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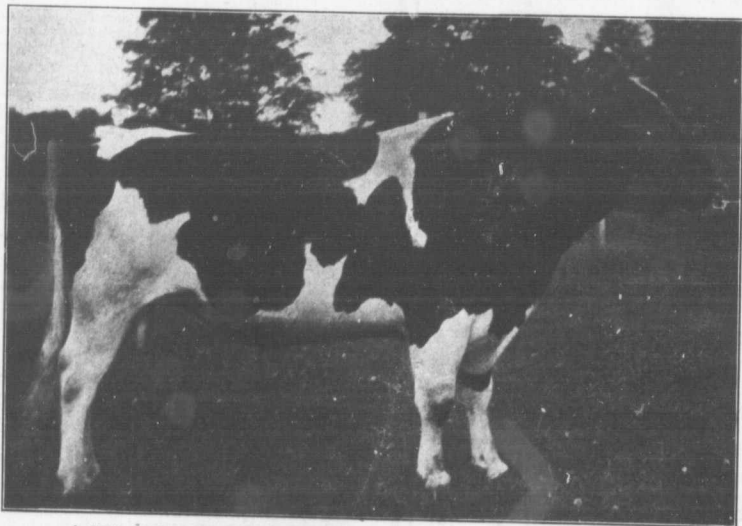
FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

JANUARY 14

190



A SIRE WITH RECORD BREEDING ON BOTH HIS SIRE'S AND HIS DAM'S SIDE

In selecting a sire for a dairy herd one should always acquaint himself with the sire's dam. See that she possesses the desirable qualities that you would perpetuate in your herd. Get her record for milk, and for butter-fat, and if possible the record of her sire's dam as well. Brightest Canary No. 5786, illustrated above, owned by Gordon Manhard, Leeds Co., Ont., has an enviable record. His dam, Canary Mercedes Brightest made 26.295 lbs. butter in 7 days, 100.9 lbs. butter in 30 days. His sire's dam, Sadie Vale Concordia made 30.64 lbs. butter in 7 days, 123.10 lbs. butter in 30 days. His sire's dam made 25.161 lbs. butter in 7 days, and 102.5 lbs. butter in 30 days.

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CANADIAN COUNTRY LIFE

A Personal Guarantee

BY

Dan Derbyshire

I want to say a personal word to the Dairy-men throughout Canada regarding the **SIMPLEX LINK-BLADE CREAM SEPARATOR.**

For years I have watched the work done by this Separator and the results of the many improvements made in the machine, and I can say right here, that the more I see and hear of it the more convinced I am that it has no equal, either on the farm or in the creamery. I want you to feel that every word that is published about the machine, or that our agents tell about it, are absolute facts that can be and are being backed up every day in the year. This Separator has done more to save money and lighten the work on the farm than any other Separator made. Now, I want you to find this out for yourself. I want you to have a

Simplex Link-Blade

sent for a 30 days' free trial, and if it don't do all that is claimed for it then we will remove it and the trial won't cost you a cent. Send to-day for particulars of how we can do it.

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A GREAT GATHERING OF EASTERN ONTARIO DAIRYMEN

Many Subjects of Vital Importance to Dairymen fully Discussed.—Some Important Recommendations Adopted and Resolutions Passed

The resolutions passed and the recommendations made last week, at the 32nd annual convention of the Eastern Ontario Dairymen's association, held in Prescott, Ont., if carried into effect would revolutionize the dairy industry in Canada. The addresses delivered were so directly to the point, and they covered such a wide range of subjects, it is impossible to pick out any as being of special importance.

Chief Dairy Instructor G. G. Publow showed that the average production of milk from 340,829 cows in Eastern Ontario last year, during the factory season was only 2,700 lbs. each. Their total production for the year, therefore, would not likely exceed 3,600 lbs. each. Dairy Commissioner J. A. Raddick capped this by reporting that 1050 cows, the milk of which was sent to one creamery in Denmark, had an average production of 8,000 lbs. of milk each. This is 1,000 lbs. each more than twice as much as the production of our Canadian cows.

Mr. C. F. Whitley, Superintendent of the Cow Testing Association, in a splendid address on the work of the Cow Testing Association showed

results of experiments conducted last summer in the care of milk on some farms at Smith's Falls. A simple method of caring for milk was described by Mr. Barry by means of lantern slides, which if followed by our farmers, would save them thousands upon thousands of dollars a year.

EUROPEAN CONDITIONS

President G. C. Creelman, of the Ontario Agricultural College, described farm conditions in Europe as he noticed them there last summer. He said that our Canadian farmers waste enough, in the management of their farms each year, to support the family of a European farmer. We do not yet know what intensive farming means. Dairy Commissioner Raddick hammered this home when he showed that although Holland is no larger than that corner of Ontario lying south of a line drawn from Hamilton to Southampton, on Lake Huron, she exported, last year, \$27,000,000 worth of dairy products on a population of 3,000,000, less than the total dairy exports of all of Canada. What our dairy exports will be when we go in for dairying in as thorough a manner as the people of Holland do, it is impossible to estimate.

Dr. Jas. W. Robertson, of Macdonald College, Quebec, bore out what had been said by President Creelman, about our wasteful methods of farming, when in a masterly address, he stated that we Canadians are robbing our soil. On many farms in Canada, the land is not as rich as it was 25 to 50 years ago. Many farmers have been skimming the best out of their soil and leaving their farms for their children in poorer condition than they were when they first began to farm them. The destruction of our timber areas has been causing droughts in many sections of the country that if they continue to grow in severity, will ultimately drive our people from vast sections of land. He stated that farmers in Eastern Ontario and Quebec are as much interested in the preservation of the timber areas on the north shores of Lake Superior as are the people of that section.

WHAT WE NEED

President Creelman stated that what we need in Canada is not new and better breeds of cattle, horses and poultry, but better strains of the breeds we have. These can be secured by proper breeding and mating. Not new and better farm machinery, but better care of the machinery we have. Not bigger and better farms, but better arranged farms. We also need to improve the surroundings of our home and the home-life of the farm in order that we may keep the boys and girls from wandering to the cities.

WE FARMERS MUST ACT

"It is up to the farmers of Ontario to improve the farm operations of the country," was the opinion expressed by Mr. C. C. James, the Deputy Minister of Agriculture for Ontario. Mr. James showed clearly what the Department of Agriculture is doing to assist the farmers of Ontario, and stated that if our farmers will take advantage of the information and assistance that the department offers them free of cost, they can revolutionize their farm operations and make farming much more profitable and enjoyable.

WHY WE MUST IMPROVE

That, whether we want to go to the trouble and expense that will be involved in changing our farm methods or not, we will have to do so if we are to hold our position in the market for the work we brought out forcibly by Dairy Commissioner J. A.

(Continued on page 10)

J. R. Dargavel, M. L. A., Elgin, Ont.

At the convention last week of the Eastern Ontario Dairymen's Association, Mr. Dargavel was unanimously re-elected as president of the association for 1909. This action was only a fitting tribute to the splendid work Mr. Dargavel has accomplished for the association. Through his efforts as a member of the Ontario Legislature the fee that the cheese factories and creameries had to pay for the use of their instruction purposes was removed relieving our dairymen of an annual tax of many thousands of dollars. Mr. Dargavel has been a member of the association for many years and is recognized as the leading dairy authority in the Ontario Legislature.

clearly that our Canadian farmers cannot expect to increase the milk production of their cows until they test them regularly. He advised them to join or form an association. The fact that the farmers of Denmark have increased the milk production of their cows during the past decade by 66 per cent. has been due in a large measure to the work of their cow testing associations. The convention unanimously passed a resolution urging the Dominion Minister of Agriculture to push and extend the work of the cow testing associations.

The immense loss that our Canadian dairy farmers sustain through not taking proper care of their milk was brought out more clearly than ever before by Assistant Dominion Dairy Commissioner Geo. H. Barry, who, in his address, (a report of which is given in another column), gave the

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a Year

FORMERLY THE CANADIAN DAIRYMAN AND FARMING WORLD

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FOR WEEK ENDING JANUARY 14, 1909.

No. 2.

THE WORK OF THE COW TESTING ASSOCIATIONS

Chas. F. Whitley, Supt., Ottawa

The work is of National importance, it has justified its introduction and is destined to strengthen the foundation of our great national industry, Dairying.

WHAT is a cow testing association? As these associations have been in existence in Canada for three or four years a description of the methods employed would seem almost unnecessary. But as many men have still need to learn them, the system may be described briefly. Members are admitted on agreeing to take weights and samples of milk of each cow in the herd at least every 10th day. The necessary time means only a bare ten minutes a cow per month. This should not be considered as any extra labor, but as much a part of ordinary farm operations as spraying potatoes or grooming horses. The Dairy Division, Ottawa, bears the cost of testing.

The work is necessary because individual cows of the same breed, or in the same herd vary so greatly in total yield. Without testing it is impossible to judge what milk tests; there are hundreds of cows supposed to give milk containing a normal percentage of fat, but which in reality tests very low, 2.5, 2.2 or lower. Yields vary tremendously; five individual cows in the same district in July gave yields of 540, 630, 720, 840 and 970 lbs. milk. Individual cows in the same herd on the same feed vary from 2,800 to 5,600 lbs. milk in the season.

COMPARISON OF 3 COWS, SAME HERD, TOTAL YIELD, 7 MONTHS*

The most Profitable.	The least Profitable.
Weight of milk,.... 5996 lbs.	2790 lbs.
Weight of fat,.... 186 lbs.	110 lbs.
Yield of cheese,.... 569 lbs.	272 lbs.
Value of milk, \$55.95	\$27.90
Cost of feed,.... 21.00	21.00
(7 months, at \$3.)	

Profit,, \$34.95 \$8.90

This is but one instance of hundreds of such differences. Two mature animals in the same herd, both freshening in spring, give startlingly different total yields, which would remain undetected unless weights are noted down. The best yield is double the poorest, therefore, many would say, the one cow is worth twice as much as the other. As they each consume about the same value of feed the net profit should be considered. It will then be seen that the better cow gives five times as much profit, and should be rated accordingly.

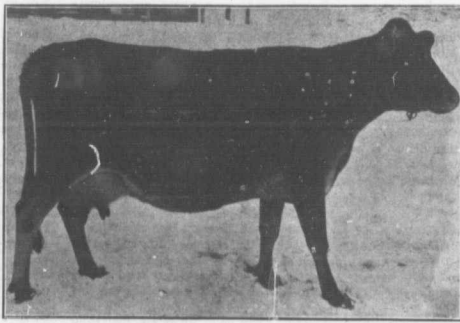
The work was introduced here because of the remarkable revelations of records in other dairy sections of the world. Thanks to the press, the best dairy thought cannot be confined within the boundaries of any one country; it is international. When it is stated that in such sections are to be

found hundreds of herds producing from 7,000 to 10,000 lbs. milk, it surely should be an incentive to dairymen here to have more records worth showing. We are scarcely yet awake to what similar records may lead.

HAS JUSTIFIED ITS INTRODUCTION

What has been already accomplished in Canada has amply justified its introduction: and further, has abundantly proved the necessity of its continuation and rapid extension.

Many men can point with satisfaction to an increase of 25 per cent., 35 per cent. and 50 per cent. in the milk yield per cow. Some men have



A Representative of the Jersey Breed at the Guelph Winter Fair Last Month
Jersey cow, 48 months and over—1st, Cantata of Normandy, A. J. C. C. 16947, B. H. Bull & Sons, Brampton, 130.20 lbs. milk, testing 4.7 per cent. fat, in three days' test.

doubled the yield. One man for instance has raised his average production in two years from 4,500 to 6,100 lbs. per cow, while the factory average remained at 3,400 lbs. Hundreds of farmers are now taking up the work in earnest, finding it, as they state, of immeasurable benefit.

Systematic improvement of the dairy herd cannot be made until records form the starting point. We cannot create an improved herd, we must select and develop. All the skill of the world's wise men cannot construct one cell of the millions of which the body is composed; not weave one square inch of the delicate fabric in which the Creator has wrapped us. The best we can do is to assist—to work in harmony with—to improve—to develop. Records of production are the only sure and certain guide in selection and improvement. First must come the root of the whole matter, a personal conviction of the system's value; the branches and fruitage of higher attainment will surely follow and add a new charm to life.

The work is spreading and is likely to grow. Members this year sent in records for as many as 6,500 cows a month as compared with 2,800 cows in 1906. It appeals to the shrewd common business sense of the practical dairymen. We cannot remain content with poor records; we must progress or be out of the running; consistency is the badge of stagnation.

Record work has shown Canadian dairymen that they may reach a definite work in dairy breeding and dairy feeding. New purposes are being given, and means whereby it is possible to know when they are accomplished.

APPEALS TO BOYS AND GIRLS

The work assists the solution of domestic problems of farm life; it appeals to the boys and girls, riveting their interest in home economies. It induces the hired men to milk cleaner, so that from that source alone an extra 500 lbs. milk per cow may be obtained. The best kept and the neatest records are evidently those sent in by some of the gentler sex, and where the women get interested we may always count on steady improvement.

A knowledge and interest concerning the business affairs of the household must act as an influence towards a higher and more genuine respect on the part of the young men and women of the country for the business of farming. The home nest will be forsaken less and less by the young fledglings when it holds forth to its young people a partnership in the daily doings.

The work calls forth the best efforts of intelligent humanity in providing better care and attention for the most patient, and hardest working species of farm stock. When the effect of cold, neglect and exposure is reflected in the records, the necessity of better treatment is forced on the owner's attention. The unfeeling law of retribution, "whatsoever a man sows that shall he also reap," applies to the housing and feeding of dairy cows. Liberality is repaid, kindness is not lost.

When the shrinkage in milk yield from one month to another attains the startling figures of 30, 40 and even 50 per cent in some cases, while with other herds it is down to 20, 18 and 13 per cent., it makes one consider a change of methods, and such wise provision as will secure a persistent flow.

The work is undertaken with one dominant purpose constantly in view, a study of individual cows with a view of increasing economical production. While the selling price of cheese in Liverpool, be it 45s. or 65s., is beyond the patron's control, the cost of production of milk is immediately under his eye, and can be reduced by learning what records have to teach. The selected herd can produce milk at one-third the cost of many an average herd. Why not save the difference?

The promising individual must remain undisturbed.

*An address before the Eastern Ontario Dairymen's Association at Prescott last week.

covered unless a record is kept. Unknown to their owners, most valuable cows have been sold for a song, or even given away. A prominent magazine recently gave a photo of a cow purchased at ordinary market price from a city milkman who could not find time to test milk, or keep a milk record, and consequently never discovered her wonderful capabilities. She has a record of close on 1,000 lbs. butter; a veritable jewel of a cow at last recognized and appraised accordingly. Another cow also unknown, unstudied by her owner, was literally given away as "just an ordinary cow." She gave over 13,000 lbs. milk last year. Who can estimate how many similar treasures have remained lost? Cold, arithmetical "averages" never detect such beauties, they level down and pry up, completely submerging the deserving individual.

Cows must "make good" nowadays or make tracks; each one must be checked up and pay up like each passenger on a train at the hand of a watchful conductor. Why should unlightening "averages" warp the judgment or stifle enquiry as to necessary individual performance? Is it any satisfaction to a needy widow or an orphaned boy to know that the people of Canada carry \$700,000,000 of life insurance? That "averages" very little per head of population; while many men are uninsured, others carry \$50,000 or more. Similarly, average yields give no due credit to the star performers, while wretchedly poor cows are raised to undeserved rank.

VARIATIONS DISCLOSED

Records disclose great variations in quantity and quality, but generally a very small difference between cost of keep and care of such a cow with low yield, and a cow with high yield. Hence, in the selection of right animals is the true application of economy. The keeping of records lies at the foundation of systematic development of economy. The right animal, the selected cow is the economical producer. If six cows will do as much as, and do even better than nine unselected, why not economize and have the prime satisfaction in handling the better stock? In some districts it takes 200 cows to accomplish as much as 75 in other districts. The weeding out of cows with low yields is at the base of economic production. We have found in a herd of 14 cows that 3 made as much profit as the remaining eleven.

The work recommends itself to every real dairy farmer as distinguished from the man who simply keeps "just cows."

When thousands of cows in Ontario are shown to produce only 2,500 lbs. milk apiece during the cheese factory season, it indicates need of better methods. Other Ontario farmers in the same localities obtain 4,000 lbs. and over during the same period. Dairying to-day is real business, and not the simple farming of old days when it was just a case of selling wheat. It was then an easy matter to calculate, so many acres, so much grain, so much cash. To-day we have diversified farming, a more complicated business, crops are sold in new form, as milk or butter; the manufactured article is produced. The gross returns may be satisfactory, but profit can be largely increased if the scales and Babcock are applied to the performance of each individual cow. There is no more reason that any cow should make her living out of her owner for nothing than that a hired man should be paid wages to loaf round and do nothing. One of the most essential points in business is to ascertain definitely where profit is made, and to stop losses.

Dairy farmers, does each one of your cows pay a profit? Do you know that she does? The way is easy, expense small, returns great. This is not book farming or theory, it's business.

\$12,500,000 FOR ONTARIO

If this work could be forced on the attention of dairy farmers generally, and if they would really

take it up seriously, it would not be too much to expect that in five years' time from now, at least three-quarters of the cows would each give \$15 worth more milk—this means an extra \$12,500,000 for Ontario. Farmers, get busy!

The work is of national importance. The eyes of the world are on the 20th century's wonder, this Canada of ours, this marvelously developing Dominion. The reputation of milk producers is at stake. Will they awaken to the necessity of adopting modern business methods in the practice of their calling, and thus strengthen the very foundations of our great national industry, dairying? The influence of their progressive action will permeate each dairy section, transforming unfulfilled effort into glorious achievement; the scope of their activities may well be termed nation-building.

"There is a tide in the affairs of men, which taken at the flood leads on to fortune," as the Bard of Avon sang, and it is for Canadian dairymen to be up and doing. Grapple with the question now, and the Dominion gains in every way immediately. With no illogical and inconclusive dreaming of the great things that might be accomplished, let each man get to work, and he will do more than command success, he will deserve it.

Great Results From Alfalfa

About eight years ago, Senator W. Owens, of Monte Bello, Que., sowed less than two acres of land in alfalfa, from which he has secured remarkably good results. Last year, this small piece of land, produced enough feed for eight horses and a bull from the 25th of May until September. The feed was cut and fed to the stock. Had it been pastured, it would not have furnished enough feed for more than about one animal. Senator Owens is a great believer in alfalfa.

"Alfalfa," said Senator Owens, to a representative of Farm and Dairy, who visited his home in Monte Bello, "can be grown to best advantage as a soiling crop, to be fed in the stable.

"If it shows any sign in the spring of being weak, I disc harrow my alfalfa land, put on fresh seed and roll it. It is a crop that does not stand tramping by large animals. I have used it with good results, as a pasture for hogs. Farmers sometimes claim that it cannot be grown in cold districts. I know one man who grew a crop of alfalfa 150 miles north of Ottawa.

"I always sow about 15 to 20 lbs. of alfalfa to the acre. I sowed four acres of alfalfa last spring and, in spite of the dry weather last summer, it made a good growth. I have never used alfalfa as a hay. It makes excellent hay. It is possible to get from five to seven tons off it in three cuts. The first cut should be made about the first week in June."

Why is the Danish Farmer Beating Us?

Geo. C. Smyc, Waterloo Co., Ont.

The articles in regard to the hog question that have appeared in Farm and Dairy of late have greatly interested me. The question is a live one and demands all the information that can be gathered on the subject.

Why is the Danish farmer and pork-packer beating us in the production of bacon? Is it because they are nearer the British market and can place their bacon on the market quicker, with a milder favor, or does the cause lie in the fact of co-operation between farmer and packer? If this is the case it behooves the Canadian farmer and packer to draw closer together.

The friction that exists here between the farmer and packer is not in the best interest of the business, however, there is some cause for the present friction.

The uncertain price of hogs deters farmers from having a steady run of hogs to ship. This again increases the packer's cost of production, because he has to maintain a larger force of men around

him to handle the heavy runs.

