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FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

MARCH 10,

1910.



THESE MEN HAVE PUT THE FORESTRY QUESTION UP TO THE ONTARIO GOVERNMENT

There are some 14,000 acres of waste land in the united counties of Northumberland and Durham. The waste area is spreading rapidly. Streams are gradually drying up and the situation is serious. The deputation from the Counties' Council that waited on the Government recently is here shown. If the Government will advance the money required to reforest and take care of this area until the timber is marketable, the counties have offered to pay the interest, and ultimately to repay the principal. Thus it will cost the Government nothing. It is expected that the Government will grant the request. This plan is the one that was recommended by Farm and Dairy. For the names of the deputation, see page 13.

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CANADIAN COUNTRY LIFE

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More Money for Agriculture

In the second consignment of supplementary estimates which was passed in the Ontario Legislature last week, the following items were among those for agriculture: Mr. C. C. James, Deputy Minister of Agriculture secures an additional \$350, bringing his salary to \$3690. The staff of the Ontario Agricultural College comes in for a further consideration of \$800, apportioned \$50 amounts to each member of the faculty. Mr. G. C. Creelman, president, gets \$100.

The Agricultural and Horticultural Societies who waited upon the Government recently to ask for increased grants aggregating over \$30,000, secure \$7,000, apportioned \$5,000 to Agricultural societies and \$2,000 to Horticultural societies. The Ottawa and Toronto Horse Shows get \$300 each, while \$2,000 is given as a grant to the Central Canada Fair Association towards the erection of a dairy building for the Eastern Winter Fair at Ottawa; \$3,000 is provided for a cold storage building at Kingston Dairy School, The Ontario Corn Growers' Association secured an additional \$250. For the maintenance of offices and expenses of three additional representatives \$1,500 is allotted. New Governmental immigration offices are to be opened up in Toronto near the Union Station. The estimates make provision for \$1,000 for their rental and equipment. A big item in the estimates was \$464,356.99, which is to be used for colonization roads. Of this sum, \$65,000 goes to new trunk roads, \$30,000 to the Sudbury-Soo trunk road, \$35,000 for the Elk Lake to Gowanda Road and \$30,000 for the Charlton to Elk Lake road.

A Provincial Grant for Rural Mail Delivery in Ontario

Editor, Farm and Dairy.—At the time the rural mail delivery agitation was on, previous to the late Dominion elections, Dr. McIntyre, M.P., for Strathcona, Alberta, stated in Parliament "The west will not permit the east to have a luxury in which it cannot share." This was characterized by some eastern newspapers as being a very unwise and selfish position for the west to take on the rural mail delivery question, or on any other. But, nevertheless, this attitude had, and will have to be reckoned with by the Dominion Government when considering the rural mail delivery proposition, on the basis of giving the service only to communities where the density of population warrants, except the limited star route, (existing mail routes).

SUPPLEMENTING APPROPRIATIONS
In view of side trading this proposition from the west I suggested in one of my newspaper articles on rural mail delivery, about two years since, that the Ontario Government take a hand in the post business, to the extent of supplementing an appropriation that the Ottawa Government might be prevailed upon to hand over for the purposes of establishing general rural mail delivery in this province. If other provinces wanted the service they, too, could supplement a Dominion appropriation. The Ottawa Government possibly might be induced to make a standing offer of an additional yearly subsidy of say \$30,000 to this province, and to all the other provinces, in proportion to their population, to be used for rural mail delivery purposes, upon their complying with the supplementing conditions above suggested. Canada's post surplus over and above expenditure, last fiscal year was over eight hundred thousand dollars. Ontario does one-half the mail business of the Dominion, consequently her contribution to this surplus was four hundred thousand dollars, which in all reason should be good and sufficient cause

for contention that a large percentage at least, of this profit, should be handed over to this province, by the Ottawa exchequer, for the extensions of its rural mail service.

Forty thousand out of the eighty-five million citizens of Uncle Sam's country are in the employ of the carrier. Proportionately Ontario's two million people would require about nine hundred rural mail carriers if the system covered all thickly populated localities as in the U.S., and not on star routes only, as in this country at this time.

A THREE-TIMES-A-WEEK SERVICE

To suggest that the country people put up with a three-times-a-week rural mail service, in the face of the fact that the cities of Canada of twelve thousand inhabitants and over, have a two and three times a day delivery, is, to say the least, a very modest proposal, and if acted upon not a fair deal by any means, but on the principle that half a loaf is better than none, would be greatly appreciated by the people.

For a three-times-a-week service the cost per carrier for a maximum route of 21 miles, would be at the most \$150 per year, and for the whole province, at maximum rate, \$400,000. This proposition should not frighten anybody in Ontario, with its eight million dollar revenue, and increasing as the years go by, nor the Dominion Government, with its yearly income of a hundred million dollars. This supplementing idea is not a new one. New York State, I understand, has supplemented the Washington pension fund.

NAVY PROGRAMME WILL BURY IT

—But this opposition to general rural mail delivery, by west Canada, is not all of it. Since the Hon. Rodolphe Lemieux declared his intentions respecting instituting this postal reform Canada has embarked on a navy programme that will bury general rural mail delivery deep. The Hon. Nelson Monteith, then member of the Whitney Cabinet, in reply to a letter of mine on this provincial supplementing idea, gave no sign of having got his pleasure in, but said he would "take pleasure in laying the contents of my letter before the Premier." The Hon. Dr. Pains, while in full sympathy with the rural mail delivery cause, feared that his colleagues would consider all post business as wholly a Dominion affair. Upon these grounds there is a probability that Sir James Whitney himself will resent with considerable feeling any suggestion of this sort, but there is no sense in Ontario shutting off its nose to spite its face." Cities from one end of Canada to the other are continually bemoaning concerns of one kind or another. The Ottawa Government expends millions every year in subsidies to ocean liner companies, iron and steel and other industries and coalitions.

I am in hope that the Whitney Government who are pushing with such determination their Niagara Falls power scheme for the benefit, largely, of the towns and cities of Ontario will take note of what I have proposed in this article, principally on behalf of the country people, the newspaper and other publishing interests, and the Ottawa Government in view of instituting, in full measure, rural mail delivery in this banner province and demonstrate by actual performances that something more must be done than ever has been to keep the boys on the farm.—Geo. Wilcox, Springfield, Ont.

There is possibly not any easier money than that made through raising a good colt or two each year on the average farm.—Archie Crow, Bruce Co., Ont.

Issued
Each Week

FARM AND DAIRY & RURAL HOME

Only \$1.00
a Year

Vol. XXIX.

FOR WEEK ENDING MARCH 10, 1910.

No. 10

A 100 ACRE FARM, WELL TILLED, WELL STOCKED

The Possibilities of 100 Acres as Exemplified on a Prize Winning Farm. Three Years with Pure Bred Dairy Cattle.

AN exponent of the small farm well tilled, well stocked and well managed, is Mr. G. A. Brethen, a young farmer of Peterboro County who has already accomplished much and who bids fair to make still greater progress in the future. His success proves that there are undreamed of possibilities in the 100 acre Ontario farm. It shows that mixed farming, practised intensively and with well defined specialties, will in future, as it does to-day, make for the greatest success of the average Ontario farmer as it is better to till a few acres well than to spread the same energy and labor over a greater area. Mr. Brethen was one of those farmers who entered his farm in the



Mr. G. A. Brethen Dairy Farms Competition conducted by Farm and Dairy during 1909. He was awarded fourth place in district No. 2 and in the special Good Farms Competition for Peterboro county he took first prize.

"Hill-Crest Farm," the home of Mr. Brethen, comprises 98½ acres. Half of the farm is sandy loam, the remainder, clay loam. Some years ago, Hill-Crest was purchased by Mr. John Knox, now Mr. Brethen's father-in-law, as a small farm on which to retire. He did much towards improving the property by clearing swampy portions, removing stones and other obstacles. Previous to the ownership by Mr. Knox, the farm had for a considerable time been rented by short term tenants, the effect of whose occupancy is still evident in the recurring problems, such as weeds, which must perennially be faced. Seven years ago, the present owner purchased the farm and assumed control.

THE PRIME OBJECT.

The farm is run expressly for dairying. The breeding of dairy cattle is the prime purpose. All operations are run in accord with that object. Hence dairying is the main issue,—not a side issue as with so many so-called dairy farmers of to-day.

A considerable portion of the farm is low and badly in need of underdrainage. Advantage has been taken of the assistance rendered by the local representative of the Ontario Department of Agriculture, Mr. H. C. Duff, in having drainage surveys made. Mr. Brethen intends installing complete systems of underdrainage in the near future. These lower lying portions, which have so far been unsuitable for other crops, have been kept in permanent grass. This area includes 35 acres. The balance of the farm is well suited for the growth of corn, clover and roots and any of these cereals, particularly oats, which are suitable for the production of milk.

Corn is possibly the most important crop; clover follows as a close second. Every effort is put forth to secure an abundance of these two crops as well as roots. Other crops, Mr. Brethen says, can be bought if need be. The corn crop is handled for the silo. Early maturing varieties that develop lots of cobs are the kinds sought, the White Cap Yellow Dent being the favorite, it having proven, in Mr. Brethen's experience, the most suitable for the locality.

PLANTS CORN THINLY

A failing of some dairy farmers is that they sow their corn too thickly. This practice arises probably from the lack of silos. People think that their cattle would not eat the coarse stalks grown when corn is planted thinly. This year Mr. Brethen will sow his corn in drills 42 inches apart. Last year there was only 36 inches between the rows. The rows he considers were much too close. When planted 42 inches apart, cultivation can be continued longer, thus keeping down the weeds and giving development to more and better cobs.

"One does not get the cobs," said Mr. Brethen, "when the rows are close together. More corn of

barley in the proportion, one to one, but since he found that barley was not conducive to milk production, he sows peas in place of barley knowing them to be better for dairy cattle.

All crops are worked into a rotation covering a period of three years. Sixty-six acres—all the land less the low parts previously mentioned—are included in the rotation, which is, first year, clover; second year, corn, roots and peas, or early summer cultivation followed by rape or buckwheat on any land which requires special attention owing to noxious weeds; third year, grain, seeded down without plowing, to clover. A little timothy is seeded with the clover in order to ensure a crop should the clover fail.

Manure is hauled out in winter and piled on the clover sod. In early spring, it is distributed with a manure spreader on those parts which are to grow the corn and roots. The corn land is spring plowed after the grass has gotten up somewhat and is thoroughly cultivated until planting time.

THE CLEANING YEAR

The second year of the rotation is the cleaning year. Stones, weeds and all obstacles are attacked during this period, while at the same time a crop is taken. This is followed by sowing the ground without plowing. Any land that is not well drained is ribbed up in the fall. Commenting upon



"Hill-Crest," the First Prize Farm in the Peterborough Good Farms Competition

The residence and farm buildings shown in the illustration are those on the farm owned by Mr. G. A. Brethen, which farm in addition to capturing first prize for the county, was awarded fourth in the general score. Read the adjoining article, which deals with Mr. Brethen's farm practice.

better quality is secured from thinner sowing. Last year a neighbor borrowed my drill after I had sown my corn. He set it to sow much more thickly and then placed two tubes into the one hoe. Quality suffered as both cobs and well-nourished stalks were lacking. I consider eight to ten quarts of seed an acre, ample, provided it be of high vitality."

