

Issued Each Week—only One Dollar a Year

VOL. XXIX.

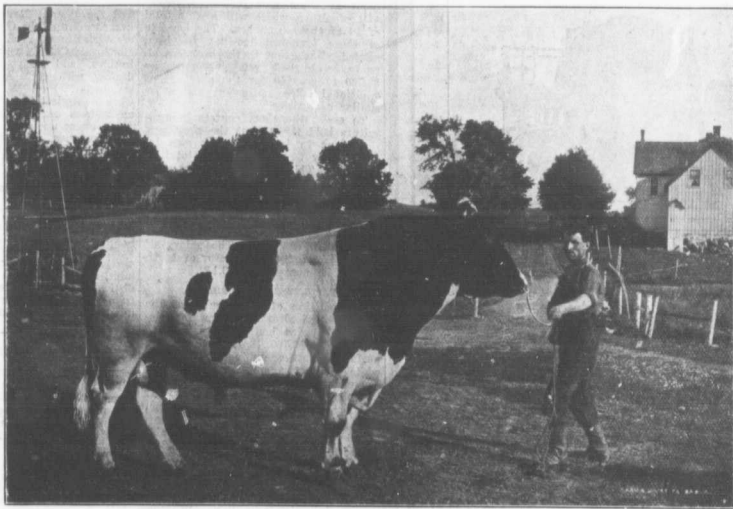
NUMBER 6.

# FARM AND DAIRY

## RURAL HOME

PETERBORO, ONT.

FEBRUARY 10, 1910.



### A HOLSTEIN BULL THAT HEADS A NOTED ONTARIO HERD

Count De Kol Pietertje Paul, No. 5446, shown in the illustration, is the senior service bull at Lyndale. Three heifers from this sire, owned by Brown Bros., Lyn, Ont., are illustrated on page five. A most important consideration in a dairy bull is that he shall transmit his superior qualities to his heifers.

For this qualification a bull is dependent upon his ancestry, his dam and his grand-dam being most important factors. Hence look to the breeding as well as to the individuality of the bull you get to head your herd.

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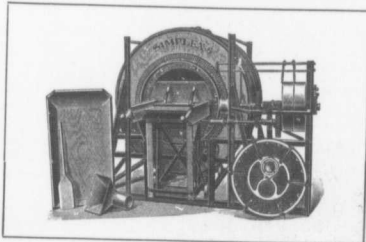
# "SIMPLEX"

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There is an entire absence of bearings, loose heads, journals, stuffing boxes, gears, etc., inside of the drum, thus avoiding a chance of leakage or injury to or soiling of the cream or butter.

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longer a matter of guesswork, but it is as certain as with table butter workers.

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The butter is automatically delivered from the drum by means of a sliding tray, or hopper. There is no digging out of the butter with ladles or spades.

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**BEATTY BROS.,** PERGUS OYNT. PERGUS

### The Swine Commission

In reply to a question asked recently in the House of Commons by Mr. Armstrong, from Lambton County, Hon. Sidney Fisher announced that the report of the Swine Commission, which visited Denmark, is in type and has been proof-read. It is to be presumed therefore that the report will soon be made public.

In reply to a second question from Mr. Armstrong as to why the Commission did not investigate conditions in Canada before going abroad, Mr. Fisher stated that the Commission being composed of men actually engaged in the rearing and marketing of swine, were from their own experience, sufficiently acquainted with conditions in Canada to enable them to examine intelligently conditions in other countries, having in view the lessons that would be useful to Canadian swine raisers.

### Government Grants for Agriculture

The estimates submitted to the Ontario Legislature last week provided for some increased grants for agricultural purposes. These included a grant of \$3,600 to provide for the establishment of three new district branches of agriculture, which will make a total of 14 of these branches. The location of these branches has not yet been settled. The grant to the branches already established was increased by \$2,500 to provide for the purchase of additional office equipment and other similar necessities.

To assist the short courses in agriculture held throughout the province, the grant to institute work was increased by \$2,000, or to a total of \$27,000. This increase in the grant will cover the expansion of the Women's Institute work. The salary of Mr. G. A. Putnam, director of dairy instruction and superintendent of Farmers' and Women's Institutes, is increased to \$2,300. The salary of Mr. P. W. Hodgetts, director of horticulture, is increased to \$2,150.

### FACULTY GETS INCREASES

The petition of the faculty of the Ontario Agricultural College for increased salaries has been granted to the total of \$4,500, the majority of the professors getting an increase of \$200, while the lecturers and assistants get \$50 each. To provide for a lecturer in agriculture \$1,200 is to be voted and for a demonstrator in soil chemistry \$700. The salaries of the staff of the Macdonald Institute are also increased to the aggregate of \$2,350, the various instructors getting \$100 each, while \$300 goes to provide for a supervisor of home practice.

The new lecturer in agriculture at the Guelph College will be Mr. Morley Pettit. Mr. Pettit will not only give lectures in agriculture, but he will establish an apiary at the farm and conduct experiments on bees.

The sum of \$300 is voted for experiments in sheep feeding. These experiments are being conducted on the farms of 11 different farmers throughout the province. The grant for the inspection of apiaries is increased by \$500, or to a total of \$3,000.

To provide for an expert in plant breeding at the Horticultural Experimental Station at Jordan, \$1,000 is voted. The Entomological Society will receive a grant of \$200.

For the services of assistants in farm drainage, \$3,000 is voted.

The Ontario Veterinary College gets a grant of \$1,800 for equipment, and \$5,000 is added for salaries.

### ORGANIZING THE POLICE

Preparatory steps are taken for the fitting out of the re-organized provincial police. The sum of \$2,850 is assigned for the purchase of uniforms, \$1,900 for contingencies, and \$45,000 for salaries. For travelling and other expenses, \$4,000 is allowed.

Expansion in the work of colonization and immigration is indicated in a vote of \$10,000 for bonuses and advances to agents and organizations engaged in procuring domestic servants and farm laborers. For the immigration work in the Old Country \$5,000 is apportioned, while Mr. J. W. Rigby gets a grant of \$175 for sending out domestics. The Salvation Army Resolute Homes at London, Hamilton and Ottawa get \$3,000. The Ottawa, London and St. Catharines sanitariums get \$4,000, while \$500 goes to Salvation Army prison-gate work.

### Essex Corn Growers

A large attendance and an excellent exhibit of corn made the success of the Second Annual Corn Exhibition and Convention of the Ontario Corn Growers' Association, held at Essex last week. A year ago, at the exhibition, there were 87 exhibitors and an \$100 was paid in prizes. This year there were offered 300 exhibitors, and a prize list amounting to \$814. There were 75 classes. The exhibition included growers from the counties of Essex, Kent, Lambton and Elgin.

The Corn Growers' Association, under the auspices of which the Corn Exhibition is held, is the outcome of the efforts of A. McKinney, B.S.A., the secretary, and the District Representative of the branch office of the Ontario Department of Agriculture. Mr. L. S. Clink, of Macdonald College, was in charge of the lectures, and each morning lectured, dealing with corn from the grower's standpoint. Prof. W. H. Day, of the Ontario Agricultural College, delivered an address on tile drainage. He laid much stress upon the beneficial results to farm lands, which had been systematically drained by tile. He declared that, if done properly, it meant increased fertility, particularly to the corn crop, which might be increased fully 50 per cent.

The Hon. J. S. Duff, Minister of Agriculture; Pres. G. C. Creelman, and Prof. C. A. Zavitz, of the O.A.C., Guelph, and Prof. G. C. Wams, of Wooster, Ohio, also delivered addresses. The corn exhibit, which numbered upwards of 900 distinct entries, attracted much attention from the visitors on account of its unusually high quality and classification.

### Items of Interest

Universal Teat Cups that will fit all ordinary sized teats have been devised by D. H. Burrell & Co., to take the place of those teat cups formerly used with the B-I-K milking machines thus doing away with the necessity of making a careful selection of the proper sized teat cup and mouth piece to fit each individual cow. The new Universal Cup has been already tested and has been pronounced a success.

Mr. R. G. Murphy, the popular and well known secretary of the Eastern Ontario Dairymen's Association, is in the Royal Victoria Hospital, Montreal, undergoing treatment. Dairymen generally will wish him a speedy recovery.

A thousand acre farm is to be established by the Salvation Army near Winnipeg for supplying a place for unemployed men to work, and as a centre for farm laborers and domestic servants brought to the west by the Army. Market gardening will form a big part of the farm work, and it is hoped to make the venture self-supporting.

Sir Geo. A. Drummond, president of the Bank of Montreal, president of the Canada Sugar Company and director of many other financial institutions, aged 81 years, died in Montreal on Wednesday last. He was regarded as one of the ablest financiers in Canada. One of his private enterprises was the establishment of a high-class stock farm. Some of his stock, almost invariably, has won some of the best prizes at the largest shows, and at the International at Chicago.

# FARM AND DAIRY & RURAL HOME

## MODERN EQUIPMENT FOR BOILING SAP PROVES PROFITABLE

Some Interesting Facts concerning the Maple Syrup Industry as gleaned from a Practical Farmer in Wentworth Co., Ont.

FOR several decades it has been the custom on most Ontario farms where a sugar maple bush exists to tap the trees each spring and market the product secured either in the form of syrup or sugar. The sugar bush on the farm now owned and worked by Mr. Wellington Sager of Wentworth Co., Ont., has for years been made to yield good interest on the capital invested and rent for the land occupied. Years ago, the old kettle method of boiling the sap was abandoned and pans of sheet iron made at the local tinmiths were installed. These were set on a home-made brick arch and from them a first-class product was made. Although Mr. Sager had three pans in all, these could not handle with the facility that he desired, the sap from the 400 trees he tapped. He had heard much of the modern evaporator and concluded that it would be a paying investment. His thoughts led to action and early in the season of 1908, he installed a Champion Evaporator.

### A PROFITABLE INVESTMENT

When interviewed by an editor of Farm and Dairy during the sugar making season last year, Mr. Sager was quite enthusiastic over the success of this modern means of turning sap into syrup. "I came to the conclusion," said Mr. Sager, "that if one was going to do anything at the sugar business at all, he might as well make all that there was in it. Although we had tapped only some 400 trees formerly, we could easily tap another 400. When we got the evaporator, we purchased also 400 each of pails, spiles and covers. The total cost of the evaporator and the extra pails and equipment was \$229. Our make during the season of 1908 was 175 gals., 135 gals. of which was sold for \$1.50 a gal., the other 40 gals., being disposed of for \$1.25, the product realizing in all \$272.50. This shows what a profitable proposition the evaporator proved to be. The evaporator more than paid for itself the first year and we now have the sugar department on our farm organized in such a way that it should be the most profitable from year to year.

### A SHANTY IS REQUIRED

"The evaporator," continued Mr. Sager, "demands a fairly well built sugar house. It will not work successfully out of doors. Our building not being up in time, we started it the first year in the open. We soon found, however, that we could not make it go without the shanty. We

could make no headway until we got it covered over. Since running the evaporator, aside from its ability to earn profits, we would not care to go back to the other way. The old fashioned method required that we work nights as well as days when the sap ran well. Now we can handle it readily as fast as we can get the sap. Our evaporator is 4 feet x 12 feet. It takes care of the sap from 800 trees much more readily than did the three pans, which were each 6 feet x 2 feet eight inches with the sap from 400 trees formerly tapped.

"When we got our new buckets, we got covers for them also. Covers are a great advantage and are well worth what they cost. We made a mistake in buying ours. We bought the hinges and then



Maple Sap Boiling Equipment in the Bush on an Ontario Farm

The means of harvesting the product of the sugar maple have undergone a revolution in recent years. The modern evaporator has superseded all other devices for reducing maple sap to syrup, where large quantities are to be reduced, and a first class product is desired. The illustration shows the sugar camp of Mr. Wellington Sager of Wentworth Co., Ont. Read in the adjoining article what he has to say of his equipment.

got the tinmith to make the covers. We should have got the galvanized covers at the outset. They would have been as cheap and would not have rusted as did those obtained from the tinmith.

### CLARIFIED SYRUP

"All our syrup as it comes from the evaporator is taken to the house and clarified. I would not take it to the market until I got it clarified though it looks all right when it comes from the evaporator and the great bulk of the syrup is placed on the market in this condition. Clarifying makes it just that much better. The standard required for syrup is 13.2 pounds to the gallon. I find that it pays to make it thicker. When we

started our evaporator, we took some syrup from our cellar that had been made the year before and found that it weighed 15 pounds to the gallon and that it boiled at a higher temperature than that drawn off from the evaporator. It pays to make the syrup thick. There is no trouble then about the demand. We believe in making it the best possible. In spite of all precautions there will be dirt in the syrup unless it is clarified. When clarified this comes out and as a result the syrup is of a better grade.

### THE PRODUCT SELLS ITSELF

"I never ask a man to buy syrup," concluded Mr. Sager, "I count on the article selling itself. The agent that sold me my evaporator told me after I had run my machine the first year that my syrup was the only batch that he had to compete with." At the time of our interview we learned that Mr. Sager could have placed 75 gallons of syrup that day, had he had it for sale. People had asked for it and he could not supply the demand. He had never experienced any trouble in getting rid of the syrup as fast as he could get it. On the other hand, Mr. Sager told of men he knew who ran their evaporators and when the season was over they had milk cans of their product for which they could not find a market. The difference in the quality of the syrup is soon recognized by the consumer and they soon learn where they can get the product that will satisfy their taste. It is therefore quite evident that it is worth while to go to the extra trouble of clarifying and to draw the syrup off thicker than the Government standard.

Mr. Sager's experience with the evaporator as compared with less up-to-date means of boiling the sap, while it seems somewhat remarkable, is quite within the range of possibility, and can be duplicated by any farmer who annually taps a few hundred trees. Mr. Sager lays particular emphasis upon the quality of his product. That it pays him is quite evident. Others may take a leaf from Mr. Sager's book of experience, and during the sugar-making season of 1910 manufacture a product, the quality of which will go far towards making satisfactory sales.—C. C. N.

### Horse Breeding for Profit

J. H. Gardhouse, York Co., Ont.

When considering this matter of horse breeding for profit, the first question that naturally arises is, does horse breeding pay? I answer yes, decidedly yes. I do not think that there is anything on the farm to-day that can be taken up that will make more money for the farmer than horses. The demand for horses is good. It is like-

ly to continue good. There is a growing demand from year to year for the right class of horses in that extensive country lying to the west of us all the way through to Vancouver.

It is not for me to advocate any special breed, but in my opinion the heavy draught horse is the most suitable horse to breed on the average Ontario farm. There are three or four reasons why the heavy horse is the horse to raise. The heavy mare is more suitable for farm work and can do much more of this same farm work than the mare of the lighter type. The heavy colt is more suitable to get work out of, it can be broken at an early date and will prove more satisfactory in every way on the farm than will colts of the lighter breeds. The work that the heavy colt is required to do upon the farm, after he reaches that age at which he can be worked, all tends to fit him for future usefulness. With the light colt, it would be quite different.

The average farmer has not the time to get the most out of the lighter breeds. He has to sell the light colt for less money than he is really worth.

One cannot make a success of any stock business unless he aims at the top and breeds the good ones. If we would make horse breeding the most profitable, we must have the blood, the feed, and give the animal care. We must aim to get the best; we must know that the animal is bred right and then give it the feed and care. The average Ontario farmer on 100 acres should raise three colts in two years and should expect to do the greater part of his farm work with his mares and with the colts as they are being gotten ready for the market. The best success is to be had from mares when they are worked steadily on the farm. Some say that mares should not be worked. I would rather have them worked right up to the time they foal. Both the mare and the foal are the better for the mare having done such work.

**Fanning Mill Seed Selection**

T. G. Raynor, B.S.A., Seed Branch, Ottawa

The average farmer does not use the fanning mill enough in his selection of seed grain. The best crops always come from the use of large, plump seed. This has been demonstrated at our various Experimental stations. Prof. C. A. Zavitz, of the Guelph station, who has done much along the line, says that over 15 bushels per acre has been gained in sowing large, plump seed as compared with small, plump seed of the same varieties of oats.

No one should sow grain as it comes from the cleaner. At least 25 per cent. should be fanned and screened out of seed grain, i.e., four bushels from the bin should be reduced to at least three per seeding; in many cases more could with propriety be taken out.

A power mill, which at one dressing would remove 25 per cent., might be bought by a farmers' club or a number of farmers could co-operate and buy one. Such a mill if operated by a skilled man would dress up a large amount of seed in a very short time. Five or ten cents a bushel for cleaning would be a mere bagatelle compared with the benefits which are bound to follow such a dressing.

**THE C.S.G.A. METHOD**

There is, however, a better way still for getting good seed. It is the plan adopted by the Canadian Seed Growers Association where the plant is made the foundation of selection. Mr. L. H. Newman, the secretary, will be glad to furnish anyone literature outlining the methods of this Association if they will apply for it at the Canadian Building, Ottawa. There are a few farmers in Eastern Ontario who are following up this kind of work, but there is room for many more, and they can do it with remuneration for themselves both from a monetary standpoint and an

increased yield in the crops so handled. However, let us not forget to use at least the fanning mill well this year.

**Some Things Concerning Seeds**

One of the speakers at the recent Dairy-men's convention at Cowansville, Que., was Dr. H. T. Gussow, Botanist of the Experimental Farm, a German who has only been in this country for six months, but who is intensely interesting. He is a new speaker with a new message. Probably he made the best impression of any speaker that had been heard in Cowansville for years.

He started out by asking if the farmers could tell why they had a good crop some years, a bad crop some others. If not, they were running a haphazard concern on the principle of luck instead of business and a business more like a lottery than like a farm. There were three things to look into regarding seeds: "Will they grow?" "Are they free from weed seed?" and "Are they free from disease germs?"

