings in connection with the election and institute meetings. Plowing is backward, yet all seem to be busy, some being plow, others plowing and buying, others remodeling what they have. The pumpkin crop, a very important one, has not yet been found to be a failure. The joy bringing in the great loads, storing away the extra fine ones for pumpkin pie. Now and then a farmer, as in the case of Hallow'ens, surely we have had a bountiful harvest; with what grateful hearts we should raise the flag of victory. W. A. F.

BRANT CO., ONT.

FALKLAND - Fall wheat seeding is practically completed. Wheat is coming up splendidly, but turnips are going to be our lightest crop. They promised splendid a month ago but since then they have been attacked by the turnip root rot. A number of the farmers are cutting the tops off, hoping to prevent the rot from coming on. The almond crop and farmers who had frost on their crops at this busy season with auction sales, political meetings, and meetings in connection with the election and institute meetings. Plowing is backward, yet all seem to be busy, some being plow, others plowing and buying, others remodeling what they have. The pumpkin crop, a very important one, has not yet been found to be a failure. The joy bringing in the great loads, storing away the extra fine ones for pumpkin pie. Now and then a farmer, as in the case of Hallow'ens, surely we have had a bountiful harvest; with what grateful hearts we should raise the flag of victory. W. A. F.

OXFORD CO., ONT.

NORWICH - Farmers are still looking very anxiously for rain. Many wheat fields are still very dry and there is not enough moisture to produce growth, and enable the farmers to begin fall plowing which will be very early. The corn crop is being packed for shipment. The price paid for corn is a little under the average. The price of hogs has dropped since the 15th and the supply is not so good as other years. Very little is doing in the wheat market. Farmers have largely abandoned wheat for dairying. Wheat is 80c a bushel, barley 50c to 55c, oats, 35c to 40c, and clover 1.00 a ton. The price of the whole the present year for our country has been a record. The price of hogs is high; prices, high, and farm help plentiful. - J. C. B.

MIDDLESEX CO., ONT.

APPIN - The dry weather has not broken, except a few light showers. Perhaps the deluge will come after the 26th of October, when the effects of the executive will be in effect. The campaign, which the political press is beginning, has passed away. The farmers are busy plowing and taking up their manure. The plowing goes hard although it is better than it was at the beginning of the season. With the early start we get most of the farmers will be finished early. The mangolds are a good crop; potatoes are splendid, but turnips are going to be our lightest crop. They promised splendid a month ago but since then they have been attacked by the turnip root rot. A number of the farmers are cutting the tops off, hoping to prevent the rot from coming on. The almond crop and farmers who had frost on their crops at this busy season with auction sales, political meetings, and meetings in connection with the election and institute meetings. Plowing is backward, yet all seem to be busy, some being plow, others plowing and buying, others remodeling what they have. The pumpkin crop, a very important one, has not yet been found to be a failure. The joy bringing in the great loads, storing away the extra fine ones for pumpkin pie. Now and then a farmer, as in the case of Hallow'ens, surely we have had a bountiful harvest; with what grateful hearts we should raise the flag of victory. W. A. F.

TEMPO - Corn husking is the order of the day. The corn is a splendid crop. An extra fine sample of seed corn is being sent to the Ontario Agricultural Experiment Station. Some farmers have purchased potato diggers. These machines are drawn by four

horses, and lift the potatoes from the drills, shake the dirt all off and throw the clean potatoes into crates. Apples are very poor, except the "Red David," which are a poor variety at the best. The dry September caused the apples to fall early, and they soon decayed on the ground. Turnips have gone bad and the odor emitted from some patches is not pleasant to inhale. Mangels are doing nicely, and some mangold ones are seen at the fall fairs. The fall wheat on loamy lands, that was plowed and sown early, and well looking splendidly, a beautiful green mass covering the entire surface. On dry clay lands the wheat looks very healthy, and some has not yet come up, and maybe never will. Threshing is about finished, the crops are giving yielding first-class, and sample O.K. The manager of Deland's cheese factory reports everything satisfactory, and this best season's output in all his experience. Notwithstanding the drought he is making more cheese than ever before at this season, and told me at Lambeth fair the quicker the farmers of Ontario got to four O's, the better for themselves, and these four are Cows, Corn, Cows, and Cows.

RAINY RIVER, ONT.