One of the chief grievances of the farmer against the packer lies in the fact that they do not discriminate strictly enough against undesirable hogs. A comes along with a bunch of fine bacon hogs, B comes along with a bunch of fat hogs and gets the same price as A. Why should A not get a larger price than B? The packer says, "well, if I do not take B's hogs? The other fellow will and I will be running my plant short." It would be better to run a little short, discriminate more closely and thereby turn out a number one article.

If we Canadians lose the bacon trade, who is going to be the loser, not the farmer, for he can take up some other line of stock, but the packer with his money invested in the one business. It is up to the packer, so to speak, to cater a little more to the farmer who will produce the number one bacon hog.

You suggest that a commission be appointed to investigate conditions in Great Britain and Denmark. This would be a good thing and worthy of the Government's consideration.

Deeper Cultivation Advocated

Arthur Christie, Dundas Co., Ont.

I read with a great deal of interest the articles on cultivation written by Mr. John Fixter, of the Macdonald College, also of Mr. Brethen, of Peterboro Co., and I thought here was a good chance for a discussion on a very important subject.

Mr. Brethen's method will answer very well on light soils, but on such soils as we have in Eastern Ontario and Quebec my experience has been that it will not answer. I have tried it and have come to the conclusion that Professor Roberts is the nearer right when he says: "Frequent and thorough plowing of the land is necessary in order to obtain the best results." Now, I do not mean to go on the land with a big wide-bottom plow and turn a fourteen-inch furrow upside down, because, if we do so, the fall and spring rains will pack the furrow nearly as hard as the ground was before plowing.

I am a young man, but I have built up one farm that was considered run down and I know for a fact it was very dirty, but I sold it for nearly one hundred dollars an acre and am now on my second farm. I have found my method of cultivation to be the only one that is successful in keeping all kinds of weeds in check, it also greatly increases the fertility of the soil.

A FOUR-YEAR ROTATION

I divide the area under cultivation into four equal parts and follow the usual four-year rotation. If the land is very dirty I leave out roots and plant the whole area to corn and potatoes, as I find corn a better cleaning crop than roots. I manure my sod land heavy in the winter, or the fall previous, or in the following spring, in order to have a rank growth of grass and later, corn. When the spring rains come it washes the manure down to the roots of the grass. I let it grow until about the 15th or 20th of May, and some years it is about 8 inches high. I then put on all the force we have and plow it down. As corn is a deep feeder I like to plow a good furrow using a good general purpose plow, setting the furrow up fairly well. By so doing I have a good ridge to disc down and besides the manure and grass is where it is needed, also the land is in a looser condition, and that is just what corn requires.

After plowing I disc the land thoroughly and then harrow it and by the time I get the seed into the ground things are beginning to warm up below and with heat from the sun above I have had corn up in less than four days after it was planted. If the ground is very dirty I plant in hills and cultivate both ways with the two-horse cultivator as often as possible. Last year

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we planted Leaming corn on towards the first of June and cut it during the latter part of September. We found it at that time nearly all matured and from twelve to fourteen feet in height, and what few sow thistles were left looked sickly and discouraged. There is no weed that can exist under these conditions.

The reason for plowing my corn stubble is to turn up what twitch grass and sow thistle roots are left to the sun and frost. I find that in their weakened state a good freezing generally puts them out of existence. Another reason is I like fresh soil for my plants and by turning up the sod and manure I plowed down the previous spring. I find I have an ideal seed bed for my clover seed and also for my grass seed and grain, and as all know cereal plants are shallow feeders, a good seed-bed is what we want.

Since following this method I have never missed a catch of corn or clover seed and I find my yields of crops increasing from year to year in spite of drought, also weeds have no terrors for me. I trust others will take up this discussion as I am always anxious to learn.

Cheap Dairy Feeds Needed

"As I have gone through Eastern Ontario, attending the district dairy meetings," said Henry Glendinning, of Manilla, at the district meeting held at Napanee recently, "I have tried to find how much the cows in each section were averaging in milk production. Around Vankleek Hill, the average for the section was 2,535 lbs. At Arvonmore the average was 2,430 lbs. Around Belleville, the figures for a few cheese factories, were from 2,500 to 3,000 lbs.

"If you take those figures and find what that milk is worth at factory prices, say \$1.00 a cwt., you will find that the cows were bringing in \$25 to \$30. That is not very much. The profit at those figures must be small. In Eastern Ontario, while we have many good farmers, I believe that we have more good cows than we have good feeders.

"In the cheese districts, I no one that the cows are not as well kept the year around as the cows in the sections where they dairy practically all the year around. Where milk is sent to the cheese factory for about half the year the cows are often allowed to dry up for several months. They are not well enough fed and go down in flesh. Near cities or creameries, where cows are milked ten months in the year, they generally are in good condition when they calve. There are lots of excellent dairy cows in the country that are not giving nearly as much milk as they might, simply because they are not given a chance. Cows should be well fed when they are dry in order that their udders and milk veins may be developed or they will not give as much milk when

they freshen as they otherwise would. If you look into the matter you will find that the cows that are making the great milk records that we read about every little while, are animals that have been liberally fed when dry. They thus had a supply of reserve flesh and strength to draw on when milking.

RAISE MORE FEED

"The truth is that we are not feeding enough. This does not mean that we should keep less cows but that we shall raise more feed. The last couple of years have been hard on the pastures. They have shown us that we need to have some extra feed in the summer for the cattle. The best summer feed I know is alfalfa and the next best, ensilage, made the year previous that can be fed night and morning.

"A good feed is peas and oats that have been sowed from week to week so that they can be cut from day to day as they mature. Later, green corn can be fed to excellent advantage. If you want to get the most out of the corn cut it as near maturity as possible.

"Our dairy farmers will never get as much out of dairying as they might until they dairy 12 months in the year. When a farmer says that he does not want to be tied to the cow's tail all the year around the probabilities are that he is lazy.

"Corn silage is one of the best foods fed on the farm. It is not good, however, when fed alone. Another feed having more protein should be fed with it. Wheat bran, when cheap, gives good results when fed with silage.

CHEAP RATION

"If we are going to make money we must have a nutritious ration that can be fed cheaply. You must grow most of it. For winter feed a cow weighing 900 to 1,000 lbs. should be given from 35 to 40 lbs. of corn silage, 15 to 30 lbs. of roots, and 15 to 20 lbs. of alfalfa hay, sufficient salt and all the water they will drink and, whenever they want it. This makes a good balanced ration for milk production without feeding any grain and it can be fed at low cost."

Mr. Glendinning was asked if cows would not fall off in milk production and flesh if fed on such a ration for any length of time. He replied that he had fed it to his cows for two years with the exception of about 10 days last spring, when the alfalfa hay gave out and was replaced with oat chop. The substitution of the oat chop for the alfalfa did not increase their milk production over what it was when the alfalfa was fed.

The Time to Get Rid of Sow Thistle

In a discussion of the eradication of the perennial sow thistle which took place at the annual meeting of the Experimental Union, Mr. Elmer Lick, of Oshawa, said that in his locality there was a general feeling that the time to kill sow

thistle was from the 20th of June to July 1st. The land should be plowed then and sown to buckwheat. His experience this past year was that this method was effective.

On another piece of land the sow thistle was completely eradicated by fallowing. On still another piece which was ploughed after haying it was impossible to kill sow thistle in spite of all the cultivation he could give. From this he concluded that there was only one time to attack sow thistle most successfully.

Coloring Cement While Soft

It is frequently desirable to color cement that is being used for some special purpose. A subscriber to Farm and Dairy has asked if cement can be colored while soft, and if so how, and what colors can be had. We have obtained this information from H. Pooock, Manager of the London Cement Machinery Co., which is herewith given: The proper way to color cement concrete is to mix the coloring with the cement while it is in the dry state. It can then be mixed with water to any consistency.

White—To color cement pure white is impossible where great strength and durability is required, but the following formula will make white stronger than some sandstones. Nothing but white Portland Cement must be used. One part pulverized lime, leimoid, or hydrated lime, two parts white Portland Cement, two parts pulverized marble, two parts fine washed silica sand, two parts coarse silica sand.

Blue-Gray—A blue-gray color is often obtained without coloring matter at all, by using a blue Portland Cement. Light colored Portland Cement may be blended to its proper color by the addition of seven pounds of Ultramarine Blue to every barrel of Cement.

Gray—Add two pounds of Germantown lampblack to every barrel of cement used, when sand is of light color. Dark sand will require less. Lampblack is a protector against the elements, but reduces the strength of the product, but not enough to be detrimental in ordinary dwelling house construction.

Blue—Add from ten to 15 pounds of Ultramarine Blue to every barrel of cement. Use dark colored cement.

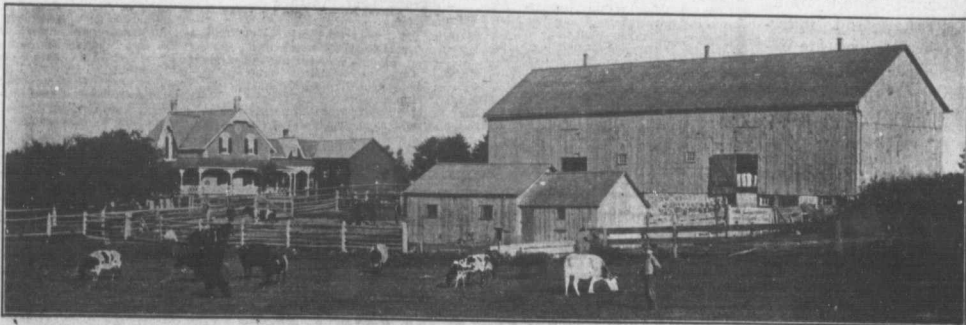
Black—From 40 to 50 pounds of Per Oxide of Manganese to each barrel of cement.

Red—Fifty pounds of Oxide of Iron to a barrel of cement.

Bright Red—The above amount of English red to each barrel of cement.

Lake Superior Red Sandstone—Forty pounds violet Oxide of Iron to a barrel of cement. Less with light sand.

Connecticut Brown Stone—Twelve to 15 pounds Brown Ochre to a barrel of cement.



"Valley Home" and Farm Buildings, a Typical Farmstead in Northumberland County, Ont.

The farm and buildings shown in the illustration are owned by Mr. D. Y. Dutar. See the four generation group on page 17 of this issue.

To the Members of the Canadian Dairymen's Association

YOU ARE ALL, we believe, progressive dairymen.

¶ You stand for improved methods in everything associated with dairying.

¶ Therefore, you will be interested in a Cream Separator that is a great improvement over anything on the market to-day.

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¶ Its points of superiority are: Frictionless Ball Neck Bearing and 3-Ball Bottom Bearing, Light Weight Bowl, Easily Cleaned Skimming Devices, Safety Clutch, Non-injurious Brake, and many others, which are explained fully in our big Catalogue. Please ask for a copy.

Empire Cream Separator Co. of Canada, Limited

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What the Dairymen's Association Has Done

The excellent work that has been accomplished on behalf of the farmers and dairymen of Eastern Ontario, by the Eastern Ontario Dairymen's Association, was referred to by President J. R. Dargavel, M. L. A., of Elgin, Ont., in his annual address at the convention of the Association held last week at Prescott, Ont.

"As president of this Association," said Mr. Dargavel, "perhaps I should not boast of what it has achieved in promoting the dairy interests of this Province, but a modest reference to its work may be ment.-ned. Does any person present believe that the bringing in of 200 cheese factories two years ago to receive instruction and sanitary instruction, which had not been receiving it before, would have been accomplished if there had been no Dairymen's Association to discuss the situation and urge its necessity upon the Government through some of its members? I say, no! Emphatically, no!"

"When I, your president, asked the Government to take off the fee of \$15, from factories for instruction, which meant about 15,000 to the farmers, does any person suppose this would have been done and this saving effected for the dairymen if no dairymen's association were speaking through me?"

"Do you believe the Milk, Cheese and Butter Act, which was assented to on April 14th last, would have been acted if there were no dairymen's association to show the necessity of this kind of legislation? I think not."

"Do you believe that the factory owners and patrons would to-day be relieved from the prosecution of the offenders of this act, if there had been no dairymen's association to step in and appoint two competent men and pay the entire cost of their services to do this work for you for the year just passed? I think not."

"Do you believe that the special dairy meetings would have been held in your various counties, at your very doors, and competent men sent to talk upon dairy topics specially, if there were no dairymen's association to urge the necessity of so doing and pay the cost of them? I think not."

"Should there be any who think this association is but its usefulness, I would say, that if there is no other reason alone than the fact that it has been and is now the connecting link between the dairymen and the government, you could not afford to do without it. You cannot afford to barter away the organized effort which this association has used for the upbuilding of this industry, for the individual effort of any one man. I can assure you that none of the things I have herein mentioned are having been accomplished has been brought about by individual effort alone, but by a union of thought and effort brought about by the exchange of ideas among the members of our board of directors and at conventions such as this."

Mr. R. G. Murphy, of Brockville, the capable and energetic secretary

of the association, when presenting his report, said: "In view of what has been accomplished by this association, backed by the government, without boasting, say 'We are proud of what has been done.' I know there are a few who are sceptical in regard to the good accomplished by this and kindred associations, but I believe it is because they misconceive the real functions of this institution. The directors do not claim for it perfection, but they do claim that it has assisted the dairymen of this country by instructing them with facts for their finishing and they have, in return, adapted them to their particular circumstances, and thus been able to produce a better product. The assistance thus rendered has not come too soon, when there is a demand calling louder and louder for better butter and cheese, and, in order to produce it, we must help the manufacturer to call louder and louder for

The two fountain pens you sent me for securing two new subscriptions for Farm and Dairy, arrived safely, and I am much pleased with them. I hope the two subscribers to the Farm and Dairy will like the paper as well as I always have myself. I have been a subscriber to the paper from the start, and I would feel lost if I did not get my paper every week. I wish your paper success and prosperity under its new name of Farm and Dairy.—J. A. Flammond, Dairy School, St. Hyacinthe, Que.

better milk. Higher grades of dairy products require higher and better grades of milk.

"Much good along this line has been accomplished by the holding of about twenty dairy meetings during the months of November and December, which have been exceedingly well attended in most instances. Speakers have been sent to these meetings by the association who are practical men, and by this means, the men who do not attend conventions like this, men who read little, and think less, men who have not been reached, and we are looking for results. It is the careless, indifferent men we have been trying to reach through these special dairy meetings, feeling that others would look after themselves, although constant watchfulness is necessary lest the best of us find ourselves in a similar rut."

Increase Your Pressure

"Those dairy farmers who economize in the feed given their dairy cows are working at too low a pressure," said Henry Glendinning, of Manila, Ont., at a dairy meeting held recently at Napawan, Ont. "Suppose a man came to your farm to thrash and you told him that you had only a small supply of fuel and you wanted him to be economical with it. Then, when the engine got started, and you threw in a couple

of shaves you found the speed go down."

"If you asked the man what the trouble was and he told you that in order to save fuel he had only 35 lbs. of pressure on you would tell him that he did not know his business and that he should have at least 100 lbs. of pressure. And yet, that is what many of our dairy farmers are doing. They are trying to get a large quantity of milk out of their cows on too small an amount of feed. They should increase their pressure."

FARM MANAGEMENT

Handling Manure

There is perhaps no department of farm management which receives such scant attention to detail as is given to the application of manure. They are trying to get a large quantity of manure to pile up in the yard or under stable windows from year to year to decay. Yet the proper place to apply and the method of handling are still neglected by many.

In many localities may be seen farmers who continually manure the same piece of land from year to year, because it is plain to be a favorite piece for planting or with the yard, to the neglect of the remaining fields. This plan of disposing of the manure is often resorted to, when it is left to accumulate in small yards, all winter until spring comes on, with its usual busy rush. Now is the time for every farmer to study where he is going to put his manure and the quantity to be applied.

Of all the various jobs on the farm, the spreading is one that should not be relegated to a careless or negligent man. This is one of the great advantages of the manure-spreader, in that it spreads the manure more evenly. For the land can be gone over twice, making a more complete job. It can be done by hand if a little attention is given and the man is interested in his work.

Manure should be taken out regularly as made, and spread on the land from the rig or by the manure spreader, until the cow gets too deep or interferes with the spreading, causing overlapping or perhaps missing some places, after storms. It should then be put into small piles, say four or five piles to the load, and as nearly even as possible to allow for easier and better spreading. Start at the farthest fields first before snow gets deep, to lessen the breaking of roads.

It is well to go right across the field when applying, and especially in winter, tracking out the road when empty for the next strip of manure or for the piles.

There is another plan that the writer makes a practice of, and that is going over the fields that are to be manured with a spraying a coating on the poor spots if there are any in the fields. Thus these spots get an extra amount of manure. The quantity to be applied is perhaps best settled by one for himself. The amount of manure to be disposed of and the area to cover governing to a great extent the amount to be put on per acre.—"A Helper."

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HOW TO BUILD A GOOD FENCE

Everyone intending fence building should send for our folder on Erecting Fences. It's full of valuable information on fence building, tells how to select the best material, and shows how to build a fence wire and has an article quoted from Bulletin of U. S. Dept. of Agriculture on concrete post making. It is a real money saver. It is sent free, postpaid, made at home. Don't fail to write for a copy. It's free.

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With prices of kind of the following economical 400 lbs., oil 100 lbs. If silage a then the ab factory. Wi hay or turn oil cake me with wholly, straw and m of the rough increasing th meal, makin say, 400 lbs, meal and 100

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The Feeders' Corner

The Feeders' Corner is for the use of our subscribers. Any interested are invited to ask questions, or send items of interest. All questions will receive prompt attention.

Feeding Grain to Dry Cows

With a ration of good silage and oat straw would you advise feeding anything extra in the shape of grain to dairy cows when dry?—E. M. Troy, Ont.

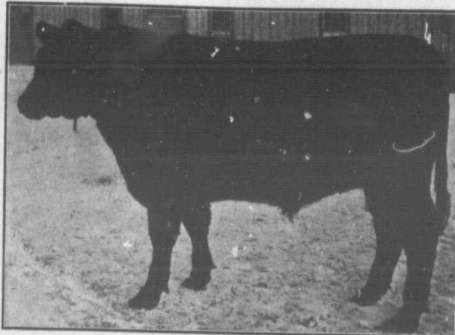
In addition to silage and oat straw I would recommend about a lb. a day of mixed meal a cow. This would be in cases where cows are not over two months dry. If dry all winter, then a bit of meal for a month or so before calving is all that is necessary. The cows would, of course, get through the winter in passable shape on the silage and straw alone, but

The last described meal ration is the kind that is likely to give best results when winter butter making is followed on the farm. The quantity to feed must depend on the individual cows. A safe rule is to feed about one lb. of meal for each four lbs. milk produced. If prices are very good for the product a somewhat heavier ration might possibly be fed, say, one lb. meal for each three lbs. milk produced.—E. H. Grisdale, Agriculturist, C. J. F., Ottawa.

Is Grain Necessary with Silage?

Is it advisable to feed a meal ration to young cattle getting well matured corn silage? The silage is very rich as the corn was exceptionally well cared; a good quality of oat straw is fed with the silage.—J. H. Brant Co., Ont.

Meal, in addition to well matured corn silage for young stock is advisable only when it is desired to force



Single Export Champion Steer

At the Winter Fair, Guelph, by John Brown & Sons, Waterloo Co., Ont. better results may be anticipated when some meal is fed.—J. H. Grisdale.

Ground Feed For Cows

As a subscriber to Farm and Dairy, I am asking for information regarding cows, for the best results of feeding ground feed, which way is best to feed, dry or scalded, which way is best for butter, and what kind of grain is best?—W. V. S. Lemnox Co., Ont.

Generally speaking, ground feed had better be fed dry. In rare instances satisfactory results may be noted from scalding the meal. Where ensilage is fed, the most advisable plan is to scatter the meal on top of the silage after it has been fed the cows.

As to kind of meal to feed, would say that it will depend largely upon the price of the different kinds available, upon the kinds of rough feed (silage, mangels, turnips, hay, straw, etc.) being fed, and likewise upon the length of time the cows have been in milk. This latter consideration is a most important one when butter is being manufactured upon the farm in winter.