The Department of Agriculture is testing seeds every day for merchants and for farmers. If seeds are germinating at the rate of 92 or 95 out of a 100, they are all right. If less than 90



One of the larger trees in Mr. Wellington Sager's bush. Maple syrup, the first harvest of the season, is an important factor on Mr. Sager's farm. Read the article on page 3, which gives his experience with modern means of boiling sap.

per cent. of them are germinating, they are poor seeds. The question is not how many pounds of seed is put on a piece of land, but it is how many living plants will be found on that land after germination takes place? Dr. Gussow referred to some of the exhibits made at the seed fair here and said that they demonstrated to him that we should imitate the example of the farmers in England, Germany and France and combine our forces to secure legislation to the end that we could say to seed merchants: "You must furnish us with clean seed, and that which is free from weeds, or we will call in the Government Inspector, who will have the power to put you out of business if our seeds are inferior or found so after purchase from you." Merchants selling poor seed in those countries are convicted on the report of the Inspectors.

Dr. Gussow advised the testing of all seed by sending it to Ottawa in samples, where the report would be cheerfully given after only a few days' time. In case these few days were lacking, he advised farmers to simply take a few hundred seeds, such as clover and lay it on a piece of white paper. It is easy to detect what is not clover, with the naked eye. Dr. Gussow asked all farmers to ask their merchants to tell where the clover seed was grown. Canadian clover grows best in

Canada, while English clover grows best in England.

As a test concerning powers of germination of seeds, Dr. Gussow advised taking two soup plates, and in one lay two damp sheets of blotting paper with a couple of hundred seeds spread between the damp sheets. Turn the other plate over it and set them in a warm place for 18 or 24 hours, at the expiration of which time all good seeds will have sprouted.

Clean farming, as the Hon. Sydney Fisher had said, was the vital point needing attention. The speaker had been in Canada only six months, but in 14 other countries with which he was familiar, he had found that that was a weak point in agriculture. Mr. Foster assured the speaker that the same trouble was in evidence here. Dr. Gussow strongly advised insurance of crops and protection of crops from disease.—P. C. D.

**A Good Rotation in Actual Practice**

J. R. Philp, Grey Co., Ont.

In Farm and Dairy, Jan. 20, I noticed your editorial advising farmers to practice a crop rotation. I heartily endorse what you say in this connection. Our land is just like a machine—if we wear out one part it is impossible for the others to do their work.

The three principal constituents in the soil are nitrogen, potash and phosphoric acid. If we crop so as to exhaust one of these, then the soil is like a binder without a knoter.

We often make the mistake of growing grain crops so long as grain will grow. Then seed the land to clover and grasses, meanwhile expecting a good stand, which is quite impossible under such conditions. The following is a rotation which gives satisfactory results with us:

1909	.....	1st Field.
1910	.....	Roots and Rape
1911	.....	Grain seeded with clover
1912	.....	Hay Pasture
1913	.....	Grain on sod plowed in fall of 1912
1909	.....	2nd Field.
1910	.....	Grain seeded with clover
1911	.....	Hay Pasture
1912	.....	Grain on sod plowed fall of 1911
1913	.....	Roots and Rape
1909	.....	3rd Field
1910	.....	Hay Pasture
1911	.....	Grain on sod plowed fall of 1910
1912	.....	Roots and Rape
1913	.....	Grain seeded with clover
1909	.....	4th Field.
1910	.....	Pasture
1911	.....	Grain on sod plowed in fall of 1909
1912	.....	Roots and Rape
1913	.....	Grain seeded with clover
1909	.....	5th Field.
1910	.....	Grain on sod plowed fall of 1908
1911	.....	Roots and Rape
1912	.....	Grain seeded with clover
1913	.....	Hay Pasture

Besides the area devoted to alfalfa and permanent pasture, we have about 100 acres that we keep as near as possible under the rotation as described. To date we have had very little trouble in keeping weeds in check. It has been stated by good authority that a short rotation would destroy perennial sow thistle, which has got such a strong foothold practically all over Ontario and in sections of the west. We have had little or no experience with this unwelcome visitor; has yet; whether our rotation is the reason or not we will not venture to say.

The accompanying schedule represents five 20-acre fields and gives an idea of how it works out (our fields are not 20 acres each, but mostly 10 acres). By following this practice our grain crop is always on sod and root and rape land.

**COEN AND RAPE IN GREY.**

As a rule there is not much corn grown in South Grey, there being practically no silos. Preparations are being made, however, to erect some this coming summer. There is considerable rape grown for fall feed. This crop is a good land cleaner if

handled properly, and it leaves the soil in ideal condition for a stand of clover. We always sow clover with the succeeding crop.

The field for roots is generally plowed during the fall previous and manure applied during the winter or directly after seeding for turnips, mangels, potatoes and corn (if any); a lighter coat is applied for rape. In this latter case the manure is plowed lightly or worked in with the disc and the cultivator. The land is kept cultivated till June 15 or July 1, when it may be drilled and sowed with the turnip seeder; about 1½ pounds of seed per acre is sufficient. The seeder may be used a couple of times or until the plants are pretty well branched out, then the plants themselves will keep down the weeds. If cultivation is properly done, the land will not require plowing for the future crop (at least in our district).

Of course the rotation as outlined cannot always be kept strictly in line, since breaking into a field with alfalfa or permanent pasture, or a miss stand of clover, would throw it out for perhaps a year or two. But one should stay as near to it as possible. I may say that we never miss a catch of clover, but sometimes the drought of summer or lack of covering in winter destroys some of it.

### Management of Dairy Herd\*

J. H. Grisdale, Agriculturist, C.E.F., Ottawa

I take exception to Mr. Barr's statement that the first weak point in Canadian Dairying is the dairy cow; the first weak point in Canadian Dairying is the dairy farmer. There is no business under the sun in which so much is required of a man as in farming. A farmer must be (1) Interested in his business; anything that lacks interest to the man doing it is not going to have the doer's best effort; (2) Progressive, not content to do things in the old way that produces only about half the profits needed from a dairy to-day; (3) Business-like, studying the markets in which he has to sell, for the latter will arrange themselves in spite of his best efforts; (4) Sensible, not subject to the blues; if one of his experiments turns out wrong he must have the courage and faith to start again; (5) Generous but not prodigal at the feed box; (6) Healthy, the sick man is always a pessimist; (7) Stodious, for there is nothing like the farm for stimulating the faculties of thought. Only the man who never stops to think and who works all the time in a perpetual grind is unsuccessful in farming. Every farmer can make more money by spending a half hour or an hour each day in honest thought and study about how to take advantage of his farm

\*Extract from an address delivered at the recent Bedford District Que. Dairymen's Association Convention at Cowansville.

and the work on it; (8) Educated upon a good line of farm methods.

Many, many things of use to a farmer are not learned from books, but from observation and experience. A farmer should read one or two good farm papers, such as the Farm and Dairy and Rural Home. A farmer should be industrious, not perpetually grinding himself to death, but simply doing his spring's work, seeing, harvesting, haying and sugaring on time and just on time. Much thought is sometimes required to decide just when is the proper time to do these things.

#### THE REAL WEAK POINT

But, reverting to the cow, the Holsteins, Ayrshires, Canadian, Jerseys or Guernseys are all adapted for Canada. It is not necessary to have pure bred cattle for good results. I know of two farmers adjoining each other, one of whom had grades while the other had pure-breds. The former cleared \$12.50 a cow per annum, on an aver-

age of 20 cows in his herd, while the latter with pure-breds only made \$50 a cow per annum. Success with cows resolves itself right down to the difference between a good business man and a poor business man. The pure-breds in the instance cited were not given a show by their owner, the whole going to show that the real weak point in farming is in the farmer himself.

Continued breeding along the same lines of breed, as the preponderance of blood in the cows shows is the only proper course to pursue. Use only pure-bred bulls for the improvement of that particular strain in the calves. These calves will be better than their mothers. Pure-breds are best where they can be had without too much expense. The average farmer, however, will make a larger balance of profit in following the aforementioned directions. The Holsteins are the best cattle where the farm is of heavy soil and the

milks are going to a cheese factory, there to be pooled at so much per cwt. If the farm is hilly and the farmer does not want to feed too heavily, the Ayrshire will give good results from moderate care and treatment. This question of gentle treatment is most important. If the cows are gently handled and treated, they will yield 50 per cent. more milk with the same feed. As to breeds, however, the breed that a farmer likes is the breed for him to have on his farm, for what a man likes, that will be care for best. In any event, do not change around, as to breeds. Keep perpetually breeding grade Ayrshire cows to pure-bred Ayrshire bulls, and so on—grade Jerseys to pure-bred Jersey bulls.

#### REQUIREMENTS OF THE COW

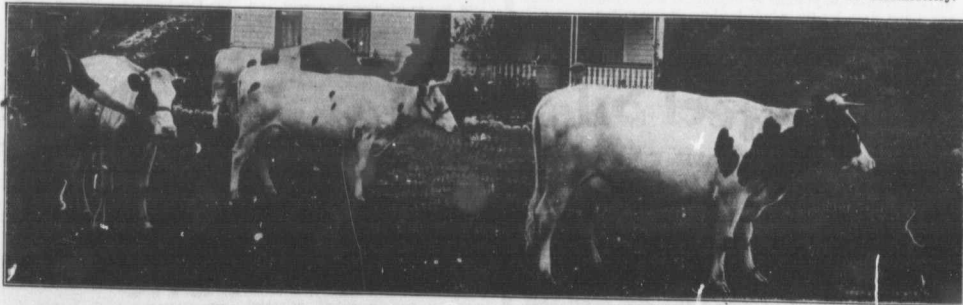
Cows require three things, good stables, good feed and good treatment. Ninety-five per cent of the stables of the province of Quebec are not fit to keep cows or dogs in. The walls, windows, doors, air and floors are generally all wrong, and that comprises about all there is in a stable, anyway. If there be a stone or cement wall, it should have a wooden lining of three-quarter-inch planed lumber, kept half an inch from the wall. The dampness of the stones or cement should be kept away from the cattle as much as possible and that one-half-inch air space will do the business.

None of our stables have sufficient windows. Stables on the southern or eastern exposure should be all glass, with only studdings enough above to support the superstructure. It is impossible to have too many windows, as light is the best disinfectant known. Lots of light in the stable means happy men and happy cattle, giving more money for the time and money expended. In regard to ventilation, the Rutherford System cools the building occupied by the cattle or horses, without moisture or dampness accumulating. The Macdonald College barns are always wet in winter. They are ventilated with the King System. I have experimented for eight years with 13 different systems, and the Rutherford I find to be the best. The foul and hot air is taken out from the top, while the cool and fresh air is taken in from the bottom with the Rutherford System. These apertures are controllable. When the weather is ordinary, each animal has eight square inches of inlet and 16 square inches of outlet. In severe weather, when the cold air rushes in much faster, on account of the difference in temperature between indoors and outdoors, the allowance is cut down till the stable is comfortable. The King System is all right for a country where the temperatures do not go so low as in Canada. (Messrs. Foster and England objected to these statements, quoting Dr. Robertson of Macdonald College, but Mr. Grisdale finally showed that the King System was being abandoned in Canada.—Editor.) Ventilation by cotton-screening has been found unsatisfactory.

### A Word to Our Readers

Owing to the Printers being on strike in Peterboro it was necessary this week to have Farm and Dairy printed in Toronto; hence the delay in this issue reaching our subscribers.

Owing to red tape in the Post Department at Ottawa, in the face of full information concerning the situation, we were further inconvenienced and delayed by having to ship the whole issue back to Peterboro before it could be mailed.



Three Holstein heifers from a worthy sire—Count De Kol Pieterje Paul and three of his get.

Reading from the right, these heifers (with their records) are: Pauline Hengerveld—Butter in 7 days at 26 months old, 14.97 lbs.; 57 lbs. in 30 days. Beauty Hart 2nd A.—Butter in 7 days at 23 months old, 12.96 lbs.; 55.23 lbs. in 30 days. Sara J. Hengerveld 2nd A.—Butter in 7 days at 23 months old, 12.54 lbs.; 52.66 lbs. in 30 days. Owned by Brown Bros., Lyn, Ont. (See Gospel).



### 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 for Milk Production

I have two heifers, three and four years old, which I would like to have tested. They will freshen in February. What will be the best feed to give them, including cost altogether. I have been feeding silage, straw and a little grain. I have mixed hay, silage, roots, clean oats, wheat and peas, mixed bran. Now tell me the best method to follow to make these cows give the most milk to make a seven-day record.—H. E. The Gully, Ont.

For heifers due to freshen in February I would suggest from now till a day or so before calving the follow-

#### Many Holsteins Sold

Through my live stock advertisement in "Farm and Dairy" I have sold over two carloads of Holstein cattle and received so many enquiries for stock that I was unable to reply to them all and turned many of the letters over to a neighbor, who keeps Holstein cattle for him to answer. The letters I received came from all parts of Canada from the Atlantic to the Pacific, showing the large circulation of "Farm and Dairy."

Eight to ten letters were received by each mail. One carload of stock went to Calgary. It was purchased by L. D. Brickner, of Didabury, who saw my advertisement in "Farm and Dairy" and as a result of it visited my farm. The second carload was purchased by Captain Max Meinke, Headingly, Manitoba, who also saw my advertisement in "Farm and Dairy" and after some correspondence telegraphed me the money for a carload of pure bred and grade Holstein cattle.

In addition to these large sales, I made a number of small sales through my advertisement, including a pure bred bull calf to F. L. Fitzg, Kings County, N.B. Another paper wrote me for an advertisement but when I got such good results from "Farm and Dairy" it is not necessary for me to advertise elsewhere.—Gordon Manhard, Manhard, Ontario.

ing ration. As roughage, what they will eat of a mixture of 100 lbs. ensilage, 40 lbs. roots and eight lbs. cut straw, about four lbs. of mixed hay and from five to 10 lbs. of a mixture of 400 lbs. bran, 100 lbs. oats, 200 lbs. mixed oats, wheat and peas. The amount to feed will depend upon the animals. If they are used to meal, they could probably make good use of eight or 10 lbs. If not used to meal it would probably be better not to give them more than five or six lbs. a day.

After calving the same kind of food might be fed for a time. It would of course be necessary to give less meal for a week or so. Then go up to as heavy a meal ration as the heifers will stand. The same roughage would be found satisfactory. If the right kind of roots were plentiful a few additional roots fed separately would be found very valuable. The best would be sugar beets, then sugar mangels, but either mangels or turnips would give good results. Turnips would of course affect the flavor of the milk more or less. If some nice clover hay could be found to feed with the cows under test it would give good results. Alfalfa hay would give still

better satisfaction. Feed from six to 10 lbs. a day of hay, and for the cows on special test the admixture of cut hay with the roots and ensilage instead of straw would prove profitable.

The meal mixture suited to give best results along with the roughage ration already prescribed would be: 300 bran, 100 oats, 100 oats, wheat and peas, 100 corn, 300 oil cake meal. This should be fed for a week before beginning the test. The amount to give would depend on the amount of milk being produced and upon the effect of the meal on the quantity of milk. Start with two or three pounds of the mixture a day and gradually increase amount till the cow does not respond by increasing milk flow when meal is increased.

I would advise you to have your cows in good shape in fact quite fat at calving time and that you have them go on the seven day record test about three weeks after calving while still in good flesh.—J. H. Grisdale, Agriculturist, C.E.F., Ottawa.

#### Shorthorn Breeders Meet

(Concluded from page 6).

of the association showed a balance of \$2,837.50. Prize money was granted in the following fairs: Toronto, \$1,000; London, Ont., \$225; Ontario, \$125; Winnipeg, \$300; Brandon, \$300; Calgary, \$300; Victoria, \$50; Sherbrooke, \$100; Halifax, \$50.

Following officers were elected: President, Capt. P. E. Robson, London; 1st vice-president, Peter White, Peterboro; 2nd vice-president, Harry Smith, Essex; 3rd vice-president, W. G. Pettit, Toronto; and a board of directors for a term of three years of W. A. Dryden, Brooklin; W. A. Cargill, S. Dymont, Barrie; J. M. Gardhouse, Weston, and J. M. Brett, Regina.

#### Clydesdale Horse Association

The meeting of the Clydesdale Horse Association of Canada in Toronto last week was addressed by Dr. J. Rutherford, Dominion veterinary general and Live Stock Commissioner. He referred to the struggle in western Canada between the Percheron and the Clydesdale, and he advised the association for a few years to sell to the West with as little profit as possible, in order to keep their ascendancy there and to prevent the enterprising westerner crossing the water for his animals. He also thought it would be the part of wisdom to pay a little less attention to quality and pedigree in their breeding, and a little more to size, weight, and substance than they had been doing in the past. He urged a little more attention to the development of good light-leg horses in the place of many bad horses.

Mr. Wm. Smith stood for the power on behalf of the Record Committee to appoint a new Registrar, which was agreed to.

It was moved by Mr. Gardhouse, seconded by Mr. Smith, that the Canadian National Board be asked to build an arena in Toronto for horses and other live stock.

The following officers were then elected: President, Mr. John Bright, Myrtle, Ont.; vice-presidents, Mr. Robt. Graham, North Toronto; Mr. Peter Christie, Manchester; Mr. Robert Shaw, Howick, Que.; directors: Mr. William Smith, Columbus, Ont.; Mr. John A. Boag, Queensville, Ont.; Mr. James Henderson, Belton, Ont.; Mr. James A. Torrance, Markham, Ont.; Mr. A. E. Major, Whitevale, Ont.; Mr. A. G. Gormley, Unionville, Ont. and Mr. T. A. Graham, Claremont, Ont.

The delegates to fairs were: Canadian National, Mr. John Bright, Ottawa; Mr. Peter Christie; Winnipeg, industrial: Mr. John Graham, Carberry, and Mr. John Wishart, Portage la Prairie; Manitoba Winter Fair, Messrs. W. J. Elder and B. Trotter, Brandon; Regina Exhibition: Messrs. Robert Sinton and Alex. Mutch, Lumsden, Sask.; Victoria: Mr. F. B. Pemberton; Sherbrooke, Que.: Mr. Robt. New; St. John, N.B., and Amherst, N.S.: Mr. W. W. Black, Amherst, N.S.



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## But Won't Scale



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Nearly every Wire Fence is Galvanized too thinly to fight off the result of these weather extremities.

Two-thirds of the life of a Wire Fence depends upon its Galvanizing. Yet, because Zinc coats four times more than steel Wire, much Wire is wiped almost clean of its Galvanizing.