BLATE RIVER VALLEY - This is the season of root harvest, threshing and hay-making. The potato crop is a good average, and the crop of mangels and carrots are an average yield. The grain crops are an average yield, although the quality of some of the crops is affected by the weather being good the crop was well saved. September was very dry but we made up for it by the rain that fell on the pastures stock are in good condition it has been a good dry season. The demand for milk is increasing and has been more brisk than usual. Bush fires have been quite common during the dry weather but excepting a few fires there has been of great assistance in clearing the land. Plowing is difficult on the heavy soil, but the dry weather is all. All crops are finding a ready market in Fort William and Port Arthur at profitable prices. The market is very brisk marketed earlier than usual. - G. E. H.

GOSSIP

A Prize Winner - D. E. Morlock, Morrisville, Ont., writes to me that he has won a prize for his cow, I think ABSORBINE the best remedy I have ever used. Have a fine yearling carriage colt which he has had for three days but the Guelph show. I used ABSORBINE as directed from 4 to 6 times a day, rubbing the colt with it every day. The colt is not well but his leg was hurt. She carried the red ribbon at Guelph and at four other shows. I have a horse named Guelph and a neighbor having trouble with his stock I had him one of your pamphlets or advise him to get ABSORBINE, and quite a number are now using it around here. ABSORBINE penetrates to the seat of the trouble promptly and effectively, without blistering or removing the hair. Get a bottle at druggist, Mcg. by W. F. Young, Box F, 15 Glenhurst street, Springfield, Mass.

ISALEIGH GRANGE STOCK FARM DISPERSION SALE

Ayrshire and Hereford breeders generally should be interested in the dispersion sale of the well known Isaleigh Grange herd, established twenty years ago, the property of Mr. J. H. Greenfield, who will place early in November at his farm three miles west of Danville, Quebec, on the Grand Trunk Railway. Mr. Greenfield has had a long and interesting experience in the breeding and management of high class stock, and well deserves the support of breeders throughout the country to the extent of the present sale. Whether you wish to buy or not. The cattle we are offering are a very useful lot, the best of all our breeding from the best imported blood that money could buy. This sale is included 50 head of registered Ayrshire and Hereford stock. Since the starting of the Record of Performance tests quite a number of records have been established, and records, which goes to show their usefulness as dairy cows. These cows and all the calves are included in the sale. Most of the young stock is sired by "Full Bloom of Hindward," and "The Best of the Best," that ever left Scotland. At present the herd is headed by "Netherland Robin Hood," imp by "The Best of the Best." This bull has proved to be one of the leading stock getters in Canada. In Herefords there are nine head on of

fering. They are an evenly fleshed lot of cattle. They were selected from Mr. H. D. Smith's herd about a year ago, and among them are such well known sires as "Bossie," the 6th, of Inverness, the champion cow of the breed at Sherbrooke this year, "Josie," the 1st, of Inverness, the 1st of the red at the Canadian National as a two year old in 1907, and the same place as a three year old at the same place last year. The stock bull, "Dunmor Ingle," set deep bloods the herd. He is a low feeder throughout. He was shown this fall at a meeting. He has thought worthy of the male diploma for his great amount of broods. There is also on offering a pair of calves that would be hard to equal.

In Yorkshire sired Isaleigh Grange has a record that well known sire, "Blackburn Park Royal" (imp. in dam) heads the herd; he was bred by Lord Rosbery and is an exceptionally fine individual. He was the first prize aged bull at Sherbrooke this fall and if only a two year old. There is on offering over 50 head of good stuff, a remarkably smooth lot with plenty of size. Breeders wishing to improve their stock will make no mistake if they do not come to the Isaleigh Grange sale. Everything has to be sold as Mr. Greenfield has raised his farm and gives up possession in November.

Let there be a bumper attendance at this closing as it will be a chance to cheer the heart of the veteran breeder and importer who has long and extended experience and skill has been a household word among stock men throughout the continent of America. The exact date of the sale will be published in our next issue.

AYRSHIRE NEWS
The Canadian Dairyman and Farming World is the official organ of the Canadian Ayrshire Breeders' Association. The members are readers of the paper. Members of the Association are invited to send items of interest to Ayrshire News for publication in this column.

The record made by the Ayrshire cow, Bena Ross, 14539, 15,073 the milk, 791 the butter in one year, under the official direction of the Ontario Agricultural Station and the Ayrshire Breeders' Association has again called attention to the capacity of the Ayrshire cow for an ever increasing interest in them by breeders who are looking for beautiful high-class milk-producing cows. The record milk becomes more and more recognized as containing an ideal blend of solids and fats for human consumption. The Ayrshire Association has done less to secure phenomenal records than some of the other breed associations have done for their favorites, but the breed has gone steadily along as the mortgagee in the hands of practical dairymen - Country Gentleman.