With prices now ruling for different kinds of feed I would recommend the following as being the most economical mixture to feed. Bran, 400 lbs., oil cake meal, 200 lbs., oats, 100 lbs.

If silage and straw are being fed then the above meal would be satisfactory. With the addition of clover hay or turnips to the roughage the oil cake meal might be done away with wholly, or at least in part. If straw and mangels are the chief part of the roughage, then I would advise increasing the proportion of oil cake meal, making the meal consist of, say, 400 lbs. bran, 300 lbs. oil cake meal and 100 lbs. oats.

the animals along very rapidly. This might be the case where beef cattle were being fed or when it was desired to have the heifers come in heat at an early age. Further, if it was desired to develop bone and muscle as rapidly as possible, the addition of a pound or so of bran and oats each day would help materially, especially where only straw was being fed along with the silage.

Our Veterinary Adviser

USE OF SULPHUR—If sulphur is fed liberally to cattle, also dusted among their hair, will it destroy lice?—Sub. Peel Co., Ont.

Sulphur is an insecticide, hence, if brought into contact with lice will destroy them. Little results are observed in this way, when the drug is given inwardly. Sulphur is largely excreted through the skin and during its excretion it is supposed to destroy insects, but local application gives quicker and surer results.

If mixed with lard or vaseline and well rubbed into the skin it gives better results as many of the insects may escape contact if simply dusted among the hair. Of course the ointment, which should be about one part sulphur to six parts lard or vaseline makes the hair dirty and greasy, but kills the lice. Probably satisfactory results would be obtained by washing with a warm five per cent solution of creolin, or by the use of Cooper & Nephews' dip.

In feeding young stock, the first consideration is milk. Milk, in its best form, must be fed them if the best results are to be obtained.—A. G. McKenzie, Oxford Co., Ont.

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Rex Sugar Food has in it the results that you want, and you can get them if you give it a fair trial by feeding it according to directions and common sense.
Rex Sugar Food is not made from the sweepings and tail ends around a mill, but every ingredient has a special value in fattening or conditioning an animal.
Rex Sugar Food is NOT a stock food in any sense of the word, it is in a class all by itself. It will have many imitations, but it will never have an equal.
Rex Sugar Food is never sold in bulk, only in three sized bags, 10-lbs, 25-lbs and 50-lbs, and it is 10c per pound—no more, no less—and worth it. If your dealer cannot supply you, write to us direct, and we will send it to you freight paid.
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HORTICULTURE

Improving School Grounds

A practical bulletin has just been published by the Ontario Department of Agriculture under the title of "Improvement of School Grounds." It is well prepared and gives valuable information on planning and managing the grounds, including such operations as grading and levelling, making the lawn, mowing the grass, planting trees, ornamental shrubs, vines and climbers, flowers, making and managing walks and drives, and so forth. Some fine illustrations and plans make the bulletin complete. It is a credit to the author, Prof. H. L. Hutt, O. A. C., Guelph, and to the department.

A copy of this bulletin will be sent by the department to the public school inspector, by whom each school board will be provided with a copy. The bulletin will remain the property of the school board for reference by the trustees and the teachers. When needed, additional copies may be obtained from the inspector at his discretion. Professor Hutt will be glad to assist in any way possible, school boards and inspectors who desire further information on the subject of school grounds improvement.

Canadian Apples Surpass

J. B. Jackson, Canadian Trade Commissioner
Leeds, England.

Very large shipments of Canadian apples are arriving in this district every week, and I am pleased to say that the importers here are unanimous in their opinion that the shipments arriving here at present surpass in quality any Canadian apples ever seen in this district. The packing is also all that could be desired. The early shipments were rather grubby and somewhat inferior, but this defect has disappeared, and Canadian apples, both from Ontario and Nova Scotia, now stand without a rival in the estimation of the consuming public here.

The market in Leeds has been exceedingly strong, and excellent prices are being obtained; in Sheffield, owing to the extreme depression in the iron and steel trades, and the scarcity of money amongst the large operative population, the market has been rather weak, and much smaller prices have been realized than in either Leeds or Hull.

Practical Plant Breeding

At the convention of the Quebec Pomological Society, Mr. W. T. Macoun, of the Central Experimental Farm, Ottawa, contributed a paper on "Some Results in Plant Breeding," in which he doubted if our fruits in the wild state have made any improvement from an economic standpoint during the last 4,000 or 5,000 years; they might have made some. But when we consider the tremendous development that has taken place in the strawberry since we got the Wilson seedling as a cultivated variety, about 40 or 50 years ago, the improvement is something wonderful. This shows that once a plant is brought under cultivation the advance is very rapid.

The art of cross-breeding was known in the 18th century, but it is only within the last half century that much progress had been made in breeding fruits by this method. Most of the true fruits in commerce have originated as chance seedlings, or as seedlings with only one parent known. This was not the fault of the method of artificial cross-breeding, but because until recently few men could or would devote the time and the land necessary for the work. With bush

fruits and vines it has been different, as the time is needed to bring them to fruition; and with ornamental shrubs, animals and herbaceous perennials the advances from cross-breeding had been very marked.

The increase in population in cities demanding more food and the increase in competition resulting therefrom, made the desire for better fruit imperative. After a time the government took up the work, and in the last 50 or 60 years, it has undertaken to provide the means for carrying on the work, and within that time some of the greatest results have been obtained, scarce to them by private individuals. More had been done, however, in the production of new varieties of flowers than of fruit. Florists have appreciated the great importance of getting new varieties for commerce, and as they were able to produce flowers in shorter time than shrubs and fruits, they went to work and obtained improvements in orchids, Gladioli, cannas, Begonia philox, roses, deutzias, lilacs, and so forth.

Mr. Macoun referred to some of the Canadians and others who have been prominent in plant breeding—Dr. Wm. Saunders, so began working in 1868 on the gooseberry, red and white currant, raspberry, blackberry, grape and apple, as well as several species of flowers; Charles Arnold, Paris, Ont.; P. C. Demery, Cobourg, Ont.; W. H. Mills, Hamilton, Ont.; Wm. Hoskins, Hamilton, Ont.; James Dougall, Windsor, Ont.; E. S. Rogers, Roxbury, Mass.; T. O. Munson, Denison, Texas, and Ephraim W. Bull, Concord, Mass. He touched also on some of the men who had been prominent in flower breeding—Le-

moine, Eckford, Crozy, Groff, Dickson and Ward. We have heard much, he said, of Mr. Burbank's work, but he did not think that it compared in value with the work of those he had mentioned. Burbank's results have been largely confined to the western parts of America. Practically none of his introductions have had a large reputation, so, although we have heard a great deal about him, we should always remember that there are other men who had done more for plant breeding from an economic standpoint than Burbank has up to the present.

Dipping Nursery Stock

Dipping nursery stock in lime-sulphur wash or other insecticides has recently been much advocated as a substitute for fumigation with hydrocyanic acid gas. The Agricultural Experiment Station at Geneva, N. Y. finds, however, that this treatment if used at all, must be handled with care to secure scale destruction without injuring the trees. With the sulphur wash, exposure of the trees for

too long a time or at too high temperature resulted in injury; while with any of the materials used, exposure of the roots to the mixture resulted in serious injury to the stock.

For nurserymen, the station still recommends fumigation as most effective and least liable to injury; and would advise orchardists to use the lime-sulphur as a spray after the trees are set, rather than as a dip when they are received.

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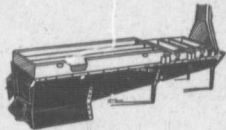
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POULTRY YARD

Low Egg Yield

Complaints come from all sides that egg yields are low. What is the reason? I don't know; I wish I did. The egg yield here is also low. There may be a number of conditions that tend to keep the yield low. Last fall was so favorable that I found that hens laid almost continuously till quite late, going into moult very late. They did not lay for a month or two yet. The early pullets laid well during the fall months and are taking a rest now. The late pullets did not get started before this exceptionally cold snap, hence are still not producing. The lack of sunshine retards laying, so that all these conditions (and there may be others) probably in part account for the lack of eggs.

The best thing to do is to give the very best care possible, change the feed somewhat; give plenty of it, and induce a good healthy exercise. Keep the places clean and birds free from vermin; houses well ventilated but free from draught; dry, and as bright as possible.—F. C. E.

Peterboro Poultry Show

Over 600 birds of remarkable good quality, and the large attendance of poultrymen and sightseers throughout the days of the show, marked the success of the first exhibition held last week by the Peterboro Poultry Association. Sixty-nine different classes of poultry were on exhibition. The largest showing was made in the Minorcas, Light and Dark Brahmas, and Orpingtons. There were also splendid exhibits of Plymouth Rocks, (Barred, Buff and White varieties.) Other utility breeds such as Wyandottes and Rhode Island Reds, as well as game birds and fancy fowl, guinea fowl, pigeons, geese and turkeys, were also well represented. Mr. J. E. Bennett, of Toronto, placed the awards.

The principal exhibitors were: Stephen Seller, Harry Lush & Dunnett, J. Baptie, McIntosh and Halliday, C. H. Wilson, W. D. Card, J. R. Hope, Vickery Bros., F. Bottrell & Son, Leslie Stephens, Howard Varcoe, John Bickell, R. Robinson, J. J. Cunningham, E. Syer, Howard Outram, Geo. Bullied, Stewart & Grady, J. F. Kelly, Harry Smale, H. Campbell, John Matheson, D. Cameron, R. J. Kidd, E. G. Scrigley, George Paxton, Geo. Paxman, R. Westcott, Charles Miller, Tom G. J. Gauthier, Andrew Miller, George Hutchinson, J. W. F. Hall, John Heffernan, Frank Head, Orval King, Sam Bickell, Eddison Wigg, A. Head, J. D. Pentland, Isaac Emerson, Wallace Kennedy, Sam Long, F. Branch, B. A. Dutton, Gerald O'Brien, A. Ash, C. D. Tucker, H. C. Garbutt, Cesare Laplante, C. D. Tucker. A feature of the show that commended itself to all, was the demonstration on Wednesday afternoon and evening, of trussing and preparing a bird for the table, given by Miss Mary Yates of Macdonald Institute, who is

on the staff of the Department of Agriculture as a poultry expert and Farmers' Institute and Women's Institute lecturer. Miss Yates is an English lady who has had an extensive experience in England as well as in Canada in connection with poultry. Miss Yates' lecture upon this subject given at the Winter Fair at Guelph last month, was fully reported in our issue of December 14th.

Miss Yates remarked that she was a great advocate of selling poultry and eggs on the market, not by the

pound and dozen, but by weight. Selling by weight is the only fair way for both the seller and buyer, and it encourages the seller to put a better article upon the market.

From the start to the finish, the exhibition was a pronounced success, and the management are to be congratulated for the enterprise and enthusiasm which made their first annual poultry show possible.

but of sight, and listen to the noise he makes in calling to the rest. Sometimes they will be afraid and not call but let them stay apart for a while and they will soon start a conversation. The gander has a loud, coarse "hack," just the one yell, while the goose has a softer "hack," and, to keep up the reputation of her sex, more of it.—G. A. Taylor.

Sex of Geese

How can the sex of geese be told?

When geese are older the difference in appearance is more marked. The male is coarse and long, in neck and legs, but when young, the "call" is the most distinguishing point of difference. Separate the one you wish to know of from the rest of the flock, not out of reach of hearing,

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but resolve to take the course that will make you a fireman, and write for free catalog and full information about our school. We'll prefer the electric road to Electric Railway Course for firemen. We'll tell you for complete service in a few weeks. Other courses in work at good wages for homepreneurs and bookkeepers. For Commercial Houses and Government. If you want to pass successfully as a fireman or in a poorly paid position, what this great school can make you a valuable asset in an excellent position. Write today for free catalog—mention which course you wish to take and state age.

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SHELL-O-EGG
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Black Watch Remarkable for richness and pleasing flavor. The big black plug chewing tobacco.

2267

A Great Gathering

(Continued from page 1)

Ruddick. By means of lantern slides, Mr. Ruddick took his audience on a trip to most of the leading dairy centres of the world. Cheese and butter factories in such countries as Denmark, Holland, New Zealand and others were shown. Some of the fac-

ories in Europe cost over \$100,000. They are infinitely ahead of any factories we have in Canada. Mr. Ruddick stated that 50 years ago, the farmers of Holland were miserably poor. They finally were forced to go into dairying with the result that now, by means of improved methods of dairy farming, they are a wealthy people.

The audience was surprised when told by Mr. Ruddick that the immigration into our Canadian northwest, of which we are so proud, is of only small proportions compared with the tremendous immigration that is taking place from Russia into Siberia. In 1907, 500,000 people crossed the mountains into Siberia and during the first three months of 1908, 450,000

more immigrated into that country. Mr. Ruddick warned those present that Canada is going to feel the competition of Siberia much more keenly during the next few years.

CHEESE MAKERS' CERTIFICATES

The committee composed of Messrs. J. R. Dargava, M.L.A., G. G. Putnam, and G. A. Putnam, Director of Dairy Instruction, that was appointed

Every Safe Lock Shingle is made to meet the rigid requirements of the British Government for Admiralty and other Public Service



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Insurance records show that one-half the fire losses on barns in Canada result from lightning. The property loss in these cases amounts to many thousands of dollars every year.

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This proves to us that Safe Lock roofing is a positive guaranty against lightning.

Anyway, we are willing to show our faith in Safe Lock Shingles and will protect you from lightning without one cent additional cost to you, directly or indirectly.

Safe Lock Shingles are sold at the same price as shingles known to be inferior in quality of steel, galvanizing and construction.

Safe Lock Shingles lock positively and securely on all four sides. They cannot be blown off, nor can they be pulled apart through the warping of the sheeting, or in any other way.

And remember this—No other shingle is a Safe Lock Shingle.

Safe Lock Shingles can be found in every part of the Dominion of Canada where they have been subject to storms of all degrees of severity.

No building covered with Safe Lock Shingles has ever been unroofed.

THE British Government requires all galvanized steel roofing for Admiralty or other public work to be of specific grade and to be capable of withstanding a certain acid test.

The acids used for this purpose are strong enough to burn the skin off a man's hand, and yet the galvanizing must be heavy enough to withstand their action for a definite period.

Exposure to wind, rain and snow for a quarter of a century is much less destructive than this acid test.

Yet every Safe Lock shingle is guaranteed to meet the Government requirements in this and all other respects.

No wonder that those who have used Safe Lock Shingles declare that they will last as long as the buildings they protect.

Safe Lock Shingles are the only shingles that actually lock on all four sides so that they cannot pull apart.

Shingles which do not lock on four sides are not Safe Lock Shingles.

Again: Safe Lock Shingles are the only shingles that completely protect the roofing nails from weather.

—The only shingles that have three thicknesses of steel along the upper edge of lock, thereby doubling the strength along the line of greatest strain.

—The only shingle galvanized after the sheets have been accurately cut

We want you to know what some of the users of Safe Lock Shingles say of them.

H. T. McLAUGHLIN, Fair View Farm, Alba, Ont.—“The ‘Safe Lock’ makes your shingles absolutely wind and water proof. They are the best shingles on the market to-day.”

F. B. DOUD, Branchton, Ont.—“The Galvanized Steel roof is apparently as good as when put on in 1898. The ‘Safe Lock’ Shingles make a lasting, storm-tight roof, and give clean cistern water. ‘I am satisfied that I put on a good roof.’”

W. J. McPIERSON, Derryton, Ont.—“The ‘Safe Lock’ Shingles that I purchased from you ten years ago have given splendid satisfaction. The roof has never leaked a drop, and they seem to be just as good as the day they were put on.”

J. C. PAYNE, Cayuga, Ont.—“It must be ten years now since I bought the metal ‘Safe Lock’ Shingles, and up to this time I have no reason to regret their purchase. We have had wooden roofs put on since which are open in spots from the splitting and shrinkage of shingles. No difficulty, so far as I have noticed at least, has arisen with your Metal Shingles, and the roof seems compact and durable. So far as I have been able to see, I have seen no wear or injury to the shingles during the ten years’ use, and cannot see but that the roof is just as good as when it went on.”

MURDOCK McKENZIE, Bear Line, Ont.—“The ‘Safe Lock’ Shingles have never given me any trouble, and they appear to be as good to-day as the day I put them on. I am well satisfied with them, as I believe them to be the best roofing that can be used on barn buildings.”

GEO. HARDY, Ashgrove, Ont.—“It will be eight years in June since the barn was shingled. I never had any trouble with it in any way, and it appears to be as good as when put on. I have been recommending your shingles as the best that can be got.”

MRS. JAMES STEWART, Pendleton, Ont.—“In reply to your letter asking about shingles I bought from you over five years ago. I looked the roof all over to-day, and they seem to be in as good condition as when they were put on the roof. The shingles don't seem to be any the worse for wear, and they will last for years.”

Send to-day for our book, “The Truth about Roofing” and full details of our Fire Insurance Policy payable in cash if your Safe Lock Roof is damaged by lightning.

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“Roofers to the Farmers of Canada”

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My roof measures.....ft.....in. long
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I expect to build..... Kind of Building.....

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My roof measures.....ft.....in.

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early last year to consider the advisability of securing legislation that will require cheese and butter makers to equal a certain standard of qualification before they would be allowed to take charge of a factory, was presented through Mr. G. A. Putnam. Mr. Putnam stated that the committee had been gathering information about the various cheese makers of the province. It had found the length of time the makers had been engaged in the business, the general quality of the goods they manufactured, etc., and was of the opinion that some action should be taken to establish a standard of qualification. It had been found that only a very small proportion of the cheese makers of the province had attended a dairy school even for only short terms. Mr. Putnam pointed out that there had been opposition at first to the passing of sanitary legislation. The legislation that had been secured is now being commended on all sides. He stated that the committee was of the opinion that a system of permits competent makers without old dairy school training would be allowed to continue in charge of their factories.

WILL ASK FOR LEGISLATION

The recommendation of the committee was adopted by the convention which passed the following resolution:

Moved by Henry Glendinning.

Seconded by T. A. Thompson.

"With a view to improving the position of the cheese and butter makers of Ontario and, also, to place the owners and managers of factories and well qualified makers, this association, in convention assembled, respectfully request that legislation be enacted, setting forth the qualifications of makers who may be allowed to take full charge of the manufacture of either cheese or butter. It is recommended that a full census be taken of makers and helpers during the season of 1909 and that certificates of efficiency be issued to those who are considered qualified for the season of 1910, and that for the season of 1911, only those who receive certificates be allowed to occupy positions as head makers. We beg to recommend that a committee be appointed by the directors of this association to co-operate with representatives of the Western Ontario Dairy-men's Association in recommending a basis upon which permits or certificates be issued.

Readers of Farm and Dairy will remember the agitation that was conducted by The Canadian Dairyman two years ago in favor of establishing a standard of qualification for cheese

and butter makers. At that time, The Canadian Dairyman printed a petition form which was signed by about 350 makers in the course of only a few weeks, asking that the standard of qualification should be established. It now looks as though such a standard will be established in the near future.

SASKATCHEWAN LEADS US

Dairy Superintendent W. A. Wilson, of Saskatchewan, made it clear that Saskatchewan leads Ontario in several important respects. "In Saskatchewan," said Mr. Wilson, "we have been endeavoring to avoid some of the mistakes that were made in the early days of dairying in Ontario. We are trying to keep out of the ruts into which you have fallen unintentionally. To prevent the erection of a large number of small factories such as you have in Ontario, we have passed legislation which makes it possible for a creamery to be erected within twenty miles of another creamery until its plans have been submitted to the Department of Agriculture. When the department finds that a proposed new factory is likely to work injury to an established factory, it seldom has difficulty in persuading the promoters not to go ahead with the undertaking. The department is also able to prevent the erection of creameries where there are not enough cows to make the venture a success. In Saskatchewan, the government pays the cost of the shipping charges on cream for the creameries. In this way, farmers who live 150 miles from the creamery are able to deliver their cream to the creamery at as low cost as farmers living near the creamery. The past season has been the most successful one we have had in years and we expect before long Ontario will hear a good deal about dairying in Saskatchewan.

WHY BUTTER DETERIORATES IN QUALITY

Chief Instructor G. G. Pablow, in his report which is published elsewhere in this issue, showed that there had been a great increase during the past year in the number of factories manufacturing whey butter. He stated emphatically that unless factories are likely to receive at least ten thousand pounds of milk a day, it will not pay them to install a butter-making plant.