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You see, all Wire, because of its process of manufacture, has a greasy surface. This dirt and scale must be thoroughly removed before Galvanizing will stick.

You can't expect Zinc to adhere permanently to greasy, scale Wire, can you?



All Wire, after it is drawn out from the Steel rolls, lacks pliancy—a quite easily broken.

But the Frost Scientific Annealing process restores Frost Wire to an exact degree of temper. This is the result of years of experimenting. It will not snap under the most severe strain.

Frost Wire is now stronger than any other of the same size.

The man who makes this Frost Wire has been making some of the best in the States for 25 years. He ought to know how.

#### Not Merely Excuses

Any Wire Fence without "coils" will snap when severely contracted. And it will snap in any shape when expanded.

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The Frost Woven Fence is the only Machine-made Fence with necessary give-and-take features.

Lots of Fence has such things as Buttons, Curves, or Kinks. These are so short that they'll snap with contraction. And they snap even when expanded.

Both the Frost Woven and the Frost Field-Erected Fence have the action, traction and expansion provisions. These Frost Fences always act the same, regardless of number of times contracted or expanded.

Write for free booklet and samples.

### The Frost Wire Fence Co., Ltd.

Hamilton, Ontario.

Agents Wanted in Open Districts

#### Cleaned Three Times

But Frost Wire goes through three Cleaning processes before it ever sees a Galvanizing Furnace.

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We are the only exclusive Fence Company in Canada who Make and Galvanize Wire. The Wire formerly used for the Frost Fence was made under our own specifications. It was as near to what we wanted as we could buy.

But we knew that we could make better, so we built and equipped our own Mills. We are now making the best Wire ever used for a Fence in Canada.

# Fence





**POULTRY YARD**

**The Housing of Poultry**

Prof. W. R. Graham, O.A.U., Guelph

The question of housing poultry has been given a great deal of attention by the Poultry Department, Agricultural College, Guelph, within the past few years. The object was to find a suitable house for the average farm in Ontario. The houses advocated for some years previous to this were quite expensive, too warm and not associated with a heavy egg yield. After a series of experiments with houses of different shapes and sizes it was proven quite conclusively that as illustrated herewith No. 1 came nearest to the requirements. This house is 12 ft. x 14 ft., 4 ft. high at the back, and 6.5 ft. in front, the latter facing the south. It is built of single ply boards, the cracks being covered with battens. Nothing is used to line this house, the Lattins being sufficient to keep out the draughts and cold.

In the front of the house is a horse manure pile. It is covered (loosely) with boards to keep out the snow. This affords an opportunity for the fowls to get sufficient exercise, and incidentally to keep them healthy. Fresh supplies of manure should be added every two weeks as it soon becomes compact, and not so well patronized by the fowls.

An opening about three square connects the manure shed with the house. This opening was never closed, the fowls being allowed to go out or in at their will.

The fittings of this house are very simple on the roosts, nests and feeding apparatus being supplied. The roosts are elevated about eight inches on dropping boards, the dropping boards themselves being about two feet from the floor. The latter is quite important as heavy birds will squit somewhat from sore feet if compelled to jump any distance. The nests can be arranged on the floor near the wall in any convenient place. The style of nest will depend largely upon the poultry owner. For ordinary purposes small sized Loxes may be used with satisfaction. However, if it is desirable to study the individual hens, trap nests may be used.

For feeding the fowls a hopper in the centre of the house seems to be the most satisfactory method. It is an economical way of feeding as well as saving in labor. Fresh water is an important consideration and should always be supplied near the feeding apparatus. Open pans are not very satisfactory for this purpose as the fowls are inclined to walk through the water and mix it up with their drinking. There are several kinds of water fountains on the market. The kind to use will depend largely upon the individual. It is also well to have a dust bath in all times at its side greatly in keeping down vermin which is a very important consideration in successful poultry keeping.

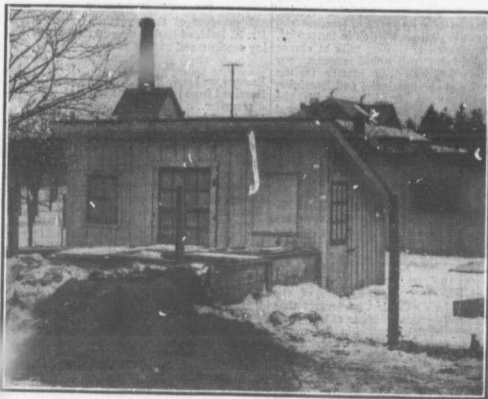
A large window facing the south completes the house, making it in all a cheap house, supplied with sunlight, fresh air, comfortable and good facilities for feeding and care.

The day of the costly poultry house, with heating equipment, and various attachments, is a thing of the past. Those wishing to attain success in the production of eggs will do well, when building, to give the style of house as described, some thought before adopting another. The hen is a good

investment but she must be kept as close to nature as possible if best results are to be attained.

**Subscriber Wants More Eggs**

We are feeding our pullets hot corn at night, peas, oats and wheat in the morning. We feed liver from beef and scraps from table, cabbage and milk. They have oyster shells, grit and coal ashes. We are getting about five eggs daily from about 40 pullets. How can we improve in



A Colony Poultry House that has given good results as the Ontario Agricultural College

run supplied with fresh horse manure and covered loosely with boards to keep out the snow, is a part of this house. The house is a suitable one for the average Ontario farm. Cut courtesy Institutes Branch, Toronto.

feed? What most would be cheaper than liver at 10 cents each—"subscriber."

Feed the grain in a heavy litter and see that the hens have to do considerable scratching for it. Give your pullets all the feed they require, keep them hungry enough to scratch, but never let them suffer for need of food. If the weather is cold livers are all right, but should the weather be warm enough for the liver to spoil you had better not feed it. If you have enough mill so that they have all they wish to drink and a few table scraps, I do not think they will require very much liver. An occasional beef head if you can get it reasonably makes an agreeable change and should you have a bone mill to grind the head up after they have picked the meat off it makes cheap food.

Five eggs from 40 pullets is not good for this time of the year. You do not say how early the pullets are, but pullets hatched in May, well fed, free from disease and lice, should by this time be laying considerably more than this. See that they are free from lice. Keep the house dry with good dry litter on the floor and ventilate it well. Open up the windows on all fine days. The feeding of cabbage along with the milk may be a little too laxative. If you have any mangels or turnips try them instead of the cabbage.—F. C. E.

**Does Poultry Pay?**

Those of our readers who are interested in making a profit from poultry raising, will undoubtedly be interested in the following letter from W. S. Phillips, of McAuley, Manitoba. Mr. Phillips was one of the prize winners in the recent "Poultry-Profit" Club contest held by Lee Manufacturing Co., Limited, of Pembroke, and this letter was written in acknowledgment of the prize money which he had just received. Mr. Phillips' letter reads:

McAuley, Man., Jan. 13, 1910,

Lee Manufacturing Co., Limited,  
Pembroke, Ontario.

DEAR SIRS,—

I am in receipt of your cheque for Ten dollars (\$10.00), for which please accept my sincere thanks.

I feel that there is more praise due the Peerless Incubator than myself in this contest. I have had my Peerless two seasons. First season (1908), I purchased all my eggs for setting, paid my first payment of \$24.00, and cleared

less in two seasons, and the machine is still good as new. Does poultry pay?

It gives me pleasure to see future success in "box-car letters" marked up for your firm. Thankfully yours,

(Sgd.) W. S. PHILLIPS.

We are very certain that there are but few of our readers who are not familiar with the name of Lee Manufacturing Co., Limited,—the firm to which possibly more than to anyone else in Canada is due credit for advancing the poultry interests of the Dominion. The missionary work done by these people to help the cause of poultry raising has been heavy; but the results have justified the labor. The field is a big one—broad and full of wonderful possibilities—and their work is bearing fruit. Their methods are intelligent and worthy of more than passing commendation, while the advice they offer free to those interested has proved a revelation to thousands.

Readers of this paper who are not already familiar with the wonderful little book, "When Poultry Pays," would do well to send at once for it to Lee Manufacturing Company, Limited, 455 Pembroke Street, Pembroke, Ontario. This book is sent free on request—though it is so valuable that it really ought not to be. The information contained in it is invaluable to any poultry raiser.

**Elm Grove Poultry Farm**

Guaranteed Fertile Eggs for sale from the following breeds: Rose Comb Bantams, Game Bantams, Silver Grey Dorkings, Light Brahma, Barred Rock, Mammoth Bronze Turkeys, Embden Geese, Rouen Ducks.

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Cockerels \$3.00 each. Eggs \$3.00 doz.  
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You never find the Hamilton guilty of hatching deformed chicks, or allowing chicks to die in the shell. That is because the heating and ventilating systems introduce the correct amount of life-giving oxygen and moisture into the egg-chamber—because the heat-regulating system is accurate.



of a degree—because the directions are so simple and correct. The Hamilton Incubator hatches every fertile egg. The chicks are so plump, healthy and lively they make the old hen jealous of the Hamilton. You can make a success of hatching chicks with the Hamilton Incubator, and just as big a success of raising them with the Hamilton Brooder. Send for our free booklet and get complete information about the always successful Hamilton Incubators and Brooders.

Act as Our Representative

In your locality, take orders for Hamilton Incubators and Brooders. Our line is a ready seller. And you will want to be our agent as soon as you read our proposition. Write us to-day.

**The Hamilton Incubator Co., Ltd., HAMILTON, ONTARIO**



bred by W. C. Edwards, and purchased by S. Dymont, Barrie; \$1,150 paid by S. Dymont for Autumn Queen, \$6417, another roan, bred May 30, 1908, and bred by Miller Bros., Brougham, Ont.

**Dominion Sheep Breeders' Meet**

The annual meeting of the Dominion Sheep Breeders' Association convened in the Temple Building, Toronto, Feb. 4, with a goodly number of enthusiastic breeders present. A very satisfactory report was presented by the Executive (one of the best in the history of the association), considerable revenue being derived from the records at Ottawa.

The report from the Wool and Tariff Committee brought out a lively and instructive discussion, which it is expected will be of benefit to the wool-producing industry. It was pointed out that in the opinion of the committee a large amount of desirable wool is being brought into direct competition with Canadian wools free of duty. The committee was continued in office to still further inquire into matters pertaining to the wool growers' industry.

The officers elected were: Pres., Andrew Whitelaw; vice-pres., J. G. Hammer, Brantford; directors, Lt.-Col. McCrene, Guelph; Jas. Scull, Clinton; John Kelly, Shakespeare; John Jackson, Abingdon; R. H. Harding, Thorndale; L. Parkinson, Eramosa; J. E. Cousins, Harrison; W. A. Dryden, Brooklin; G. E. Day, Guelph; J. W. Smith, M.P., Maple Lodge; John Campbell, Woodville.

Representatives to Fair Boards: Toronto, W. A. Dryden, J. G. Hamner; Central Canada, N. F. Wilson, Cumberland; Western Fair, London, Lt.-Col. McEwen and R. H. Harding; Winter Fair, Guelph, John Jackson, Lt.-Col. McEwen, A. W. Smith and Robt. Miller; Eastern Ontario Winter Fair, A. Whitelaw, W. A. Wallace, of Kars and R. Richardson, South March, and N. F. Wilson.

Representatives to Record Board: John Campbell and R. H. Harding—R. H. H.

**Ontario Sheep Breeders' Association**

The Ontario Sheep Breeders' Association met in Toronto, Feb. 4, and after the usual routine of business elected the following officers: Pres. Geo. L. Telfer, Paris; vice-pres., John Campbell, Woodville; sec.-treas., A. P. Westervelt; directors, J. E. Cousins, Harrison; Jas. Douglas, Caledonia; J. Lloyd Jones, Burford; J. S. Robertson, Milton; F. Biggs, Dundas; John Jackson, Abingdon.

Representatives to Fair Boards: Toronto, G. L. Telfer; Western Fair, Jas. Scull and John Kelly; Central Canada, Jos. Underhill, Claremont.

A resolution was passed requesting the Toronto Fair management to have the sheep judged earlier in the show. The Executive was also requested to take up with the Ontario Department of Agriculture the matter of better legislation for the industry. Other matters of importance were discussed and referred to the Executive, among which was the matter of freight rates on exhibition stock—which rates have been considerably increased.—R. H. H.

**Live Stock Rates to Exhibitions**

At several of the meetings of the breeders' associations, held last week in Toronto, questions were asked in regard to the rate of schedule of rates, charged last fall for the first time by the railway companies, for taking pure-bred stock from exhibition to exhibition. A lively discussion over this matter took place at the meeting of the Dominion Cattle Breeders' Association. It was pointed out that the Live Stock men have little reason to grumble, inasmuch as the railways are

still giving them better rates than prevail in most countries.

Up to last fall breeders were able to ship stock to the Toronto Exhibition for which the railways charged full rates. If, however, the breeders shipped their stock on to Ottawa or London from the Toronto Exhibition, they were charged only half rates, and their stock was returned home free. Last fall the railways changed the rates, and charged full rates to all exhibitions, but still returned the animals home free from the last exhibition.

When the matter of approaching the railways to see if the old rates could not be obtained again was suggested at the cattle breeders' meeting, Mr. George Pepper, of Toronto, said that he did not think that there was any chance of the present rates being changed. He admitted that he complained to the railway companies that the old rates were unfair in some cases, inasmuch as they permitted a breeder, say at Hamilton, to ship his stock to the Toronto Horse Show, paying full rates for the short haul, and then to ship them on to the Montreal Horse Show, a long haul, at half rates, while a Toronto breeder, shipping from Toronto to Montreal, was charged full rates for the long haul, thus paying more than the man who shipped stock from Hamilton to Montreal. Mr. Pepper stated that it was this condition of affairs that had led the railways to change the rates.

Some breeders present were quick to point out that the new rates were even more unjust. For instance, a man living at Woodstock, who shipped stock to the Toronto Exhibition, would have to pay full fare to Toronto, and when he returned his stock to the London Fair he would still have to pay full fare at Woodstock, thus getting a free return fare only for the short haul from London to Woodstock. There being general dissatisfaction with the new rates, several of the associations decided to take action to see if the railways cannot be induced to restore the old rates, even if they have to be modified to overcome such objections as those pointed out by Mr. Pepper.

There is too much of this washing farm separators only once day.—Henry Glendinning, Manilla, Ont.

Orchard and Garden Number, Mar. 3.

**DO YOU ADVERTISE?**

If you do, be sure and use space in our big

**Orchard and Garden Number**

which will be published March 3rd, 1910. If you are not an advertiser, then is a good time to start. It will be a BIG number, with a BIG circulation, but NO INCREASE IN RATES.

Forms close Feb. 25th. You have no time to lose. Write us to-day Advertising Dept. FARM AND DAIRY, Peterboro

**Grant for Dairying**

The estimates submitted last week to the Ontario Legislature provided for an increase of \$500 in the grant to the Eastern Ontario Dairymen's Association, making the total grant \$2,500. There is also an item of \$300 for the conduct of experimental work in dairying. In the experimental dairy department at Guelph \$525 is allowed to provide for a cheese-maker.

The salaries of Chief Instructors Publow and Hearnis are both increased by \$100. The salary of Mr. Publow is now \$2,300, and of Mr. Hearnis \$1,750. Mr. G. A. Putnam, director of dairy instruction, has had his salary increased to \$2,300.

Don't put off seeing your friends and getting up a club of new subscribers to Farm and Dairy.

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With the same attention devoted to your maple bush as you give your other lines you can make more money in two or three weeks making Maple Syrup than can be made in the same length of time at ordinary farming. This crop does not require a great outlay and will bring the best returns. The Champion Evaporator does the business. Made in 22 sizes.



The above represents our "Champion" Evaporator, size 518, one of our largest machines

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When buying fencing FORGET about the NOW cost. Do as the railways. Think only of PERMANENCY. Select the fence with the quality, weight, stiffness and strength to give longest service. And three or four years from now you will shake hands with yourself because you were shrewd enough to see eye to eye with the railways and buy IDEAL woven Wire Fence.

This Lock makes

**"IDEAL" FENCE**

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No fence has a simpler lock than the IDEAL. Let the railways have proven to their entire satisfaction that the IDEAL lock has the greatest gripping-tenacity. Other things being equal, the impossible-to-release grip of this simple lock makes IDEAL fence strongest in existence. But other things are not equal. IDEAL Woven Wire Fence has the best quality of hard drawn galvanized iron wire laterals. It has the stiffest uprights. The galvanizing is the smoothest and heaviest—most rust-proof. The reason you want to prompt you to buy IDEAL fence? Well, here is another: IDEAL Fence will cost you no more than other fences that you will not buy if you think only of permanency. Our fence and gate booklet shows different styles for horses, cattle, hogs, etc. Write for yours free copy.

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and increase your income. The weight, quality and strength of IDEAL fence make it easiest to sell. THE MCGREGOR-BANWELL FENCE CO., LIMITED, WALKERVILLE, ONT.

## 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, Quebec, Dairy-men's Associations, and of the Canadian Holstein, and Ayrshire, and Jersey Cattle Breeders' Associations.

**SUBSCRIPTION PRICE.** \$1.00 a year, strictly in advance. Great Britain, \$1.25 a year. For all countries, except Canada and Great Britain, add 50c for postage. A year's subscription free for a club of two new subscribers.

**REMITTANCES** should be made by post Office or Money Order, or Registered Letter. Postage stamps accepted for amounts less than \$1.00. On all checks add 20 cents for exchange fee required at the bank.

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**ADVERTISING RATES** quoted on application. Copy received up to the 27 day preceding the following week's issue.

**WE INVITE FARMERS** to write us on any agricultural matter. We are a ways pleased to receive practical articles.

### CIRCULATION STATEMENT

The paid subscriptions to *Farm and Dairy* exceed 1250. The actual circulation of each issue, including copies of the paper sent subscribers who are not slightly in arrears, and sample copies sent from 5,000 to 12,000 cop. ex. 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 counties and provinces, will be mailed free on request.