Books for General Farmers
A.B.C. of Agriculture \$0 50
Selling & Marketing \$0 50
Selling & Marketing \$0 50
By F. S. Peck \$0 50
By F. S. Peck \$0 50
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By F. S. Peck \$0 50
By F. S. Peck \$0 50
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Books for Dairymen
A.B.C. in Butter Making \$0 50
By J. H. Menrod \$0 50
By J. H. Menrod \$0 50
By J. H. Menrod \$0 50
By J. H. Menrod \$0 50
By J. H. Menrod \$0 50
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THE CANADIAN DAIRYMAN AND FARMING WORLD
Peterboro, Ont.

EXPORT BUTTER AND CHEESE

The cheese market this week opened with a decidedly easy tone and country markets showed a slight further decline in prices, as low as 1 1/4 have been accepted at several points in Ontario, and the markets in the province of Quebec ruled about 1 1/2c. Towards the end of the week however, there was more activity from the other side, especially for colored cheese, and prices at country points advanced, coming to 1 1/2c. as high as 1 3/4c was paid for colored cheese, while regular imports to 1 1/2c. Westchester and not this time, but the week's transaction hinted next week remains to be seen.

HOLSTEINS

HOME-BRED AND IMPORTED 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 get a good bargain; so we also have a few young bulls, Pointed, and a few of the best of the Herdwick DeKok, world's greatest sire, head of herd. Come to see.

H. E. GEORGE, CRAMPTON, Ont. Putnam Stn., 1 1/2 miles - C. P. R. E-4-49

SUNNYDALE HOLSTEINS

FOR SALE—richly bred bull Keyes DeKok No. 3013 Vol. 9. Dam, Helens DeKok, with world's best butter record, 1 1/2c. to 1 3/4c. Old sire's dam, Maggie Keen, in American advanced register, with record of 1 1/2c. in 70 lbs. Dam is half sister to Herdwick DeKok and Fierstein's Longhorn's dam. DeKok, the best bull of the breed. He is 3 years old, kind and right every way. \$100.

A. S. FOSTER, Bloomfield, Ont. E-1-38

SPRINGBROOK HOLSTEINS AND TAWMORTHS

My Choice Young Tawmorths from imported sows and bred by renowned King John David, a few of high bred Holstein bulls and several famous Bards' 1/2c. quick buyers.

A. C. HALLMAN, E-5-1-20, Breslau, Ont.

HOLSTEINS

I have only the best of the brightest Canary to offer for sale. Speak quick if you want one.

GORDON H. MANHARD, E-5-5-01, Manhard P. O., Leeds Co., Ont.

EVERGREEN STOCK FARM

Holstein cattle and Zandwood swine. Bull calves for sale, with good pedigree. Bulls behind them also. Two young spring pigs. For particulars write to

THOMAS DAVIDSON, Spring Valley P. O., E-4-2-29, Brockville Station.

MISCELLANEOUS

J. W. FEATHERSTONE & SON, Streetsville, Ont. Large Yorkshire Hogs for sale. E-1-1-09

R. B. HARDING, Mapleview Farm, Thorndale, Ont. Dorset Sheep a specialty. Telephone, E-97-1-09

J. A. GOYENKUC, Forest, Ont. Hereford, Canada's greatest winners. Toronto and London, 1907-1908. Stock, all ages, for sale. E-9-10-05

THE HOMESEED HERD OF ABERDEEN BRIGGS CATTLE, Present offering: 8 months old bull, sire a Toronto shank plan, also cows and heifers of the same kind. breeding must be sold to the same room, at prices that will surprise you. E-17-10-06, Prop., Sebringville, Ont.