CLOVER ADVOCATED

Speaking of clover, Mr. Brethen said, "It is just the thing for building up land. There is a great change coming over the average man, even in towns and cities, in regard to clover hay. He now has little or no objection to it and if he keeps cows, he is quite pronounced in its favor."

Oats is the principal grain crop. It is always sown in a mixture with peas. At one time, Mr. Brethen sowed the standard mixture of oats and

this practice, Mr. Brethen said, "I do not wish to undo the results of my year of cleaning the seeded from weeds by bringing up a fresh supply to encumber the succeeding grain crop. In a rotation such as I practise, all weed seeds are sprouted and developed in a crop in which they can be handled. The lack of plowing at the end of the second year, aside from its effect on weeds is to be commended in that it ensures a catch of clover, since it increases the capillary action thus supplying the moisture so much needed by the young clover plants, while fighting for their own amongst the crops of grain. Those advocates of grain farming and of the summer fallow as a means of combating weeds can scarcely stand in an argument against a three-year rotation since on their 100 acre farm, 10 acres of which they devote yearly to the summer fallow, weeds get a start of 10

old, at auction sale, the one bringing \$250, the other \$185. Then another was sold at 12 months for \$150. The other one we kept and at 17 months is valued at \$650. The dams before they were bred cost on an average, \$575 apiece.

Symptoms of Rabies in Dogs*

The eccentric habits of some dogs are often mistaken for symptoms of rabies; therefore, it is necessary to remember any peculiar actions of a dog when inquiring into its condition of health. Moreover, dogs are subject to maladies which are very often mistaken for rabies. Epileptic fits, for instance, have been taken as signs of the madness. In an epileptic convulsion the dog falls on its side and emits a frothy saliva from its mouth; the attack lasts only a few minutes and the dog entirely recovers in half an hour. It is not possible to make a statement on paper of the symptoms of rabies which cannot be misunderstood; therefore an owner should obtain the advice of a skilled person as soon as he becomes alarmed by his dog's manner and illness.

A dog will lap water, for it does not dread fluids, when rabid; it never suffers from hydrophobia. (Note.—Rabies is the disease in the animal; hydrophobia is the disease in the human being). Foaming at the mouth, raging madness, and fits, are the last forms of rabies. The first signs are seen in habits—the dog's behaviour is entirely changed and his countenance is altered. An affected animal becomes dull, gloomy, and taciturn, and tries to hide itself in out-of-the-way places; or, when spoken to by its master, it looks up apparently with an effort to be cheerful, its countenance dropping the moment afterwards into an expression of wretchedness, and its eyes staring with a sad void in them; sometimes it collects dirty pieces of rope which it hides; or it is restless the moment it lies down, finding no place comfortable, "seeking rest but finding none"; or, it seems to be under fitful delusions, and fancies it sees things, or hears sounds, and starts at them, and subsides the moment afterwards into stupor. Its temper generally changes from natural sociability to disagreeableness. In many instances it vomits, the ejected matter being streaked with blood.

Though surly, it is not vicious at this stage of the malady, but, on the contrary, it is unusually affectionate; and yet its expressions of love seem tinged with a melancholy which impresses a careful observer with the unhappy thought that the poor creature is conscious of its serious condition, and of a danger to its friends that it may be the agent of. Sometimes it shows distrust, preferring solitude to the company of those it has loved; at others, an imploring, despairing appeal is made to its master to save it from impending disaster. Its master's voice always has a semi-magical influence on it. In more decided cases, it snaps at the air, apparently seeking for something it cannot find, and scrapes incessantly. These are bad signs, especially if, at the same time the poor creature becomes fastidious in feeding, or refuses food which it formerly was partial to, and, instead shows a morbid disposition to eat carpet, wool, wood, earth, stones, excrement, etc.

When the above signs are present, or any of them are sufficiently present to alarm its owner, the animal should be isolated, and a veterinary surgeon should be called in, and no child should be permitted to go near it. When the peculiar noise is heard, which is neither a snarl, nor a growl, nor a bark, nor a howl, but all of these, in which the howl predominates, then no doubt can be felt. Generally a rabid dog tries to escape from its master, probably fearing to injure him and others whom it loves; and then it wanders—moving along with no visible object or aim, but still going on and on, frequently at a quick pace until its strength fails.

*Adapted from the Seventy-Ninth Annual Report of the Royal Society for the Prevention of Cruelty to Animals, London, Eng., and published by the Toronto Humane Society.

Make a Good Selection of Seed

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

The value of the farm crops to Ontario are scarcely realized by the farmers of the province. Business men seem to be able to grasp the situation better, for they have their finger on the pulse of the farm crops from year to year. To them our crops are their index for expansion or contraction in ordering supplies.

The estimated value of from \$164,000,000 to \$200,000,000 for the crops of the province last year on the basis of commercial values, in itself is wonderful. When we realize, however, that probably two-thirds or more of this is the farmers' raw material with which they produce more concentrated products such as pork, beef, mutton, milk, butter, cheese, poultry, horses, etc., then

A first-class fanning mill selection would be to reduce the grain as it comes from the machine fully one-half before sowing the seed. A fair selection would be to take out $\frac{1}{2}$ or $\frac{1}{4}$ of the light seed and dirt before sowing. This would require the passage of the grain over the ordinary mill at least three or four times, with plenty of wind and good screens. Most farmers are content with one cleaning.

There is a good deal in knowing how to manipulate a fanning mill, to adjust the sieves so that it can get plenty of wind direct on the seed as it falls from the hopper and to fix the slant so that it will rapidly carry off the chaffy light stuff. A good power mill located so that a large number of farmers might have access to it, I believe would be a good paying investment. There are a few



A Line of "Uncle Sam's" Free Rural Mail Delivery Wagons

Our neighbors to the south of us who enjoy a very extensive system of Free Rural Delivery, are proceeding with their agitation for a parcels post. As soon as rural delivery has become more general in Ontario, our farmers must be prepared to agitate for it here.

we are able to form some conception of the immense value a good crop is from year to year.

Hetefore we have been measuring our capacity to produce crops too much from averages instead of taking the more comprehensive view of what it is possible to produce. For instance, the oat crop which is by far the largest grain crop grown in the province. The average yield per acre is about 36 bus. There are many farmers who are getting yields of 50 to 80 bus. an acre. There must be a large number then who are content with less than 30 bus. an acre.

FOOD FOR THOUGHT

These facts should furnish us with food for thought to see if we cannot discover remedies for this. It is well known that some of the old countries are getting much higher averages than we are, and their land has been much longer under cultivation. Doubtless this is partly due to smaller buildings and more intensive methods of farming. Yet when we learn that in the southern part of Sweden they are growing 90 bus. of spring wheat to the acre, it should make us think a little.

The most potent forces for increasing our crops are good seed, good drainage and good tillage. Taking the first requisite as our theme this time let us see what good grain. It might be defined as large, plump, sound seed having good vitality. It pays to make a good selection. The fanning mill selection is the method in most common use and I believe it would be possible to increase our yields per acre by at least five bus. if the fanning mill method were well observed this spring. If under present methods we are producing grain at a profit, then every additional bushel we can grow must be profit.

seedsmen here and there who will clean the farmer's seed for them at about cost prices. A power mill properly adjusted will take out at one cleaning about one quarter of the seed, etc.

A VALUABLE OBJECT LESSON

Our experimental farms have given us some good object lessons on the value of selection. Take Prof. Zavitz's work at the O.A.C., Guelph, which has been conducted for a series of years, in determining the difference in yields per acre by using large, plump seed and small plump seed respectively. Every year and with all the cereals tried, including oats, spring and fall wheat, barley and peas, the largest yields have come from the use of the large plump seed. A difference of as much as 15 bushels an acre in oats being obtained. In other grains from three to six bushels per acre. Surely that would pay. These results only emphasize the value of a good fanning mill selection.

The selection by plants of good tillering and yielding capacity supplemented with a good fanning mill selection is another method of increasing the yields per acre. This is the plan adopted by the Canadian Seed Growers' Association. Now is the time for farmers to get busy and dress up their seed grain before the rush of spring work is on in caring for stock and in preparing the seed bed.

I have met a number of farmers who have tried these methods and they are prepared to corroborate what I have said. For instance, Mr. W. D. Saunders, Huron Co., Ont., said he had tried it last year with barley and while most of his neighbors had rather indifferent crops last year he had a good crop and had 600 bushels of good, Mandshouri Larley for sale.

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Start in right now on a seed grain grower. Use every care in preparing the soil. From some of our Regenerated Banner Scotch Oats and you will find that not only will you increase your yields by 10 to 30 per cent, as our last year's customers did, but also your high prices, costs no more in land, labor, horse feed, no more chinery to grow our best seed than common run-out seed, but the prices and yields obtainable are very different. We offer these oats single bush, or \$1.25 per bush, in 5 bush lots. Bags free. Send for sample, also catalogue.

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THE DAIRY FARMS COMPETITION

Prizes Ordered—This Year's Final Competition—Splendid Essays Coming—Next Year's Contest.

As announced recently in Farm and Dairy, the prizes won in the dairy farms' competition held last year throughout Ontario by Farm and Dairy, ably assisted by a committee of well-known dairy farmers, have all been ordered from the firm of P. W. Ellis & Company, of Toronto, and are being engraved.

We expect to be able to announce soon the details for this year's final competition. A meeting of the committee of management will be held at an early date when the arrangements will be completed. Certain of the leading prize winners in each of the four districts will be allowed to compete in the final competition that is to take place this year in either the West farms in the province. Either three or five prizes will be offered in this year's competition.

GET READY

Our readers are reminded that we purpose holding another competition this next year, open again to the whole province. It is likely that the Committee of Management will decide to prevent the leading prize winners last year in each district from competing in next year's general competition, although they may be given a chance to try again in the final competition that will follow, provided that they do not win first place in this year's final competition. Those farmers who did not compete last year will have another opportunity to take part in next year's competition.

It is probable that the province will again be divided into four districts as it was last year. Owing to the success of the competition that has just closed, and to the widespread interest it has created, Farm and Dairy expects that there will be a much larger entry list next year than there was last year.

OTHER PRIZE WINNERS

When we published, early in January, in Farm and Dairy the detailed scores of the eight leading prize winners in each district, we neglected to mention that a number of other farmers in each district had also been successful in winning prizes, although their scores had not been published. As it is only fair to these prize winners that their winnings shall be made known, we now take pleasure in announcing them, only regretting that we neglected to mention their names at that time. The other winners in District No. 1 were: Messrs. Bert Bulard, of Plum Hollow; and Jas. Bezzard, of Grand Hill; in District No. 2, Messrs. Wellington Boulton, of Deserestville; J. K. Moore & Son, of Peterboro, and R. W. Walker of Utica; in District No. 3, L. S. Hall & Son, of Churchville; John Baird, of Wornburn and G. Forester, of Formley; in District No. 4, W. C. Good, of Brantford; Mason Bros. of Tyrrell; Fred Howell and F. Ellis of St. George. All win silver cups.