### OUR PROTECTIVE POLICY

We want the readers of *Farm and Dairy* to feel that they can deal with our advertisers with our assurance of our advertisers' reliability. We try to admit to our columns only the most reliable advertisers. Should any subscriber have cause to be dissatisfied with the treatment he receives from any of our advertisers, we will investigate the circumstances fully. Should we find reason to believe that any of our advertisers 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 orders to advertisers the words, "I saw your ad. in *Farm and Dairy*." Complaints should be sent to us as soon as possible after receipt for dissatisfaction has been found.

## FARM AND DAIRY

PETERBORO, ONT.

### OATS CAPABLE OF IMPROVEMENT

Notwithstanding the fact that oats is the most commonly grown farm crop in Ontario there is probably no other cereal about which so little is known and which many people judge wrongly. At the short courses in stock and seed judging held in Peterborough and Almonte last week, Prof. C. A. Zavitz of the Ontario Agricultural College caused many to think seriously about this matter. The Professor, after each man in attendance had received three individual samples, the samples being numbered 1, 2, and 3, called for an expression of opinion as to which was the best. Practically to a man, all were in favor of a sample of fine plump looking oats which had every appearance of weighing heavily per measured bushel. After a careful examination had been made of the three samples and differences explained, Professor Zavitz again called for a showing of hands in favor of the sample that had been so popular a half hour before. Scarcely a man could be found to champion

that variety. The point sought had been illustrated to a nicety.

As a rule those varieties of oats that weigh the heaviest are of the poorest quality, since the heavier oats largely gain their weight from the thick, harsh hull that envelops the kernels. Two varieties from which a striking comparison can be drawn in this connection are the Daubeny which has 24 per cent. of hull, and the Early Dawson, 36 per cent. of hull—a difference of 12 per cent., or in other words, a difference of 12 pounds of meal in favor of the former oat when the comparison is made on 100 pounds of grain of each of the two varieties.

It is well known that the hull of the oat has little if any more feeding value than straw. It is apparent therefore that we need to give this matter of quality in oats serious consideration. We may well make a careful examination of our favorite variety of oats and find out if we have been growing straw or meal. The oat crop is capable of great improvement. Shall we longer regard this matter with indifference?

### EXTRA GRANT NOT NEEDED

At the annual convention of the Ontario Association of Fairs and Exhibitions, that will be held in Toronto this week, an effort will be made to induce the Ontario Government to increase the grant to the agricultural societies of the province. It is probable that the societies will ask the Government to increase the grant by some \$30,000. This increase in the grant is not needed. The Government will make a mistake if it gives it or any part of it.

Ontario has too many agricultural societies. There are more full exhibitions held in Ontario than in any other province or state on the American continent. The Ontario Government gives larger grants to its agricultural societies than does any other province or state. In spite of this, a large part of the money spent by the societies is practically wasted. With many, their attractions are emphasized at the expense of their educational value.

During the past few years the grants to over half of the societies have been increased more or less. As the result of the new method of distributing the grant, each society now gets its grant in proportion to its expenditures for agricultural purposes. This has forced some forty societies that were mostly doing poor work out of existence. The grants they formerly received are now being distributed among the remaining 350 odd societies, thus enlarging their grants. There are still, however, a number of poor societies that are finding it hard to make their exhibitions a success. Any increase that is made, therefore, in the Government grant will only have the effect of helping to continue these poor societies in existence for a few years longer. If they were to drop out it would give our best societies a better chance.

There are other ways in which the Government can spend money for agricultural purposes to better advantage. More money might well be devoted to

the organization of farmers' clubs. More branches of the department of agriculture might be established in counties where none now exist. Special competitions, like the Field Crop Competition, which has been productive of so much good, might be held. For these, and many other reasons, therefore, Hon. Mr. Duff will do well to make it clear that the Government does not intend to increase the present general grant to agricultural societies.

### SUGAR MAKING UP-TO-DATE

All along the line improved means of doing farm work is meeting with favor. And right they should; for, invariably such equipment results in facilitated work and increased profits. That is why the modern evaporator has become so popular in sugar making camps where sap in large quantities has to be reduced to syrup.

Not so very long ago, it was thought that the evaporator, while possibly a good thing where exceedingly large quantities of sap had to be handled, would not prove profitable on the average farm. In the light of evidence that is continually coming forward, we learn that the evaporator is a good investment even where syrup is manufactured on a comparatively small basis. The record of Mr. Wellington Sager of Wentworth Co., Ont., given elsewhere in this issue, shows a handsome return on money invested. Sugar makers who use antiquated means of boiling sugar should seriously consider the matter of installing modern methods before the opening of another season.

### A NECESSITY, NOT A LUXURY

What do you think of a subscriber who writes to *Farm and Dairy* as follows: "I find your paper very interesting and useful reading, but as 'our income from the farm last year was below the average, I must reduce expenses, consequently you shall have to lose my subscription 'this year.'" Is this man not starting to practise economy at the wrong end of his business? Wherein can he hope to better his conditions or increase his returns if not through coming in touch with the success of other men in the business and learning their practices. The experiences of successful men are featured weekly in *Farm and Dairy*.

The time has long since passed when agricultural periodicals should be regarded as a luxury. They are a necessity. Our most successful farmers are those who keep themselves in close touch with such publications as *Farm and Dairy*. Economy had better be practised elsewhere than in curtailing expenses in a direction calculated to increase earning powers by increasing the fund of knowledge. *Farm and Dairy* is a great dollar's worth. Such folly as dropping it to save expenses should not be thought of.

Evidence is continually cropping up all along the line to show that it pays to co-operate. The theory so prevalent in some districts that farmers cannot carry on a business amongst

themselves has been quite disproved. The report of the New Dundee Farmers' Co-operative Creamery Company, Limited, published elsewhere in this issue, is still more evidence that farmers can run a business and make it a success.

### Root Out the Gambling Evil

(The Globe.)

Members of Parliament should listen to no proposals to compromise on the question of race-track gambling. Such proposals are being made. Newspapermen hear them in the hotels at Ottawa and about the Parliament and committee rooms of Parliament. Skilful lobbyists are making the suggestion quietly. The proposal is that book-making on the streets and it be allowed and legalized on the race-tracks. That proposal is presented to members, according to their supposed attitude, as being a "reasonable compromise."

Surely in vain is the net spread in the sight of any bird. No member of Parliament who can distinguish his right hand from his left in matters of public morality will be deceived by this show of "reasonable compromise" on behalf of a serious public evil. The fact is the gamblers and their friends are fearful because of the aroused and determined public opinion against this vice. They are convinced that action will be taken by Parliament this session. They know the Government views Mr. Miller's bill sympathetically. They have the gambling features of the race meets condemned by racing men. They are beginning to hear the farmers mock at the pretext that horse-racing is necessary for the farmers in their horse-breeding industry. And the friends of race-track gambling are eager to sacrifice a few of the outposts if by so doing they can save the citadel.

But it would not be a "reasonable compromise" were the lesser growths and berries on the outmost branches plucked off the upas tree and the main trunk left vigorous and even more fruitful because of this judicious pruning. That would not be "reasonable compromise." It would be "reasonable surrender."

Canada has had enough of such "reasonable compromise." The law as it now stands is sufficient experience of that sort. Parliament and the people thought the law meant what it seemed to say when it was last amended. Legal cleverness from Toronto, it is said, drew that amendment in the interests of the Woodbine. It seemed satisfactory, but it was discovered to allow the very thing the people of Canada want to prevent. Let there be no more such "compromises."

Race-track gambling is growing rapidly in Canada. The statistics of the racing associations indicate something of its growth. But its reach is beyond calculation. It extends over the whole year. It is an evil growth. Only one thing should be done with it. It should be pulled up root and branch. To do that is the privilege of Parliament. The people of the country expect their representatives to do their duty.

## Creamery Department

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

### The Scales vs. Pipette

Jus. Stonehouse, Ontario Co., Ont.

The editorial appearing in Farm and Dairy, January 13, re method of testing cream is timely and strikes at a weak spot in our methods of determining the value of different samples of cream. Weighing the cream, however, is not going to solve the whole difficulty. If the whole question is to be ventilated and threshed out, it will be certain to create a distrust in the minds of many patrons and make them suspicious of the Babcock method of getting at the value of their cream.

It has been demonstrated that the 18 c.c. pipette, if properly used, will give results tallying very close to weighing the samples and for all practical purposes, gives fairly accurate results.

But how many use the 18 c.c. pipette. Then again how many rinse out their pipette after every sample?

It has been demonstrated that a difference of one per cent. can be and is made in rich cream by not rinsing the pipette because one per cent. which should go into the bottle, sticks to the pipette.

Either an 18 c.c. pipette or a 17.6 c.c. pipette will give fair justice to the patrons of a creamery if these are properly used and there is not a too wide variation in the richness of all cream received. A 10 c.c. pipette could be used to divide up the money due the patrons and divide fairly accurately, but how would that affect the next creamery or any other creamery that used an 18 c.c. pipette or the scales? If the creamery using the 18 c.c. pipette paid its patrons 25c a lb., for fat in cream using the 10c.c. would pay 45 cents a lb. for fat supposing both sold their butter for the same price, but both patrons would receive the same amount of money if their cream was equal.

The scales would rectify all this to a certain extent, but if an operator was inclined to read low so as to pay a larger price than his neighbor, the scales would not stop him from doing that. However we would have more uniformity with the scales than we have now and it should be made compulsory to use them.

Mr. Glendinning's method, i.e., the patron taking a sample same as the driver's and testing it or getting it tested as advanced in Farm and Dairy of December 2, about the best and most practical check on the creamery that I have yet seen.

As for myself I have used the 18 c.c. pipette for the past two years and with a 36 per cent. cream, I am handicapped by one per cent. by not using the 17.6 pipette as the latter would give 35 on the same cream.

### Pipette Satisfactory With Sweet Cream

Editor, Farm and Dairy.—We have been following the different articles that have appeared in Farm and Dairy dealing with the matter of using scales for testing cream. We have used a pipette and have had no complaints from our patrons.

Some years ago when the question was discussed at a meeting of dairymen, the scales were favored by some and we invested in a set soon after and when we tried them along with the pipette we could find very little difference in the result. Of course our cream is all sweet and we may get better results than where

sour cream is received, for the pipette was no doubt made to measure sweet cream.

We would like to see the question discussed fully, and if we are convinced that the scales are more accurate than the pipette we will use them.—Locust Hill Creamery Co., A. C. Resnor, Manager.

Note.—These columns are open for a full and free discussion of this question. What do creamery patrons think about it?—Editor.

### New Dundee Creamery

The annual meeting of the Farmers' Co-operative Creamery Co., Ltd., was held at New Dundee on Friday, January 28th, a large number of shareholders being present. After the president, Mr. I. S. Lautenschlager called the meeting to order, the minutes of the last annual meeting were read by Mr. A. Hilborn, the company's secretary treasurer, and adopted. A brief report of the business transacted during the past season was then given, showing that the company had enjoyed a very successful year.

The directors reported that the past year had resulted in a substantial increase in the number of patrons and the amount of butter manufactured. There are at present 185 shares sold at \$10 a share. During the past year an up-to-date building has been erected, furnished with the latest and most approved equipment. In connection with the creamery is a cold storage built according to plans and specifications supplied by Mr. J. A. Rudick, Dominion Dairy and Cold Storage Commissioner, Ottawa. It has the continuous cold air circulation system, most approved by the highest authorities on cold storage. This makes the plant second to none in Western Ontario.

The amount of butter manufactured during the year 1909 was 146,062 lbs., for which \$32,413 was received. This shows an increase of 42,780 lbs. over the make of 1908. Mr. G. Bouché, one of the patrons, who is also a shareholder took 5th prize in the Dairy Herds Competition for Western Ontario, with nine Jersey grades. He sent a total of 1,184 lbs. of butter fat to the creamery during the six months from May 1st to October 31st, this being an average of 131.5 lbs. of butter fat per cow. Mr. A. Gieseler, another of the patrons stood 6th with an entry of 10 cows.

### A HIGH-CLASS PRODUCT

A high-class trade in one lb. prints has been developed in several of the largest cities of Canada, which proves that the creamery is producing butter of finest quality. The buttermaker's report showed that 235 patrons sent cream during the year, with an average test of 92.1 per cent. butter fat.

After this gratifying report was unanimously approved of, the election of directors followed. Upon the resignation of Messrs. D. D. Snyder, J. Amos, and S. Crossman, the following were elected: I. S. Lautenschlager, E. B. Hallman, H. E. Einwächter, A. McDonald, A. C. Becker and E. E. Beck.

A number of interesting subjects were then discussed, including the "Individual Can System" for collecting cream, which was very ably presented by Mr. H. B. Lowe, the company's enterprising buttermaker. It was decided to investigate further as to the merits of this system and report at the next meeting.

It should be understood by all that this is purely a farmer's company, organized for the mutual benefit of farmers. It is conducted on co-operative principles which provide that the extra cost of manufacturing the butter is deducted from the balance of the total receipts paid to patrons in proportion to the amount of butter fat supplied by each. The farmers here



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are beginning to realize that "the time has come when we must organize in order that as a class we may assert ourselves."—Special Farm and Dairy Correspondent.

Those who are not convenient to an ice pond or river and who find it impossible to get a supply of ice, would find their cream much improved if the vessel containing the

cream were kept in a tub of water, even at a medium warm temperature. Those who have the ice, need only to use a small quantity in the tub to keep the cream sweet and cool. The cream should be given an occasional stir even when in such a position.—Fred Dean, Creamery Instructor, Guelph.

Orchard and Carden Number, Mar. 3.

## WILL YOU REQUIRE SEED CORN THIS YEAR?

Yes, but where will you get it? Will you again be content to plant corn taken from a crib of shelled corn that in a probability has been brought into your town for feeding purposes? Hundreds of dairymen have in past years suffered untold loss through having planted just such corn. In order that and experience with which so many have met in the past—that of having secured seed corn that will not grow—Farm and Dairy has secured a quantity of seed corn that is guaranteed. It is from a reliable and well known source in the corn belt of Essex Co., Ont. This seed will be delivered on the job if requested. Seed corn of the following varieties is available:

### KING PHILIP (FLINT), EARLY LEEMING WHITE CAP YELLOW DENT, NORTH DAKOTA

Farm and Dairy offers any one of these varieties as follows: Two Bushels for Four New Subscriptions to Farm and Dairy; One Bushel for Two New Subscriptions (Subscriptions to be taken at \$1.00 each). The corn will be delivered F.o.b. at the grower's station in Essex County, Ont.

For the silo, corn of strong germinability and vitality should be planted about 10 quarts to the acre, hence you would only need to get four new subscriptions to Farm and Dairy to get enough seed corn for six acres—enough to fill the average silo. This great offer means much to you as a corn grower. It means that you can secure reliable seed corn, which will insure all for the little trouble of canvassing your friends.

If you will grow corn during 1910 take advantage of this offer. Don't put it off until tomorrow. Take this year's new, short Farm and Dairy to your friends. Tell them of its many bright features, its practical articles, its special magazine numbers, its illustrated supplements and of the special articles from prize winning farmers that will be featured during 1910. They are sure to subscribe. Name thy variety of corn that you want, whether on the cob or shelled, and send in your subscriptions at the earliest possible date to

Circulation Dept., FARM AND DAIRY, PETERBORO, ONT.

## Swine Breeders Meet

The members of the Dominion Swine Breeders' Association held a business like annual meeting in Toronto last week, with the president, Mr. D. C. Platt, of Millgrove, in the chair. There was a fair attendance of members. The financial statement showed a balance of cash on hand of \$1,393.12.

Dr. J. G. Rutherford, Dominion Live Stock Commissioner, stated that the members of the Swine Commission who had visited Denmark had compiled a vast amount of valuable information. Their report was in the hands of the printers, and would be ready for distribution in the course of a few days. It would be profusely illustrated, and should prove helpful to the swine breeders of Canada.

## HERD BOOKS

President Platt explained that some trouble has been caused in the registering of stock, due to certain United States records not being recognized here in Canada, although they are recognized by the United States Minister of Agriculture. On motion of Mr. Jones, of Zenda, seconded by Mr. R. H. Harding, of Thorndale, it was decided to amend the rules of entry as to amend all books of record for Poland China, Chester White, Duroc-Jersey and Hampshire swine, certified by the secretary for agriculture for the United States.

On motion of Mr. Harding, the Executive was given power to revise the constitution and have it printed and submitted to the members for their consideration at the next annual meeting. On motion of Mr. Featherstone, of Streetsville, it was decided to accept the Hampshire Association for membership in the Dominion Swine Breeders' Association, and to make arrangements to establish a record for this breed of stock. President Platt claimed that the prices offered for hogs at the London exhibition were so small that the association should cut out the grant to that show until it greatly increased the prize list.

Exception to such action was taken by Mr. Douglas, of Mitchell, and by Mr. Harding, of Thorndale. It was finally decided not to make any grant unless the London Association will increase its grant to each breed on the prize list by \$25, in which event the usual grant will be made.

A motion moved by Mr. J. E. Brethour, of Burford, and seconded by Mr. Cox, of the Ontario Veterinary College, that the Ontario Government upon having taken over the Ontario Veterinary College, and urging further action to improve the standard of qualification of the practicing veterinarians of the province.

## RAILWAY RATES

On motion of Mr. Harding, the Executive was instructed to confer with the railway companies to ascertain if the rates on live stock that prevailed until last fall in the shipping of stock to exhibitions could not be renewed. On motion of Mr. Platt, it was decided that the herd books hereafter should be printed in one volume instead of in four each year.