Mr. G. A. Putnam reported that last summer Mr. Hems conducted some experiments in Kerwood factory in Western Ontario, and Mr. J. W. Mitchell similar experiments in two factories in Eastern Ontario with whey butter. These experiments showed that while some excellent whey butter had been manufactured, the average quality of such butter was in-

ferior to the quality of butter made in the usual way. Whey butter when placed in cold storage, deteriorated in quality quite rapidly.

CAMPAIGN DENOUNCED

Dairy Commissioner J. A. Ruddick, denounced vigorously the methods that have been followed in a campaign that has been conducted in Eastern Ontario by a paper that has been endeavoring to introduce changes in the method of selling cheese. "The question," said Mr. Ruddick, "has been magnified to an extent out of all proportion to its importance. The

result has been to divert the attention of some dairymen from questions of much more real importance.

OFFICERS ELECTED

The following officers were elected: Hon. Pres., Senator D. Derbyshire; Brockville; Pres., John R. Dargavel, M.L.A., Elgin; 1st Vice-Pres., Henry Glendinning, Manilla; 2nd Vice-Pres., J. H. Singleton, Smith's Falls; Executive Committee, T. A. Thompson, Almonte; Edward Kidd, North Gower; James Sanderson, Kemptonville; C. F. Whittaker, North Williamsburg; J. H.

(Continued on page 8)

FENCE TALK No. 1

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Common sense will show you that because Page Fences are—by actual test—fully one-third stronger than the best of other fences.

Common sense shows you that the stronger fence is the better fence—because it can be stretched tighter, and will stand up to its work longer.

Page Fences, with their high-carbon (tougher, harder) steel nine-gauge horizontal wires, are a third stronger than the best of the other kinds. By harsh tests, this Page wire stands a strain of 2,400 lbs. The "hard drawn" horizontals in the other kinds break at 1,800 lbs. strain. Some of them break at less.

Simple arithmetic will show you that Page Fences, costing maybe a cent more a rod than the half-as-strong kinds, is actually five cents and more a rod cheaper—because fewer posts will keep them in better shape.

Figure it yourself. Using Page Empire Fences, say, you can safely set the posts half as far apart again as you'd dare to with ordinary wire fencing. That means two posts for Page Fence to three for the other kind.

What is it worth to dig post holes? What are fence-posts worth in your section? Figure out the saving for yourself—it is easy to do.

Here are but part of the reasons why you can't afford to buy other than the Page Fences—no matter what you pay. Let us send you a booklet (free) that shows you how to prove fence-value before you buy. Ask by mail of our nearest place. The Page Wire Fence Co., Ltd., Walkerville, Toronto, Montreal, St. John, Vancouver, Victoria.

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FARM AND DAIRY

AND RURAL HOME

Published by The Rural Publishing Company, Limited.



FARM AND DAIRY is published every Thursday. It is the official organ of the British Columbia, Manitoba, Eastern and Western Ontario, and Bedford District Farmers' Associations, and of the Canadian Holstein, Ayrshire, and Jersey and Breeds Associations.

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CIRCULATION STATEMENT

The paid-in-advance subscriptions to Farm and Dairy during its first year, with our circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears, amounts to 15,000 copies, varies from 8,500 copies (never being less than that) to 15,000 copies. Subscriptions, unless renewed, are discontinued at the year's expiry. No subscriptions are accepted at less than the full subscription rates. Thus our mailing lists do not contain any dead circulation.

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

OUR PROTECTIVE POLICY

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

FARM AND DAIRY

PETERBORO, ONT.

TORONTO OFFICE:
Room 366 Manning Chambers, 77 Queen St., West, Toronto.

SEND A COMMISSION

The suggestion advanced by Farm and Dairy in its issue of December 23rd, that a commission of leading Canadian farmers, and hog raisers, arranged by the Dominion Government, be sent to Great Britain and Denmark, to investigate conditions connected with the bacon industry there, has excited much favorable comment. In last week's issue we published the views of Mr. J. H. McNish, of Leeds Co., Ont., and Mr. Thomas McFarlane, of Carleton Co., on this question, both of which are favorable towards, and come out strongly for, the sending of such a commission.

We must admit that Danish farmers and pork packers are beating us in the production of bacon. If we are to right matters, we must find

out the reason. To do this we must investigate the conditions at first hand. For years it has been the practice of the more progressive countries to send commissions to this country to find out what we are doing, notable among which was the Scottish agricultural commission, which toured Canada last year. It is time that we followed their example by sending some of our leading farmers to Denmark. The report of such a commission would be invaluable and would carry much weight with our farmers.

UNITED STATES FARMERS ORGANIZED

No better evidence of the strength and resources of the National Grange in the United States—which is the only national organization that the farmers of the United States have—need be given than was furnished by the financial statement presented at the recent annual convention of the Grange. It showed that the Grange in October, 1908, had resources of \$111,677. These resources included \$56,267 in loans on real estate; \$20,333 of railway and other bonds, and \$34,230 of a balance with the Farmers' Loan & Trust Co.

By being thus organized, the farmers of the United States secured the benefits of rural free mail delivery, many years ago. In a short time, they will enjoy the privilege of having parcels post, by means of which parcels up to eleven pounds of weight, will be delivered at their doors at a nominal cost. It is going to be a difficult matter for the farmers of Canada to compete in the markets of the world with the farmers of other countries if they do not enjoy similar benefits. They are not likely to obtain these benefits until they organize. The time is ripe for a revival of interest in the Dominion Grange. Local granges should be established all through the country.

THE MAKER AND THE CHEESE SHORTAGE

As was shown in last week's issue of Farm and Dairy, the make of cheese for the past two seasons has been considerably below what it was previous to 1907. We pointed out how this shortage had affected the patron and the cheese manufacturer; now for its relation to the maker. How has this shrinkage in make affected him? The great majority of makers make cheese for a certain rate per lb. If the make is large, the maker has a fairly good living. But, if it falls off to any large extent, as it has done the past few years, any profits there may be in the business for him are wiped out, and he may consider himself lucky if he comes out even at the end of the season.

The profit in, cheese making, as in every other business, comes from the amount of business done over and above what is required to pay expenses. If, for example, a maker requires to make ten cheese a day to meet expenses, he is not making any profit unless he can increase the make to twelve or fifteen cheese a

day. If a census were taken of the business of 1908, we believe it would be found that the percentage of makers coming out with a reasonable profit on the season's work, would be comparatively small. A shortage in the make of cheese in any season, hits the cheese maker harder than anyone else connected with the business.

The patron has other sources of revenue than the cheese factory. The manufacturer, unless he is a maker also, has usually some other string to his bow. Not so with the maker. The making of cheese is his sole concern. If the season does not pan out as expected, he has no way of making it up, or of adding to his revenue. Is he to be blamed, therefore, if he asks for more pay, and a better recognition of his responsible position from those whom he serves?

The time has come, whether the make of cheese increases or not, when higher wages should be paid to the cheese maker. The need for this is all the more apparent when a season like the past one comes along with a falling off in the make. To a large extent the falling off has meant the cutting off of any profit there may have been in the business for the maker.

FEWER VARIETIES MORE PROFITABLE

A remark made by a well-known potato shipper recently to the effect "that-one could not buy a carload of Ontario potatoes without getting at least from five to twelve different varieties in the lot," brings up again the discussion which took place at the recent annual meeting of the Ontario Experimental Union. The estimate value of the potato crop for Ontario last year is \$12,000,000, according to Prof. C. A. Zavitz, of the Ontario Agricultural College. This estimate came as a surprise to some who have heard so much of the good qualities of potatoes from the Maritime Provinces, and of the inferior quality of the crop as grown in Ontario.

"Do not grow over three varieties in a district," was the advice recently given by Mr. C. F. Alward, a New Brunswick farmer, who is touring Ontario in the interests of the Farmers' Institutes. He attributed the great popularity of the New Brunswick potatoes to the fact that they were uniform in quality, that a whole carload, and even train loads, of the same variety were available to fill any order.

On many Ontario farms potato growing is still a profitable branch. It could be made more profitable if we would adopt this principle which has done so much for the potato growers of New Brunswick, namely, growing but one or two varieties instead of a large number of the 90 different varieties, and more, which are largely grown over Ontario. We must adopt more of the spirit of co-operation in regard to the varieties of potatoes grown in any one section. Ontario potatoes can be made just as popular as potatoes grown in any

other section of our Dominion but they must be of a uniform quality and in car loads of the same variety.

PUT IN ICE

Thousands of dollars have been lost to our dairymen in years past because their cheese and butter did not grade "finest." Much of this was due to the improper care of the milk upon the farm, chiefly to lack of cooling. A finest quality of product cannot be made in hot weather from milk that has not been properly cooled. The experiments that have been conducted in connection with cooling milk, and particularly those carried on last summer by Mr. George H. Barr, Assistant Dairy Commissioner, prove conclusively the great need of cooling milk as soon as drawn from the cow. When a plentiful supply of cold water is available, a supply of ice is not so necessary, though there are few cases where ice could not be used to advantage by most dairymen. Even should it not be needed regularly throughout the summer it will come in most acceptable in hot spells when the supply of water proves inadequate to bring the milk to a proper temperature.

Then, besides, ice is a luxury that can be made good use of in the house in the summer months. As Senator Derbyshire aptly put it recently, "one owes it as a duty to his wife to put in ice for her comfort alone, aside from the interests of his dairy."

The time for harvesting ice will soon be at hand again. If you have not been putting in ice in past years, store a supply this winter. A very simple, inexpensive building can be erected that will fill the bin for an ice house, and the ice to fill it can usually be obtained near by and at a very nominal cost. Put in ice at this year; you will not regret it.

Ontario Fruit in the West

(The News)

Nobody who ever saw the prairies and the mountains can believe that British Columbia will ever compete with the prairies in the raising of grain. But in more intensive farming British Columbia is making great advances and particularly in regard to fruit growing. It may very well be, as argued by Ontario growers, that British Columbia fruit, particularly that raised by irrigation, is not equal to Ontario fruit, but the British Columbia orchardist has many advantages. The orchards are young, the trees comparatively free from disease, and the fruit, like that of California, has good carrying qualities. Ontario's best peaches and plums are too tender to carry to Saskatchewan or Alberta with success unless very carefully packed and forwarded by express.

There are varieties, however, which while but slightly inferior to the best stand the journey much better. It is, therefore, now the duty of the Ontario grower to select and grow these varieties, and to take advantage of all plans of co-operation, cold storage, good packages, and the like, to meet in the prairie provinces the competition from British Columbia. The West is a big and growing country and its trade is well worth fighting for.

Renew Your Subscription Now.

Creamery

Butter Maker
matters relating
past subjects
to the Creamery

Creamery

For I

James Stinson

The creamery in Eastern Ontario in some parts of other parts. I tions existed and along the caused by a son being ex of June. Betw to the pastur age through J were very ac through the duer's stand unsatisfactory standpoint at usually high year. A great its way to t year than th which tended creamery but tario is put assumed largely by Montreal a creamery located at eas is conducive t

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SHIRING

Some of th suffered a g output during years, and t expenses in as possible. I age in lack of sold off during great many past season. Other cause for dairy butte I have fou giving excell they have h duced. The creamery the maker h examine it fo objections to the extra coo patron or cr district which they are ship Tanks are m ries in my have their a tages. For l hilly country advantage an be hauled o que the feet o any other way

An Address
Dairymen's
week.

Creamery Department

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

Creamery Workand Suggestions for Improvement*

James Stanhouse, Creamery Instructor, Fort Ferris, Ontario.

The creamery season for 1908 in Eastern Ontario has been satisfactory in some parts and unsatisfactory in other parts. The unsatisfactory conditions existed in the most easterly part and along the Ottawa river, and were caused by a lack of pasture, the season being extremely dry from the 1st of June. Between Belleville and Toronto the pastures were up to the average through June and July and prices were very satisfactory for butter all through the season from the producer's standpoint, and undoubtedly unsatisfactory from the consumer's standpoint as prices have been unusually high nearly all through the year. A great deal more butter found its way to the British market this year than was sent over last year, which tended to stiffen prices for creamery butter. The bulk of the creamery butter made in Eastern Ontario is put into prints and is consumed largely in the district bounded by Montreal and Toronto. Nearly all the creameries in my district are located at easy shipping points which is conducive to doing a print trade.

I had only one creamery in my district (Maxville) which was exclusively a whole-milk creamery. I had two others, Locust Hill and Peterboro, which separated a portion of the milk at the creamery.

The make of butter throughout my territory was fairly uniform, only one creamery pasteurizing the cream throughout the summer, and the benefits of so doing were very apparent in the finished product. This creamery takes no sour cream and pasteurizes all cream and milk taken in. The custom of collecting cream only twice per week is becoming almost general and from the standpoint of quality this is to be regretted. The cost of hauling has increased so much during the past four or five years that collecting three times per week eats up a great part of the profit where the creamery patronage is small, or where the patronage is falling off as it is in many cases.

SHRINKAGE IN OUTPUT

Some of the older creameries have suffered a great shrinkage in their output during the last three or four years, and they are curtailing their expenses in every direction as much as possible. One cause of the shrinkage is lack of cows. Many cows were sold off during the fall of 1907, and a great many were farrow during the past season. Lack of farm help is another cause and the strong demand for dairy butter is another.

I have found the individual cans giving excellent satisfaction where they have been successfully introduced. The cream seems to come to the creamery in better condition and the maker has a better chance to examine it for quality. The principal objections to the individual can are the extra cost of cans either to the patron or creamery, and the limited district which can be covered unless they are shipped.

Tanks are used in only two creameries in my district, and they also have their advantages and disadvantages. For long hauls over rough and hilly country they seem to have an advantage and much more cream can be hauled on a given number of square feet of wagon bed than in any other way. Jacketed cans are the

most popular among creamery men, as they have several advantages over the other methods. I found a great lack of proper covering for the cans while on the road. I induced one creamery to adopt a canvas covering, and the butter-maker reported that cream from the covered cans came in four degrees cooler than those not covered. These covers not only keep the temperature down, but they prevent dust and mud from getting into the cans. This road dust is one of the worst things that can get into milk or cream as it is always laden with germs of a putrefactive kind.

LACK OF COLD STORAGE FACILITIES

There is a lack of cold storage facilities for keeping butter at a low temperature. I have 23 creameries in my territory and none of them use the salt and ice system. The large majority ship out their product once or twice per week and some every day, thus lessening the necessity of low temperatures. Low temperatures, however, are a necessity where the butter is for export. The majority of creameries in Eastern Ontario are particularly well situated to cater to the large consuming centres and they are not paying much attention to the export trade, and for this reason they do not attempt to provide first-class cold storage. There are but few unsatisfactory buildings used as creameries in my district and only four which have no cement floors in their make-room, and many have cement all through.

I found a general uniformity in the amount of moisture contained in the butter, usually running from 12 to 14 per cent, but individual cases running from 16 to 20 per cent. Where an attempt was made to incorporate moisture I usually found the highest test.

The score of the butter for quality was generally not as high as is desirable and this is accounted for by the cream generally not being kept at a temperature sufficiently low to prevent it from becoming too sour, and the cream not being gathered often enough, usually twice per week. The cream generally handled in good shape after it is received at the creamery, but the butter-maker usually has but little control of his product as the quality is fixed in the cream before he receives it.

ADVANTAGE OF RICH CREAM

I have found that where the cream is made rich and kept at a low temperature at the farm that it is usually in first-class condition when it leaves the farm. Many patrons of creameries insist upon sending a low testing cream, and I find that the creameries getting a low testing cream usually turn out the poorest quality of butter. The reason for this is that a low testing cream has too much milk left in the cream and it is the constituents of the milk which sour and decompose and cause bad flavors. A rich cream has less of these decomposing materials in it and the less we have the less chance there is of bad flavors developing in the cream. It would be good thing if all cream haulers could be paid according to the amount of fat they bring in as this would induce the haulers to insist on a rich cream from the patrons. Where this is in vogue it works well, as it makes the haulers hustle after cream and they won't carry any more milk than they are compelled to.

In summing up the suggestions I would make for the improvement of the creamery, the first and most important is a richer cream kept at a lower temperature while in the hands of the patron; second, gathered as often as necessary after the cream is old flavors; third, pasteurizing to eliminate food and other injurious flavors; fourth, have canvas covers for the wagons that carry cream in cans; fifth, wash farm appliances after each milking. Neglecting to wash separators after using is becoming a very common practice and cannot be too



A FATAL WAIT

A man sometimes means to correct a fault, habit or imperfection knowing that he is without question suffering a loss in one or another way in permitting its continuance. But it is so blamed easy to go on just one more day, that finally the accumulation of penalties—effects of the injurious cause—prove too great a load and down comes the structure, business or physical, a wreck.

For DAIRY CORRECTIVE Use The DE LAVAL

CREAM SEPARATOR AND MOVE NOW

THE DE LAVAL SEPARATOR CO.

173-177 William St.

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strongly condemned. People who consider themselves very clean in other respects are falling into this error along with the most careless.

Report of Dairy Instruction for 1908

At the annual convention of the Eastern Ontario Dairyman's Association, held last week in Prescott, Ont. the following account of the work of dairy inspection and instruction in Eastern Ontario last year was given by Chief Instructor G. G. Publow, of Kingston, Ont.

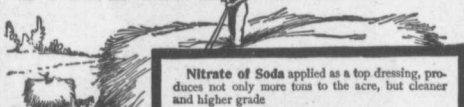
The work of instruction and inspection was carried on in a similar man-

ner to that of the season of 1907, the only new feature introduced being the appointment of two official prosecutors, to deal exclusively with cases of adulteration of milk, thus relieving the factorymen of a very unpleasant duty.

The number of instructors and sanitary inspectors employed was 24 for cheese factories and one for creameries. The cheese instructors had 941 factories under their supervision, and the creamery instructor had 28.

One hundred and seventy-two full-day visits were given to the cheese factories by the instructors. Full days were spent when requested by the factorymen, or when it was found

Nitrate of Soda



Nitrate of Soda applied as a top dressing, produces not only more tons to the acre, but cleaner and higher grade

TIMOTHY

Test It for Yourself Entirely Free

Let us send sufficient Nitrate of Soda for you to try, asking only that you use according to our directions, and let us know the result. To the twenty-five farmers who get the best results, we offer, as a prize, Prof. Voorhees' most valuable book on fertilizers, their composition and how to use different crops. Handsomely bound, 32 pages.

Apply at once for Nitrate of Soda by post card, as this offer is necessarily limited. * Grass Growing for Profit, another book of useful information, will be sent free to farmers who send the present edition last, if paper is mentioned in which this advertisement is seen.

Send name and complete address on post card

W. S. MYERS, Director, John Street and 71 Nassau, New York

* An address before the Eastern Ontario Dairyman's Association Convention held last week.

Better the Butter

Give it that delicacy of flavor which adds to the original tastiness of the butter *without taking from it*, by using fine pure Salt.

Salt that dissolves at once
Salt that works in evenly, easily, quickly
Salt that does not cake or harden

Windsor Salt

Every grain is a perfect crystal, with all its natural strength preserved. And, because it is all salt and strong salt, less gives a *better flavor to more* butter than other brands. It is acknowledged to be the finest and purest.

Used for years by prize-winning butter makers at the leading agricultural fairs.

In spite of the fact that it goes farther and betters the butter, **Windsor Salt** costs no more than any other salt.

For the same reasons of strength, purity and fineness, **Windsor** is the best Table Salt.

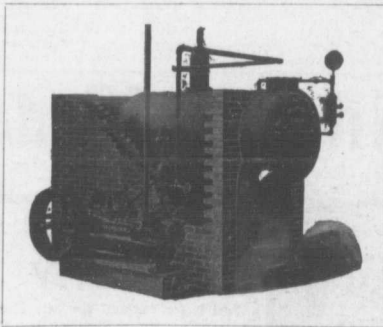
AT DEALERS EVERYWHERE

THE SUPERIORITY

— OF OUR —

Dairy Outfits

IS UNQUESTIONABLE



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BRANTFORD, CANADA

necessary to give general instruction in the manufacture of cheese, or to assist in locating the cause of any defects that might exist, and for a general inspection of the milk supply and sanitary conditions. The factories also received 4,852 call visits, the instructors remained from half an hour to half a day as occasion required.