PRIZE ESSAYS

Our readers will remember that one of the rules of the competition provided that the winners in the competition must furnish three essays on any branches of their farm work that might be asked for. These essays might be published in Farm and Dairy during the coming year, as they will be written by practical farmers who have made a distinct success of their farm work, we feel that the readers of Farm and Dairy will have a treat during the coming months reading these articles. The competitors will be asked, in most cases, to write on those subjects for which their farms scored the highest number of points. For instance, Mr. W. C. Shearer, of Bright, who stood in eighth place in the general competition in District No. 4, owing largely

to the fact that his buildings were as commodious as those of some of the other competitors, led all the other competitors in the province in the number of points he scored for freedom from disease, his farm scoring 70 out of 75 points offered for this. The judge reported that he could scarcely find a weed on Mr. Shearer's farm. On crops, as compared with all the other competitors in the province, while on farm management he tied with Mr. R. H. Harding of Thorndale and Mr. O. D. Bales, of Lansing, for only one point by Mr. G. Lathe of Goderich.

Articles by such men as these on such practical subjects are bound to be of great practical value and interest. Watch for them and tell your neighbors about them. If you have a fine farm or any of your neighbors have good farms, try and get them to enter our next competition. Tell them about it now so that they can be preparing for it.

THEY WERE THANKED

At the recent conventions of the Eastern and Western Dairymen's Associations, and of the Canadian Ayrshire Breeders' and of the Canadian Holstein-Friesian Cattle Breeders' Assn. by their directors, expressing their appreciation of the benefits derived from the holding of such competitions, and expressing their approval of the generosity of those individuals and firms whose liberal cash contributions made the holding of the present competition possible. As the generosity of these donors cannot be too highly commended we take pleasure in again mentioning their names, viz: Dr. James W. Robertson, who has an interest in agriculture is whose deep interest in the Dominion, and who gave \$250; The De Laval Separator Company, and The Empire Cream Separator Company, each of whom gave \$200; Mr. E. G. Henderson, of the Canadian Salt Company, Windsor, who gave \$200 and who for years had urged this nature; and T. Good Shapley & Muir Company of Brantford, which gave \$25.

A Wonderful Producer of Human Food

A Holstein cow owned by the Dairy Department of the University of Missouri in one year produced more human food in her milk than is contained in the entire carcasses of four steers weighing 1,250 pounds each. This statement, impossible as it seems, is not only true, but does not even fall in justice to the cow. The solids in the milk, which are completely digested and used by the body, are counted against the entire carcass of the steer which is only in part edible.

The cow that performed this feat of producing the equivalent of four steers is Prince Charlotte. In the year she produced 18,495 pounds of milk. Below is given the amount of Proteids, fat, sugar and ash contained in this milk added the amount of some substances found by Dr. P. F. Townbridge in an analysis made of the carcass of a fat steer weighing 1,250 pounds.

18,495 lbs. milk	1250 lbs. steer
Proteids.....552 lbs.....	172 lbs.
Fat.....618 ".....	333 "
Ash.....920 ".....	
.....128 ".....	43 "

The total amount of dry matter in the milk was 2,218 pounds, all of which is edible and digestible. The steer, with a live weight of 1,250

HORTICULTURE

Ontario Co-operative Fruit Movement

The Co-operative Fruit Growers of Ontario, the central organization with which are affiliated the leading local associations in the province, has this year made a step in advance in reference to the purchasing and distribution of supplies. Up to this year, the directors have simply obtained prices from a number of the wholesale houses and manufacturers and distributed these so that the local associations could write direct to these firms for their supplies. This year they have arranged with the St. Catharines Cold Storage and Forwarding Co., to purchase all of the supplies and distribute to the local associations. In this way they have been able to get lower prices, and a better quality of goods. The central association hopes in time to be able to rent or build its own warehouse and to distribute material from some central point. In the meantime, however, this year's plan is a decided step in advance.

It was also ascertained at the last meeting of the executive that it was possible to obtain a charter under the provincial Act, and the executive were instructed to arrange this matter before the annual meeting in the summer. Some of the executive hope to be able to arrange matters so as to sell the products of a number of the smaller associations this year. This will entail some system of inspection and will necessarily have to be gone into rather cautiously. There is no doubt, however, that in time the plan will be perfected and it will aid materially in the organization of smaller associations which are not generally in a favorable position to dispose of their pack. The secretary of the provincial association is P. W. Holgett, Department of Agriculture, Toronto.

San Jose Scale in Ontario

R. H. Lewis, Provincial Inspector, Hamilton

San Jose scale in this province is spreading. In most municipalities which I have visited, during the past year I have found more of the scale. What surprises me is to find such townships as South Grantham and Niagara, all in the peach belt, not having local inspectors to inspect the orchards where trees are badly infested with scale. There are about 10 municipalities that have local inspectors and all are doing good work. In North Grimsby and Saltfleet townships excellent work is being done by the inspectors and the growers are holding the scale in check by thorough spraying.

Leamington has taken up spraying so extensively that the coming spring a large number of peach trees are going to be planted. Now that the growers can buy the lime and sulphur prepared, I expect to see greater advancement in the way of general spraying of peach orchards this coming spring. Apple orchards in this locality are nearly a total ruin by the scale.

The department of agriculture is doing everything that possibly can be done. All stock in the nurseries is inspected during August and September by inspectors sent by the department. Every tree is carefully looked over, and when found with scale the trees are broken down and the nurseryman notified to take out and burn.

I visited a number of the nurseries during the past season and found the nurserymen doing all that is possible to keep the stock free from scale. The nurserymen have a good

deal to fight against. Surrounding most of our nurseries are old apple orchards and the fences with all kinds of trees growing, which are infested badly with scale and affording breeding spots for it.—The Canadian Horticulturist.

Managing the Hot-bed

(Continued from last issue)

The essentials for success in the management of a hotbed are a steady, uniform degree of heat and moisture, and the soil should at all times a few degrees warmer than the air; and the careful "hardening off" (by exposure to the air and diminishing the supply of water) of the plants before transplanting into the open air.

Simple as these may seem to be, there are many difficulties in the way of securing them, prominent among which is overheating the air under a bright sun. Without experience one would scarcely believe how quickly the temperature inside of a well-built hotbed will rise to 90 or 100 degrees Fahrenheit on a still, sunny day, even when the temperature outside is far below freezing, or how quickly the temperature will fall to that outside, if upon a windy, cloudy day the sash is left open for so little. A rush of cold air driven over the plants is far more injurious than the same amount when the air is still. Again, in cloudy weather, a bed will go several days without watering, but will dry up in an hour when sun comes on a sunny day.

The details of management must be learned by experience, but may be easily acquired by one who gives the matter careful attention, keeping constantly in mind the essentials given above.

Propagating Strawberries from Seed

W. T. Magoon, Central Experimental Farm, Ottawa

Owing to the comparatively short time from the sowing of the seed until the plants bear fruit, the growing of seedling strawberries is one of the most interesting lines of experimental work in fruit culture. If the seeds are sown immediately after ripening they will germinate in four or five weeks if the soil is kept moist, and in some cases from them will fruit the next season, if the conditions for growth the first summer are favorable. These conditions may be obtained by growing the plants in cold frames where they can be protected in late autumn and have a longer season for growth. If seed is not sown the same season as planting, it should be held over until spring, mixed with sand or in envelopes. The seed should be sown quite shallow, not more than a quarter of an inch in depth, in well-prepared soil. When the plants are large enough, they should be pricked out, about six inches apart, where they will remain until the spring following the planting of the seed. They should then be set out in the open in three feet apart each way. If the plants are grown on a large scale, it may be more practicable to transplant the seedlings directly from the seed-row to the field. No runners should be allowed to form the year before a variety is distributed, it should be fruited at least three years as often the promise of the first season is not borne out the next year. As no two seeds from a cultivated variety are likely to produce strawberries exactly alike, one may have five hundred different varieties from five hundred seedlings of one named variety which are as good or better than the best on the market is very small.

Considerable work has been done in growing seedling strawberries at the Central Experimental Farm, but as

yet no variety has been produced which was thought worthy of introduction. Of 650 seedlings which fruited in 1889, forty were saved. These have been gradually reduced in number until only six are being tested. Most of these are of very good quality, but lack other characteristics desirable in a commercial berry. In 1897, about 1100 seedlings were raised from some of the best named varieties. These were gradually reduced to 34, among which were some of great promise. In the winter of 1905-6 these were practically all winter-killed. Another lot of seedlings has been raised and set out in the hope of better success, and some very promising varieties have fruited.—Extract from Britin No. 62, on "Strawberry Culture."

Some growers imagine that they can spray only a few trees in the orchard, and not the others, and at the same time control the pests. If only a few trees in the orchard are infested

with insects, especially scale insects, or infected by disease, the entire orchard should be sprayed. Only by this means can the trouble be successfully combated.

Spraying is sometimes practised with no definite purpose in view. The operation should be definite and for some one thing or purpose. The orchardist should know what he wants to accomplish. Usually a good reason is not difficult to find. Spraying should be performed at the proper time for the most effective results in combating the various insects and diseases.

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POULTRY YARD

Poultry Industry in British Columbia

M. A. Jull, B.S.A., Poultry Expert for B.C.

Few realize the vastness of the British Columbia of to-morrow. Its many progressive industries are the backbone of the Province, and as one of these, agriculture is endeavoring to develop to as large a measure as possible a self-sustaining Province. Among the various branches of this industry there is one which is deserving of much more attention than it has received in the past. The adaptability of British Columbia for poultry raising is not questioned, nor are the profits on the capital invested too small.

Poultry-raisers realize greater profits in British Columbia than elsewhere in America in the production of commercial products. Notwithstanding this fact, over two million dollars are sent out of the province annually in the importation of eggs and poultry flesh, besides the thousand-

produce its egg laying characteristics in the offspring, at the same time maintaining the highest possible degree of vitality. Inherited stamina, fresh air, plenty of exercise and proper food are necessities if constitutional vigor is to be maintained. All of these factors must be considered when endeavoring to improve the qualities of any strains of birds.

Suggestions on Raising Ducks

E. G. Cooper, Halton Co., Ont.

In raising ducks for profit, two plans may be advisable. First, after selecting the best eggs to be hatched and the little birds have seen the light of day for the first time, care should be taken to pick out those that would be best to fatten quickly for market and those that would be best to keep growing until fall. To have about half in each division is about right.

Second, take the ones selected for forcing and put them in a pen by themselves. The necessary quarters are as follows: A warm pen, say 10x14 ft. to every 25 ducks. Provide them with a small trough of fresh, clean water daily and feed as follows: In the morning, soft feed, shorts, just wet enough to crumble. At noon, corn meal fed in the same condition.

born for table use. Kindly advise me what breed of male to use, or should I continue with the Leghorns? I would like to keep the flock white in color.—Mrs. J. L. W., Oxford Co., Ont.

You do not state how old your hens are but from the fact that you say they have been laying well other winters, it would indicate that they have seen a number of them which probably explains the thing. Old hens do not lay well in the early winter. Hens that lay well during the winter frequently lay during the early fall months and moult again during the early winter which is doubtless the case with your flock.

We have in our pens pullets hatched in March that laid during August to December, but since then have gone into moult and will not likely lay again until March or April. Your early Leghorn pullets have done the same thing. I find that in order to have a fair supply of eggs from Leghorns during the winter late April or May hatched chicks are early enough. Just as soon as your flock has finished its moult it will probably start again.