## FINANCIAL STATEMENT

The following financial statement was submitted by the secretary-treasurer, Mr. A. P. Westervelt:

## RECEIPTS

Cash on hand as per last report.	\$1,886.23
Memberships.....	758.90
Registrations.....	2,469.60
Interest.....	25.33
Swine Record Sold.....	1.00
<b>Total.....</b>	<b>\$5,140.16</b>

## EXPENDITURES

Directors' Expenses.....	\$ 253.40
Grants, Ontario.....	75.00
Winter Fair, 1908.....	75.00
Winter Fair, 1909.....	75.00
Canadian National Exhibition, 1909.....	100.00
Central Canada Exhibition, 1909.....	50.00
Western Fair, 1909.....	50.00
Eastern Show, 1909.....	50.00

Ontario Large Yorkshire Breeders' Society.....	\$215.67
Ontario Berkshire Breeders' Society.....	149.75
Manitoba Swine Breeders' Association.....	129.37
Saskatchewan Swine Breeders' Association.....	90.60
Quebec Swine Breeders' Association.....	266.17
Alberta Swine Breeders' Association.....	82.02
Maritime Stock Breeders' Association.....	74.19
British Columbia Swine Breeders' Association.....	30.17
Record Office for Salaries, 1909, Expenses, Record Office, 1908, Swine Refunds.....	1,200.00
Printing.....	681.60
Rent of Hall for Annual Meeting	4.00
Auditor.....	2.50
Postage.....	2.00
Miscellaneous.....	7.77
Cash on Hand.....	1,393.12
<b>Total.....</b>	<b>\$5,140.16</b>

## SWINE REGISTRATIONS

The statement of registrations according to the provinces was as follows:

Province	Registrations	Transfers	Members (Pd. at Ottawa)
Ontario.....	2,013	216	149
Manitoba.....	214	44	50
Saskatchewan.....	164	28	26
Alberta.....	219	33	26
British Columbia.....	74	9	9
Quebec.....	705	61	8
New Brunswick.....	98	2	64
Nova Scotia.....	84	6	9
Prince Ed. Island.....	56	5	5
United States.....	18	3	1
<b>Total.....</b>	<b>3,735</b>	<b>407</b>	<b>347</b>

## GRANTS

It was recommended that out of the profits for 1909, amounting to \$512.13, that the following grants should be paid: To the Ontario Large Yorkshire Swine

## Mr Farmer

Do you know that Purity Salt will create a market for all the butter you can produce.

That it will also increase the price from one to two and a half cents per pound and make the buyer want more.

Does this extra profit look good to you? If it does, we will show you how. Write to-day for trial samples and prices of

## PURITY

THE WESTERN SALT CO., LIMITED  
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A perfect engine for pump, the grinding, sawing, wood, corn shelling, churning, mixing purposes. Larger sizes for feed cutting, threshing, silage, and heavy farm work.

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Breeders' Society, the profits from Yorkshire registrations amounting to \$223.85. To the Ontario Berkshire Society, the profits from Berkshire registrations, amounting to \$153.08.

From the balance of the profits from Ontario and the Ontario surplus, there should be paid in grants to Fair Associations as follows: On condition that the prizes for swine given by these exhibitions in 1910 should be at least as large as in 1909:

Provincial Winter Fair.....	\$25.00
Canadian National Exhibition.....	50.00
Western Fair, London.....	25.00
Eastern Ontario Live Stock and Poultry Show.....	25.00
Central Canada Exhibition.....	25.00

This money will be given with the understanding that the prizes for Yorkshire and Berkshire classes at these shows should not be increased out of these grants.

## ELECTION OF OFFICERS

The election of officers resulted as follows: Pres., Wm. Jones, Zenda; v-pres., Geo. Douglas, Mitchell; sec-treas., A. P. Westervelt, Toronto; directors: S. Dolson, Norval Station, for Berksires; J. E. Brethour, Burford, for Yorkshires; D. E. Coursy, Bornholm, for Chester Whites; W. M. Smith, Scotland, for Poland Chinas; A. C. Hallman, Breslau, for Tamworths; Jos. Featherston, Streetsville, for Essex; D. C. Platt, Millgrove, general director; Prof. Geo. E. Day, for the O.A.C., Guelph. Representatives to Fair Boards: Toronto—J. C. Platt, S. Dolson; R. J. Garbutt, R. O. Morrow, Hilton; R. J. Garbutt, Belleville; London—Geo. Douglas and Henry McDiarmid, Fingal; Guelph Winter Fair—Prof. Day, R. H. Harding, G. B. Hood, Guelph; W. M. Jones, Ottawa Winter Fair—Wm. Jones, F. O. Collins, Bowesville; J. C. Smith, Ottawa; R. J. Garbutt, Belleville.

We can never dispense with barn yard manure. We must have organic matter present in the soil in order to get the best results.—Prof. W. P. Gamble, O.A.C., Guelph.

# IHC CREAM HARVESTERS SOLVE THE LABOR PROBLEM

DO YOU own any cows? If you do, you own them for the profit there is in them for you. You keep two—five—or a dozen cows, and your object is to make money.

Then, with the present price of butter and milk, why not make all the money you can?

Why not do it with as little labor as possible?

Did you ever figure out that you could keep double the number of cows that you now keep with practically no increase in labor—that you could more than double your profits, and that you could make more money out of each individual cow if you went at it in the right way—that is

## The IHC Cream Harvester Way

With one of these machines you skim milk at milking-time and have done with the whole operation. Cream ready for market—sweet, appetizing milk ready for the calves or pigs while it is still warm. Only one can of cream instead of a dozen cans of milk to haul to the creamery. You do not have a great number of pans and crocks to wash twice a day.

There is no question about the labor saving. It is the modern way of dairying. It means more than double profits, because you get all the cream; you cannot get it all by hand-skimming. There is not even a trace of cream left in the milk when separated with an IHC Cream Harvester.

IHC Cream Harvesters are of two styles—chain drive and gear drive—each made in four sizes. It will pay you agent of your town and get a catalogue. Or, if you prefer, write the International Harvester Company of America at nearest branch house for further information.

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**Cheese Department**

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

**Dairy Industry Not Declining\***

J. A. Ruddick, Dairy Commissioner, Ottawa.

The Canadian dairy industry, as a whole, is not declining. On the contrary it is showing substantial gains from year to year. Of course, we do not expect to see any more of the rapid development that took place in the nineties, when new territory was occupied by the organization of hundreds of cheese factories and creameries. The field is now fairly well occupied.

\*An extract from an address delivered before the recent Ontario Dairymen's convention.

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Then you are a poor business man if you do not learn all you can about it from the experience of others—these magazines are the best of their kind in Canada.

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Practical common-sense advice on the culture of fruits and vegetables, lawns, flowers, shrubs, trees and all ornamental plants. It is inspiration for the amateur, and money-earning for the professional.

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Looking over The Home Journal, you can scarcely believe it is the same magazine that you knew a year ago. It has doubled in size—its daily—in attractiveness. The Home Journal today is a forty page monthly—a magazine of which Canadian women can justly be proud.



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Poultry Review	..... .50	
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Canadian Horticulturist	..... \$1.00	\$2.00
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**Farm and Dairy**

PETERBORO, ONT.

cupied in Quebec and in those parts of Ontario where dairying is likely to engage the attention of the farmers, and the extension of the industry is now chiefly limited to the development in the newer provinces and to improved production in the older districts.

**HOME CONSUMPTION PER CAPITA.**

It is impossible to quote exact figures, because, unfortunately, we have no annual statistics of the actual production of dairy products in this country. That is why we have in the past relied on the figures of our export trade, of which we do have statistics, to measure the progress of dairying from year to year. With the rapid growth of population, affecting the home consumption, the export trade is no longer a reliable index of the growth of the industry of its magnitude. I have made as careful an estimate as possible of the consumption of milk, butter and cheese in Canada and I put it between 10 and 12 dollars per capita. The consumption of these products in the United States is said to be over \$10 per head, and I think ours is larger; but to be conservative we will put it at \$10.

**TOTAL HOME CONSUMPTION.**

The population of Canada in 1901 was 5,371,315. At \$10 per head the home consumption of dairy produce, including milk and cream, by that many people, would be \$53,000,000. The combined value of the exports of cheese and butter in that year was \$24,000,000 (I use even figures for simplicity), making a total production of \$77,000,000. It is estimated that the present population of Canada is now about 7,184,700. On the same basis, then, the present home consumption in 1909 would amount to \$71,000,000. If we add to this the \$22,000,000 as the value of the exports of cheese and condensed milk, we have during the last fiscal year, the value of the total production at present, or a gain of \$16,000,000 since 1901 as against a decrease of only \$2,000,000 in the exports between 1901 and 1909. Of course, the decrease in exports appears to be greater if we compare last year with 1909, in which year the exports of cheese and butter reached the maximum of \$31,000,000.

But conditions were abnormal that year, and it does not make a fair comparison. If we average the value of the exports in the four years from 1902 to 1905, it gives us \$28,000,000, which, compared with last year's figures, shows a decrease of only \$6,000,000. Against this we have an increase in the consumption of something like \$2,000,000 a year, or \$3,000,000 to \$10,000,000 more than it was in 1905. I have used values only in making these comparisons because it complicates the matter to deal with quantities of butter and cheese, and the total production of milk is the important thing.

**SPECIFIC INCREASE IN 1909.**

Then we get another view of the matter from the specific gains which are reported from various sections. The production of cheese in Prince Edward Island in 1909 showed an increase of 11,000 boxes, or 30 per cent over that of 1908. This increase is due partly to the more favorable conditions and partly to a keener and more vigorous dairy policy on the part of the farmers. Prof. Cumming, of the Turro Agricultural College, speaking recently of the marked revival of agriculture which appears to be coming in that province, used these words:

"The greatest evidence of improvement in the marked interest in dairying is eminent adapted. This we can show best by stating that the demand for good dairy bull is far in excess of the supply and, what is still more encouraging, those who are buying are, for the most

part, seeking bulls from cows noted for their large production of milk. Whereas a few years ago it was very difficult to get a sale for dairy bulls from the College Farm, today the bulls that are available can be sold over and over again there being five or six purchasers for every one of the animals, and the demand being keener for those from the best milking cows, for which the College herd is famous. Within a mile of our office there have been established during the past 18 months three pure bred Yorkshire herds, and we know of similar developments in many other parts of the province."

Mr. Putnam reports that the returns from the cheese factories in Ontario show an increase of nearly 100,000 boxes in the output for 1909, as compared with 1908. In Alberta the Dairy Commissioner reports an increase of 500,000 pounds of butter in 54 creameries in 1909, or 70 per cent increase in two years. In Saskatchewan the increase in 1909 was 70 per cent over 1908.

The exact quantity of cheese that will be exported for the season of 1909 will not be known until the last shipment is made, but all estimates show a substantial increase over the season of 1908. These estimates vary according to the source, but it seems safe to say that had not been for the large shipments of cream to the United States, the cheese exports for the past season would show an increase of well over 100,000 boxes. The export of butter so far for the season of 1909 are about 50,000 packages less than in 1908, but the receipts at Montreal to November 30 were only 25,000 packages behind the previous year. It is plain, however, that even though the exports of 1909 are only equal to those of the previous year, there must have been a substantial increase in production to keep pace with the increased home consumption.

**Pasteurization of Whey**

Had the old system of handling whey met the difficulties of the whey question, or if the whey was not returned in the cans, then the pasteurization of whey might not have been necessary; it must be admitted by everyone that these conditions were never met. Pasteurization of whey eliminates so many abuses at a small cost that results far outweigh any objections to the system. Cleaning tanks in the ordinary way did not get rid of bitter flavor neither did the leaving of them without cleaning do so.

When the fat was allowed to rise to the top and the whey allowed to become very sour it did not put it in proper condition for feeding. When the whey tanks became filthy and ill smelling it was not improving our milk supply, therefore a system, which, when properly practised, overcomes many of these conditions, must have an uplifting effect. I have yet to learn of a factory adopting pasteurization and doing the work properly that has not had good results.—Frank Hearn, Chief Dairy Instructor, London.

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SHUN Idleness; it is the rust that attaches itself to the most brilliant metals. —Voltaire.

## Diantha Whittaker's Shiftless Neighbor

Annie Hamilton Donnell

**I** DECLARE!" The indignation that accompanied the exclamation sat oddly on Diantha Whittaker's plump and pleasant features, yet it was an indignation determined to maintain its sitting. Its presence seemed to have something to do with the view from Diantha's sunny window. "Thursday again, and the wash just going out! Week before last it was Friday, and week before that Saturday!" She glanced at the clock; it was nearly three. In orderly, thrifty little Peace Valley, washings were not hung out Thursday afternoons—at three o'clock. A Peace housewife thought it a shame to have empty clotheslines at ten of any pleasant Monday morning. Diantha's own lines blossomed white before breakfast.

"And to live next door to such shiftlessness!" the woman sighed. She drew down her shade with a snap and dropped plumply into a rocker, while about her in rows, with disapproving, ghostly frowns on their faces, seemed to stand departed Peace housewives upholding her in her righteous wrath. As for those yet in the flesh—the woman in the rocker set her lips. It was high time that everybody knew the kind of family that had moved on to the old Fox Place.

"I'll tell 'em I haven't called on the woman. I thought it was safest to wait, and gracious knows it was! I'm not going to call. I'll tell 'em. They can do as they please." Inermostly Diantha knew that what she did not do, the other Peace women would not do. A certain pious calm succeeded her righteous indignation; she rocked more gently, more gently still, in the quiet of the darkened little room. She felt, in a sense, the appointed purveyor of justice to these interlopers upon the sacred customs and thrifths of her beloved little town. Was Peace Valley to lose its proud reputation, was she to sit idly and let it? When before in the memory of any Peace person had washes been juggled with like this, had door-yards been left littered and unbecomingly with flowers, had children been allowed to take care of themselves? When had any dweller in beautiful, spotless little Peace Valley been shiftless?

A patterring of small knuckles sounded low down on the panels of the outer door, and Diantha rose to answer it. She recognized it as a child's knock, and she was fond of children. But if it was one of those Kimmy children—

It was two of them? Measured by inches there was not much to choose between them, but the fractionally

bigger child has a startlingly vivid, wise little face, as though she had overtaken a woman's years on her short little legs. She was hugging up with



The up-to-date farm home of Mr. Wm. Batten, of Peterboro Co., Ont.

The house and buildings on this farm show the good care and systematic methods carried out by Mr. Batten. It was through Mr. Batten's assistance that the telephone service was brought into this section, which convenience is much appreciated by the farmers roundabout.

quaint motherliness the fractionally tinier girl.

Diantha Whittaker steeled her heart. "Well," she interrogated crisply. The caller smiled upward with frank neighborliness. "I'm Angelina, an' this is Blessed. I'm taking care of her, so I had to bring her. Blessed's our baby. We can't find clothes'n's enough to hang up the stockin's with, an' I thought maybe—" The small voice hurriedly lowered, "Don't tell Mothie, please, or Tilly, so's not to—to bother them. We can't find clothes'n's, because one of Augustus's is lost." Humor dawned in the child's blue eyes and broke out twinkling into dimples. "He'll have to limp, won't he? Should you s'pose he'd be lame in the bare leg or in the stockin' one?"

Diantha Whittaker, resolutely steeled against little Kimmy charms, got the clothespins in grim silence. She did not look at the pair of small faces, but over them at the fluttering clothes on the Kimmy lines. As if with renewed clarity of vision she was suddenly aware that the clothes were left

very white and that they were hung out short and long, colored and white, in slovenly confusion. On Peace clotheslines like hung with like—sheets and pillow-cases, skirts and little nightgowns, hand in hand. And all Peace clothes were of a beauteous, dazzling whiteness.

"You're pretty late getting out your wash," the Purveyor of Justice said gravely. "Oh, I guess you didn't get up very early over to your place."

"No'm." Angelina agreed, smiling. "Mothie didn't get up much 'fore dinner. She said to play it was breakfast!"

"And you're playing to-day was Monday morning, I suppose," grimly rejoined the woman in the doorway. "Horse and worse—not getting up 'much 'fore dinner!"

"Why, we never thought of 'that!' laughed the child sunnily. "But we play all kind o' things. When there isn't anything cooked for dessert, Mothie says to play the crackers are little round pies. It's easy enough ain't it Blessed? only you have to shut your eyes up. An' sometimes we play we like Lurnt apple-sauce!"

Diantha went back to her rocker. She did not put up the shade. A plan to transfer her sitting-room to the other side of the house formulated slowly in her mind. From the other side the windows looked upon wide green stretches with only trim flower-beds to break them, and beyond, down the road, the spruce little house and

reason to believe those clothes out there won't ever be ironed.

The two Peace women looked out of shocked, outraged eyes into each other's faces. Further speech seemed unnecessary, only the shifing faced little mantel-clock talked so volubly for the ensuing moments. Then Alethea Potts gathered up her own faith with a conscious and beautiful effort. "Oh, I guess it isn't as bad as that—not that," she said, reassuredly. "You've got them kind of on your nerves, Diantha. Likely as not there's some good excuse—"

"Excuse for getting up in the middle of the forenoon, for washing all times o' week, not having anything cooked up for those babies to eat, not patching 'em or taking any kind o' care of 'em!"

"Where's the man—Mr. Kimmy?" Alethea strove to stem the tide of her friend's scorn. Mr. Kimmy might serve temporarily.

"Away—somewhere. All I know is the children's talk. He's something other on a freight steamer. The oldest child, Tilly, that seems to run things about as much as anybody, says when he's rather rich the father—'he's going to stay at home.' But I hope to goodness it won't be next door to me—yes, I do, Alethea! I've always lived next door to decent people. You needn't look like that—'not so long ago, it all out to-night and I've got no comfort that way! I've borne with about all I can in the line of shiftlessness—"

Again Alethea strove: "You've seen Mrs. Kimmy, of course? Some one said she was a real good-appearing woman—"

(Concluded Next Week)

## Readings and Books

So many girls tell me that they would like to have a library of their own, but that they are too poor to afford it. Personally, and from my own experience, I should say that poverty is rather an aid than a hindrance to the girl who wants a good library of her own. My own library, consisting of about two hundred volumes, is a poor girl's library. I was very poor in those days—not so long ago, either—when I was slowly building it up. I earned my books at the same time that I earned my living, and it was not easy.