By visiting the factories at short intervals, and spending some time in the curing room with the makers, the instructors are often able to be of as much service in remedying defects in the cheese, as if they had spent the whole day in the factory. We find this particularly true with makers who have a good knowledge of the principles of cheese-making, but who are liable to be confused owing to the varied conditions in which the milk is received. These call visits have proven to be a great factor in keeping the quality of the cheese uniform throughout the different months of the season, and have proven beneficial to the makers in many other respects. They also enable a more frequent sanitary inspection and this results in the factories and surroundings being kept in a much better condition than they otherwise might be if inspection were not so frequent.

VISITED MANY FARMS

Considerable time was spent by the instructors visiting the farms of patrons. There were 3,481 farms visited with a view to improving the quality of the milk supply. From the conditions revealed by these visits, it would appear that much greater attention should be given to this important feature of the work. It was found, at many of the places visited, that very little attention was given to the sanitary conditions under which the milk was being produced and kept. At many of these places from which milk was being received out of condition, the instructors showed the patrons how the milk should be cared for during the warm weather. The milk was divided and one part was cared for simply by dipping and the other part was covered and rapidly cooled by means of water or ice to a temperature ranging from 65 to 70 degrees.

When the milk was received at the factory next day and fermentation tests made, it was found that the portion cooled by water or ice showed about 2-100 per cent. less acidity than that which had been only dipped, and invariably the curds produced were much closer and cleaner in flavor, the difference being most marked in cases where the surroundings where the milk was cared for were unsanitary. In practically every case the instructors were well received. The patrons visited showed a willingness to comply with all suggestions offered.

QUALITY IMPROVING

While there are still a number of cheese being manufactured that can be classed as second grade, yet it is gratifying to be able to say that there is a gradual and decided improvement in the average quality, and notwithstanding the critical inspection this year, there was a marked decrease in the number of claims. In this connection I would like to commend the Montreal merchants for the fair manner in which they treated the factory men in this respect. Very seldom were whole consignments faulted, but in several cases, where whole shipments were objected to, it was found that a few cheese were responsible for the claims made.

If factorymen would adopt the plan of numbering the boxes of defective cheese, and acquaint the buyer of the same, it would result in the docking of only the cheese that are deserving, thus preventing much confusion and dissatisfaction. I would like to thank Mr. Burgess, the official referee, for the prompt and efficient manner in which he reported on the defective lots he was called upon to examine.

It enabled me to immediately acquaint the instructors with the existing defects, so that they were able to give prompt assistance to the makers who were in need of it.

NOTE.—More of Mr. Publow's report will be given at a later date.—Ed.

Cheese Department

Makers are invited to send contributions to this department, to ask questions on matters who will be immediately answered. Subjects for discussion. Address your letters to The Cheese Maker's Department.

Care of Milk for Cheesemaking*

Geo. H. Barr, Assistant Dairy Commissioner, Ottawa

All dairymen should be deeply interested in this subject, for the very foundation of successful cheese-making lies in the production of clean, sweet milk.

It is the general opinion that milk for cheese-making should be "aired" in some manner after it is drawn from the cow, and for many years patrons of these factories were advised to use some special style of aerator, to expose the milk to the air by dipping it.

A few years ago Professor Dean reported some experiments on this subject. His conclusions were that there was no advantage in aerating milk for cheese-making. Many dairymen at that time thought such a statement almost rank heresy and that his college experiments were scarcely applicable to factory conditions, but there has been a growing conviction in the minds of dairymen that aeration is of little value.

In order to throw some further light on this important but somewhat obscure subject, Mr. Ruddick decided to have some experiments conducted last summer under factory conditions.

It was my privilege to carry out this interesting and instructive work with the able assistance of Mr. J. G. Bouchard, also of the dairy staff. Our object was not to secure information from a bacteriological standpoint, but rather to discover, what effect different methods of handling the milk at the farms, would have on the quality of the curd and cheese.

The price at which we had in view here, to ascertain the advantages or disadvantages of aerating, of cooling and aerating, and of cooling the milk without aeration under ordinary farm conditions, and if possible, discover a simple, convenient, inexpensive and effective method of treating the milk, so that it might be delivered at our cheese factories, in such a condition, that our cheesemakers would not have to contend with gassy and other undesirable fermentations during the process of manufacture, or suffer losses from unclean flavors in the cheese.

WHERE EXPERIMENTS WERE MADE

We made a very convenient arrangement with Mr. John McEwan, proprietor of the Rideau Queen cheese factory, Smith's Falls, whereby we had the use of his creamery room for the season, and also a number of his patrons were willing to allow us the privilege of going to their farms to arrange for the care of their milk. At first we thought of taking the milk from six or eight patrons, but we found it would be difficult to get all the details in connection with the treatment the milk received at the farm from so many, and finally decided to use the milk from two patrons, Mr. Walter Hyslop and Mr. D. Condie. These two gentlemen had the largest herds convenient to the factory, and also had ice stored for summer use. Mr. Condie's farm lies on the west and Mr. Hyslop's on the south side of the town of Smith's Falls. Part of Mr. Condie's farm con-

*An address before the Eastern Ontario Dairymen's Association at Prescott, last week.

ists of drove Canal, and the part of the around this Hyslop's farm well as high, scarcely call land for the milk, but these conditions opportunity to may be co- farm land. Mr. Con- stated on the grade. Holst Shortborns. had aborted were milking One cow has year.

Mr. Hyslop consisted of one grade Holst Ayrshires. also aborted cows were fe in July, with milk well, on the milk.

CONDITIONS

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The equip consisted of a box for c in the cans, water, and two half-bar cans in coling's milk w milk was no Mr. Bouch way presen ing commen chaw of th drawn from as the cow was strained behind the the milks ta milk was p in the stabo stand and st

The milk into a squa of the aerat list at each the milk to the two mil The mornin the evening in the annu lots were t possible at two small v of the even being put i Vat B. The ided equally. Curd tests evening's m ing's milk, of the milk received, at son, only a difference.

slats of drowned land from the Ribou Canal, and the cows pastured a good part of the summer on the flats around this swampy section. Mr. Hyslop's farm had some low land as well as high and stony soil. One could scarcely call either farm ideal pasture land for the most delicate flavored milk, but we were very glad to have these conditions, thus giving an opportunity to submit to you what may be considered about average farm lands.

Mr. Condie's herd of 17 cows consisted of eight grade Ayrshires, four grade Holsteins and five Shorthorns. Several of these cows had aborted during the winter, but were milking fairly well all season. One cow had been milking over a year.

Mr. Hyslop's herd of 18 cows consisted of one pure-bred Holstein, two grade Holsteins, and fifteen grade Ayrshires. A number of the cows had also aborted during the winter. These cows were fed silage for several weeks in July, which kept up the flow of milk well, with no detrimental effect on the milk for curdling.

CONDITIONS AT THE FARMS

The cows were always milked in the stable at both places. Mr. Hyslop's stable was frame and Mr. Condie's a stone basement under the barn. Both had wooden floors, which could not be considered by any means as sanitary as cement. The walls, ceilings and floors were dusty. The milking was done at Mr. Hyslop's by his four sons, and at Mr. Condie's by himself and two hired men.

At both places, bright tin pails were used to milk in. No special regulations were asked for in regard to milking, or feeding the cows, our object being to get milk as they gave it to us, and see what result different treatment at the farm would have on it when manufacturing it into cheese.

The milk was delivered to the factory in the usual way, each patron delivering his own milk. Mr. Hyslop usually came to the factory about seven o'clock, and Mr. Condie about eight o'clock. The morning milk gave us ordinary factory conditions for delivery.

EQUIPMENT USED

The equipment used at each farm consisted of two Champion aerators, a box for dividing the milk equally in the cans, a shotgun can for ice and water, a dipper, a thermometer, and two half-barrels for setting the milk cans in cold water. Only the evening's milk was treated. The morning's milk was not aerated or cooled.

Mr. Bouchard and myself were always present at the farms when milking commenced in the evening to take charge of the milk as soon as it was drawn from the cow. At Mr. Condie's the evening's milk and the morning's milk was strained into shotgun cans sitting behind the cows, and then carried to the milkstand. At Mr. Hyslop's the milk was poured into a strainer pail in the stable, and carried to the milkstand and strained into the milk cans.

The milk was divided by pouring it into a square tin box placed on top of the aerators or milk cans. An outlet at each end of this box allowed the milk to flow quite accurately into the two milk cans marked A and B. The morning's milk when mixed with the evening's at the farm was divided in the same manner. The different lots were treated as nearly alike as possible at both farms. At the factory, two small vats were used, the A lots of the evening's milk from each farm being put into Vat A, and B lots into Vat B. The morning's milk was divided equally into each vat.

Curd tests were made of each can of evening's milk and also of the morning's milk. Babcock tests were made of the milk in each vat after it was received, and during the whole season, only four times was there any difference in the per cent. of fat,

showing that the different methods of handling the milk, had not much effect upon the per cent. of the fat. The per cent. of fat in the milk from the two herds was practically the same.

The per cent. of acid was determined in each lot of evening's and morning's milk by the Acidimeter or Alkaline test.

Milk from the Hyslop farm nearly always showed a higher acidity than that from the Condie farm.

When the milk was cooled in the evening and the morning's milk delivered in separate cans, one-half of one per cent. of acid was added as soon as the first milk was received (about seven o'clock) and often the milk would not set until about ten o'clock.

We had to use a starter all the time, in order to get the curds in condition to leave them and go out to the farms to look after the milk in the evening, and in many cases it was given in better condition in the curds from gassy milk, than if no starter had been used.

No effort was made to do experimental work regarding methods of manufacture. All the curds were handled carefully, as nearly alike as possible, and according to the best methods in practice in our cheese factories.

The cheese were kept in the factory curing-room from 12 to 15 days, then shipped to the Ottawa Cold Storage. The average temperatures in the curing-rooms were in June 71, July 72, and August 65 degrees. The cheese were scored for flavor just before being shipped and again on September 21st in the cold storage.

Although we have considerable information relating to the number of pounds of milk required to make a pound of cheese in the different experiments, we feel it is scarcely reliable on account of the small quantities of milk we used.

Flavors in the milk, and flavor and texture in the curds and cheese, may be secured equally as well from small quantities as from large, but to get reliable results in regard to the losses in manufacturing, we believe it is necessary to do the work in the large factory vats. This we hope to do another year.

LOCATION OF THE MILK STANDS

Lantern slides were used to illustrate the utensils used at the farm and the position of the milk stands. The first slide showing Mr. Hyslop's milk stand. To the right is the corner of the barn, the cow stable being nearer the stand at the end of this barn. This stand is 60 feet from the cow stable door, and the space between is in grass and fairly free from manure or dust. On the other side of the stand is the orchard and backyard of the house. The barnyard is on the opposite side of the stable. The second slide was baulded out early in the season. Fault may be found with the location of this stand. It is probably a little too close to the stable, and the building and orchard prevent getting the full benefit of the wind from all directions, yet it is better situated than hundreds of milkstands throughout the country. Everything about it was kept clean and tidy. Notwithstanding the apparent favorable location of this stand, 38 per cent. of the curd tests from milk dipped or run over an aerator, were gassy and not clean in flavor.

The second slide showed the milkstand at Mr. Condie's. It is at the end of the woodshed, in the corner of which is stored the ice. A roadway runs between it and the house, the horse stable is about 40 feet distant directly in front of the stand, and the barnyard and cow stable on the other side of this about 136 feet from the stand. A horse pen is situated 88 feet from the stand, a short distance from the other end of the woodshed. This stand may be considered in a good location, as there is good circulation

of air and not much dust surrounding it, yet 61 per cent. of the curd tests from milk dipped, or run over aerators, were gassy and not clean in flavor.

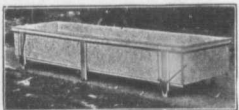
The third slide showed a splendid gas producing situation, the wagon standing in the barnyard not far from the hog pen door. Milk exposed to the air or left open all night here, never failed to give gassy and floating curds in the curd test, as well as gassy flavor and gas holes in the curds.

COOLING WITHOUT AERATION

The fourth slide showed the method of cooling the milk without aeration at the Hyslop farm. The tub shown was

(Continued on page 30)

"PERFECT" Steel Cheese Vat



(Patented August 14th, 1906)

Durable—All Steel, Sanitary—Not a crack or spot for milk to lodge. Dairy decompose. Handy—Levers and gears to raise and lower inch by inch. Ideal Drainer—Built so the last drop runs out.

What Men who Know Say About Them:

Am pleased to say that your steel cheese vat is the coming vat. After testing it carefully during the past year, I can recommend it very highly to all dairymen. O. B. LARRY, Finch, Ont., Dairy Instructor

I have examined and carefully tested your steel cheese vat and consider it the best vat I have ever seen and take pleasure in recommending it to all factory men. H. E. BRINTNELL, Kingston, Dairy Instructor

Your steel cheese vat is superior to anything I have ever seen, as to sanitation and durability it is by far the best it heats and holds the heat just as well as the wooden vat. I have pleasure in recommending it. W. J. RAGSDALE, Smith's Falls, Dairy Instructor

This is to certify that I have had 40 years' experience using cheese vats and it gives me much pleasure to say that the vat manufactured by your company is the best that I have ever seen. I have one in use at the present time in the Plum Grove Factory. JAMES WILLIAMS, Williams Corners, Cheese Mfr. and Buyer

We have no hesitation in saying that we regard a steel cheese vat as the best and most sanitary tank we use at the present time. J. W. MITCHELL, Supt. East Dairy School, G. G. PUBLLOW, Chief Dairy Instructor.

Get our free catalogue of steel vats, steel agitators, steel curd slides, steel whey tanks, etc. Write us.

THE STEEL TROUGH & MACHINE CO. Tweed, Ont. LIMITED

THE NEW Demi-Bloc System

of Double-Gun Manufacture

adds new excellences to the superiority of the

STEVENS FIREARMS

One of these new features is the forging and compressing of the barrel and lug all in one piece. This gives the strongest breech mechanism possible to make.

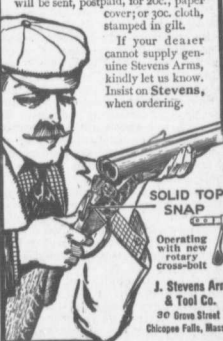
Then the barrels, loop and extension rib are brazed in one process. So the barrels are necessarily straight and true.

While the solid top-snap, illustrated below, operating with our new rotary cross-bolt, makes a fastening unequalled for strength, Thus Stevens Guns cannot shake loose.

If you'll send for the Stevens Catalog, you'll learn all about these new Demi-Bloc features, and all the many superiorities of Stevens firearms—shotguns, rifles, pistols. 5c. for postage bring it.

"Guns and Gunning," by Dan Beard—all about hunting and shooting, game, the care of a gun, etc., will be sent, postpaid, for 20c., paper cover; or 30c. cloth, stamped in gilt.

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



SOLID TOP SNAP Operating with new rotary cross-bolt. J. Stevens Arms & Tool Co. 20 Iron Street Chicago, Ill., Mass.

FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD, CASH WITH ORDER

FOR SALE OR RENT—The best equipped cheese and butter factory in the country. Good section and buildings; capacity 125 tons per season. Owner has other business. For particulars apply Box F, Farm and Dairy. 1-13

WILL BUY 100 ton cheese factory, where patrons deliver milk—Box 7, Farm and Dairy. 1-13

WANTED — A first class second hand creamery plant. Cash down. Box "F", Farm and Dairy. 1-13

THE LINDE BRITISH REFRIGERATION CO. Limited

OF CANADA HEAD OFFICE MONTREAL, P.Q. MANUFACTURERS OF

REFRIGERATING AND ICE-MAKING MACHINERY

Special Machines Designed for Dairies

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WHICHEVER way the wind doth blow
Some heart is glad to have it so;
Then, blow it east, or blow it west,
The wind that blows, that wind is best.

—C. A. Mason.

The Domestic Adventures

By Joshua Dakam Bacon
(Continued from last week)

"THERE now!" cried Mr. Ogden triumphantly, "what did I tell you? Exactly what you want!"

I looked at him scornfully. "Has she any other qualifications besides weak eyes and high marks?" I inquired.

"She has had two terms at a cooking school," said Chloe defiantly, "and she's going to study Domestic Science—whatever that is—when she gets money enough. She is extremely sensible, Editha says. Of course she won't wash—she isn't strong enough."

Sabina caught this last sentence, and looked despairingly at me. She says that between Chloe's amusing monologues on the subject and my serious problems, we are growing into a household of one topic. I met her look firmly.

"Sabina," I said, "what would you think of an educated cook, of a waitress that had been to college, of a chambermaid that wins high marks?" "In my own experience," replied Sabina with her most businesslike air "I have never found the situation where brains, supplemented by training, failed to tell. I cannot see why the labor of a household should form an exception to this rule."

So Mary Bostwick came. She came with an immense box of books, a small cast of the Flying Victory wrapped in a couch pillow, and a combination of pulleys and elastic ropes quite unknown to me.

"Have you any objections to my attaching this to my bedroom door?" she inquired of me in a manner so impersonal that Sabina's office tones compared with it, seemed warm and intimate.

"No indeed, Mary," I hastened to assure her. I supposed vaguely that it must have something to do with the study of Domestic Science, and it was some time before I learned to connect it with the mysterious groanings and creakings which might have been a fatigued lawn mower that waked me with a disgusting regularity every morning. Though every evidence of my sense pointed to the sounds coming from over my bed, I refused to believe this for some time, it seemed so unreasonable and it was in the utmost innocence that I inquired of Mary if she had been disturbed by them. She flushed a dark red and pressed her lips very thickly together.

"It is my chest weights," she said. "I am sorry they annoy you. I ought to use them night and morning for fifteen minutes but of course I will stop it immediately."

And equally, of course, she didn't.

It was bad enough to have hurt her feelings so terribly, without injuring her health; and I accustomed myself to the weights which I privately oiled, long before I grew used to Mary's feelings, which I had no means of oiling.

I have never known anyone who had so many feelings. Sabina accuses me of directing the table conversation with a view to Mary's feelings, except

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clusively. While this is hardly true, I admit that I have sometimes felt obliged to steer Chloe and Mr. Ogden away from certain subjects. Why, for instance, should they select a pizza luncheon, with Mary running back and forth every minute to discuss the usefulness of a college education for a woman who does not expect to earn her living by it? Mr. Ogden's descriptions of blue stockings kept me and needles, for it seemed to me he must have noticed Mary's high spectacled forehead and straight hair, and Chloe's frivolous recommendations of the higher education, on the ground that one forgot everything but four recipes for chocolate confectionery was even worse; I could feel Mary stiffening behind my chair.

She has taken a dislike to Chloe, on general grounds of frivolity and low standards of life. I suppose, and I am sorry to say that Chloe has rather fostered this by her careless behavior.

It began with the affair of Mary's room. I took a special interest in getting it ready for her, and made some new such curtains and a light counterpane of cream colored muslin with rosebuds scattered over it, and picked up two remnants of a very good carpet with roses on it, to lie before the bed and bureau. I also borrowed from Chloe a pretty modern Madonna, the gift of a loving pupil, in a deep oak frame, and took down from the hall a little photograph of an orchard in bloom, to give the room a homelike look. I was quite pleased with it when it was done, and by the time I had added a small hanging bookshelf with a few odd books, it

was really, except for the wall paper, which might have been nicer, pleasant enough for a guest room.

When Mary said to me, the day after she came, "Would you have any objection to my changing the furniture a little in my room?" I was so much impressed by her scrupulous consideration in asking my permission in such a small thing that I forgot to wonder what she could want to alter in such a simple arrangement. When she disappeared behind a somewhat ostentatiously locked door for half an afternoon, I knew that something important was going on over my head, but I was quite unprepared for what met my eyes as I mounted the stairs an hour before dinner to remind Mary that even two terms in a cooking school could hardly enable one to prepare a hot dinner in less than that time.