If you want a larger White bird than the White Leghorn why not try the White Wyandotte or the White Rocks. I would not advise you to cross a male of either of these breeds with your flock but would prefer getting some eggs for breeding purposes.—Prof. F. C. Elford, Macdonald College, Que.

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Ducks and Geese in the Okanagan Valley, British Columbia

Ducks are capable of returning profits, but they require to be handled carefully. Advantage should be taken of their feeding qualities in having them rushed to market while young. Photo courtesy Dept. of Agri. B. C.

and dollars that are sent abroad for breeding stock. It is quite time that something be done to modify the existing conditions and one might infer that we should be exporting produce rather than importing.

INTEREST IS INCREASING

A remarkable change has already taken place and greater interest is now manifested throughout the Province in this important industry. Fruit-growers, dairymen, ranchers and poultrymen are anxious to learn, and there is a great field for work along educational lines. The industry speaks for itself and the important question is not to foster poultry-raising, but to direct the industry through the correct channels, where maximum returns may be realized with minimum expense. The people know "why" but they want to know "how".

PRICES ARE EXCELLENT

The average number of fowls per farm in British Columbia is about 45; the average yearly production per fowl is 65. With these figures before us we can clearly see room for improvement. The urgent need is to increase the number of fowls and more particularly to increase the number of eggs from each fowl. A 65 egg hen will realize a small profit even on our high priced feeds, but the average hen in every flock should produce at least from 120 to 150 eggs a year.

The thing of importance is to breed a heavy egg laying strain that will re-

At night, shorts or bran with the same proportion of water as in the morning.

Green food should be provided in proportion as the ducklings increase in size. If milk is obtainable, it should be used instead of water in mixing with the mash.

The other birds should be provided with large runs, plenty of grass, a running creek, if obtainable. When full grown, fatten quickly with corn or peas. Green food should be given in the form of garden truck, or any kind of vegetable while the ducks are in the growing state.

Old Hens—Winter Molt

My flock of 40 well bred White Leghorns have always been splendid layers until this winter. When putting them into winter quarters they never looked more promising. Some of them moulted last July, and were all through moult before the 1st of November. A few commenced laying in November, but about the middle of December the whole flock showed signs of moulting, and now they are nearly all naked, including the early hatched pullets.

What causes them to moult twice in a year? Since the 1st of October I have been feeding them wheat, corn, oats, buckwheat with a warm mash of table scraps, shorts and bran for the noon feed. They also had all the skim milk and butter and grit always before them. The hen house is not warm, but dry, and plenty of light from south windows. I would like a bird of larger size than the Leg-

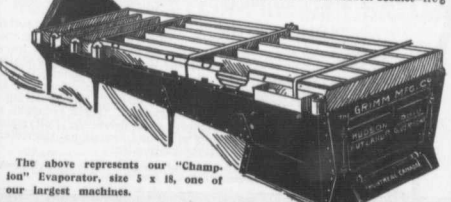
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HOLSTEINS FOR THE OTTAWA EXPERIMENTAL FARM

Hon. Sydney Fisher intimates that a Herd Will be Purchased—Stables May Have to be Re-arranged.

A herd of Holstein-Friesian cattle is likely to be established soon at the Experimental Farm, Ottawa. Assurance to this effect were given last week by Hon. Sydney Fisher, Dominion Minister of Agriculture, a deputation that had been appointed to wait on him by the Canadian Holstein-Friesian Cattle Breeders' Association. Hon. Mr. Fisher gave the members of the deputation a pleasant interview. He stated that he had been watching the great progress being made by Holstein cattle, and intimated that while it might necessitate the re-arrangement of the barns at the Experimental Farm, he believed such could be effected and a herd of Holstein cattle installed there.

The members of the deputation were Messrs. Malcolm Schell, M.P., Woodstock; J. E. K. Herick, Abotsford, Que.; D. C. Flatt, Millgrove, and R. F. Hicks, of Newtonbrook. Mr. Schell is not only an enthusiastic Holstein breeder, but he is chairman of the Committee of Agriculture in the House of Commons, and his presence was a source of strength. Mr. Allen, whose constituency adjoins Hon. Mr. Fisher's, assisted the deputation in every way possible.

SUBJECT INTRODUCED

The object of the deputation was explained by Mr. Herick, who said, "Owing to the important position you hold, as Minister of Agriculture, we presume, Hon. Mr. Fisher, that you

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are aware of the great records Holstein cattle have been making in the production of milk and butter as well as of their growth in popularity throughout the country. The members of our Association have often wondered how it is that Holstein cattle are not kept at the Experimental Farm at Ottawa. This matter was brought up at our last annual meeting and this deputation was appointed to see you. Our association has some 800 active members and represents about 5,000 Holstein cattle breeders. We are the strongest Association of the kind in Canada, having cash in the bank and municipal bonds to the value of \$10,000.

Hon. Mr. Fisher. "Have you got enough funds to present me with a good herd of Holstein cattle?"

(Laughter.)
Mr. Herick. "Three years ago," continued Mr. Herick, "we organized a branch for the Province of Quebec with 30 members. Yesterday we held an annual meeting of this branch and had over 100 in attendance."

Mr. D. C. Flatt. "The Holstein cow has demonstrated her superiority as a dairy animal in dairy tests of every kind. At sales Holsteins sell for higher prices than cattle of any other dairy breed because our farmers have come to recognize their value. The question has often been asked how it is that this great breed of cattle is not represented at the Experimental Farm and we have never had a satisfactory answer to it."

THE REASON

Hon. Mr. Fisher. "I have been asked this question before. The reason is because the barn is so arranged that we have not room for them. We keep four breeds there now. I have never liked the arrangement of the barn. It is laid out in four sections each with a double set of stanchions. One breed

of cattle is kept in each of the four sections. Were we to introduce another breed of cattle it would necessitate our breaking up the divisions and mixing the arrangement of the breeds to some extent, or we would have to keep one of the breeds of in another part of the barn. All the breeds have been kept for some time except the French-Canadian cattle which I introduced myself. I would not like to do away with any of the breeds that are there now."

Mr. Fisher. "Our Dominion is a big one. If necessary could not the barn be re-arranged to provide for the introduction of Holsteins?"

Hon. Mr. Fisher. "That would entail the re-building of the barn."

Mr. Flatt. "What breeds do you keep there now?"

Hon. Mr. Fisher. "Milking Short-horns, Guernseys, Ayrshires and French-Canadian."

Mr. Flatt. "Could you not keep a few less of each of those breeds and thus make room for the introduction of a few Holsteins?"

Hon. Mr. Fisher. "It would not look well if we had to keep five breeds of cattle in the present four divisions of the barn. There is a wing to the barn, however, which it would be possible for us to fit up so that we could keep some Holsteins in it. This will not be very satisfactory, but may do."

WILL BE PLEASSED

Mr. Herick. "Under the conditions we will be well satisfied with such an arrangement. We are satisfied that if Holsteins are once introduced at the Farm they will be able to take care of themselves afterwards. This breed has run the gamut of unfavorable criticism as no other breed has and in spite of it has won out, thereby proving its merits."

Hon. Mr. Fisher. "I am afraid that the price you are asking for the Holsteins will make it difficult for me to obtain a good herd."

Mr. Flatt. "It would be a great mistake for any Holstein breeder to sell the cream at a poor animal; such action would hurt the breed and would hurt the breeder."

Hon. Mr. Fisher. "Still it is going to be necessary for us to use great care in selecting the animals. We have never paid fancy prices in purchasing stock for the Farm, and the animals we purchase must stand the tubercula test. Of course, we want only good animals. I think that it can be arranged so that the stables that we can use for us to keep eight or ten females and a good bull."

The members of the deputation all agreed that this would be thoroughly satisfactory. Mr. Flatt thanked Hon. Mr. Fisher for the reception that he had given the deputation, and stated that he had had occasion to wait on Hon. Mr. Fisher on several occasions on behalf of the farmers and had always found him anxious to do whatever he could to help the farmers.

LARGE PROFITS

Mr. Hicks told Hon. Mr. Fisher that Mr. Herick had recently returned from a visit to Boston where he had seen the noted herd of Holsteins owned by the Field brothers. Although immense sums have been spent in the establishment of this herd it is paying 20 per cent. profit. Hon. Mr. Fisher replied that it was no wonder then that Holstein breeders were getting wealthy. Any farmer whose farm could pay 20 per cent. profit was a good object lesson for others. "These city people who complain about the high price of farm products," said Mr. Fisher, "should leave the cities and go out in the establishment of farms, that when I hear farmers always tell them that the farmers are charging too much for their products. If they think so, they should become farmers themselves."

During the course of the interview, Hon. Mr. Fisher assured the members of the deputation that he personally had no objection to Holstein cattle, that he appreciated their great merits as a dairy breed, and that being a dairyman himself, he was anxious to assist the dairymen of the country in every way in his power. He had always found it his duty to be willing to assist him in helping the farmers. This concluded the interview.

HISTORY OF THE AGITATION

Seldom has an agitation on behalf of the farmers met with a more cordial reception from the Government. It is only a few months since Farm and Dairy pointed out editorially that Holstein and Jersey cattle were not kept at the Experimental Farm, and urged the two cattle breeders' Associations interested to petition the Government to establish a herd at the farm. The suggestion met with a hearty response from the Holstein breeders who took the matter up at their annual meeting, and it was appointed a deputation to wait on the Hon. Mr. Fisher.

Later, Holstein cattle breeders in Mr. Fisher's own constituency signed a petition and forwarded it to Mr. Fisher, asking him to act favorably upon the suggestion. Last week, at the annual meeting of the Quebec branch of the Holstein Cattle Breeders' Association a resolution was passed urging the Government to establish a herd at the farm. The announcement, therefore, that Hon. Mr. Fisher purposes taking action in the matter is one that will be welcomed by Holstein breeders all over Canada.

Quebec Holstein Breeders

The annual meeting of the Quebec branch of the Canadian Holstein-Friesian Cattle Breeders' Association was held last Thursday at the home and farm of Dr. L. de Lot Harwood, at Vaudeville, Que. The President, Mr. J. E. K. Herick, of Abotsford, Que., presided. Mr. Herick pointed out that the branch was started about three years ago, had only some 30 members. It now has about 125. Its mission was to educate the people of the Province of

(Continued on page 22)

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Criticism on a Recent Issue

Editor, Farm and Dairy—I have been much pleased with Farm and Dairy, and although not actively engaged in the Dairy business, I am farming in a small way, devoting most of my energies to growing fruits and vegetables. I have seen many good things in your paper. Your issue of Feb. 24, is before me. It is very interesting, but I would like the privilege of making a few comments on some of the articles it contains.

On page 6, I notice a remark made by A. D. Harkness about feeding mangels to dairy cows, in preference to feeding turnips. Now I have a great deal of respect for Mr. Harkness' opinions, knowing him as I do to be a successful, up-to-date farmer, but I wonder why so many people are opposed to feeding turnips to dairy cows. I have heard a great many say that they cannot be fed without contaminating the milk. Now sir, I believe every dairyman about Ottawa feeds turnips, and lots of them, and of them from 10 to 12 acres every year, and according to the Milk Commission's report Ottawa has the finest milk supply of any city in the province.