LEICESTER SHEEP, CHESTER WHITE SWINE. Toulous, Geese, Pekin Ducks, Bronze Turkeys, Wyandottes, C. C. Dorkings, 1/2c. Golden, or Black Red Game Fowls. Write for what you want, to

G. D. BENNETT, E-11-18-07, Charing Cross, Ont.

LOCHABAR HOME FARM. Offers some high class Shorthorn Bulls, Leicester Rams and Ewes, sired by "Knob", winner at St. Louis World Fair, also at Portland, Oregon, and other leading exhibitions. "Knob" is also for sale, and a some Graham Warwicked, all ages. Write for particulars to

O. T. D. A. CHAMMAN, Westnash, Ont. E-1-1-01

PINEGROVE BERKSHIRES

Stock of all ages from imported and Canadian bred sires and dams of the choicest breeding for sale and guaranteed as representatives. Write for particulars to

C. W. BROWNRIED, Ashrove P. O., Georgetown, G. T. R. E-11-38

Cheese Board Prices

Table with columns: BOARD, Date, Meet'g, WHITE CHEESE (Boarded, Lowest Price, Highest Price), COLORED CHEESE (Boarded, Lowest Price, Highest Price). Lists prices for various locations like Madoc, Woodville, Vankelee Hill, etc.

seen. If it does there will certainly be no further fall in prices, as at this season of the year it does not take very many orders to take up the few cheeses that are coming from the factories. If the demand is not maintained there is every likelihood of a still further drop in prices, as local dealers are not inclined to speculate at all in cheese as there is at any like present prices.

The shipments were very light this week, indicating to some extent the smallness of the demand from the West side. The total did not equal 50,000 boxes, and is over 30,000 boxes short of the corresponding week last year. The demand for butter this week has improved and accompanied by a further falling off in the receipts has tended to stiffen up the market, and dealers generally are looking for a further advance in prices during the next few days. The country market is reported to be steady this week with every prospect of still higher prices being paid next week.

MONTREAL PRODUCE TRADE.

Montreal, Saturday, October 17.—Eggs.—The market for eggs is steady and practically unchanged from last week. Receipts are coming in freely but there is a good demand and there is no stock accumulating. We quote new laid at 25c; selected stock at 24c and 25c; and No. 1 at 24c to 25c; and No. 2 at 23c to 24c.

Butter.—The demand for butter has been better this week and dealers report a good demand. The market is steady and factory stock in solids and blocks. Finest is selling at 25c to 25 1/2c and ordinary 1/2c to 25c. Dairy is quoted all the way from 23c to 25c a lb.

Cheese.—There is nothing new to say about cheese. There is a fair demand at prices ranging from 12 1/2c to 14c a lb.

GOSSIP

The Iowa State Board of Control will soon have 1000 Holstein cows at its different institutions. Different breeds have been used heretofore, but it has been decided to have only one breed, and the Holstein was selected because of its milking qualities. Last year the cows at Iowa institution gave nearly a quarter of a million gallons of milk, and the amount will be increased.—G. W. Clemens.

R. H. Harding, Thorndale, Ont. writes: "The Mapleview Stock of Dorset sheep is at its home quiet, costing very little. A successful trip to the Grand Canadian show, where they were in the strongest evidence of their worth. We are getting a bunch for the Provincial Winter Fair at Elm Point, and still hoping to show at the Internationals. (Chicago) If it is arranged that Canadian stock can leave that show in time to reach the Ontario show. If it is not so arranged I believe that very few Canadian sheep will be shown at the Internationals. A number of lots of ewes and rams that will be sold at very reasonable prices to make room for the new crop of lambs which will commence to arrive in December."

OPPORTUNITY IN RAILROADING

No doubt the greatest industry in the country to-day is railroading. On the American continent, the use of iron lines of track are laid yearly. In Canada along these lines are extending until it is only a matter of time before the Dominion will be a network of rails. The operation of these trains requires a large army of men, and this demand, coupled with the natural vacancies that occur, offer to the tradesmen one of the very best chances of making money. The work is steady, and few classes of labor pay the exceptionally large salaries as does that of railroading.

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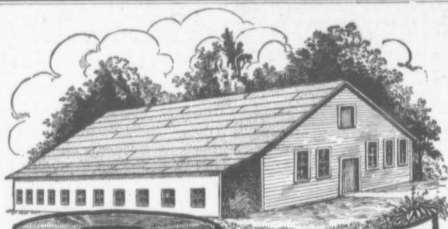
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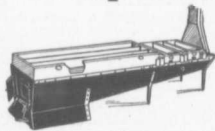
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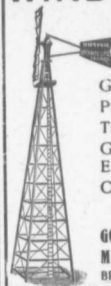
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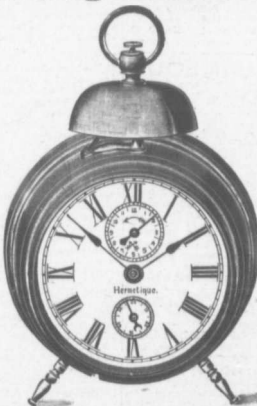
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