In the upper hall stood a pile of matting—Mamie's aunt had spent an afternoon putting it down—and on it was bestowed in neat one the rosebud counterpane and dark curtains, the Madonna and the orchard, and the pillow from the bed. The books on their shelf stood in the most disintegrated pile, and Mary leaned against the doorway, limp as the proverbial rag and red from her exertions.

"If you will tell me where you like these, I will do them wearily," I will take them there."

I stared curiously into the room. The bare floor, though scrubbed conscientiously, looked a little mottled and stained, and the two rugs, the only efforts of mine considered worthy a place, looked new and glaring against their unusual background. The pine box in which Mary's solemn brown and black books had come

formed their case, and the Victory of Samantha presided over an otherwise unornamented room.

I would not contest, even to Sabina that I felt a little disappointed but I suppose I must have, for I could not resist saying a little critically, "Do you like the room better this way, Mary. It looks a little cheerless to me."

"It is not all that I could wish," she returned in a minor key, and I saw sudden that she had hurt her feelings, "but it is the best I can expect under the circumstances. I suppose all authorities agree about a hard wood floor for sleeping rooms, and draperies as they now attract and hold the dust. My heavy books would break that little case, and I am not fond of Madonnas. May I shade?"

I felt somehow as if I had thrown her poverty in her face and it made me so uncomfortable that I said nothing about the spots on my ceiling where her serene water had penetrated—I was afraid of hurting her feelings again.

Chloe was highly amused at the result of my efforts to make Mary feel at home, and rejoiced Mr. Ogden with her version of the affair after dinner one evening; I had managed, with great difficulty, to keep her from the subject during the meal. I say with difficulty, for she and Mr. Ogden took an impish pleasure in skating as near to it as possible while Mary was in the room and hurriedly trying to discuss it while she was in the kitchen. Between them they got me into a state of nervous irritation which Sabina quite failed to relieve

by assuring me that this intimate, if somewhat childish, fooling on their part, together with Mr. Ogden's bold-faced requests for dinner invitations, indicated very clearly to her that Chloe was coming to a decision yet. "She would never argue so with him if she didn't love him," Sabina concluded.

(Continued next week.)

The Upward Look

Love in Daily Living

Let us not live in word, neither in tongue, but in deed and in truth. I John 3, 18.

Many of us, if we were asked if we loved the different members of our families, would be indignant. And yet, but few of us have any conception of what love is. If we had, our lives would be very different from what they are. Love, as Prof. Henry Drummond has so ably pointed out, is the greatest thing in the world. We cannot all have wealth, or honor, or power, but we can all have something that is greater still, love. The greatest wealth in the world cannot purchase the love of a true mother or wife or husband. If there is no love there, the gold richest is not put up, and the silver richest is not put up, and the cause of suspicion, jealousy, anxiety and many other ills. Love makes the lowly cottage the happiest spot in the world.

If we loved "in deed and in truth," our lives would be transformed. Most of us think so much about ourselves and our own comfort and convenience, we have little room for love. In the thirteenth chapter of the Corinthians we are told what love is. We find there that "Love suffereth long and is kind; love envieth not; love vaunteth not; love is itself not puffed up, but that it doth itself abase itself; it is not easily provoked, it keepeth not account of evil, rejoiceth not in unrighteousness, but rejoiceth with the truth; it beareth all things, believeth all things, hopeth all things, endureth all things."

If we will compare love as there described, with the love we manifest in our daily living, it will show us wherein our love is weak. Sometimes when little or even big things annoy us, we speak crossly to our loved ones we should remember that love suffers long and is kind. When those around us seem to be having a much nicer time than we are we should rejoice with them because, if we love them, we will bear in mind the fact that love is not puffed up. It means discomfort because conceit is a mark of selfishness. If we love others as we do ourselves we will not think ourselves better than they. We must be hard on ourselves, and generous to others, unselfish, unadvisable, inconsiderate conduct, reveals a disregard for the sensibilities of others. It is a form of selfishness.

True love of the family or in any place in life, is not shown by being kind only at times. We should be patient and kind, and considerate, and anxious to help others at all times. Love is shown when we are not ourselves or the giving-up of some of our own pleasures. The extent and reality of our love is in proportion to our willingness to sacrifice our own comforts and desires for the sake of those around us.

If we all loved as we should what a different world this would be! How happy all our homes would be. We would all know what goodness and unkind words were. God's kingdom would have come to this earth, for God is love. If we love one another, we dwell in us, and His love is perfected in us. (John 4, 12)—I.H.N.

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Mary St.

Dear Editor:—

years since me and barring that couldn't have been good to me about any amount now he's dead women folks money. "What say to me?" women folk money?" A he when he was didn't have money, leastwise. The other day your paper was and said to my know my Josh in't your corner with savin' their giving them a women die away get some more some cherished the next farm Everybody know that I've scripped for enough money front com. Sit butter and milk she'd raised, scarce, John I to her, and must buy a new plot of not having a kill Eliza, I had me on her dead money front floor, I goodness she Eliza was gone women and she ped down an' But I must Josh come to me. When I married bit of money of few years after plenty to buy ed, but I was inter eyes, raised between our farm clear side and out came, I could she was delicate course, did at times when he'd say: "Why mighty fine she a cent would of the sale of the pile of money wanted some for baby. I ing, and I guess still for Josh or ask me if I no, that I never as he'd say, how long I up and ling in my so belled, and pos

The of the tu using B. Leaves fragrant Best for Albert S. Man MOU

Mary Rutherford's Under-standing

Dear Editor—It's high on to thirty years since me and Josh was married, and barring the money question we couldn't have been happier. Josh was good to me, he was (God forbid I should say anything about him now he's dead), but he did think women folks shouldn't handle money. "What's a husband for," he'd say to me, "if 'isn't to keep you women folks from worryin' about money?" A heap he knew about women when he was worryin' 'cause we didn't have the handling of the money, leastwise some of it.

The other day I read a piece in your paper written by Marlon Dallas, and said to myself, "I wonder did she know my Josh?" But goodness knows my Josh isn't the only one 'round our corner who thought they was a savin' their women worry by not giving them a cent. There's heaps of women die awaiting and a hoping to get some money all the even for some cherished wish. Why right on the next farm was John Livingston. Everybody knew Livingston and how his wife Eliza, had her hair scraped for years tryin' to get enough money to buy a carpet for the front oom. She'd been having the butter and milk from a Jersey cow she'd raised, but when feed was scarce, John sold her cow, unknown to her, and took her little saving to buy a new plow. The disappointment of not having that new carpet helps kill Eliza, I know it did, for she told me on her deathbed, "If I just knew that there was a new carpet on that front floor, I'd die happy." Thank goodness she wife he took soon after Eliza was gone was none of your weak women and she soon put a new carpet down an' new plush chair, too.

But I must tell you how me and Josh come to have an understanding. When I married Josh I had a little bit of money of my own. So the first few years after we were married I had plenty to buy the little things I wanted, but I was working hard gathering eggs, raising chickens and making butter between times trying to make our farm clean and cheerful like inside and out. After my wife got me, I could not leave her much for she was delicate like, so Josh of course, did all the trading. Many times when he had been to market he'd say: "Well Mary, I had some mighty fine sales to-day," but never a cent would he give to me as my part of the sales. Till at last my little pile of money was all gone, and I wanted some specially pretty things for baby. I waited and 'jest awaiting, and I guess I'd have been waiting still, for Josh to offer me some money or ask me if I needed anything. But no, he'd never thought of such a thing as that. I suppose he was a thinking how he was a saving me worry. At last I up and asked him, with trembling in my soul. How my pride rebelled, and poor Josh was unconscious

of all my independent longings. "How much," said he, "do you want." I named the lowest amount possible and without so much as a word he laid down the sum. For a long time I did without any little things I wanted.

Well, to make a long story short, years rolled by and three dear little children came to bless our home. Fortunately our farm was a good one and we were very comfortable. Josh was

Now I thought the roof would fall on us, but it didn't. Jeff and I say out and just went and left us. I felt mighty humbled, but poor Josh! for a long time neither of us spoke. At last Josh said, "Mary," and his voice had a far away sound, "did Jessie speak the truth? Have you been breaking your heart all these years and me thinking I was saving you care and worry?" I fortisly-like answered, "O Josh, it isn't so bad as

Indian path. By the aid of natives he built a log house and finally cleared a farm in that vicinity. Mr. D. Y. Buttar, his son, is a progressive farmer in his vicinity and a good friend of Farm & Dairy. An illustration on page 3 of this issue shows Mr. D. Y. Buttar's home and farm buildings.

To Waste Table Linen

A wonderful way of saving your table-cloths and saving strength and time in laundering, is to use plate cloths. I have plate cloths two yards in length for the sides of the table, and one yard for each end. These are made of cheap cotton towelling, 18 inches in width, slightly starched, and pinned at corners when placed upon the table, to prevent their slipping into untidy positions. I use a centrepiece of a good grade of flour sack by neatly hemstitching. By use of these I am able to use a tablecloth on my table for two or three weeks without being much soiled, and we live on a farm where it is considered a hard matter to keep table cloths clean.—Mrs. Wylie, Hastings Co., Ont.

The Care of the Broom

Before using a new broom put it in boiling water and let it remain there till the water is cold, then put it out in the sun to dry. Just before using dip it into water for a minute. To make a broom last a long time, the bristles should be kept tough and pliable, and that is what the boiling water does. As a further help dip the broom into hot soap suds every week or two on washdays. Frequent wetting of the broom when sweeping, makes it last much longer, and do better work, and is also a good thing for the carpets. For a stiff, wiry broom wears them out very quickly. When the bristles begin to wear to a point, dip the broom in hot water for a minute to soften them, and cut them off evenly with the kitchen shears. Always clean it after a general sweeping by dipping in water for a minute, and shaking well before hanging up.

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Four Generations in One Family. Mr. Charles Buttar and three of his descendants. A good old Ontario family. See article on this page also illustration on page 5 of this issue.

always a kind, loving husband and father. Every time he'd go to market on business or away on a visit he'd always bring us something. Once when he brought me a green plush album, and me having two already, I told him I'd rather had the money. "Why," said he quite hurt-like, "I thought you'd like that." Someway he was blind to my longings for independence, but our children were growing. Once when I had a little party and the women folk was talking about "suffragettes," Josh turned and looked fondly at me and he meant it too, and said he, "Mary and me never worry over the women's rights, do we? She has all I make; I give her all she wants." And I fearing to tell our family secrets, said, "Indeed, Josh is a pretty good husband."

Our girl could see how things were shaping; she had the women's instinct and felt for me. It was drawing nigh to the time when she would be starting a home of her own. One day we were all sitting down and talking about her cent, and me I have watched our mother and I made up my mind if any man asked me to marry him and he be his partner in life, I'd say I wanted to be his partner in every way. If I help him earn his money, part of it's mine to do as I please with, and if he really loves me he will be willing. I'm going to combine business with sentiment and we will be happier. James has promised to do that way, for his father did, and see what a happy home they have. I know you love mother, but you keep the money in the bank and mother has missed much happiness out of her life because she couldn't be at all independent."

she says." But I saw that he was feeling real bad and I waited.

He said no more, but just came over and kissed me, saying in his loveliest and humblest tones, "I've been a brute, Mary, I see it all now, but thank God, I've my eyes opened before it's too late. You'll never be humbled in our children's eyes again."

From that day until the day he died, every week he'd bring me the price of all my sales, and if there was no trip to market, he would just put what he thought was the right sum sheepishly down on my stand and I always understood and was happy.

Josh has been dead for ten long years. If he had only known one another well enough when we were first married, to plan our money matters that a home we would have had, for Josh loved me and well did I love Josh; I just guess I did, money or no money. Respectfully yours, MARY RUTHERFORD.

A Good Old Ontario Family

Through the courtesy of Mr. D. Y. Buttar, of Northumberland County, Ont. we are able to publish the interesting illustration on this page which shows four generations in one family. This is rather an unusual coincidence.

The picture from which our illustration was made was taken several years ago. It shows Mr. Charles Buttar, who was then 95 years of age, Mr. David Y. Buttar, who was 55 years of age, Mr. Charles E. Buttar, 31 years old, and wee Arthur, 10 months old. Mr. Charles Buttar came to this country from Perthshire, Scotland and landed in this country at Thorold, Ont., about the time of the rebellion. He took part in the battle at Queenston Heights, from where he moved to Hamilton township. He then took up land on the south shore of Rice Lake when the country was only a wilderness, finding his way by an old

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THE COOK'S CORNER

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CORN SOUP

Take 1 pt canned corn, add 1 qt hot water, boil it for 1 hour or longer, and then press through a colander. Put into a saucepan, butter the size of a small egg, and when it bubbles, sprinkle in a heaping tablespoon sifted flour. Cook a moment, stirring; it will and add $\frac{1}{2}$ of the corn pulp; when smoothly mixed, stir in the rest of the corn. Add pepper, salt, 1 scant pt boiling milk and 1 cup cream.

This soup is nice with no more addition, but some add a tablespoon tomato catsup and many add the yolks of two eggs just before serving, mixed with a little milk and not allowed to boil.

PRUNE PUDDING

Stew 1 lb prunes and sweeten with $\frac{1}{2}$ cup sugar and then drain off the liquid, of which there should be 1 cup, and no more. To this liquid add 1 cup rich, sweet milk in which has been dissolved one tablespoon cornstarch. Place over the fire and stir until thick as custard, adding while stirring about $\frac{1}{2}$ cup sugar. Pit the prunes, pour the custard over them, chill and serve.

POTATO SUET PUDDING

To 1 large, raw, grated potato, add 1 cup chopped suet, $\frac{1}{2}$ cup sugar, $\frac{1}{2}$ cup molasses, 1 pt buttermilk, in

which 1 teasp soda has been dissolved, and flour enough to make a stiff batter. Spice to suit and milk may be added to the flour, and also raisins and currants, if liked. Steam about 1 hour and serve with any preferred sauce. I prepare about five or six times the above amount in the fall, omitting the soda and spices and put away in a well-covered jar in a cool place. From this I take a small amount as I need it and add necessary soda and spice. In this way I can have a quick dessert with very little trouble. Sometimes I use this same recipe with the spice omitted and steam in small individual moulds, and serve with canned fruit, or whipped and sweetened cream. I have found that this pudding seems to improve with age.—Mrs. D. O. Church, Halton Co., Ont.

Dainty Tea Cakes

Almost everyone knows how to concoct dainty sandwiches for tea, but perhaps some have not tried the following recipes for tea cakes, which are very nice.

Take three long shallow tins and just cover the bottoms with sponge cake made as follows: One cup powdered sugar, 5 eggs, 1 cup pastry flour into which has been whipped $\frac{1}{2}$ teaspoon baking powder, 2 spoonfuls boiling water and one of lemon juice, also the grated rind of the lemon. Beat the yolks of the eggs with the sugar ten minutes, add water and lemon, then flour and the whites of eggs beaten to a stiff froth. Bake in a quick oven. When the cake is cool, cut into wedge diamonds, some of two layers, and various other small devices should be used. Ice with the following:

ICING

Two lbs. confectioner's sugar, beaten with 2 tablespoons cold water, separate into four parts. To one add pink coloring, to the next chocolate, to a third a bit of the yellow part of an egg, and allow the fourth part to remain white, seasoning with vanilla. These cakes prove very attractive to the eye when iced in fanciful ways and are delicious to the taste.

Another tea cake is made thus: One cup Porto Rico molasses, 1 cup granulated sugar, $\frac{1}{2}$ teaspoon ginger, $\frac{1}{2}$ teaspoon cloves and the same of salt, one teaspoon cinnamon, stir together then add 1 cup lard and butter mixed, $\frac{1}{2}$ cup boiling water in which a teaspoon of soda has been dissolved; beat quite stiff with pastry flour, then add two cups chopped hickory nuts and raisins. Drop on to buttered tins and bake in a quick oven. An egg may be used, but is not needed. Suet may take the place of lard and butter if preferred.

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Talks with Mother

The Golden Rule Applicable

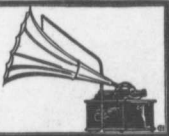
The passionate nature is usually a warm, loving one, gifted with noble impulses. The conscientious parent will find no difficulty in leading such a one, and no child should be driven. I do not believe in corporal punishment; no one is the better for the degradation of a blow. Teach your child both by precept and example, beginning at a very early age, to govern his own temper.

Between mother and child there should be perfect confidence and loyalty. Do not forget your own childhood and you'll but let your sympathy and love be ever apparent. Be not only gentle but firm. A weak indulgence is often as injurious as severity. Do not needlessly arouse a spirit of opposition in your child. I have heard mothers say, "I am not afraid to cross my children." I demand unquestioning obedience. My children know what to expect if they disobey." Another says, "I never yield to a child's whims." How much happiness such mothers miss! The very blessing of life they transform into something very like a curse.

It should be the mother's pleasure not only to seek her child's best welfare and happiness but to teach that child to exercise that same consideration for others. You would not feel a blind, unreasoning obedience yourself; then why demand it in another? In the management of children as elsewhere, the golden rule is applicable. Your child has rights that you are bound to respect. The solemn injunction, "Parents, provoke not your children to wrath," is not always heeded. Teach your child that "he that ruleth his own spirit is greater than he that taketh a city." Teach him to be a conqueror of self, and there is no other victory to which he may not aspire.

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ART

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Quite the embroidered useful and indoor costume wear, or for grown. This is very prett beautiful eye



ished with a lace. Price including all stamping is \$1.50. Design stamped 45c. Six skeins ing, 15c extra.

The night ed in this col can find any dots should b broinery and stitches. At seems difficu



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Quite the newest fad is the small embroidered apron, which is a most useful and attractive addition to any indoor costume intended for morning wear, or for protecting any afternoon gown. The one shown here, No. 538, is very pretty when worked in the beautiful eyelet embroidery, and fin-

ished you will have a very pretty hand embroidered night gown that



No. 520

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The Independent Farmer

A farmer drove up to a shoe store, hitched his team and stepped within. "Good morning, Mr. Rippskin," he said.

"Ah, good morning, Mr. Landside, nice morning,—anything that I can do for you to-day?"

"Well, yes, I think you can, that is, if we can make a deal. You see, times are pretty dull and I haven't sold anything yet. I want a pair of shoes for my wife and a couple of pairs for the boys and as you know what sort of butter we make. I put in a jar of that, and a few dozen nice fresh eggs. I thought perhaps I could turn them for some shoes."

"I'm sorry, Mr. Landside, for I like your butter, but we've got a good supply on hand now and as for the eggs, I bought some this morning. What are you asking for your butter?"

"Mr. Hayfield had some in yesterday and he told me he got 18 cents."

"Where! Hayfield must have found somebody soft. Why, I can buy a cartload for 14 cents; that's the mar-

ket; but you're an old customer, Mr. Landside, and you make good butter. Seeing you'll trade it out, I won't mind giving you a cent over the market."

"Can't you split the difference and make it 16?"

"Couldn't possibly, times are dull with me too."

"Will you take the eggs too?"

"That's according to what you want for them; they're away down you know."

"Hayfield got 14 cents for his."

"Hugh! Must have sold his eggs where he did his butter. Twelve cents is the market. You can bring them in at that if you want to."

A few minutes later the shoe deal begins.

"How much is this pair, Mr. Rippskin?"

"Those are solid calf, hand sewed and a bargain at \$2.75."

"Can't you let 'em go at \$2.50?"

"I couldn't think of it; then here's just what you want for the boys—only \$2.25 a pair,—just the thing."

"I think you ought to throw off the extra quarter."

"O, that's rock bottom, Mr. Landside. Those are the right sizes too. Shall I put 'em up for you?"

"I suppose so. Now how do we stand?"

"Let me see: 34 pounds of butter at 15 cents is \$5.10; nine dozens of eggs at 12 cents is \$1.08; total \$6.18. Twice \$2.25 is \$4.50 and \$2.75 is \$7.25; \$6.18 from \$7.25 leaves \$1.07 coming to me. O, give me a dollar, that's near enough!"

"How's crops this year, Mr. Landside?"

"Only middling, and what with low prices and an overstocked market one can scarcely scrape along."

"Ha, ha! Too bad for you fellows. I sometimes wish I was a farmer. It's the most independent life one can live."