Yet it was just this, you see, which helped me to love and know my books so well. To get some of them I had actually sometimes done without my supper or had practised some rigid self-denial, and books that are gotten in any such fashion are very precious books, you may be sure and very thoroughly read when one does at last get them. Then, too, my poverty helped me not only to love especially every book as I got it, but it taught me, as well, how to choose books. Sometimes I would go into a book-shop and see ten or twelve or more books, each of which I especially wanted, but my slim purse could afford no more than one. Which one should it be? I must think and choose and decide. So my poverty was teaching me discretion and judgment in books, you see. So I would not have my library other than it is. Indeed, I could not tell you how much clearer these books of mine seem, for having shared my poverty, and for having comforted so many tired hours. So, to all you girls who tell me that you have no money, and only days full of earnest work, I am afraid I would be tempted to say, after the fashion of the wolf's answer to Red Riding Hood: "All the better to get books with, my dear!"

No matter what your education, or what your position, or what your poverty or wealth—if you are planning to have a fine, useful, happy library, you cannot afford to be without books. Get that clearly in your head, and then—get the books. Begin plan-



ning a library right away—to-day. As to what books to buy—I would rather you choose them yourself. But if my choice of books can be of any use to you, I am glad to tell you about it.

On my first book shelf I have what I call my "general" and "classic" books. On this I have such books as "Pilgrim's Progress," the Bible, "Don Quixote," "Robinson Crusoe," "Aralian Nights," "Aesop's Fables," "Alice in Wonderland," "Hawthorne's 'Wonder Book,'" "Stories from King Arthur," Grimm's and Andersen's "Fairy Tales," "Uncle Remus's stories," "The Iliad," the "Odyssey," the "Aeneid," "Faust," "Rasselas," "King-ley's," "Greek Heroes," "Tudine," "Dan's," "Divine Comedy," and "Lamb's 'Tales from Shakespeare.'" This may seem to you a strange mixture, yet all of these books are great and general and classic. Generations have tested them and preferred them. If you can not afford many books, get at least one of these—whichever one you choose—and read in it often and carefully. If you select one of the more ancient ones, such as the "Iliad" or "Odyssey," or the "Divine Comedy," or "Faust," read them with the help of a good commentary. I did this and found it most helpful.

On my next shelf are great novels: "The Scarlet Letter," "Lorna Doone," "David Copperfield," "Old Curiosity Shop," "The Tale of Two Cities," "The Cloister and the Hearth," "Scottish Chiefs," "Adam Bede," "Days of Bruce," "Mr. Gillfil's Love Story," "Romola," "Mill on the Floss," "House of the Seven Gables," "The Marble Faun," "The Vicar of Wakefield," "Domby and Son," "The Newcomes," "Henry Esmond," "The Virginians," "Pendennis," "Poe's "Tales," "Ivanhoe," "Kenilworth," "Rob Roy," "Red Gannet," "Jane Eyre," "Wuthering Heights," "Last Days of Pompeii," "Childie Harold," "The Last of the Barons," "Weir of Hermiston," "Sense and Sensibility," "Ten Thousand a Year," "Pride and Prejudice."

On my next shelf are my beloved poets. I name them in the order in which it would seem to me wise to know them, though one should have several at a time to read, since one will suit one mood and one another. Longfellow, Procter, Bryant, Whit- tier, Emerson, Aldrich, Kipling, Ril- key, Lowell, Wordsworth, Moore, By- ron, Scott, Poe, Shelley, Keats, Tern- son, Stevenson, Coleridge, Burns, Mil- ton, Elizabeth Barrett Browning, Christina Rossetti, Robert Browning, Arnold, Blake, Gabriel Rossetti. Here again make your own selection, but it is generally better, I think, to grade from the more easily understood poets to the more difficult, as I have done in this list.

On my next shelf are my essays. Here again I have graded them: Lamb Hunt, Hazlitt, Lubbock, Stevenson, Emerson, Goldsmith, Irving, Thoreau, Lowell, De Quincey, Carlyle ("Heroes and Hero Worship," "Past and Present," as well as other essays), Mac- aulay (general essays), Bacon, John- son ("Lives of the Poets"), Ruskin (such essays as are to be found in "Modern Painters," "Sesame and Lilies," and so on.)

On the shelf below are my nature and science books: Lubbock, Darwin's "Travels of a Naturalist" and "Origin of Species," Tyndall's "Forms of Water" and "Fragments of Science," Humboldt's "Travels," Huxley's "Lay Sermons," Lubbock's "Ants, Bees and Wasps," White's "Natural History of Selborne," John Burroughs' essays. Further down are books of travel and history: Carlyle's "French Revolution," Mrs. Oliphant's "Mak- ing of Venice" and "Makers of Flo- rence," Prescott's "Conquest of Peru," Irving's "Alhambra," Plutarch's "Lives of Great Men."

These lists may seem to you of full

to lack many of the great names, but I have taken care to name only those whose works are uncopyrighted, and are published in such cheap editions as are to be had in our big department stores for anywhere from twenty-five to seventy-five cents a volume, while many of them can be had at second-hand for even less.

(Continued Next Week)

Boys in New Ontario

In the Northwest, little boys have small ponies to ride and go for horse mail, but in New Ontario most of the boys use a team of dogs for the purpose, as shown in the illustration. My dogs, as you will see, are both collies. The black dog is the mother of the yellow one. My father got it



One Way a Great Many Travel Through the Northern Wilds of Ontario

for me about five years ago down near Toronto at a place called Chester. The yellow dog is about three years old.

Before the yellow one (which I call Major) was old enough to break in, I used to drive his mother alone. I very seldom use one alone now, because I can travel much faster with them. It is about three miles to the postoffice. I can often go that distance in 18 minutes when the roads are good.

I often go to Sunday school with them, but the most fun of all is when I go back in the swamp to look at my snares, as I catch quite a lot of rabbits during the winter. When the dogs see a rabbit run I can hardly hold them. One day they got away and broke my sleigh. I had to get a new one. I have a large sleigh which runs in the same track as the horse sleighs.

In the summer I have a wagon for the dogs, as it comes in handy for delivering the milk. I have to deliver the milk every day to a few customers about a mile down the road. My dogs are not only good to me, but they will go and fetch the cows just as far away as they can hear the bell without any person going with them. The boys in the West may like their ponies, but I wouldn't trade my team for any of them.—H. Oldfield, Powsan, Ont.

Advice in which Doctors Agree

An antioxin or serum injection for use in tetanus (lockjaw) is now prepared by the German Government for physician's use. It is claimed to be almost sure to arrest and cure this dreadful complaint, which is caused by a certain germ or microbe that is killed by this serum.

Hot flannels dipped in camphorated oil and laid over the chest and be- tween the shoulders of a very young child are better than a mustard plaster, and if frequently renewed and used as hot as can be borne, are fully as effective.

For colic in the head try sniffing

up the juice of a ripe lemon in two or three applications.

For cramp in the leg, wind a garter or a strong cord around the limb over the place in which the pain is felt and take one end in each hand and give it a sharp pull, one that will hurt a little. The cramp will cease instantly and the sufferer can go to bed assured that it will not come again that night.

The satisfactory employment of kerosene as a local application to wounds and ulcers is reported by The New York Medical Journal. "Ulcers, especially indolent ulcers, were smeared with commercial kerosene, either pure or diluted (from 35 to 50 per cent.) with alcohol, by means of a small camel's hair brush or with a piece of gauze soaked in the solution. The appearance and character of the

ulcers soon changed for the better, the discharge gradually diminished and in from two to four weeks the rapidly granulating surface formed a sear surrounding parts." The advantages claimed for kerosene are rapidity of action, economy and freedom from poisonous effects. Keep both kerosene and alcohol away from fire.

Lemon juice, in a glass of water, taken before retiring and in the morning before rising, is a good cure for biliousness.

A circular issued by the leading medical societies of Paris and Ger- many protests against the use of coffee by growing children, which, it claims, is becoming more common every year. The symptoms of coffee poisoning are insomnia, a heady burning of spirits, lack of appetite and nausea. These societies express the belief that the evils of excessive coffee drinking, among young and old, are almost as serious as those of alcoholism.

If the face becomes so badly burned in a high wind, rub it with olive oil or vaseline or cover it with cloths dipped in warm water containing bicarbonate of soda, which is both healing and cooling.

A hearty laugh is the best positive relief from the tension of an over- worked brain.

Equal portions prepared of chalk and powdered irritin make an efficient and harmless tooth powder.

A good food for an invalid is beef jelly. Cut a pound of the lean of beef, as for beef tea, and cover it with a pint of cold water. Pour into a double boiler and stand aside ½ an hour. Then put over the fire and heat to the boiling point and simmer for half an hour. Skim the surface to remove any particles of grease. Soak ½ of a box of gelatine in 2 tab- spoonfuls of cold water and pour the hot broth over it. Season to taste with salt and pour into small cups or tarts. Do not strain the broth. Though a clearer looking jelly will be the result, as part of the nutriment is taken out by the straining.

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mended for promoting the growth of the hair is common salt. Rub in every night before retiring, a solution of it.

The action of worry upon the cells of the brain is more serious than most persons realize. Its effects extend to the entire system and in time produce death. A medical authority says: "It is precisely as if the brain were struck lightly with a hammer every few seconds, with a mechanical precision, for days and weeks, with never a sign of let-up or of the failure of a stroke. Such a succession of blows from a hammer would, of course, injure the brain irretrievably almost immediately, but it helps to illustrate the idea, and make the annoying idea, the maddening thought that will not be done away with, strike or fall upon certain nerve cells, never ceasing and weak by week diminishing the vigor of those delicate organisms that are so minute that they can only be seen under a microscope.

For a laxative diet, Mrs. Rorer recommends an abundant use of fats. If bread is used, it should be whole wheat bread, with a roody quantity of butter; masticate it thoroughly. At least once, and better twice a day, take lettuce or cress or tomatoes with plenty of oil and very little acid, and net vinegar. Eat, also, a little fat with meat and masticate thoroughly. Tea should not be used. Take a half pint of water the first thing in the morning and the same quantity before going to bed.

A leaf of common sage, rubbed on, will whiten the teeth.

A Kitchen Safe Cooler

Make a frame of one-by-two-inch strips, four or five feet high, three feet wide and twenty inches deep or more deep. This is simply a sheet of tin cut at the corners and bent up at the desired depth to fit the top of the frame. It is tacked and soldered at the corners. One foot from the floor fit in another sheet of the same tin, and between the top and the bottom put in two or three shelves made of thin slats, one and one half inches wide by one-fourth of an inch thick. Make a door to open on one side, with a small catch or-latch. Cover all of the sides and the floor with clean burlap, stretched well and tacked firmly.

Place the safe where it will be in the open-air, or in a draft, but also in the shade. Fill the top pan with water two or three times daily and have strips of woolen cloth the width of each side and long enough for one end to be in the pan and the lower end half way down the side of the burlap cover.

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DEVELLED MUTTON

Cut thick slices from a leg of cold underdone mutton. Score them with a sharp knife. Mix together 1/2 teaspoonful of mustard and 1/2 a teaspoonful of salt, and rub the slices with the mixture, working it well into the scorings. Prepare a sauce with 1/2 a cupful of the gravy, 1/2 a teaspoonful of oil of the mutton, one catsup and Worcestershire sauce, one teaspoonful of lemon-juice, and heat well. Broil the slices of meat, arrange them on a hot platter which has been rubbed with cut onion, pour a little and serve. Serve the remainder of the sauce separately.

OATMEAL MACARONS

To 1-4 cup of rolled oats add 1 egg; and 2 table-spoons each of cream, milk and water. Let stand till the oats have soaked up the moisture, then add 1 cup powdered sugar, 1 teasp. cinnamon, and 1 table-spoon melted butter. To this mixture add enough flour to make a stiff dough, sift with teasp. baking powder. Shape into balls as large as walnuts, flatten slightly, place on oven. Bake in a moderate oven.

CHARLOTTE RUSSE

Make a custard of 1 cupful of cream, 1/2 cupful of coffee, 1/2 cupful powdered sugar, a little salt and a teaspoonful of vanilla. Cook in a double boiler. Garnish with pyramids of currant jelly.

SOFT CUSTARD

One and one-half cupfuls, coffee, 1/2 cupful rich milk, 2 eggs, 1/2 cupful sugar, a little salt, and a teaspoonful of vanilla. Cook in double boiler.

FLOATING ISLAND

Make like soft custard, only use yolks of 4 eggs instead of 2 whole eggs. Beat the whites very stiff, add 1/2 cupful sugar for each egg and place in spoonfuls over the custard. This is improved by tiny spoonfuls of tart jelly or preserves.

SPICE FRUIT CAKE

Cream, 1/2 cup butter and 1/2 cup lard with 2 eggs in a cup and then fill with sweet cream. Into a mixing bowl put 1 cup sugar and a little oil, stir in 2 cups flour sifted with 2 teasp. baking powder, then stir in the eggs and cream and 1 teasp. lemon extract. Bake in a shallow tin about 15 minutes.

EGG AND CHICKEN SALAD

Mash the yolks of 6 hard-boiled eggs and add to them an equal amount of finely chopped chicken meat. Moisten with dressing, shape into balls size of original yolks, and refill the whites, which should be so

cut as to admit of such filling. Arrange on lettuce leaves and serve with dressing as given. If preferred, the whites of eggs may be chopped in with yolks and the whole made into balls.

Essential Points in Ironing

A COUNTRY GIRL. The foundation of good ironing begins with well washed clothes neatly and systematically pinned to the line. In every well regulated household, method and order are the reigning results to succeed and get first-class aim to make the clothes in good ironing condition.

As you remove clothes from line, drop clothes-pins in laundry bag, neatly fold clothes, lay in order in the clothes basket. Bunch up starched white clothes with care and push into a white linen bag. This little convenience made and kept for that purpose should be noted for its immaculate appearance which means pure white, spotless clothes. If the clothes are very dry they should be made damp. For this purpose, use an up-to-date sprinkler with which you can get much better results than you can get with the old-fashioned way of sprinkling by hand. Dampen fabrics carefully. Lay in order in the clothes basket.

The starch clothes should always be ironed first as they are more tedious and particular. The next consideration is the condition of the irons. This has a lot to do with first-class ironing. The temperature of the iron, also, irons should be kept smooth and clean, and moderately heated. Always have your irons so you can handle with ease. If too hot, you will be in danger of scorching fabrics. Another essential point in good ironing is to keep your clothes racks well dusted as the dust will soil white clothes after being ironed.

A quick and good way to clean bottles is to cut up bits of potato peel, put in the bottle with water, and shake hard. Warm water is best, but if in a hurry, cold water may be used. This process will make bottles shine like crystal.

Good Speech

Think not, because thine inmost heart means well, Thou has the freedom of rude speech; Sweet words will be as another sort; Are like the voices of returning birds; Filling the soul with summer, or a bell.

That calls the weary and the sick to prayer, Even as they thought, so let thy speech be fair.

—Archibald Lampan.

Pork tenderloins make an excellent dinner dish served as another sort of mock birds. Get small ones, have them opened on one side and suff with seasoned crumbs; cook in a covered roasting-pan, basting often and dredging with seasoned flour. When brown, take them up and serve on toast, with sliced, browned potatoes around them.

Orchard and Garden Number, Mar. 3.

Opportunity Returned

At the request of a number of our readers, who were disappointed in not securing seed of "O. A. C. No. 21" barley, arrangements whereby seed of this great barley can be secured in return for new subscriptions to Farm and Dairy. The offer is:

Two Bushels "O. A. C. No. 21" barley for only Four New Subscriptions to Farm and Dairy.

One Bushel for Two New Subscriptions.

Subscriptions to be taken at \$1.00 each in both cases.

The barley will be delivered f.o.b. Brantford, Ont.

Now is the time to take advantage of this opportunity. Show this copy of Farm and Dairy to your friends, tell them about it, and secure the seed of this great barley.

Secure their subscriptions, and send them in to the Circulation Department, FARM AND DAIRY, PETERBORO, ONT.

Send 2¢ Stamp & Get Handsome Calendar

Would you like a calendar handsome enough to hang up in your parlor? Such a one is our 1910 Calendar. The picture entitled "Homeward Bound" is a typical farm scene, done in eight beautiful colors and giving one of the richest effects that has ever been produced in a calendar. We ask you to pay 2 cents postage, simply as a proof that you value a picture of real artistic merit. As there is always an enormous demand each year for our calendar, yours may be a few days late in reaching you, but no one will be overlooked. The sooner you fill out and send the coupon, the earlier the calendar will reach you. Be sure to write your full address distinctly.

FROST & WOOD FARM MACHINERY



Frost & Wood Co Ltd Smith's Falls, Canada

For Dept. 839 - enclose 2 cents postage for which we will send you by mail the most possible mail a copy of your handsome new calendar.

Table with columns for days of the month (1-23) and rows for dates (7, 14, 21, 28).

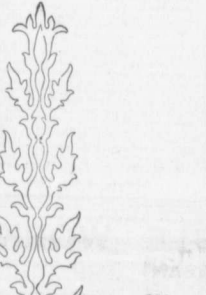
Form for Name, Post Office Address, County, and Province.

## Embroidery Designs

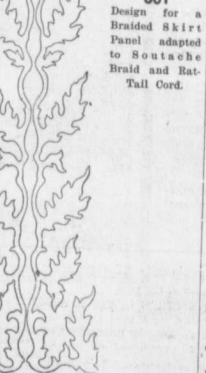
Designs illustrated in this column will be furnished for 10 cents each. Leaders desiring any special pattern will confer a favor by writing Household Editor, asking for same. They will be published as soon as possible after request is received.



433 Design for a Braided Blouse or Princess Gown. Patterns for stamp: the front, collar and sleeves are given. Soutache braid or rat tail cord may be used.



381 Design for a Braided Skirt Panel adapted to Soutache Braid and Rat Tail Cord.



**CARE IN ORDERING**  
Be sure and state size, also number of patterns. Do not send illustrations of patterns. Order by number and size only. Your address is also quite necessary.

## The Upward Look

### Refillings of the Spirit

And they were all filled with the Holy Ghost, and began to speak with other tongues, as the Spirit gave them utterance.—Acts 2: 4.

Then Peter, filled with the Holy Ghost, said unto them, Ye rulers of the people, and elders of Israel.—Acts 4: 8.

And when they had prayed, the place was shaken where they were assembled together, and they were all filled with the Holy Ghost, and they spake the word of God with boldness.—Acts 4: 31.