FEEDING TURNIPS TO COWS

One instance I have in mind at present, is a man who milks about 40 cows, winter and summer, who feeds white turnips, by the wagon load, in the fall, while the cows are on the grass, simply scattering the turnips as they are pulled, and letting the cows eat them off the ground about the pasture. Then when the cows go into the stables he has a large quantity of Swede turnips that he feeds during winter. His milk is skimmed, and the cream sold to confectioners in the city, and there was a turnip flavor in it, I doubt if he could sell it. The Ottawa Dairy Company's milk, which probably is the best in Canada, is produced all winter, and through the autumn very largely from turnip fed cows.

But the turnips are stored away from the cattle, and are red after the cows are milked, in small quantity to begin with, and the quantity gradually increased, and the same amount fed at each meal and at the same time each day.

THE POTATO SITUATION

The remarks made by Mr. Leavens on "The Potato Situation" are much to the point. We certainly grow too many varieties. If we would be guided by the reports of the Experimental Farm, and plant only one early and one late variety such as most highly recommended by them, and stick to these varieties till they have recommended something better, we will have much better success in potato raising, than we will by listening to the stories of agents of nursery firms, and so-called seed growers, who sell a dozen varieties of potatoes out of the same bin, the greatest thing about which is usually the price. I know something of this matter myself, having bought 10 lbs. of each of nine so-called new varieties of potatoes for \$9.00, and after several years of carefully watching their growth, I concluded that I

had the old Maggie Murphy, Carman No. 1, and one other I do not know the name of.

The Editorial on "We need Fewer Dogs," is a splendid one. I will admit that it may be advisable for a farmer to have a good dog, but he should never be allowed to see the cows. From my experience, I am fully convinced that the dog who is making most money out of his cow is the one who has no dog, or at least, if he has one, he keeps him away from the cows. In one sense, I would welcome an outbreak of Rabies in Eastern Ontario, if it would tend to exterminate a lot of our useless dogs. I estimate that Ontario has room for about 500 dogs, but Ottawa alone, has, I believe, over 2,000. All over the country we see people too poor to feed their families decently, keeping two or three dogs, half starved, to pillage from their neighbors.

THE EXPERIMENTAL FARM

In the lower right hand corner of page 12, you ask why the Experimental Farm at Ottawa is not more popular. Well, Mr. Editor, I have had a very close relationship with the Experimental Farm for about 20 years, and my answer to your question is that, first, the officials on the Farm, while most courteous and obliging, have not seen fit to pander to the wishes of every person who has offered them suggestions, but have gone along making careful experiments with a very efficient staff, and reporting the results of these experiments for the benefit of the people, many of whom have not tried to profit by these experiments. As an instance, I was in conversation with a man yesterday who has a farm over in Quebec, and who has bought 250 apple trees to plant next spring, and most of them such varieties as Baldwin, Ontario, Gano, and Wismer's Dessert, which are of no use in his climate. He lives within 100 miles of the Experimental Farm, is a prominent real estate agent of Ottawa, an intelligent and successful business man, but in place of doing as an inexperienced man should do, simply phoning out to Mr. Macoun at the Farm, for a list of varieties suitable to plant in his locality, he took the advice of agents who know nothing about fruit growing, and has bought a lot of trees that will winterkill the first winter they are in, and he will naturally sour on fruit-growing, and give it up, saying there is nothing in it.

POPULARITY OF THE C.R.F.

Another reason why the Experimental Farm is not more popular, is the fact that the majority of farmers, through the surrounding country call it the "Model Farm," and because it is not a paying proposition as a model farm, they are not willing to pay expense to the country. They look upon it from the wrong view point. It is not a Model Farm, and was never intended for such. It was started, and is being maintained, at considerable expense, to experiment in feeding cattle, in growing crops, in variety tests, of grain, fruits, vegetables and flowers, etc., and it is up to us, as citizens of Canada, to avail ourselves of the knowledge at our disposal from their tests, and quit spending our money and time in efforts to grow undesirable and unreliable varieties of fruits, grains, grasses, etc. I consider that the experiments carried on at the Experimental Farm have been worth thousands of dollars to me, in fitting me for my business.

You say that the Staff does not get in among the farmers as it should. I prefer to put it that the farmers do not get in with the staff on the Farm as they should. We see Mr. Grisdale's articles in all the agricultural papers, we hear him from his public platforms and believe him to be a very capable man, fully fit for his position, and we have the privilege

of visiting his fields during summer, and seeing the fruit of his work and it is our loss if we do not do so.—W. J. Kerr, Carleton Co., Ont.

Tannery Refuse as Fertilizer

I can get a quantity of tannery refuse, which appears to consist of hair, scrapings of hides, salt, lime, etc. How much should I apply per acre, and for what crops is it most suitable? Would it be best mixed with farmyard manure or with earth? My land is light sandy soil. I grow cucumbers and cauliflower, also root crops, corn and grain.—J. W. P., York Co., Ont.

As the soil is sandy I should not advise the questioner to apply the materials mentioned in this letter. In the first place, I may say that hair and the scrapings of hides contain, it is true, some nitrogen, but the nitrogen is an insoluble form, and, secondly these materials do not decay very easily in the soil. Salt would be of no service on the light, sandy soil, and, therefore, the only constituent which would be beneficial is the lime. This could be secured cheaply and in some other form than that just mentioned. The hair and the scrapings of hides would on this

land, I feel sure, open it up and thus permit it to dry out too quickly in a dry season, and I am even inclined to believe that on the whole the farmer would not have as good a crop by the application of this material on such a soil as he would without it.

Root crops require large quantities of nitrogen and phosphoric acid. Corn and grain also require nitrogen, phosphoric acid and potash. These constituents are not supplied in the considerable quantity by the materials mentioned by your correspondent. If these materials are to be used at all, they should certainly not be mixed with the manure before the time of application, as the lime would react with manure, thus liberating ammonia.—Prof. W. P. Gamble, O.A.C., Guelph.

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OF OVER 40 HEA HOLSTEIN-FRIESIAN CATTLE At MADOC, MARCH 25th, 1910. Including the great bull, SARA JEWEL HENGERVELD'S SON, whose dam has an E.O. butter record. In 7 days of 28.12 lbs.; in 30 days of 110.18 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. Catalogue will be ready by March 1, 1910. Positively no reserve. Stages connect with C.P.R. at Ivanhoe and C.O.R. at Eldorado for Madoc, and will deliver on the G.T.R. at Beaton. Inquiries and orders for tickets, and arrangements are complete for transportation from G.T.R. station to Madoc. Col. D. L. PERRY, Columbus, Ohio, J. A. CASKEY, Prop. Madoc, Ont. Auctioneer Cheap Rates on All Railways

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FARM AND DAIRY

AND RURAL HOME

Published by The Rural Publishing Company, Limited.

FARM AND DAIRY is published every Thursday. It is the official organ of British Columbia, Manitoba, Eastern and Western Ontario, and Bedford, Quebec. Dairymen's Associations, and of the Canadian Institute of Agriculture, and Jersey Cattle Breeders' Association.

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The paid subscriptions to Farm and Dairy exceed 5,000. The actual circulation of each issue, including copies of the paper sent subscribers who are not slightly in arrears, and sample copies sent from 9,000 to 10,000 copies. No subscriptions are accepted at less than the full subscription rate. Thus our selling price does 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.

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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 adopt to our columns only the most reliable advertisers. Should any advertiser cause us to be dissatisfied with the treaters, we will investigate the circumstances fully. Should we find reason to believe that any of our advertisers are un-reliable, 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. We include in all our letters to advertisers the words, "Published in Farm and Dairy." Complaints should be sent to dissatisfaction has been found.

FARM AND DAIRY

PETERBORO, ONT.

THE GOVERNMENT SHOULD ACT

So many foolish requests for assistance in one form or another are made to the Ontario Government that it is refreshing to hear of one like that made recently by the united Counties of Northumberland and Durham for aid in the reforesting of the thousands of acres of waste land in their united Counties. Not long since the case was reported of a deputation, including several members of the local legislature, that waited on the government to ask for a paltry grant of \$50. One would think that the members of such a deputation would feel like hanging their heads in shame to belittle themselves in such a way.

In the case of the united Counties of Northumberland and Durham, the situation is utterly different. The situation that confronts the united counties is too large a one to be dealt with effectively by a purely local body like a county council. Every year the problem of how to deal with the waste land in these counties has been grow-

ing more acute as the area has extended. During the past few years scores of farms have been buried under blow sand. Unless action is taken quickly scores of additional farms will suffer the same fate within the next few years.

As this waste land, for the most part, is on a watershed, in which streams take their rise, the result of these conditions has been to dry up many of these streams, and thereby, injuriously affect thousands of acres of land in fertile districts adjoining.

It will cost from \$50,000 to \$100,000 to re-forest and take care of this land until the timber becomes marketable in size. If the work is to be done successfully, it is essential that it shall be undertaken in a systematic manner, and that the policy followed shall be continuous in its nature. This can be done best by a regular forestry bureau under government control which will be free from dictation by local interests. This is why it is not practical for the Counties' Council to undertake the re-forestation of such a large area of land. The Counties' Council recognizes this. It recognizes that the Government can obtain the money required at lower rates than the united counties can and that is why the Council has asked the government for assistance in this large problem.

The Council has practically asked the Government to simply loan the money that will be required to carry out the work of reforesting this land. It has offered to pay the interest on the money while the timber is growing, and ultimately to pay back the principal. Thus, the government will not be put to one dollar of expense. Was ever a more reasonable request made of a government? The government's own forestry expert, Dr. Fernow, has pronounced the scheme thoroughly practicable. He has shown that exactly the same principle has been followed in France and Germany. Here, then, is a chance for the Ontario Government to help a worthy cause. It is a form of assistance that the people have the right to expect their local governments to extend.

RIGHT METHODS IN CREAM TESTING

Farm and Dairy, in an editorial published January 13th, drew attention to the fact that the practice of using the pipette for making the Babcock test, as followed generally in creameries, is strongly to be condemned. Unlike milk, the specific gravity of cream varies so much that the testing of cream by the use of a pipette is wholly unreliable. The editorial in question has created considerable discussion. It develops that creamery men are willing to adopt the scales in place of the pipette for measuring samples of cream, which samples are to be used in determining the percentage of fat in the cream as furnished by their individual patrons, provided it is shown that such a move would be in the best interests of the business.

Most States of the American Union now make the requirement that in making tests of samples of cream for which any person is to pay on the basis of the amount of butter fat contained therein, these samples shall be weighed on scales sensitive to one-tenth gram, at least. Dr. C. A. Pablow, of Cornell University, commenting upon this question, says that in most States it is considered a misdemeanor punishable by a heavy fine to distribute money for cream tested by the use of a pipette for measuring samples.

Wisconsin in her dairy laws requires that cream shall be tested by weight, the standard unit for testing being 18 grams. J. Q. Emery, Dairy and Food Commissioner for the State, writing to Farm and Dairy states that the law has been in operation since 1903 and that scales are now exclusively used for the purpose of testing; furthermore that the law has proved an advantage in that it gives patrons their just dues.