"Yes, seems to me I've heard some such talk before. I come in here, you set your price on my produce and I am obliged to take it. I buy goods of you and you set your price on mine. If I don't like your prices I can let your goods alone. O, yes, we're an independent lot of farmers."

Buttermilk as Medicine

Even when sourest, if it is still in good condition, buttermilk is a valuable medicinal agent. A refreshing acid, it is always nourishing without being insipid.

The lactic acid which it contains attacks and dissolves every kind of earthy deposit in the blood vessels; keeps the veins and arteries supple and free from matter which might otherwise clog them, and destroys the irritating calcareous deposits that may gather around the joints, as well as any poisonous waste in the muscles. It is not only beneficial to the digestion, but also for tuberculosis and all other pulmonary complaints. It is also a harmless substitute for intoxicants.

AS A BEVERAGE

Drinking buttermilk freely—two quarts daily would not be too much—is said to preserve the complexion of youth, and as gouty difficulties generally arise from sluggish excretion it is a blessing to all who suffer from such complaints.

Buttermilk not only tones the stomach, but furnishes material from which healthy blood may be easily made. It is also easy of assimilation, and in cases where sweet milk would prove objectionable from a medicinal point of view, it may safely be given with every assurance of beneficial effect. For creaking, aching or swollen joints it should be taken frequently, and care should be observed to procure it freshly churned.

Renew Your Subscription Now.

The Sewing Room

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



6121 Short Kimono, Small 32 or 34, Medium 35 or 36, Large 40 or 42 bust.



6124 Girl's Dress, 8 to 14 years.



6122 Directoire Girdles, Small 22 or 24, Medium 26 or 28, Large 30 or 32 waists.

6125 Directoire Coat, 34 to 42 bust.



6123 Girl's Apron, 6 to 12 years.



6126 Princess Line Dress, 32 to 40 bust.

THREE-PIECE SKIRT 6157



Every variation of the skirt that gives a circular effect is fashionable.

This skirt is made in three pieces. The closing is made invisibly at the back. Material required for medium size is 9 1/2 yds. 24 or 27, 44 yds either 44 or 52 in wide. The pattern is cut for a 25, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100.

Renew Your Subscription Now.



No. 535

ished with an edging of Valenciennes lace. Price of perforated pattern, including all necessary materials for stamping is 25c.

Design stamped on lawn, 30c.

Design stamped on imported linen, 45c.

Six skeins of silky cotton for working, 15c extra.

The night gown, No. 520, illustrated in this column, is as dainty as one can find anywhere. The daisies and dots should be worked in eyelet embroidery and scallops in button-hole stitches. At first glance this design seems difficult to embroider, but in

WORLD'S POST-CARD SCENES

A Free Trip Around the World

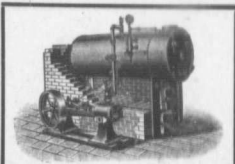
What boy and girl would not like to take a trip around the world? We can offer you such a trip by sending you a set of 50 beautifully illustrated post cards, representing every country in the world. These cards are not a cheaply gotten up affair. They are finely colored and true representations of the scenes they portray. Send us only **ONE NEW** subscription to FARM AND DAIRY at \$1 a year and we will send you a set of 50 of these cards, every one different, absolutely free of cost. The supply is limited.

Better send in your new subscription to-day. Write—

Circulation Manager
FARM AND DAIRY
PETERBOROUGH . . . ONTARIO



ROCK SALT for Horses and cattle, in tons and carloads. Toronto Salt Works, Toronto.



ENGINES AND BOILERS FOR CHEESE AND BUTTER FACTORIES

The largest output of any factory
in Canada

E. LEONARD & SONS
LONDON, ONTARIO

A Great Gathering

(Continued from page 11)

Singleton, D. Derbyshire, and H. Glendinning, Directors, Neil Fraser, Vankleek Hill; Napoleon Longtin, The Brook; John McGregor, Alexandria; P. McDermid, Avonmore; Jos. McGrath, Mount Chesney; W. J. Paul, M.L.A., Tamworth; James Whitton, Wellman's Corners; A. Hume, Menie; G. A. Gillespie, Peterboro; A. S. White, Sidney Crossing; G. G. Puhlow, Kingston.

AUDITORS' STATEMENT

The secretary, Mr. R. G. Murphy, presented a detailed statement of the receipts and expenditures for 1908 and offered to read it to the meeting if anyone so desired, but was not requested to do so. The auditors' statement showed total receipts of \$5,377.19, and expenditures of \$5,160.09, leaving a balance on hand of \$217.10. The report stated that the treasurer's books were correctly and neatly kept and that there were vouchers for every item of expenditure. The auditors were Messrs. J. A. Kerr, of Belleville, and John Hyatt, of Prince Edward County.

OTHER ADDRESSES

Among the addresses delivered was one by Mr. A. A. Ayer, of Montreal, the well known cheese exporter; one by Mr. James Stonehouse, of the Kingston Dairy School, (which is reported in another column); and addresses by Dr. W. T. Connell, of the

Kingston Dairy School; Joseph Burgess, official referee of Montreal, and Henry Glendinning, Manilla. Most of these addresses will be published in full in later issues. The convention was unusually well attended and was pronounced by all to have been about the best in the history of the association.

Care of Milk for Cheesemaking

(Continued from page 15)

part of a gasoline barrel which cost \$1.25 and made a tub for each farm. Our custom was to fill this tub with water from the well before milking commenced, and set the milk can in it, and as the cows were milked, the milk was strained into the can. We found that 180 to 200 lbs. of water was all that was necessary to cool one-half of the milk from 15 cows. This milk was not stirred or dipped. The only agitation it received was to stir it with the thermometer to get the temperature, and as soon as milking was finished, the cover was put on the can and left sitting in the water all night. The water used came from the well at 46 degrees temperature. The average temperature of the water in the tub when we left it (about five minutes after the milking was finished) was 59.5 degrees and the milk at the same time was 77.3 degrees. The average temperature at the factory the following morning was 66.5 degrees, and only 6.6 per cent. of the curd tests from milk so treated on this stand,

were slightly gassy and not quite clean in flavor.

COOLING IN A TUB

The fifth slide showed where the milk was cooled by setting the milk can in a tub of water at Mr. Condie's. This platform is in the corner of the barn, and a corrugated iron trough was seen to the right. The cow stable is directly in front of this trough about 95 feet distant. All around this trough is bare ground, where the cows often stood both before and after milking, and in dry weather it was very dusty. The manure pile from the horse stable is about 52 feet from this platform.

The pump is situated behind the horse stable, 93 feet from the trough, and the water piped under ground to the trough. A gas pipe was put into the trough, and the water in the trough to the tub at the end of the trough, and a spout put from the tub into the trough. All the water pumped for the stock had to pass through this tub, flowing out at the top into the trough. By this arrangement, not five minutes were required to take care of the milk, or when enough water was pumped to water the cows, the milk was cooled enough to leave as soon as the milking was finished.

This milk was not aerated in any way. The cover was put on the can as soon as milking was finished. The temperature of the milk and water was practically the same as at the other farm, and the curd tests from this milk showed the same results also, only 6.6 per cent. were slightly gassy and not quite clean in flavor.

The curd tests from the milk aerated by dipping or running over a strainer at this platform gave 71 per cent. gassy and not clean in flavor, some of them floaters.

We did not go to very much expense in arranging to cool the milk. The results, however, were so satisfactory that I would strongly recommend patrons of cheese factories who have a good water supply to construct a tank as was shown on the screen. It should be placed between the pump or water supply, and the watering trough, and all the water used for watering the stock would pass through this tank and cool the milk while doing so. The important point to observe in connection with such a tank is, the overflow must be at or near the top of the tank, so that the water which is warmed by the milk, may overflow into the watering trough.

CONDITION OF CURDS

A number of illustrations were given showing the condition of the curd tests and curds, from milk aerated, and aerated and cooled, compared with curds from the same milk cooled without aeration. They all showed that the milk exposed to the air gave curds full of gas openings, while those from milk cooled with as little exposure to the air as possible were free from gas. Tables were also shown which gave the percentage of defects in the curds and cheese in the different groups of experiments. These will be published later.

By far the best results were obtained from milk cooled by setting the milk cans in water, and putting the covers on the cans immediately after milking was finished. This particular method of treating the milk was carried on during the very hottest weather in July and August last, and the milk arrived at the factory in practically the same condition every morning, sweet and clean in flavor. If all milk for cheese-making was handled in this manner, and the milk cans and pails kept perfectly clean, I believe we would practically do away with all gassy curds. The cheesemakers would have shorter hours, they would make more cheese per 100 pounds of milk, and have very few, if any, bad flavored cheese.

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Rural Telephones for Family Protection.

It's not an unusual thing for tramps or burglars to get into country houses and, while the men are away, frighten the women.

Often they don't stop at merely frightening, but sometimes steal and occasionally commit murder.

Unless immediate assistance can be summoned, the women are practically at the mercy of these ruffians.

With a telephone in the house neighbors can, at a moment's notice, be called in.

Or, in case of a sudden illness, during the night, to go for a doctor might mean the loss of a dear one's life.

With a telephone at hand, the doctor can, without loss of time, be summoned and, in the meantime, advise what to do.

It's every farmer's duty to himself and family to have a telephone.

He can never tell at what moment it may be the means of saving a life.

But what he does want is a durable and reliable telephone—one that has a reputation behind it.

Write us for more particulars about this kind of a telephone, the cost of installing, etc. You can build and operate your own telephone line.

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MONTREAL.

No. 27



Toronto, holiday factory on was about bright and forward to tailor's line late and the future. Ge commenced shape that Money is greater des male enter months bac and discoura year ago.

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MARKET REVIEW AND FORECAST

Toronto, Monday, January 11, 1909.—The holiday trade this year was fairly satisfactory on the whole. In many lines it is ahead of last year. The outlook is bright and business houses are looking forward to a busy spring. Stocks in farmers' hands have been greatly reduced of late and there will be larger buying in the future. Generally, most business have commenced the new year in much better shape than at the beginning of 1908. Money is plentiful and banks show a greater desire to accommodate all legitimate enterprises than they did a few months back. Quotations for call loans and discounts show no change from a year ago.

WHEAT

The wheat market continues one of interest both to the trade and the speculator. The latter has probably had more influence on the market than usual this year. The removal of many millions of bushels from the market by speculators and holding it for a rise, has undoubtedly strengthened prices and made it hard for the legitimate trader to do business at a profit. Such manipulation, however, is only temporary and interferes with the regular trade considerably. As regards the future are divided. There are some in the trade who confidently look for much higher prices, especially when the bulk of Argentine wheat, which is being shipped in large quantities now, is marketed. There are others who are not so hopeful. Generally, the local situation is one in which prices are on the high side for profitable export business. There was more activity in Manitoba wheat at Montreal during the week, but chiefly in the cheaper grades. The export market improved at the end of the week. Wheat prices rule firm here at 94c to 95c outside, according to freight. Very little wheat is being offered by farmers. On the farmers' market here fall wheat sells at 94c to 94½c and grows at 32c to 34c a bush.

COARSE GRAINS

The oat market is firm and prices rule higher. There is an improved demand both at home and abroad. Local dealers here quote oats at 50c to 50½c outside, and 45c to 46c on Toronto farmers' market. Since the New Year a better inquiry has sprung up for barley but so far there is no advance in price. At Montreal, 65c to 66c is still quoted for malting, and 67c to 68c a bush for feed barley. Prices rule here at 52c to 55c outside, and 56c to 58c for malting, and 50c to 52c for feed barley on the farmers' market. Peas are quoted at 86c to 87½c outside and 89c to 90c on Toronto farmers' market.

FEEDS

The market for mill feeds shows no change and last week's quotations hold good. The corn market is quiet. Dealers here quote American corn at 66c to 68c and Canadian at 63c to 64c a bush in car lots Toronto freight.

SEEDS

There is a little more activity in seeds,

which being the most active. It is expected that red clover will sell at short-bid. Quotations show little change and still rule at \$6.75 to \$7.50 for alaska; \$15.50 to \$21.00 for timothy and \$4.00 to \$5.25 a bush for red clover at country points.

HAY AND STRAW

There has been very little hay so far exported, as prices on this side are too high to admit of a profitable business. Canadian exporters have to compete with a new competitor in the British market, Sweden is now shipping hay to Glasgow, where it competes with Canadian hay in the market. At Montreal more hay is being delivered, and exports have increased, the local demand not being sufficient to take all arrivals. The market has a weaker tendency, though prices as yet show little change. Quotations for baled hay there are as follows: No. 1, \$12 to \$13; No. 2, \$10 to \$11; No. 3, \$8.50 to \$9.50; clover mixed, \$8 to \$8.50, and clover, \$7.50 to \$8 a ton in car lots. Baled straw is quoted there at \$8 a ton. Baled straw is quoted at Montreal. Prices for baled hay hold steady here at \$11 for No. 1 timothy, and \$8 to \$10 for undergrades, and \$7.50 for baled straw in car lots on heavy deliveries of hay on the local farmers' market here during the week. Prices are held steady, however, timothy selling at \$12 to \$14; clover at \$9 to \$10; straw, in bundles, at \$15 to \$14, and loose straw at \$7 to \$8 a ton.

POTATOES AND BEANS

The potato market rules steady at unchanged prices. Ontarior are quoted here at 60c a bag in car lots Toronto and 70c to 85c on Toronto farmers' market. The bean market is dull and unchanged prices. Ontarior are quoted at \$1.65 to \$1.65 for three; 1 and 2 are higher here and new-laid are quoted at 40c to 46c to the trade; selects, at 35c to 32c; storage, 55c to 56c, and held country stock and picked at 34c to 35c a ton. On Toronto farmers' market new-laid sell at 45c to 50c, and fresh or stored at 30c to 35c a ton.

EGGS AND POULTRY

Egg prices are increasing especially for new-laid. Stocks of held eggs are being gradually reduced and all kinds are at a premium. Strictly fresh-laid are quoted at \$1.65 to \$1.65 for three; 1 and 2 are higher here and new-laid are quoted at 40c to 46c to the trade; selects, at 35c to 32c; storage, 55c to 56c, and held country stock and picked at 34c to 35c a ton. On Toronto farmers' market new-laid sell at 45c to 50c, and fresh or stored at 30c to 35c a ton.

Though the poultry trade is quiet prices rule steady. At Montreal owing to light supply poultry is selling higher than it did for the Christmas trade. Fresh-killed turkeys are scarce there and sell in a jobbing way at 13c to 16½c; geese at 15½c to 16½c; ducks, 12 to 13c to 15c; chickens, at 14c to 15c, and fowl at 12c to 13c a lb. Prices rule steady here at 15c to 14c for choice chickens; 10c to 11c for common; 7c to 8c for fowl; 15c to 18c for turkeys; 10c to 12c for ducks; and 10c to 12c a lb for geese, to the trade. On Toronto the farmers' market prices rule at from 12c to 2c a lb.

DAIRY PRODUCTS
There has been some stir in cheese during the week and cables are higher. Stocks on hand in Canada are placed at about 70,000 boxes less than at this time last year, and if the market continues cleaned out. Dealers here quote cheese 13 1-4c to 13 3-4c for large and 12 1-4c to 12 3-4c for twin.

The butter market rules steady at about last week's prices. There appear to be ample supplies for present requirements, though the demand from outside points for butter is increasing and may cause a more active market. Finest fresh cream-butter is quoted at Montreal at 25½c to 26c, and Sept. make at 26½c to 27c a lb. Wholesale quotations here are: Creamery, 22c to 26c; choice dairy prints, 25c to 27c; store prints 22c to 24c; tuba, 22c to 23c, and inferior, 20c to 21c a lb. On Toronto farmers' market dairy prints sell at 28c to 32c and solids at 26c to 28c a lb.

UNION STOCK YARDS HORSE EXCHANGE

Trade prospects are much brighter and the outlook is for active business from this on. At the Horse Exchange, West Toronto last week, considerably more business was done than on some weeks past. Prices ruled about as follows: Heavy draughts, \$165 to \$175; light purpose and wagon horses, \$130 to \$155; fat mares, \$125 to \$160; drivers, \$100 to \$150, and serviceably sound work horses at \$90 to \$50 a pair. Dealers are more active in securing shipments in the country and receipts are expected to increase. Though the market shows more activity it is doubtful if prices will advance and parties who have surplus horses to dispose of should not hold out for higher prices than the market will warrant paying.

LIVE STOCK

The cold weather stimulated buying on the live stock markets last week, and the week closed steady and brisk. Receipts ruled large yet everything sold at steady prices. On Thursday, the last market of the week, more prime cattle would have found ready sale and they been offered. The general quality of cattle offering shows some improvement over that of the past few months. Things seem to be changing for the better in round trade, and if the quality of the offering continues to improve steady prices are likely to rule. The export trade seems to be looking up and it is rather disheartening to have the business hampered by insufficient space for shipping cattle. This kind of thing has been going on for some

months, and there should be some way of remedying things. The Dominion Government has done much for the dairy and fruit interests in the way of securing better facilities for carrying products to market. Might it not be possible to do something in this way for cattle are connection? London cables for cattle are reported steady at 13c to 14c a lb dressed weight, which is a cent or two higher than a few weeks ago. On Thursday one load of choice export steers sold at \$5.90 a cwt, prices for other lots ranging down to \$4.75 a cwt. Export bulls sold at \$3.75 to \$4.50, the bulk going at \$4 to \$4.25 a cwt. Some choice exporters were bought for butchers' purposes.

In butchers' cattle prime picked steers and heifers, 1050 to 1200 lbs each sold at \$4.75 to \$5 a cwt on Thursday. Loads of good butchers' cattle sold at \$4.40 to \$4.70; medium, \$3.9c to \$4.30; common, \$3.50 to \$3.80; cows at \$2.50 to \$4.25; and canners at \$1.50 to \$2 a cwt.

Trade in feeders and stockers was fair, with deliveries light. Had there been cattle of a better quality offering quotations would have been higher. Best feeders, 900 to 1050 lbs each, sold at \$3.60 to \$4; best feeders, 600 to 900 lbs each, sold at \$3.45 to \$3.60; best stockers, 600 to 900 lbs each, sold at \$3.25 to \$3.45; and common to medium stuff at \$2 to \$2.50 a cwt. There was a better market last week for milkers and springers than for some weeks past. Prices on Thursday ranged from \$30 to \$60 each with the bulk selling at \$45 to \$50 each, one extra choice cow selling at \$70.

Receipts of veal calves have ruled light and prices were firm at \$3 to \$7 a cwt. Sheep quotations are higher. Export steers at \$4.75; rams at \$2.75 to \$3.25, and lambs at \$2.50 to \$4.25 a cwt. Lambs are quoted at Buffalo at \$5 to \$7.25 a cwt.

The hog market shows an advance of 2c a cwt over the week previous, and quotations on the market here are 65.25 for selects and 66 a cwt for lights. Dealers quote \$6 a cwt f.o.b. at country points. At Buffalo veal and mixed hogs are quoted at \$6.40 to \$6.50. Yorkers, 65.25 to 65.45, and dairies at \$6 to \$6.30 a cwt. The Trade Bulletin's London cable of Jan. 7th quotes the market as follows: "A decided change for the better has come over the market and prices have advanced 2s with good demand. Canadian bacon, 48s to 49s."

UNION STOCK YARDS PRICES

West Toronto, Monday, Jan. 11, 1909.—The run at the Union Stock Yards this morning was 48 cars, comprising 536 cat-

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You want a fence that is so heavy, stiff and strong that it will discourage any attempt at forcing. After an argument with the IDEAL your hogs will become thoroughly discouraged of trying to get under it. The IDEAL is undoubtedly the best fence for the reason why you should buy it is the BIG reason. Buy the IDEAL lock is the BIG reason. No lock equal to the IDEAL in gripping tenacity has yet been discovered. Chances there never will be. When stretched up, IDEAL is a very handsome fence. Every strand measures exactly true. Every lock is

correctly applied. You see, the IDEAL is manufactured by the most improved fence machinery, in a plant that is considered a model of fence factories. With such superior manufacturing facilities the natural result is a fence overhadowing others in quality—and this is IDEAL fence. For further reasons read our free booklet.