There are many striking points connected with the foregoing passages, any one of which are worthy of deep thought and meditation. Notice that "all" the people were filled with the Holy Ghost, this showing that the gift of God's holy spirit is not necessarily confined to a few, or to any one class of people. Notice, also, the results that followed the baptism. God, in one case, gave them power to speak with other tongues, and in the other instance they were filled with courage so that they were able to speak the word of God with boldness. Many of us need this form of baptism. We often do not show our love for God when we might, because we fear to be laughed at or misunderstood.

The special point about these three paragraphs which we are to note this week, however, is that they show that at three different times the apostle Peter was filled, or we might almost say refilled, with the Holy Spirit, for we know that he was present on all three occasions. Generally, God reveals Himself to us in power only in times of great distress, when we feel our own helplessness and need, and are thereby led to seek Him in humility and with earnestness of purpose. This is often the case, because the darkest moments are converted by God, when He fills us with His power, into occasions of great joy and gladness. But right here is where we are apt to commence going astray. We take up our burdens or duties with rejoicing, but think too much of the experience that has been given us, and neglect to go back for fresh power. Thus, we soon find ourselves striving once more to accomplish in our own might that which we can perform only with the power of God's Spirit.

The evil spirit is constantly endeavoring to trip us and lead us into sin. It is often when we feel the strongest that we are really the weakest. That is why God warns us to be humble. During the next few weeks we will note some of the temptations which have caused many sincere Christian men and women to fall again into sin without fully realizing it, and thus they have lost the power God gave them. We should pray constantly for wisdom to recognize these temptations when they assail us, and for strength which is not sufficient. We need frequent refillings with God's Holy Spirit.—I. H. N.

### Economies for Housewives

The genuine, all-around economist who puts by a comfortable little sum from her housekeeping allowance always assures the beginner that it is in the kitchen that she makes the ends meet and lap over.

It is right in the kitchen, where we fondly believe that "not a crumb is wasted," that we can learn to save money.

To begin with soups, it is quite unnecessary to buy anything whatever for soup stock in a small family. The end of a slice of veal cutlet, the one piece of meat on the platter after

lamb or veal stew, the ham bone, denuded of all its meat, can all be utilized. Not alone, of course, for that would give but a watery result, but in combination with other things.

Suppose you have a ham bone; stew that with a slice of onion and a top of celery, if you have it, or a quart of celery, or bay leaf, or any seasoning in the house, but do not buy a stalk of celery on purpose to have the top for this soup. Put at least the top for this soup. Put at least a quart of cold water with the bone and seasoning and add more as it cooks away; simmer half a day, and meanwhile have a small cupful of beans soaking, white or black ones. When these are soft, strain over them the soup stock and simmer till they are a pulp, season well and you will have a good puree when the whole is pressed through a sieve. Black bean soup will need high flavoring and a slice or two of lemon, if you have it, and a little grated or sliced hard-boiled egg on top.

A half cupful of tomato, left from dinner can be put over with onion, parsley, a clove or a bay leaf and simmered; meanwhile a pint of milk may be heated and seasoned with salt and pepper; put in the tomato a quarter of a teaspoonful of baking-soda, beat it up well, and after a moment slowly pour it in the milk; strain, slightly thicken, and serve as tomato bisque.

When a cold potato is left, or a spoonful of potato is bisque, or a few creamed carrots, or a little dish of vegetable or small collection of vegetables, make them up into a cream soup with the pint of milk. If you have no milk, then simmer them, add a bone if you have that, or, if not, merely plenty of seasoning, cook rather thick, add a little bit of rubbed butter and flour, and put through the sieve. There is nothing made of potatoes which is both nutritious and palatable.

### USE THE MEATS.

Meats, of course, must be carefully watched, or some morsel will be wasted, and there is not a bit of fresh, good meat that is not useful. Take this case of a steak, that part which comes on the table unchanged and is never eaten. Instead of leaving this on the raw steak, cut it off and lay it aside. The next day put it through the meat chopper and make it into small cakes. Or, mix with potato and make hash and brown like an omelette. Or, wet it up with gravy or stock, line a small tin with mashed potato or boiled rice and put the meat in the middle, covering with the same potato and bake.

When only a small amount of meat is left from a stew, add barley and tomato to it and make a second dish. If there is not enough for this, line a dish with cooked macaroni, put the minced meat in between two layers,

wet well with white sauce or gravy, or best of all with tomato, and make with cheese on top. This makes a good, substantial dinner dish.

If a tough, uninteresting piece of beef is left from a roast, put this through the meat chopper, mix with brown gravy and roll into round balls, dip each one in flour seasoned with salt and pepper and fry in deep fat; serve with tomato sauce or gravy.

Slices of beef or mutton may be made into mock birds by trimming them, laying a spoonful of highly seasoned crumbs on each and pinning them together with a wooden toothpick on the back; simmer in stock or mixed gravy and water till hot, and serve on squares of toast.

## The Sewing Room

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

### GIRL'S SACK NIGHT GOWN 651



The simple plain night gown is one generally liked for younger girls. It is equally well adapted to the heavier materials of the winter and to the lighter ones of the warmer weather.

Material required for medium size (14 yrs) is 5 1/2 yds 27, 4 yds 26 in wide. The pattern is cut for girls of 10, 12, 14 and 16 yrs., and will be mailed on receipt of 10 cts.

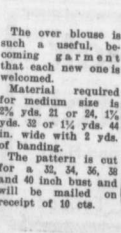
### GIRL'S TUCKED DRESS 653



Simple tucked dresses are exceedingly pretty for school girls. The skirt is straight. It can be made with a hem and tucked or with a hem only.

Material required for medium size (12 yrs) is 4 1/2 yds 24 or 27, 3 1/2 yds 32 or 44 in wide. The pattern is cut for girls of 8, 10, 12, and 14 yrs., and will be mailed on receipt of 10 cts.

### TUCKED OVER BLOUSE 657



The over blouse is such a useful, becoming garment that each new one is welcomed.

Material required for medium size is 2 1/2 yds 21 or 24, 1 1/2 yds 32 or 3 1/2 yds 44 in wide with 2 yds. of banding. The pattern is cut for a 32, 34, 36, and 40 inch bust and will be mailed on receipt of 10 cts.

## A Churn For Women



This is our "LEADER" CHURN—made of the best White Oak—which won't chip or peel like glass or crockery—absolutely sanitary—and may be operated by foot or hand. If you desire further details send for our circular. Write us direct to

CURNER-BOWSWELL LIMITED, - Hamilton, Ont.

OUR FARMERS' CLUB

Contributions Invited.

PRINCE EDWARD ISLAND
QUEEN'S CO., P.E.I.
MARSHFIELD—An almost unusual snow...

RICHMOND—Farmers are busy getting their year's supply of wood. Good wood lots sell for \$40.00 to \$50.00 an acre...

WICKLOW—Stock, generally, is wintering very well. The best of the season of 1909-10 was very satisfactory to the producer...

LAKELFIELD—The second regular meeting of the Pine Grove Farmers' Club was held in the Pine Grove hall on Thursday evening, Jan. 7...

KIRK WALL—Hogs have dropped considerably in price since last writing; they are now \$8.25 a cwt. Young pigs are still very scarce...

FRANK CO., ONT.
FALKLAND—Many are getting in a supply of ice for the summer. The ice is nearly 14 inches thick and is clear and hard...

WATERLOO CO., ONT.
AVR.—Quite a number of farm sales are coming off and prices are changing hands. The late Ayr Farmers' Club meeting, they held at the date 'Dairying versus Beef Raising'...

WELLINGTON CO., ONT.
PERGUS—Farmers in general are busy attending to their stock; not much bush work to be done...

Some are putting in their spare time hauling turnips at 10c a bundle. The having been paid earlier in the season. One man, about 12 miles from here, shovelled 27 cars at 15c per car...

MIDDLESEX CO., ONT.
TEMPO—While in conversation with Mr. G. M. James, recently, he gave the following information: 'I have tried an experiment this year in this respect. I have covered a 15-acre field...

ESSEX CO., ONT.
KINGSVILLE—For the past month we have bination of each but the winter has been deleterious this winter than in the last three put together. The clover and wheat are not so healthy as they were...

HOLSTEIN-FRIESIAN NEWS
Farm and Dairy is the official organ of the Canadian Holstein-Friesian Association...

BROWN BROS.' HOLSTEINS.
Elsewhere in this issue are reproduced the photos of Brown Bros.' senior service bull, Count De Kool, Pietrie Paul, and their daughters...

Count De Kool P.P. is from a daughter of Piete-rie Hervengeld's Count De Kol. The only bull sire, two daughters and a son were mated...

To avoid interfering having placed in service the richly-bred bull Withop De Kol Korndyke Wayne, whose dam has A.R.O. 7 dam with record of 28.87 lbs. her milk testing 4.27 per cent...

LIVE HOGS

We are buyers each week of Live Hogs at market prices. For delivery at our Packing House in Peterborough, we will pay equal to Toronto market prices. If you cannot deliver to our Packing House, kindly write us and we will instruct our buyer at your nearest railroad station, to call on you.

THIS WEEK'S PRICES FOR HOGS DELIVERED AT FACTORY
\$8.25 a Cwt.
FOR HOGS WEIGHING 160 TO 220 LBS.

THE GEO. MATTHEWS CO., LIMITED

PETERBOROUGH, HULL, BRANTFORD

The butter each in 7 days. By this sire we have a number of young bulls we are now offering for sale. All are from A.R.O. dams, some of them from daughters of 'Count De Kol Piete-rie Paul'...

Another bull we now have in service is 'Count Hervengeld De Kol', a son of Sara Jewel Hervengeld 3rd, by Count De Kol Piete-rie Paul. He will be three years old in April; his calves are a straight, uniform lot, two-thirds of them bull-calves...

HISTORY OF TWO HOLSTEIN HERDS
Twenty-four years ago the herd of Registered Holstein now owned and managed by P. E. H. Mallory, of Lawn Crest Stock Farm, and E. H. Mallory, of Glenispen Stock Farm, was founded...

24 years this herd has been carefully bred and improved, so that the yearly milk production per cow of the herd has been more than doubled. The herd was founded when 7 day, 30 day and yearly records were kept. To-day the two herds can boast of as many 7 day and yearly records as any herd of similar numbers in Canada.

THE FIRST STOCK BILL
The first stock bull was Count Echo De Kol. His heifers were the first subjected to the 7 day test. Six were entered in the test and all six passed well above the standard set for their age.

The present excellence of the two herds is due wholly to the careful selection of good sires with which the two herds have averaged, heifers and all of these herds with to be known as breeders, and breeders only doing has place in their ambitions. No phenomenal records have been made...

(Continued on Page 22)

UNPROFITABLE WORK AND UNPLEASANT TOO



but it is just as unprofitable and unpleasant to use an inferior Cultivator at any season of the year.

THE PETER HAMILTON CULTIVATOR is constructed so that the front or back teeth raise or fall independently of each other, following the unevenness of the ground and cultivating to an even depth.

No catching of the teeth in furrows. Easy draft. Comfortable seat. Lever that controls the teeth perfectly. A pleasure to operate and perfect work. Try one this spring.

THE PETER HAMILTON CO., Limited
PETERBOROUGH, ONT.

Back at the

"Biggest and Best" Plug Chewing Tobacco

207

MARKET REVIEW AND FORECAST

Toronto, Monday, Feb. 7.—The recent panic condition in the money market has had its effect on the English and European markets, where American failures have caused an uneasy feeling, and American stocks have advanced.

and shorts at \$24 a ton on track. Toronto and Ontario bran and shorts at the same figure. In Montreal the market is also quiet, and prices are mostly confined to Manitoba shipments.

HAY AND STRAW

Canadian farmers may be thankful for the abundant hay crop of last season, which owing to the scarcity in the United States, has been commanding extraordinary prices.

WHEAT

Wheat is lower, the prices at all the great centres having declined. At Liverpool the price is a penny lower, there is a downward tendency at Winnipeg and Chicago.

Receipts of butter are continually increasing, and prices are easier. There is a good deal of butter of indifferent quality on the market, and the prices in consequence show a great variation.

COARSE GRAINS

There has been a considerable variation in the price of coarse grains, the following being the quotations: Corn, Canadian Westerns, 42 1/2c to 43 1/4c, on track; No. 1, white, 39c to 39c outside; 41c to 42c on track; Toronto, 42 1/2c.

POTATOES AND BEANS

The supply of potatoes is ample, and the prices current for the last few weeks. Quotations are 43c to 45c a bag in car lots, on track, and 51c to 60c out of store.

EGGS AND POULTRY

Eggs are tumbling in price owing to daily increasing supplies, and are quoted now at 32c to 34c a dozen for fresh-laid. Storage stock, 25c to 28c a dozen in case lots.

FOR SALE AND WANT ADVERTISING

WANTED.—Experienced farm laborer, married, \$300 per year; house, garden and milk supplied. Mile from town. State experience. Address Box 914, Farm and Dairy.

AUCTION SALE OF Registered and Grade Holstein Cows and Bulls

There will be sold by public auction on lot 3, concession 3, North Oxford, on THURSDAY, FEBRUARY 24th, 1910 at one o'clock, three miles west of Ingersoll, three miles east of Thamesford, 27 Registered and Grade Holstein cattle, consisting of 10 Registered cows, 4 Registered Bulls, and the balance Grade Holsteins. Also 2 Brood Sows, one Registered Berkshire, and 3 Shropshire Sheep.

TERMS OF SALE—Eight months credit approved joint notes, six per cent. over for cash. Decision of auctioneer, final. ALEX. ROSE, Auctioneer. TELFER BROS., Proprietors, Box 445, - Ingersoll, Ont.

SALE OF OVER 40 HEAD HOLSTEIN-FRIESIAN CATTLE

At MADOC, MARCH 25th, 1910 Including the great bull, SARA JEWEL HENGERVELD'S SON, whose dam has an A.R.O. butter record: In 7 days of 28.12 lbs. In 30 days of 10.18 lbs.

and the only cow in Canada that ever produced in official test one hundred pounds of milk in one day. All the females old enough are bred to this great bull, and by the time of the sale there will be 20 calves sired by him. Catalogues will be ready by March 1, 1910. Positively no reserve. Further particulars later. J. A. CASKEY - - Madoc, Ont.

in Montreal, eggs are quoted at 36c to 37c for first quality, and 24c to 27c for storage. Prices for poultry remain the same as last week's quotations. The export trade in poultry from this side of the water is likely to be affected by the enormous quantities of eggs exported to Russia, which is now over 50 per cent. greater than last year's exports, and the total amount from that country amounted in value to more than \$6,000,000.

SEEDS

The latest local quotations for seeds are as follows: No. 1 Abasco, 36c; No. 2, \$5.40 to \$5.70; No. 3, \$5.00 to \$5.27. Red clover, first quality, \$8.00; No. 2, \$7.50 to \$8; No. 3, \$7 to \$7.50. In Montreal the following prices are quoted: No. 1, \$6.50; No. 2, \$5.75 to \$6; No. 3, \$5 to \$5.50; red clover, No. 1, \$7.50 to \$8; No. 2, \$7.50 to \$7.75; No. 3, \$7.15 to \$7.40 a bu. There is a report of a failure of the export trade in parts of Europe and England, and this may probably affect the prices in a short time in the Canadian market.

DAIRY PRODUCTS

Receipts of butter are continually increasing, and prices are easier. There is a good deal of butter of indifferent quality on the market, and the prices in consequence show a great variation. Wholesale quotations are as follows: Creamery prims, 25c; separator prims, 24c; choice dairy, 23c to 24c; ordinary quality, 22c to 23c a lb. In Montreal the following prices are quoted: No. 1, \$5.40 to \$5.70; No. 2, \$5.00 to \$5.27; No. 3, \$4.50 to \$4.75; red clover, No. 1, \$7.50 to \$8; No. 2, \$7.50 to \$7.75; No. 3, \$7.15 to \$7.40 a bu. There is a report of a failure of the export trade in parts of Europe and England, and this may probably affect the prices in a short time in the Canadian market.

HORSE MARKET

There has been a more active demand for horses for local purposes the past week, and some good purchases have been recorded. The following are quoted: Horses, choice heavy draft, \$175 to \$250; agricultural horses, \$100 to \$200; excreasers, \$160 to \$200; middle horses, \$140 to \$275; drivers, \$100 to \$200.

LIVE STOCK

The "high cost of living," the latest hogboon strike society, and the continued bad effect in the live stock markets of Canada, as well as the fact that the outlook for the future is consequently is not encouraging to those engaged in the trade. Why the live stock trader in Canada should be looked upon as an advertiser holding up prices is not easy to ascertain. The fact cannot be denied that in advanced countries certain irresponsible newspapers, viz., an orange and a blue, are the part of wholesalers to force their own prices on the public, and the one advanced by Dr. Rutherford, viz., that there are not sufficient quantities of Canadian farms to supply the demand. It is an enormous mistake to suppose that the Canadian farmer is a weakling and that he is unable to stand up to his own feet.

The Canadian export business has caused a lively tone in our markets, so that wholesalers are not at present particularly troubled about the talk of lowered prices for home buyers. There have been good runs of cars to the Union Stock and Veterinary Markets, and the following prices are quoted: Export steers, choice, \$5.40 to \$6.10; medium, \$5.50 to \$5.75; ordinary, \$4.25 to \$4.50; export cows, \$4.75 to \$5; butchers' cattle, \$5.50 to \$5.75; ordinary, \$4.25 to \$4.50; calves, \$4.50 to \$4.75; sheep, \$4.50 to \$5.50; lambs, \$6.50 to \$7. Hog, choice, \$8.10 to \$8.35.

There is a movement on foot in Toronto amongst the wholesalers to prevent the sale of cattle that have been heavily fed and watered prior to being brought to the market. It is a pity that the dealers have their way, are to be the sole criterion as to what cattle to sell, who find their way to the weigh scales. Hogs are coming in well, but prices remain firm.