Some Farm and Dairy correspondents have advanced the claim that the displacing of pipettes by scales will not cure all the evils of the creamery business. No one expects that it will. The whole path of cream testing is full of possible sources of error. And the method so largely in vogue, that of using pipettes, is one of the worst. According to Dr. Pablow a difference of nine per cent. is possible in samples measured and weighed. It would seem therefore that the only proper thing to do is to adopt the scales in our creamery work. Further and convincing evidence of the need for using the scales, rather than the pipette, is given on the creamery page of Farm and Dairy this week. The tables presented show a difference in samples measured and weighed of as high as seven per cent; furthermore that the per cent. of fat as determined by the Babcock method, where the amount taken is weighed, is practically identical with that determined by the chemical method, thus vindicating the Babcock test (if such were needed) and proving it to be accurate when properly conducted.

The errors in conducting the Babcock test with the pipette as a means of measuring has become a serious matter. If the creamery is to advance as it should and if patrons are to be dealt by justly, we must resort to a more accurate means of determining the per cent. of fat in cream—the Babcock test in which the gravimetric method in determining the amount of the sample is used.

MILK VS. BEEF

Not long since, an admirer and advocate of the beef animal was inclined to doubt the statement of a Farm and Dairy representative, that in comparison beef and milk would stand two to one in favor of the dairy cow as a producer of human food, reckoning solids only. Our representative wishing to be well within the average and speaking of hand put the ratio two to one. In reality it is higher. Elsewhere in this issue is

published the record of one cow owned by the dairy department of the University of Missouri. Her record many times doubles that of the best record in any steer. In one year, this cow produced more human food in milk than is contained in the complete carcasses of four steers weighing 1,250 lbs. each.

In the light of such facts, is it any wonder that dairying is becoming more and more popular and that as the price of land advances dairying is resorted to more and more.

A WISE RECOMMENDATION

The Canadian Commission of Conservation, which has Hon. Clifford Sifton as its Chairman, and Dr. Jas. W. Robertson as one of its officers, is taking its work seriously, and since its start has made an excellent impression. Recently the following resolution was adopted by the Commission: "That in future no unconditional 'titles to water powers should be given, but that every grant or lease 'of powers should be subject among 'others to the following conditions: "1st. Development within a specified time.

"2nd. Public control of rates.

"3rd. A rental with the power to refuse same at a later period."

In harmony with the foregoing resolution the Commission has taken a strong stand against the proposition to dam the St. Lawrence River at the Long Sault, or to any similar proposition involving the construction of a dam across the St. Lawrence.

We are in great need of an organized body such as the Conservation Commission to protect the rights of the people. Practically all of the great fortunes that have been made during the past century in both Canada and the United States have been acquired through securing the control of monopolies in one form or another, thereby enabling a few men to squeeze the public for their benefit. A favorite form of monopoly has been the control of water powers. If the Conservation Commission can succeed in preserving the rights of the public to their water powers it will save hundreds of millions of dollars to the people of Canada. As farmers, we should back up every public movement of this kind to our utmost. The resultant benefits will flow back to us, directly and indirectly, through many channels.

ANALYSIS OF SMALL SEEDS

One cannot exercise too much care in making a selection of the small seeds, grasses and clovers. It is an easy matter to overrun a farm with various forms of noxious weed life obtained in grass and clover seeds. Many of these weed seeds to the unpractised eye are difficult of detection. In the past we have unwittingly overlooked weed seeds that in after years have resulted in veritable plagues and have caused much loss.

Machinery is now provided whereby one can have an examination made of seeds, free of cost. Samples of seed sent to the Botanical Department of the Ontario Agricultural College,

Guelph, or forwarded to the Seed Branch, Department of Agriculture, Ottawa, will be analyzed and reported upon and through this means we may know just what is contained in a given sample of seed. If you would reap the benefit of this service, get samples early of the seed you intend to purchase and have an examination made. Then buy accordingly.

PUBLISHER'S DESK

PIGS ARE POPULAR

No letter evidence of the number of farmers that are going back to hog-raising as a result of the higher prices being paid for pork could well be given than is furnished by the large number of clubs of subscriptions Farm and Dairy has secured during the past few months from parties desiring to win some of the pure-bred young pigs we have been giving away for seven new subscriptions. The number of orders received has been so great that during the past few months we have had serious difficulty purchasing the necessary stock from the breeders.

Breeders report to us that the general demand has been so keen that most of them are sold out. In consequence of this demand most of the breeders have advanced the prices that they have been asking for their pigs. The result is that Farm and Dairy has been forced to pay more for the pigs that it has purchased, and we are, therefore, unable to continue our offer to give a pure-bred, young pig for only seven new subscriptions. Hereafter we will have to ask our subscribers to send us nine new subscriptions before we will be able to furnish them with one of our pigs. It will not be long before the spring litters will be ready for shipment, after which we expect to be able to fill our orders more promptly.

OUR ILLUSTRATIONS ENJOYED

Every now and then we receive letters from readers expressing their appreciation of the clearness of the illustrations that appear in Farm and Dairy. We are pleased to find that our illustrations are enjoyed because it costs us several thousand dollars more a year to use the fine quality of paper on which Farm and Dairy is printed than it would to use a cheaper grade. The illustrations we have been publishing of the homes of some of our prize winning farmers appear to have been especially enjoyed, although our other illustrations have also attracted favorable comments. Recently Mr. J. A. McVaters, the President of the Owen Sound Creamery, wrote us as follows:—"You are certainly deserving of credit for the very clear-cut illustrations which appear regularly in your paper. The outline of "Pleasant View" Creamery that appeared on the front cover of your issue of February 17th, seems quite equal to that of the photograph." Any of our readers who have good photographs of farm scenes are invited to send them to us as we will take pleasure in publishing them if at all possible.

Special Good Farms Competition

In addition to the dairy farms' competition conducted for the Province of Ontario last year by Farm and Dairy two special competitions were held, open to all classes of farmers. These competitions were confined, one to Peterboro county, and the other to Durham county. The winners in the Peterboro county competition were announced some time ago, but their scores were not published in detail. The winners in the Durham county competition are herewith announced

for the first time. They are published in detail. Each of the farmers whose scores are published herewith are prize winners. Mr. H. Bappte, of Springville, who entered for the Durham county competition, although sure of winning a prize, stopped out because of special work on his farm which prevented him from taking part.

The farms of Mr. Smith and Mr. Baker in Durham county were found by the judges to be exceptionally fine. Either of these farms compare favorably with the best farms in the province. The outstanding feature on Mr. Baker's farm was the live stock. His herd of Shorthorn cattle as well as his horses, sheep, and swine are not only well bred, but well kept. The farm itself is also strong in all departments, its freedom from weeds being particularly noticeable. Mr. Baker has given considerable attention to public matters, and for a man who has given so much time to the public, has made a remarkable success of his farm.

The farm of Mr. Smith, and of his sons who work it with him, is a treat to visit. It is a model farm in almost every sense of the word. Mr. and Mrs. Smith started on the farm some 25 or 30 years ago with practically nothing. They have not only paid for their farm, and bought one or two adjoining farms, but they have erected buildings that alone are assessed at \$11,000. It has all been made out of the farm. Several issues of Farm and Dairy could easily be devoted to describing features of the farms of both Mr. Smith and Mr. Baker. Before long we expect to be able to give our readers an extended description of both of these farms with illustrations. Mr. Tamblin's farm, which won a silver medal in the competitions held many years ago, has a number of strong points that enable it to easily surpass a large proportion of the farms throughout the country.

THE PETERBORO COUNTY FARMS

Most of the farms in the Peterboro county competition have already been described in part in Farm and Dairy. A description of Mr. Brethen's farm and methods is given on page 3 in this issue.

The scores of the prize winners in the Peterboro and Durham County competition are published on page 4.

Leaders in Forestry Movement

The members of the deputation which forms the subject of our front cover this week, reading from left to right are: A. A. Colwell, Newcastle; J. J. Preston, M.P.P.; Bethany; Alex. Wight, Bowmanville; Joseph Hickson, Mt. Horeb; Herbert Rosevear, Fort Hope; Warden A. L. Hoyes, Barford; James Byers, Purple Hill; Alfred Sherwin, Rosemeath; John Henry Devitt, M.P.P.; Blackstock; C. J. Thornton, M.P.; Kirby; A. A. Powers, Orso; Daniel McColl, Wooler; R. S. Caldwell, Osga.

The Grain Growers of Saskatchewan who met in convention at Prince Albert recently passed a strong declaration for free farm implements, which was incorporated in a resolution as follows: "Whereas Canadian machinery can be purchased at from ten to thirty per cent. less in Great Britain than in the Canadian west, and whereas we believe, such conditions are caused by the protective tariff existing at the present time, therefore be it resolved that immediate steps be taken regarding the said tariff so that the home purchaser may at least be able to purchase as cheaply as the outside world."

I am more than pleased with the pig that was sent me by Farm and Dairy from Mr. W. J. Elliott, of Coleman, Ont., for securing a club of seven new subscribers to the paper.—Geo. Whetter Valerita Co., Ont.



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SCARCITY OF PIGS

forces us to change our "Pig" Subscription Offer. Hereafter we shall require a club of 9 (NINE) new yearly subscriptions to secure a pure bred pig, free, as a premium. We are unable to fill present orders for pigs promptly, and find that we cannot now afford to give a pig for a club of only Seven.

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FARM AND DAIRY

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Not to be Tolerated

Miss Laura Rose, Dairy School,

In Farm and Dairy, Feb. 17th, this statement, by a creameryman of Victoria Co., Ont., stood out prominently. "I would rather have dirty cooled cream than clean, uncooled cream in creamery work." As one reads the lines the sensation produced was like getting a hard knock backward when you thought you were making fairly good progress toward better conditions.

There should be no preference given whatever to dirty cream, whether it be cooled or uncooled. Surely after all that has been taught, written and legislated for, in regard to raising the standard of our dairy products by producing cleaner milk, such a statement comes as a shock.

Cleanliness is always first, then comes the cooling. They go hand in hand and cannot be separated and comparisons between cleanliness and coolness should not be made. Dirty milk is such a serious thing, no concession should be given it on any ground. We know the need and value of quick and thorough cooling, but cleanliness comes before, afterwards set at all times.

Accurate Determination of Fat in Cream

It has been shown in the columns of Farm and Dairy in recent issues that the volumetric system (pipette) of determining the amount of the sample of cream for the Babcock test is unreliable. The pipette does not do justice to rich cream. It puts a premium on poor cream. Many of the States in the American Union have passed laws making it unlawful to use the pipette in cream testing. Section 33 of the Agricultural Law of New York State provides, among other things as follows:

"No person or persons receiving or purchasing milk or cream upon the basis of the amount of fat contained therein, shall credit any patron or patrons delivering milk or cream thereto with a greater or lesser percentage or average percentage of fat than is actually contained in the milk or cream so delivered. The commissioner of agriculture or persons em-

ployed by him for that purpose may at any time assist in making tests at any factory for the purpose of determining the efficiency of tests usually made at such factory. All persons using other than standard bottles or acid which is not of the required strength to accurately determine the amount of fats in milk or crediting any patron or patrons delivering milk or cream with a greater or lesser percentage or average percentage of fat than is subject to the penalties prescribed by section fifty-two of this article and shall be guilty of a misdemeanor."