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IDEAL Agents make the best living, because IDEAL Fence has the weight, strength and quality that make it the easiest. Let us send you our money-making proposition.

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DAVID A. MACFARLANE, Kello, Que. milkers, good testers and good lookers. Several young bulls for sale. Prices right. O-9-89

AYRSHIRES FOR SALE

A fine lot of young bulls and calves also the famous stock bull "Not Likely of Ste. Anne, 1970." Come and see his offspring. Also Shetland ponies and Yorkshire pigs.

D. BODDEN, Manager, Riverside Farm, Montebello, Que. Hon. W. Owens, Proprietor. O-6-15-09

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Ayrshires, Clydesdales and Yorkshires
If in need of good stock, write for prices which are always reasonable.
W. F. KAY, Phillipsburg, Que. O-5-19-09

BURNSIDE AYRSHIRES

Are in such demand will make another importation. Will attend great dispersion sale of the world renowned Barochie herd of Mr. And. Mitchell, Kircaldie, Scotland, where some of the choicest Ayrshires ever offered will be sold. Orders entrusted to me will be carefully attended to. Take advantage of this great sale and replenish with a safe and good one. Correspondence invited and satisfaction guaranteed.
R. R. NESS, Howick, Que. O-9-15-09

HUME FARM AYRSHIRES

Our 1908 importation has landed, consisting of females, 3 year olds, yearlings and calves, bulls, yearlings and calves, 13ams reared up to 1300 lbs. milk in Scotland. We also have calves from our own Record of Merit cows and others. Females any desired age, either imp. or home-bred. Come and see our herds. Phone in residence. Howick Station, G.T.R. H-10-10-08

ALEX. HUME & CO., Montebello, Q.C.

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Harold M. Morgan, prop. Ste. Anne de Bellevue. Choice young Ayrshire Bulls and heifers for sale. Yorkshire pigs from imported Sires and Dams, February and March litters. Highest selection. Highest quality. Write for prices.
E-5-5-09 E. W. BJORKELAND, Manager.

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THE CHAMPION AYRSHIRE COW of Canada, for milk, according to the last Herd Book, is Daisy of Carleton, Reg. No. 11,458. She qualified for Advanced Registry with 12,267 lbs. 4 1/2 lbs. per yearling bull, which is for sale at a reasonable figure. He is vigorous, quite large for his age, and should make a first-class herd bull. For description, extended pedigree and price apply to
GUS. LANGELIER, Cap. Rouge, Que. O-5-2-09

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Here may be seen some of the best Ayrshires in Canada, Imported and home bred. Record of performance cows and heifers
Prices of stock quoted on application.
HECTOR GORDON, Howick, Que. O-8-8-09

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Our success in the show yards stands for everything that is best in the breed. Our success in the show yards stands for the excellence of our herd.
FOR SALE—Stock of both sexes.
D. M. WATT, St. Louis Station, Que. O-6-15-09

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Present offering 13 grandly bred Holyhead Bulls, 10 1/2 months old in calf. Price \$40; also a few good cows in calf by Duchland Sir Hengerveld Mapicroft, son of Pictieje Hengerveld's Count De Kol, champion bull of the breed, the only sire of two daughters that have made over 30 lbs. officially in seven days. Prices reasonable. O-4-5-09

A. D. POSTER, Bloomfield, Ont. Mention Farm and Dairy when writing.

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The Great Wholesale and Retail Horse Commission Market Auction Sales of Horses, Carriages and Harness every Monday and Wednesday. Private Sales every day.
The largest, best equipped and most desirable stables in Canada. Half-mile of railway loading chute, stable dock. Quarter-mile open track for showing horses. NORTH-WEST CORNER OF ST. CLAIR & SPADINA STS.
HERBERT SMITH (LATE GRANT'S REPORTING) Manager
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JAS. REGO, St. Thomas, Ayrshires, Standard for this herd in 40 lbs. milk a day. No culls. O-3-19-09

SPRINGBROOK AYRSHIRES

are large producer of milk, testing high in butter fat. Young stock for sale. A few young bulls available in 1908 ready to ship. Prices right. Write for call on O-4-1-09 W. F. Stephen, Huntingdon, Que.

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Bull Calves dropped this spring. By imported foreign. First prize Toronto, Ottawa, and Halifax. Long distance phone O-4-3-09 W. W. BALLANTYNE, Stratford, Ont.

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Ayrshires, Clydesdales and Yorkshires. Write for special prices on Bull Calves.
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Have been bred and imported with a view to combine quality with production. The herd contains some noted sires. Nether Hill Goodtime (Imported) now heads the herd. Young stock for sale. Address:
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Imported and home bred stock of all ages for sale. See our stock at the leading shows this fall. Write for prices.
ROBT. HUNTER & SONS, Maxwellville, Ont. Phone distance phone. E-6-23-09

JUST BULLS

For sale 1 to 10 months old Holsteins and Ayrshires of great milking strains.
GEO. RICE, Tillsonburg, Ont.

HOLSTEINS

EVERGREEN STOCK FARM
Holstein cattle and Tamworth swine. Bull calves for sale, with good official records behind them; also Tamworth spring pigs. For particulars write to
THOMAS DAVIDSON, Spring Valley P. O. O-4-21-09 Brockville Station.

SUNNYSIDE CATTLE

For Sale, first prize bull, 9 months old, price \$40; also a few good cows in calf by Duchland Sir Hengerveld Mapicroft, son of Pictieje Hengerveld's Count De Kol, champion bull of the breed, the only sire of two daughters that have made over 30 lbs. officially in seven days. Prices reasonable. O-4-5-09

A. D. POSTER, Bloomfield, Ont. Mention Farm and Dairy when writing.

the, 253 sheep, 5 hogs and 6 calves. Business was brisk all around with prices high in some lines. Export cattle sold at \$5 to \$5.50; butchers' stock at \$5 a cwt. For pickled lots the bulk going at \$4.25 to \$4.75; calves sold at \$5 to \$7 a cwt, the latter figure being for choice quality. Sheep are higher, ewes sold at \$5.50 to \$4; rams at \$2.50 to \$3, and lambs at \$2.50 to \$3 a cwt. Hogs are quoted at \$6.25 a cwt delivered here.

THIS WEEK'S HOG PRICES

The William Davies Company, Toronto, will pay \$6.15 f.o.b. at country points this week. Several lots of hogs as they quoted last week, and is higher than the prices quoted last week on Toronto live stock market at f.o.b. 10 cents. During the holidays many farmers do not market their hogs and consequently more over-look or over-fat hogs were on the market last week. Danish killings last week totalled 30,000 hogs. This shows a decrease from a week or two ago. It is likely only a temporary falling off, as the Danish farmer is still producing hogs in large numbers. Curers there have been endeavoring to lower the price to the level of the Canadian farmer does sometimes, the latter is withholding the supply.

PETERBORO HOG MARKET

Peterboro, Jan. 11, 1909.—The demand for bacon in the old country was a little lighter last week; prices are declin-

HOLSTEINS

HOLSTEINS FOR SALE.—Thirty females from one to seven years. Six young bulls from advanced registration stock. Justice H. McLean, Inkerman, Ont. O. P. F. A. E-3-27-09

FOR SALE—30 HEAD OF HOLSTEINS

If you are wanting a choice young cow or young bull, or better cow or pick them from GORDON H. MANHARD, O-4-5-09 Manhard P.O., Leeds Co., Ont. 7 miles south of Brockville on C.P.R. (Clear's Crossing)

SPRINGBROOK HOLSTEINS

AND TAMWORTHS
33 Choice Young Tamworths, from imported sires and known King David. A few rich bred Holstein bulls and several females. Bargains to look back on.
GORDON H. MANHARD, O-4-5-09 Manhard P.O., Leeds Co., Ont. 7 miles south of Brockville on C.P.R. (Clear's Crossing)

HOME-BRED AND IMPORTED HOLSTEINS

We must sell at least 25 cows and heifers at once, to make room for a good lot of new arrivals of our herd. This is a chance of a lifetime to get a good lot of cows and heifers at low prices. King David, Pontiac Hermes, Imp. son of Hendrick Dekol, world's greatest sire, head of home-bred cows and heifers at once.
H. E. GEORGE, CRAWFORD, ONT. Putnam Stn., 1 1/2 miles C. P. R. E-4-8-09

MISCELLANEOUS

JOS. FEATHERSTONE & SON, Streetsville, Ont. Wholesale and Retail Dealers in
R. H. BARNING, Macleod Farm, Thorold, Ont. Dorset Sheep a specialty. Telephone. E-7-19-09
J. A. GOVENLOCK, Forest, Ont., Hereford, Canada's greatest winners. Toronto and London, O-7-26-08. Write for prices.
BARRISON BROS., Mt. Albert, Hereford cattle, Oxford town sheep. Stock for sale at all times. O-2-21-09

H. BARTLETT

KIMBO, LINCOLN, ONT. BREEDER OF DORSET SHEEP Prompt Attention given to Inquiries. O-16-7

PONIES FOR SALE

Exmoor and Shetlands of all ages and sexes, broken and unbroken.
P. A. BEAUDOIN, O-6-2-09 187 St. James St., Montreal.

BERSHIRE AND TAMWORTHS

Choice Berkshire Boars fit for service and sows ready to breed, in most ages. Choice Tamworth spring pigs by a Toronto and London prize winning boar. Prices low, consistent with quality.

J. W. TODD, E-2-17-09 Maple Leaf Stock Farm Corinth, Ont.

NITHSIDE STOCK FARM

Large English Berkshires; Southdown Sheep and S. G. Dorking cockerels. Present offering consists of 100 choice fat service, 80 ready to breed. Also choice lot of S. G. Dorking cockerels, \$2 each.

E. E. MARTIN, Prop., Paris station, Oxford Co. O-13-29

The George Matthews Co. quote the following prices for this week's shipments f.o.b. country points, \$6.35; delivered at abattoirs \$6.25 a cwt. weighed of cars, \$6.50.

MONTREAL HOG MARKET

Montreal, Jan. 12, 1909.—Business has been decidedly more doing in the trade in live hogs, and prices have scored an advance this week on those current last week. Selected lots were sold off cars sold as high as \$7 a cwt. this week, although the ruling price was nearer \$6.75 a cwt. Dressed hogs were sold at \$5.50 and fresh killed abattoir stock quotations ranged from \$9.25 to \$9.75 a ewe. Country dressed abattoir at \$5.50 to \$9 a cwt for light weights.

EXPORT BUTTER AND CHEESE

Montreal, Saturday, Jan. 9.—There has been a decided improvement in the demand for cheese from the other side, and holders have been very much encouraged by the improvement in this respect. Prices are most firm and have advanced slightly since the beginning of the week, holders asking 12 3/4 for finest Sept. and early Oct., with gradually falling prices for the rest of any description under 12c. The demand soon absorbed all the cheese available at these lower prices, and there are very few now available at 12c. Should this demand keep up for some time, the stocks of butter here will be reduced to a very low compass. As it is, the stock is confined to two or three of the large holders, the smaller dealers having cleared out some time ago.

The shipments this week have been fairly heavy. The coming week will see a demand, and when the figures are published next week there is no doubt that the total first aggregate of exports here will mean a substantial reduction in the stock of cheese in Montreal.

The butter market is steady with prices unchanged. The coming week will see the factories from day to day are being bought up at 50 to 50c, according to quality. The demand is still strong, although slightly heavier than at the same time last year.

HOLSTEIN FRIESIAN NEWS

The Canadian Dairyman and Farming World is the official organ of the Canadian Holstein-Friesian Association, all of whose members are readers of the paper. Members of the Association are invited to send items of interest to Holstein breeders for publication in this column.

The Twenty-Sixth Annual Meeting of the Holstein-Friesian Association of Canada will be held in Association Hall, corner York and McGill streets, Toronto, on Thursday, Feb. 4th, 1909, at 9 o'clock a.m. The executive committee will meet on Wednesday, Feb. 3rd, at 10 o'clock a.m. in the Iroquois Hotel.

Mr. J. W. Richardson gives notice that he will move an amendment to Article 6, Section 2, owing to Customs regulations governing the importation of new young bulls.

Mr. James Rattie gives notice that he will move an amendment to Article 6, Section 2, of the constitution.

To secure reduced rates a single ticket to Toronto should be purchased and a Standard Certificate procured from the agent.

The annual fee for 1909 is due on Feb. 1st.

G. A. GILROY, G. W. CLEMONS, President, Secretary.

Half a Can Dtd It.—E. C. Jones, Grand Rivers, Ery. writes under date of March 27, 1908: "I have been thinking of writing to you for some time to tell you that today I was in the hospital with my horse. I wish to say that it took the lump off and to-day I consider him well, and your medicine did it. When I commenced your treatment my horse was not worth \$25. That was last fall that I used it and I traded him off not long since for a mare that today would be worth \$100 here, and half a can did it. After I traded him off a veterinarian asked me what I did. When I told him I used your treatment he said it struck him like a bolt. B-SORBINE penetrates to the seat of the trouble promptly and effectually, without blistering or burning the skin. It does not require the horse to be laid up and will give you satisfaction. \$2.00 a bottle, at druggists or express paid. W. F. Young, E. D. D. 28, 28, Springfield, Mass. Canadian agents, Lyman Sons & Co., 380 St. Paul street, Montreal, Que., Canada.

OUR FARMERS' CLUB

COMPTON CO., QUE.

COMPTON CENTRE.—The weather is very cold and stormy; about 40 inches of snow fell but of course not all of it has remained. Farm produce continues high. Eggs are 40c to 60c; butter, 35c; hay, \$10 to \$12; pork, 8c. The weather has been so dry that it has not improved the weather situation much, many farmers being obliged to draw water for their stock. Quite a lot of lumbering is being done to clear off the timber on the land which was burnt off this last summer.—H. O.

HASTINGS CO., ONT.

MADOC.—The water supply is very slim; a good many wells are entirely dry, others will only give a few pails a day. The worst feature of the situation though is the small creeks and streams where people water their stock in winter. They are running so shallow that very little frost would freeze them to the bottom, and shut off the small supply that we have at present. A good many have bought their wells deeper, but then all do not get water.—W. T. H.

NORTHUMBERLAND CO., ONT.

WICKLOW.—Wells continue dry, much to the inconvenience of stockmen. The farmers' institutes have commenced to hold their meetings. It is a great surprise to merchants and professional men why the farmers do not attend meetings that are calculated to give them special benefit, and have proved so instructive to those who do attend. The facts brought out by Mr. Padgett with regard to the benefits derived from dairymen testing

Farm and Dairy is an interesting paper, two things I especially like in it. "The Farmer's Club," for it brings the news of the farmers of Canada, to my fireside. The other is the attractive pictures, with their explanatory immediately under. I never saw either in any other paper.—James E. Orr, Middlesex Co., Ont.

their cows, has created much thinking. Cattle factories have closed; generally, they have given satisfaction to the patrons. The milk of W. F. W. factory is taken in by the pond.—E. B. H.

DURHAM CO., ONT.

BLACKSTOCK.—Recent thaws have completely ruined the sleighing. The extreme frost of the past few days will soon make the ice sufficiently thin to harvest. Few farmers lay up a supply, which causes serious loss in summer. Quite a number are engaged in laying up next winter's supply of wood, though some prefer to delay this operation till the frost has gone from the timber. Feed appears to be unusually cheap, owing to so much mild weather. Some are obliged to feed cattle over for another winter owing to their coming into stable in poor condition. Prices are not much changed, corn bringing from 50 c to 60 c and upwards.—R. F.

VICTORIA CO., ONT.

OAKWOOD.—Fine winter weather prevails. The fall was very dry and many wells have failed. Farmers have decreased the bulk of their grain and clover seeds. Prices ruling here now are as follows: Fall wheat, 80c; spring wheat, 85c; ground wheat, 85c; buckwheat, 80c; barley, 80c; oats, 37c; alfalfa, 47.50 for No. 1; lower grades in proportion; red clover, 85 to 85.50 a bush. Machine threshed timothy from \$1 upwards; butter, 25c a lb; new-laid eggs, 27c to 30c a doz. Straw is scarce and is selling at \$15 a load. Hay sells at \$10 to \$12 a ton for good timothy; clover hay, \$9 to \$10 a ton. Roots were a very short crop, many farmers being without sufficient to run them through the winter.—F. G. P.

HALBURTON CO., ONT.

HIGHLAND GROVE.—We are having very cold weather and lots of snow. Feed seems to be plentiful as yet. Hay is \$12; oats, 45c a bush; potatoes, \$1 a bag; pork, 8c a cwt; beef, \$4.50 and 5c a cwt; butter, 25c; eggs, 50c a doz.—J. B.

WELLINGTON CO., ONT.

FERRUG.—On account of the long dry spell of weather it was very hard to get plowing done until late. There being open weather longer than usual the plowing was pretty well finished. Some of the wells are low. Threshing is almost completed. Some of the grain is light and some of the spring crops were good in most places. The weather has been rather mild with occasional cold snaps. The snowfall has not been very great, just enough to make fairly good sleighing.—A. M.

WATERLOO CO., ONT.

AYR.—The weather has been mild and soft, but is turning colder again. Just a little more snow and the sleighing would be good for there is a good foundation. The municipal elections are the centre of interest now, and the good roads system is coming in for a good deal of discussion in Waterloo Co. Farmers are busy with their chores, and solving the different feeding problems. A considerable number are drying manure to be sold as made and spread it directly on the land or put it in piles ready for the manure spreader in the spring. This gives the idle horses some exercise and provides work for the hired man, giving him steady employment. What is selling from \$2 to \$2.50 a ton.

MIDDLESEX CO., ONT.

DELAWARE.—The pleasant winter weather we have had thus far is a subject of general remark. Clover seed is turning out well; the price is only about half that of a year ago. More liberal sowing of it is being done. Hay sells locally at \$9 a ton. Butter is easier in price than a month ago; good quality of early factory butter 25c to 26c a doz., although the mild weather is starting the bidders to shell out more liberally. Hogs, \$6 to \$7 a cwt. The township of Caradoc is noted for the quantity and quality of its potatoes, one dealer alone in Mount Brydges having shipped over 50 cars last season.—E. M.

BRUCE CO., ONT.

CLUNY.—The growing of alfalfa for hay is becoming more common. It seems to be adapted to this part of the province. I have found it to do well on a clay soil. I intend to top dress it this winter with manure. Less hogs are being fed this year; cattle are being fed in their place.—J. M.

THUNDER BAY DISTRICT, ONT.

SLATE RIVER VALLEY.—A new year has commenced with severe winter weather, the thermometer registering 13 deg. below zero early this morning. The mild weather during December has been quite an agreeable surprise, especially to those who have only recently taken up farming here, and of course looked for severe weather in this northern section. Snow came in small quantities about the 26th inst. but not until the last week has there been enough snow for good sleighing. The roads are perfect now, and are being freely used by those who have produced to market. On December 29th we had our heaviest snowfall. The oldest residents claim that a rainfall so late in December has never before occurred to their knowledge. Dairying is a profitable branch of farming. With some farmers egg production is receiving special attention. The market in this line is contracting. There is a keen demand for fresh eggs in Port William at 50c a dozen. There is a great need of a rural telephone system to connect with the municipal telephone of Port William and Port Arthur. This subject should be discussed at the Farmers' Institute meetings this winter.—J. R. H.

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THIS WEEK'S PRICES FOR HOGS DELIVERED AT FACTORY
\$6.25 a Cwt.
FOR HOGS WEIGHING 160 TO 220 LBS.

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GOSSIP

It is seldom that fence manufacturers offer to send a sample of their fence to those interested in fencing. This unusual offer is being made by the Selkirk Fence Co., of Hamilton, whose advt. appears on another page. As the sample is sent free, our readers should avail themselves of the opportunity of learning more about this splendid fence. Send today for a sample.

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LYMAN, BROS & CO., Montreal, Canadian Agents.

SEED OATS

FOR SALE.—A quantity of Improved American Banner Oats, grown from poll-greed seed. Also some "Dew Drop," a splendid early white oat, that I have grown for several years with good success. Heavy, thin hulled, about same length and quality of straw as Banner, but four or five days earlier.

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