MONTREAL BUTTER MARKET

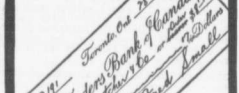
Montreal, Saturday, Feb. 5.—The market here for live hogs this week is quiet, and with increased supplies prices have been easier, and show a decline from those current at \$9.00 to \$9.25 per 100 lbs. for selected ones. The following prices are quoted: Dressed hogs were in fair demand, quotations ranging from \$12.50 to \$13.00 per 100 lbs. for fresh-killed abattoir stock. Country hogs are quoted at \$12.00 to \$12.25 per 100 lbs.

MONTREAL BUTTER AND CHEESE

Montreal, Saturday, Feb. 5.—The market here for cheese continues very strong, with prices well maintained. Holders are very confident of the future, and many cases have withdrawn their holdings from the market, believing that prices, which are now at a much higher figure than is current at present, in any case, the quantity of cheese used in this country is very small, and by some dealers is estimated to amount to barely 50,000 boxes, of

which about 30,000 boxes are held in Montreal for 12 1/2c a lb. In finest September and October Westerns, with a few Easterns changing hands at about 12c a lb. This latter grade, however, is in small supply, the bulk of the stock consisting of Ontario-made cheese of September and October make.

The market for butter is firm, and dealers expect a better demand all around than has been



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Keep a Checking Account

Put your private expenditures on a business basis, and pay your bills by cheques on the Traders Bank.

Then you are never short of cash to make a payment demanded unexpectedly. Nor do you need to bother with receipts—your cheques provide them automatically.

There's a prestige, too, in paying by cheque, that is well worth while.

THE TRADERS BANK OF CANADA

Capital and Surplus \$6,350,000

WANTED TO BUY PGS

We want to secure at once, pure bred pigs as follows:

- Berkshire Sows and Boars
Chester White Sows
Poland China Boars
Tamworth Sows and Boars

The above must be pure bred, with pedigree for registration. From 6 to 8 weeks only.

Write your very best prices to: Circulation Manager FARM AND DAIRY Peterboro Ont.

Dr. Bell's Veterinary Medical Wonder cures kidney, the soft winter. Agents wanted in every county. Write for a free trial & bottle. This offer only good for 6 days. Limited to good bottles. DR. BELL, V.S., Kingston, Ont.

"O.A.C. No. 21" BARLEY

Price winning seed at the Guelph Winter Fair well maintained. Holders are very confident of the future, and many cases have withdrawn their holdings from the market, believing that prices, which are now at a much higher figure than is current at present, in any case, the quantity of cheese used in this country is very small, and by some dealers is estimated to amount to barely 50,000 boxes, of



duets with most profit requires dairy bred cattle, and the majority of them either have placed or will place well bred Holstein-Friesian bulls at the head of their herds. Auction sales everywhere show black-and-white grades selling from \$15 up over and above the average price for common dairy cattle.

It is continually growing harder to break the record in any class of any division; yet in this issue of the official reports we are able to announce the breaking of the record in the senior three-year class of the 7 and 30-day divisions, and the smashing of the record in the same class to the semi-official division. Also a 30-day record is established in the full aged

Millbrook King Posh, D. H. Brown to John Welsh, Kilbuck, Que.
Pioneer J. DeKalb, Redgodd to Walter Pitt-Simmons, Thorndale, Ont.
Paul Butler Boy, L. E. N. Pratte to F. A. Hibbard, Gowansville, Que.
Peary's Boy, L. Summerfield to Geo. McKay, Colburn, Ont.

People's Friend, Oxford, Ont.
Shuring to Alexander Campbell Jr., Embury, Ont.
Pieterte DeKok Boy, Thomas Stroud to Harvey French, Avon, Ont.
Pieterte DeKok, Prince, Toole & Mann to H. E. George, Brampton, Ont.
Pieterte DeKok, E. B. Sedgock to A. Duffin, Rebecca, Ont.
Pontiac Hermes Harold, Poole & Mann to H. E. George, Brampton, Ont.
Pride of Welburn, A. J. Thompson to John McKay, Colburn, Ont.

Thomas Posh, Byron Stephens to John Gaw, Wausano, Ont.
Van Tromp Posh, Jas. Engelson to Alfred Merrill, Campbellford, Ont.
Willow Lodge Lad, Wm. G. Graham to John Little, Hawthorne, Ont.

AN ATTRACTIVE CALENDAR.—Readers of Farm and Dairy, wishing to secure an especially attractive calendar, containing the price cost by writing to the Frost & Wood Co., Smith's Falls, Ont., and mentioning this paper.

Why blame the cows if we do not give them a chance?—Henry Glendinning, Victoria Co., Ont.

Seldom See
a big knee like this, but your horse may have a touch of this

ABSORBINE
will clean them off without laying the horse up. No blister, no hair gone.
Remove all swellings, distensions, etc.
W. F. YOUNG, P.O. Box 127 Temple St., Springfield, Mass.
KYLE'S LEE, Montreal, Canadian Agent.

Brings the Best Results
are getting better results from our advertisement of Holsteins in "Farm and Dairy" than from our advertisement in any other farm paper.
D. C. FLATT & SON
Millgrove, Ont.

class of the eight-month division that is a credit to the breed, to Belle Segis, 23.04 lbs. fat from 532.3 lbs. milk in 30 days, 25.63 lbs. fat from 2,491.7 lbs. milk in 90 days, belongs the honors in the first instance; while Pieterte Lass Pauline completes her year with 63.63 lbs. fat and 2,135.94 lbs. of total brood from 18-134 lbs. milk, and wins great honors in her division. Spring Brook Creamerie, 14.28 lbs. fat from 456.5 lbs. milk in 30 days, 22.62 lbs. fat from 1,984.4 lbs. milk, establishes a record for the 30-day test of the eight-months division, and shows in the semi-official long-time division—M. H. Gardner.

- BULL TRANSFERS FOR FRIEND, 1909
(Cancelled for dead)
King Korsyke Friend, Allen S. Mainse to Fred S. Ferguson, Inverary, Ont.
King of the Valley, Francois Chonetie to Arthur Chenette, Salsburg, Ont.
King Posh De Kol, James Nichols to Walburn Rivers, Falden, Ont.
Korsyke Johanna Fay, W. J. Trellius to Wm. Muller, Spruce Grove Centre, Alta.
Lady Jane's Rooker of B. F. McCraig & Robertson to Maxime Dequire, Glen Robertson, Ont.
Lassie's Ahbecker Lad, Fred Hilliker to John Eddy, Tavaco, Ont.
Leola Dale's Calanthy DeKok, J. H. Lean to Henry Strader, Brimston, Ont.
Lord Emerald DeKok of Fairview, Holland Conner to Jos. Goodfriend, Howe Island, Ont.
Lord Tessen DeKok, Samuel Leman to Charles Dale, Wear, Ont.
Maita's Tiltshire, C. F. Pearce to Wm. Fletcher, Pilsbrough, Ont.
Maple Grove Butter Boy, H. Bollert to B. H. Hunter, Norval, Ont.
Maple Grove Hero, H. Bollert to L. C. Nelso, Boston.
Mechthilde Pontac DeKok, G. W. Courtneyman to Jas. Couper, Tweed, Ont.
Mercedes Hamming DeKok, J. Summerfeldt to J. T. Weir, Malvern, Ont.

Prince Greteui DeKok, L. Abbott to Geo. M. Miller, Osborne, Ont.
Prince Hamming Paul, L. Summerfeldt to E. Livingston, Humber, Ont.
Prince Karunya DeKok, Thomas Neal to Charlie Thomson, Stirling, Ont.
Prince Mercena Schuiling, B. M. Brook to Wm. J. Thompson, Lanigan, Ont.
Prince Money Maker, L. Abbott to D. F. Smith, Caniache, Ont.
Prince N. H. Posh, Chas. Thomas Stroud to Jas T. Sturgis, Tillonburg, Ont.

Prince Paul DeKok Silver, Thomas Montgomery to Robert Christie, Stirling, Ont.
Prince Paul of Priner, Louis P. Hubbs to Robert Wright, Prizer, Ont.
Prince Pieterte DeKok, David Rife to A. Stewart, Preston, Ont.
Prince's Netherland DeKok, Russel Warner to Arthur Weldon, Derwent, Ont.
Rhoda's de Emporer, Wm. Higginson to J. E. K. Herrick, Abbotford, Que.
Royal Canterlander, E. A. Chapman to J. E. K. Herrick, Abbotford, Que.
Ruby Canary Court, Frank Stroubridge to John Armstrong, Ingersoll, Ont.
Suzette Mary Jane, A. R. Potter to Walter Simpson, Regina, Sask.
Sir Arthur Jewel Posh, Frank Greenbank to James Gresham, Norwood, Ont.
Sir Calanthy DeKok, Thos. B. Carlaw to Andrew Hamilton, Campbellford, Ont.
Sir Camrose, T. E. Redgock to Robt. McKenzia, Crumlin, Ont.
Sir Glendhie Gretui, L. Abbott to Oswald Jackson, Kertich, Ont.
Sir George Gretui, Abbott to Clinton York, Belmont, Ont.
Sir Hector Jewel Posh, Frank Greenbank to F. E. Heald, South Dumfries, Ont.

THE HUMAN SIDE OF TWINE

When we drive home from the implement dealer with our little load of Sisal twine for the coming harvest, we do not often realize that we are giving that twine its final lift on the journey of many thousands miles which it has taken months to make. Seldom do we appreciate when we give it that final resting place in the binder belt that the first hands which touched it were those of a Maya boy or a girl of the island of Yucatan whose ancestors were a great civilized people, with temples and literature, and whose remains are scattered all about in his red velvet soil.

Or, if it is Manila twine, the first step in its long pilgrimage was under the guidance of a Spaniard, and it was a great Filipino savage, who perhaps never heard of a binder, and whose views of agricultural implements are a pointed stone or a crooked stick.

Yet, if we note that for the industry of these two widely separated nations, the farmer of this rich state would still be obliged to bind their grain with old-fashioned wire, which never worked or with a twine that is discarded as unsatisfactory because of its tendency to rot, the problem of twine was the problem of success in binding for years after the self-binder was an established fact.

It took many years and thousands of dollars to eliminate this primary drawback to the early grain binders of the country. One manufacturer alone spent \$100,000 trying to make twine out of grass, \$30,000 using paper as a substitute, and \$40,000 trying to make twine out of straw. All the twine in the end to be discarded as unsatisfactory. Then, after searching the world with a close to the rake, as it were, it was found that two fibres could be made to do the work—Manila and Sisal. The Manila—long, soft and even—had generally been used in multiple strands for making cable and cordage; while the Sisal—strong, pliable and smooth—was found to lend itself perfectly for the manufacture of a single-strand cord, such as the self-binder necessitated.

Then commenced a merry struggle between the distant rakes for the honor of supplying the twine which was to make His Majesty, the American farmer, the greatest food producer in the world. At first, owing to the established position of the Manila hemp trade caused by the cordage industry, the little brown brother in the Philippines forced ahead, but he made no progress in his methods of production, using the huffs and block and other simple methods followed by his primitive forefathers in extracting the fibre. It was soon seen that a Sisal would either be the ultimate material to supply the demand or the demand would not be filled. At this

point of the race a number of clever, aggressive Yucatecas, educated in the sciences in this country and abroad, sprang into the game. They saw the future commercial possibilities of the neglected Sisal plant. At their own expense they built railroads into the arid, dry territories where benegen grew. They invented new machines, capable of cleaning 100,000 leaves a day, and soon began to compete on an equal basis with the Manila fibre.

The Spanish-American war temporarily advanced the price of Manila fibre to such an extent that good grades of Manila fibre commanded a price which was practically prohibitive for binder twine. Therefore, their energy and genius in the production of a perfect binder twine from Sisal. This required some adjustment of machinery and some change in methods, but manufacturers of twine succeeded so that the twine made from Sisal has for some years been as perfect and satisfactory as any binder twine ever made from any material. This has resulted in the increased use of Sisal, until during the past season not less than 80 per cent, and possibly 90 per cent, of the material which went into the manufacture of binder twine in the United States was Sisal fibre.

First-class binder twine can be made from high-grade Manila fibre, but it is very difficult to make even a reasonably good Manila. Before the American occupation of the Philippine Islands, the Spanish officials at times exerted their arbitrary power for the purpose of maintaining the quality of the fibre which was produced by the natives. It was not an uncommon thing for the governor of a district to seize a quantity of inferior fibre and publicly burn it in the middle of the plaza. This was an object lesson to the natives to produce better grades of fibre. However, since the Americans have taken possession of the Philippine Islands, no authority has been exercised and no influence exerted by the officials in connection with the quality of fibre. The result is a very much greater proportion of low-grade fibres than has ever been produced in previous years. Unquestionably, large quantities of this low-grade fibre will be used in the manufacture of binder twine for the harvest of 1910, and it is unnecessary to state that those who attempt to use twine made from this low-grade Manila fibre will have troubles of their own.

It is to the farmer's interest always to keep a weather eye on the future, and in this particular instance to secure his Manila supply, whether it be Sisal or Manila, as early a date as possible.

CORRUGATED IRON

"All corrugated looks alike to me," says the novice. "Looks alike, yes," replies the experienced builder, "but what a difference in quality!" . . . The contents of most buildings with corrugated iron roofing or siding are exceptionally valuable—factories, barns, warehouses, elevators, etc. . . . Only the best is good enough for such structures—Metallic Roofing Co.'s Corrugated Iron. . . . Absolutely free from defects—made from very finest sheets. . . . Each sheet is accurately squared, and the corrugations pressed one at a time—not rolled—giving an exact-fit without waste. . . . Any desired size or gauge—galvanized or painted—straight or curved. Send us your specifications.



N.B.—Insure the safety of your grain. A Metallic Portable Corrugated Granary protects against loss by lightning, fire and vermin—rats, mice, etc. Write us to-day for information. Also ask us to mail you our well illustrated catalogue, No. 70.

MANUFACTURERS
Metallic Roofing Co. Limited
TORONTO

Agents Wanted in Some Sections
Write for Particulars

# BIGGER CROPS — BETTER GRAIN MORE MONEY

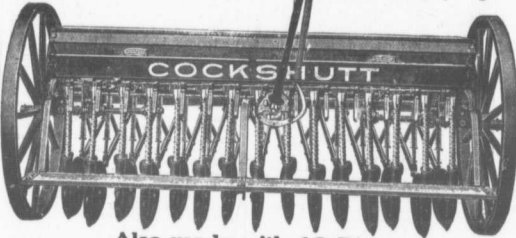
## IS THAT WHAT YOU WANT?

**L**IKE lots of other farmers at this time of the year, you are thinking of buying either a Disc or a Hoe Drill. Read this advertisement carefully before you decide—study the principle of

this Cockshutt Disc Drill—get our Drill booklet and go into this matter thoroughly, because here is a machine that will help you get better crops.

**Cockshutt**

**New  
Model**



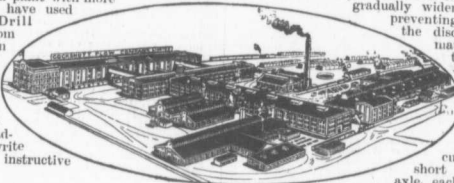
Also made with 13 Discs

**15  
Disc  
Drill**

**T**HE particular advantage which the Cockshutt Disc Drill possesses, is that it sows the grain 6 inches apart—not 7 inches as is the usual method. Close seeding gives the grain a better chance to germinate—to sap all the nourishment of the soil. Thus the grain grows up closer and firmer—holds moisture better—resulting in a bigger yield and better grain. Close seeding does not mean that you have to sow more seed—you simply plant the same quantity of seed as you would with old style machines, but you plant with more discs. Farmers who have used this Cockshutt Disc Drill report an increase of from 2 to 5 bushels an acre, in other words this Cockshutt Disc Drill will easily pay for itself in one season and still leave you a nice profit over and above. Read all about the other advantages it has—then write us and get our very instructive booklet about it.

The discs on this machine are 6 inches apart—not 7 inches like old style machines. Footboard runs the whole length of the machine, which makes it optional with the driver whether he walks or rides. Footboard can also be used for carrying seed bag to the field. The frame is built of high carbon steel, the corners being reinforced by heavy malleable castings and steel corner braces. The castings pressure bar and short self-aligning axles are rivetted to the strong I beam which runs the

whole length of the machine. One of the great advantages of this I beam is that it never allows the machine to sag in the centre. Axles are made of cold rolled shafting, always uniform in size and set at the right angle to give the wheels proper pitch. The self-oiling device keeps the disc bearings in good shape a whole season. The grain flows down the closed boot right into the bottom of the furrow and is always sown at uniform depth. The space between the grain boots and discs gradually widens from bottom to top, preventing mud and trash stopping the discs from revolving. No matter how wet or sticky the soil, these discs will always revolve and cut. Scrapers are provided so as to keep discs clean on each side. The feed on this Cockshutt Disc Drill is a positive force feed of great accuracy and is driven by a short steel chain from the axle, each half of the feed being driven separately. The seed box is made of choice seasoned lumber and the cover locks automatically. We use metal bridges between feed cups to prevent grain from clogging, so that the last seed is sown out of the box at the same rate per acre as when the grain box is full. You can't realize all the advantages and improvements of this Drill until you read full explanations in our booklet. Don't buy a Drill of any kind until you read it.



## Read These Letters—Then Write for Booklet

Cockshutt Plow Co. Ltd.,  
Brantford, Ontario

Dairy Farm, Bay View  
May 31st, 1900

I purchased a Cockshutt 15 Single Disc Drill from your agent, Mr. J. H. Finlay of Collingwood, and I desire to state that I am more than pleased with the work done by it. After giving it a severe trial in lumpy ground, also in wet and sticky soil, I could not clog the drill. I would recommend this drill to all farmers intending to purchase.

(Signed) R. S. BAKER.

Cockshutt Plow Co. Ltd.,  
Brantford, Ontario

Thorndale, July 20th, 1900

Gentlemen:—

I have very much pleasure in recommending the 15 Single Disc Drill purchased from your agent, W. McMartin of Thorndale. After putting in seventy acres of spring seeding with two horses I think it the best drill I have ever seen, and the easiest to operate. I have not seen its equal, and think it has to be made yet. I cannot say too much for it.

(Signed) JOHN MORDEN.

# COCKSHUTT PLOW CO. LIMITED BRANTFORD