THE PIPETTE CONDEMNED

Those creamerymen and others who are in doubt as to the advisability of using the scales, and who deem the pipette quite accurate enough to meet all requirements, should give careful study to the following extract from a circular sent out by the New York State Department of Agriculture:

"For the purpose of determining the accuracy of the methods used in ascertaining the amount of fat in cream the Commissioner of Agriculture has caused a series of experiments to be performed at the New York State College of Agriculture, Ithaca, N.Y., by our chemist connecting therewith upon fifteen different samples of cream with the results as set forth in the following table:

PERCENTAGE OF FAT IN CREAM.

Fresh Sweet Cream.				The Same Cream Preserved with Corrosive Sublimate.			
Babcock Method.		Differ- ence.	Chemical method.	Babcock Method.		Differ- ence.	Chemical method.
Measur- ing 17.5 C.C.	Weight- ing amount taken.			Measur- ing 17.5 C.C.	Weight- ing amount taken.		
1	14.30	14.50	.20	14.00	14.30	.30	14.49
2	20.20	20.60	.40	20.00	20.60	.60	20.20
3	27.00	28.20	1.20	28.27	28.20	-.07	28.30
4	33.00	34.60	1.60	34.96	33.00	-1.96	35.00
5	38.40	40.00	1.60	39.84	38.40	-1.44	38.88
6	42.20	44.50	2.30	44.04	42.20	-1.84	42.24
7	48.50	52.00	3.50	51.93	47.80	-4.13	45.24
8	57.00	63.50	6.50	63.60	57.00	-6.60	63.84

PERCENTAGE OF FAT IN CREAM.

Babcock Method.		Differ- ence.	Chemical method.	Babcock Method.		Differ- ence.	Chemical method.
Sample No.	Measuring 17.6 C.C.			Measuring amount taken.	Sample No.		
1	32.20	34.00	1.80	33.97	32.20	-1.77	32.20
2	37.00	39.20	2.20	39.02	37.00	-2.02	37.00
3	46.50	50.50	4.00	50.42	46.50	-3.92	46.50
4	20.50	22.50	2.00	22.41	20.50	-1.91	20.50
5	31.00	33.00	2.00	33.19	31.00	-2.19	31.00
6	41.50	45.80	4.30	45.66	41.50	-4.16	41.50
7	49.20	54.80	5.60	54.93	49.20	-5.73	49.20

"It will be noted from the results indicated by the above figures that in each instance the result obtained by the weighing or gravimetric method of determining the amount to be tested is nearer the percentage and the results produced by chemical analysis than the results produced by testing the other sample, the amount of which was determined by the measuring or volumetric method. It would, therefore, seem that in order to comply with the requirements of persons making the tests for butter fat in cream, to determine the amount to be tested by the gravimetric or weighing method rather than by measuring. It seems that this is the most accurate way now known and its use, therefore, is imperative under the statute above quoted, which provides that credit shall not be given for more or less butter fat than is actually contained in the cream. Such a requirement necessitates the most accurate methods known.

"All persons are, therefore, hereby advised, in making tests of samples of cream for which they are to pay on the basis of the amount of butter fat contained therein, to use the gravimetric method of determining the

amount of sample.—Geo. L. Flanders, First Assistant Commissioner of Agriculture and Counsel."

In view of these facts what should our dairymen do in this matter? What do you think about it?

Returns from the Creamery

When milk is separated on the farm, what is the price paid per cent. for the butter fat in the cream delivered at the factory? How much would it net per 100 pounds of milk?—V. A. Antevy, Ont.

The price paid for cream at the creamery depends upon the market price of butter and further upon the system in vogue at any particular creamery for dividing the proceeds. The charge for making varies from three to four cents per pound, sometimes more. After the cost of making is deducted, the remainder should go to the patron. In an average season, the price received per 100 pounds of milk would vary from 85 cents to \$1.30, or more, according to the richness of the milk, the state of the butter market and the toll exacted for making.

At the recent Bedford District Dairymen's Convention, held at Cowansville, Que., Preston Foster announced that the Government would send men to each of the counties in that district to take up more in detail the problems of handling milk and feeding cows,

and that these meetings would be thoroughly advertised through the press, and would probably be held at Bedford, Knowlton and Waterloo.

If creamery owners and makers are going to insist on their patrons sending a first grade cream they must see to it that they test and handle this cream in the very best way possible.

Is Well Repaid

Our pig offer is proving so popular that we are unable to supply all the pigs requested as premiums. We would like to secure several pure bred pigs of the standard varieties, as per our advertisement in another column.

A subscriber wrote me recently as follows:—"I received the pig sent me by Farm and Dairy from Mr. W. F. Elliott, of Coleman, Ont., in return for securing a club of seven new subscribers. I am much pleased with it and feel well repaid for my efforts in securing the new subscriptions.—Horton Johnston, Norfolk Co., Ont.

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

APRIL 7

IS THE DAY

Our Big Dairy Special Will Appear

ARE YOU going to take advantage of the EXTRA CIRCULATION this number will give you as an ADVERTISER to reach the best class of Farmers in the country at a time when they need your goods, and you want to sell them?

If you would, drop us a card requesting space, at the same price as our weekly edition (7 cents per line) and we will reserve it for you, but don't wait until the last minute before making up your mind. The quicker your card arrives, the better location you will receive.

THIS SPECIAL NUMBER is for Dairy Supplies, Gasoline Engines, Silos, Cream Separators, Roofing, Fences, Stock Foods, Cattle Remedies, and anything that a Farmer can use at this time of year.

Don't Forget—**HE WILL BUY THEM, BECAUSE HE NEEDS THEM.**

April 2nd is the last day on which we can receive copy.

FARM AND DAIRY - - PETERBORO, ONT.

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.

Farm and Factory Water Supplies*

Dr. W. T. Connell, Kingston Dairy School

A subject to which considerable attention has again been given is that of water supplies at factories and on farms. During the past year over two-thirds of such samples submitted have proven to be infected with dangerous forms of bacteria. I class as dangerous those forms which can be traced as originating from the intestinal discharges of animals or men, or in the case of factories as coming from factory drainage or whey. Of course it must be remembered that I am only sent samples which have fallen under suspicion, so that my figures do not represent the condition of the farm and factory wells in Eastern Ontario. Still I think I can state that quite one-third of the wells at farms and factories are so situated as to be open to pollution from surface drainage or from seepage from manure piles, stables or pig-pens, or from house wastes.

I find it a difficult matter at times to convince factory owners, etc., of the correctness of the reports, and have often had hung at me when my report has condemned a farm house supply, that the water has been used for 20 or 30 years without falling under suspicion, hence my analysis must be wrong. Still the sight and smell of polluting material falls to convince some.

PERSONAL EXPERIENCE

I can best illustrate this by telling what I myself saw this past season at a factory shortly after it had been rebuilt on site of previous one. The factory was quite well situated on a sandy ridge and very little care would provide good drainage and with that a good water supply could be assured. The floor of the make room was of

*Part of an address before the last convention of the Eastern Ontario Dairy men's Association.

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coment and there was a gutter which served as they drain, and as drain for washings (a very common and very bad system from a sanitary standpoint). This gutter connected through the wall with an elevated, open trough, with very frail supports which ran to they tank some 30 feet away. There was no outside drain and the connection between the gutter and open trough permitted considerable splashing.

Now the well was within 12 feet of the connection and inside the engine room which covered by open grating through which ashes, chips, etc., readily made their way; further the soil about the well was a loose sand. One day the whey trough fell down but the whey was run out just the same, and of course the well became the whey tank that day. But this fact did not stop its use, nor did a similar accident a few days later. The cheese began to be complained of in price and then the assistance of the instructor was wanted to assist in determining what was the matter. By this time the water was very foul, but it did not enter into the cheese-maker's own head that this could be the trouble—it only had him in it you know. A visit by Mr. Publow and a plain talk of what had to be done at once convinced them, but it cost them \$400 in cuts in price of cheese.

DIFFICULT TO CONVINCE

My point is that if it was difficult to convince people when there was visible indication of pollution in the water and when the nose made one aware of it when one entered the factory, how much harder it is to convince men, when such tangible evidences are lacking.

It seems to me to be an essential for factories and dairy farms to provide safe water, or in other words free from pollution by excreta of man and animals or factory drainage. More care will have to be taken in location of wells, the protection of their mouths and in providing the drainage area from excrement of men and animals and from slop and other drainage wastes.

The Dairy Industry

J. A. Ruddick, Dairy Commissioner
Those engaged in the several branches of the dairy industry are now turning their attention to the coming season of 1910. The cows are reported to be coming through the winter in good condition, and that makes the foundation for a good beginning in production.

If attendance at dairy meetings is any indication of real or active interest in dairy work, there never has been a time when interest has been keener. Officers of this branch have addressed a large number of meetings during December and January, and they report an unusually large attendance of farmers and their families.

Reviews of the season of 1910 by importers of Canadian cheese in Great Britain contain frequent reference to the harm which is being done to the Canadian trade by the continued shipment of green cheese. The shipment of immature cheese has been encouraged by the falling off in the Canadian exports, which has brought the consumptive demand and the supply much nearer together than they formerly were. With New Zealand cheese supplying a large part of the demand in the winter months, the tendency is for Canadian summer-made cheese to go into direct consumption. There is therefore more reason for giving the cheese time to mature well before shipment than there was in the days when market conditions made it necessary to hold the cheese in storage for weeks and even months after it left the factory. Extract from Census and Statistics Monthly.

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

Pasteurization of Whey

Frank Hens, Chief Dairy Instructor, London

Ninety-four factories pasteurized the whey last year; 22 factories fed the whey at the factory, leaving 95 factories out of 211 not pasteurizing the whey. The average was .204 per cent. The average per cent. of fat in the whey returned in the patron's cans where not pasteurized was .1 per cent. The average acidity of the whey returned in the patron's cans pasteurized was .37 per cent. The average acidity of the whey returned in the patron's cans not pasteurized was 1.2 per cent. These figures are practically the same as last year. The average length of time required to heat the whey to 155-degrees was 1.49 hours. The average time the whey remained above 150 degrees was 2.4 hours. At a few factories they did not do a first-class job in the pasteurization of whey. Several reasons for this fact might be mentioned. Some factories are not properly equipped for this work. The boilers too small, tanks too far from the factories, water supply short, and insufficient attention paid to the general conditions, necessary for proper results. However the majority of the factories have done the work well and the patrons seem to be well satisfied and quite willing to pay their share of the cost of pasteurization.

The patrons would in all cases pay the cost and I wish to point out that when makers receive pay for the work they should in every case use their best efforts to see that the very best possible work is performed.—Extract from Annual Report on work of Inspectors.

I admire the method "Farm and Dairy" has of rewarding club raisers for new subscriptions by giving free pure bred stock as premiums. This method tends to interest the young folks on the farm and improve the wire hine at the same time.—G. B. Gould, Edg's Mills, Ontario.

FURS

Do you trap or buy Furs? I am Canada's largest dealer, I pay highest prices. Your shipments solicited. I pay mail and express charges; remit later in Beehives, Sheepskins, etc. Quotations and shipping tags sent free.

JOHN HALLAM. TORONTO

TOO BAD



Too bad any woman must wash a complicated cream separator. Too bad any one is misled into thinking complicated bores are necessary. LOOK AT THE UPPER PICTURE. Those 52 disks were all used in one common disk machine that was discarded for a Sharples Dairy Tubular. LOOK AT THE LOWER PICTURE. It shows the only piece used inside the wonderfully light, simple, sanitary, easy to clean, wear a life time Sharples Dairy Tubular Cream Separator Bowl. Any wonder Tubulars probably replace more common separators every year than any one maker of such machines sells? Tubulars skin faster and cleaner than any other separator. Tubular sales exceed most, if not all, others combined. The manufacture of Tubulars is one of Canada's leading industries. The only modern separator—The World's Best.

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CONSCIENCE is nothing else but the echo of God's voice within the soul.

— E. B. Hall.

The Binding Tie

By Emily Ruth Calvin.

(Continued from last week)

ELIZABETH ran to his side. She put her hand on her husband and pushed him away.

"Oh, she cried, "you cruel, cruel man! How can you hit a tiny baby? Oh, I hate you—I hate you—"

She fell beside the crib, weeping. Her hand reached out blindly for the child. She wept hysterically for some moments, Doane standing near her. His face was livid, and when he spoke his voice held a note that his wife had never heard before. She shivered, but looked up at him.

"If I struck a tender thing like that in anger," he said slowly, "I should deserve your words. If you can think that of me then I do not wonder that you hate me."

Elizabeth did not answer. The baby was quiet and the mother tucked the little comforter around him.

The episode was closed, but the remembrance of it clung painfully to the parents.

Summer with its beauties came; but in Elizabeth's heart was no joy. She turned more and more to her baby for love and comfort. Doane was inconsiderate and at times boorish. Sometimes an entire evening passed without conversation between husband and wife. Never again did Doane attempt physical punishment of the child, if spitting the tiny hand can be called by so harsh a name.

They had always gone to a quiet country place for their vacation. Elizabeth wondered if Doane could get away this year. They had grown so far apart that she would not ask him. But he introduced the subject himself.

"I think I can manage to leave the business for a time," he said. "Can you be ready by Monday?"

"Yes," Elizabeth answered, "and I think the change will do the baby good."

"Isn't he old enough now to be called by his proper name?" asked Doane snappily.

"He's not a year old yet," she answered. "I hope there'll never be another baby, so I shall not call him Walter for some time."

"I'm glad you feel so," Doane muttered; "if there's such unhappiness with one I don't know what there'd be with two."

For the first time in many weeks Elizabeth looked straight into her husband's face. He was now always cross, she thought. But she noticed with a little start that his face had grown thin and worn. His hand moved restlessly among the papers on the table.

"Are you nervous?" she asked gently.

The look of gratitude which he gave

her was pathetic, for it was long since she had been concerned about him.

"No, I'm all right," he said slowly; "but I shall be glad to get away for a few days."

So they started on a vacation. The baby enjoyed the ride on the cars, but if Elizabeth left him for a moment he vigorously protested. Doane received letters, for when the baby cried he remained indifferent.

The change, however, did not agree with the child. He was fretful and Elizabeth was up day and night with him; he claimed her entire attention, while Doane wandered off alone into the woods alive with beautiful memories of earlier days.

"I think he had better go home," said Elizabeth at the end of two weeks; "baby is not comfortable here."

So they went home. Doane felt that his vacation did him more harm than good, and Elizabeth was worn out.

The Sunday after their return Doane lay dozing on the couch in the library. Elizabeth held a book which did not chain her wandering attention. The baby stirred uneasily in his carriage and the noise awakened Doane.

He lay for some minutes watching his wife. He loved the bright hair coiled low on her shapely head; her profile with its purity of outline touched his heart as of old. Motherhood had given her charms. If she only loved him now! Doane wondered why the change had come; whether he had done wrong in any way. Then, impetuously, in memory of the golden days passed, he put out his arms.

"Beth," he cried.

His wife turned. She saw his arms stretched toward her. She rose hastily to go to him. As she passed the perambulator she stopped to look at the baby.

"Come to me," said Doane abruptly. Silently she obeyed. He sat up and drew her to him, his face close to hers; "you are my wife, the woman I love. Why do we go on in this way?"

"I don't know," Doane," she answered sadly; "I have thought lately that you don't care for me."

He tightened his hold, and his hungry lips sought hers. But the child, being now awake for some second whimpers without attention, began to frown from the encircling arm of her husband.

"Don't go, Beth," he pleaded. "The baby, Doane!" she said hurriedly. "He needs me."

"And I don't," he said bitterly. His arms fell inertly. She moved

swiftly to the child, and, raising him, held him with a passionate delight to her body, kissing his hair, his eyes and his dimpled chin.

The telephone bell rang. Doane did not move, and Elizabeth, placing the baby gently in his carriage again, answered the bell; but she heard the insistent cry as she stood at the telephone.

When she entered the room a few moments later she found Doane leaning over the child. A quick thought urging her forward, she ran to him, her hands stretched forth in entreaty.

"Doane, Doane," she called, her voice shrill with fear, "don't hit him again. Hit me instead!"

Doane looked around at her. He kept himself from falling by grasping the handle of the carriage. His eyes flashed and his lips parted thinly over his teeth. The baby was crying in a subdued way.

"Do you think me a monster?" said the man. "Is not the child as much mine as yours? Whose fault is it that he is everlastingly crying? Will he thank you for your selfishness in years to come? Don't come near me," he cried in terrible excitement. "I've stood tortures since he came. You told me that you hated me. I don't hate you, but don't speak to me again."

The words fell on Elizabeth's ears with a terrible force.

"Doane—Doane!" she cried.

"Don't speak to me," he repeated, now mechanically, "I'm not worth speaking to. I've fallen so low that my wife comes pleading to me when she finds me bending over her child. Keep him out of my sight hereafter. Who was it that said it was Heaven to have a child? It's—"

"Don't, Doane," Elizabeth said steadily; "I don't say what I can never forgive. I'll keep the child out of your sight, and I'll not speak to you again. I'll do anything, but don't say that."

Doane relapsed into silence. He raised his hand to his head and for a moment looked at her blankly.

Elizabeth resolved to eat thereafter in solitude. She moved into the spare room and thought bitterly that Doane should be obeyed. She would neither speak to him nor see him.

The night after his outburst Doane went upstairs. Opening the door of his room he looked curiously about him. Then he called:

"No answer came. He heard the sound of a rocker and followed it to the spare room.

"What are you doing here?" he questioned sternly.

"If you remember," Elizabeth replied calmly, "you asked me not to speak to you."

Doane stared at her almost stupidly, and the same blank look darkened his face.

"Several things have escaped my memory lately," he answered; "I don't remember that. You want to be more alone with the child. I'm in the way."

Elizabeth looked back at him sharply.

"You didn't ask me to refrain from speaking to you?"

"No," he answered; "you are mistaken. But you may keep away from me if you desire. I'm as lonely now as I can ever be."

The words touched Elizabeth, but she did not reply. The child lay biting his thumb.

"Do you want him to bite his thumb?" he asked, as if seeking information.

"He's teething," said Elizabeth curtly.

"Oh, I just wanted to know," Doane answered. "I expect a visitor tonight," he added; "try to keep the boy quiet."

The visitor proved to be the family doctor. Elizabeth, looking up, saw him as he passed the door.

"Doctor?" she called, "I—I did not know you had been sent for."

The doctor stopped for a moment. "I'm sorry to tell you, Mrs. Grantley," he said, "that your husband is in a bad way. His nerves are completely shattered. Watch him closely and see that he is not irritated. Nothing serious," he added, trying to still the alarm that surged quickly through her and sent the vivid color to her face. "Too many business cares. He came to me today and I promised to look in on him again tonight. Make him stay at home for a week, and let him have all the rest and sleep possible."

He passed on and Elizabeth remained in the doorway, a deadly fear clutching at her heart. If Doane should be ill? If he should be taken away, and drawing a low chair to the window, looked out into the quiet night.

As a girl she was always self-analytical. Had she been just to Doane, she wondered. Then the sharp thought caught and held her: Had she been just to the baby? He had been lovingly at the crib. Doane had missed the glowing sweetness of that darning baby. Why? Suddenly she knew. He had missed it because she knew. He feared—interfered with his fatherhood rights. She had kept the baby to herself when he was good and lovable, and had allowed Doane to know only his cross, crying moods to know only

Still she went on pitilessly with her self-examination.

"Put yourself in your husband's place," said an insistent inner voice.

She did. She saw herself suddenly hunging outside the portals of his love, hungering on the threshold, neglected, uncared for; she saw him letting the child loose, undisciplined, while she was helpless to do anything; and bitterly she saw herself pleading hands to her and implore her not to hurt a clinging, helpless baby.

There stood the case reversed. Was there any appeal? Could she ever right things?

Was this mental illness of Doane's a result of the inharmonious in his home? At the thought Elizabeth was filled with sorrow.

Then her determination came strongly forward. There should be another home-thing. She felt suddenly that she was competent to take the reins of this mismanaged home and sling husband into her hands. She had been wrong, entirely so. She had permitted this Promised Land, to which they had looked longingly before, to be brought to naught by her own fault. Through her thoughtlessness she had put strength enough into baby fingers to draw two well-beloved persons apart.

She went to the crib and stood looking at her child.

"They'll draw us together again, my son," she said, "and very soon."

The doctor, called by Elizabeth, opened quickly down the hall and pushed open the door of her husband's room from which she had so recently fled. He lay on the bed, his eyes closed. How

But he did not wake. Then she drew a chair beside the bed and sat near him. Her eyes never left his face. His heart never over him, just as it had yearned over her child when he lay sleeping. Poor boy! He had not meant to speak to her unkindly.

But resolutely she put such thoughts from her. The future was hers, not the past. She felt a quick movement and saw that he was awake.

"Don't go away, Beth," he murmured.

"No, Doane," she whispered; "try to sleep."

Next day he was somewhat better.

(To be concluded next week.)

◆◆◆

Renew your subscription now.

The Upward Look

The Broader View

It will be done in earth, as it is in Heaven.—Matt: 6, 10.

Not until we recognize that God desires to give us every good and perfect gift, including not only spiritual but material blessings as well, is it possible for us to express the prayer "Thy will be done," in the spirit most pleasing to God. Too many well meaning Christians rebel rather than encourage others to become Christians by the manner in which they speak of being resigned to God's will. They give the impression that they consider that we cannot hope to understand and that, therefore, we must be prepared to submit meekly, when adversity or troubles overtake us. This is true, but it is only half of the truth. This half truth has kept and is to-day, keeping many people out of the kingdom of God.

The full truth is that God's will is the grandest and best thing that can happen to us. "No good thing will He withhold from them that walk uprightly." (Psalms 84, 11). "Delight thyself also in the Lord and He shall give thee the desire of thine heart." (Psalms 37, 4). "If ye then, being evil, know how to give good gifts unto your children, how much more shall your Father which is in Heaven give good things to them that ask Him?" (Matt 7, 11). "If ye abide in Me and my words abide in you, ye shall ask what ye will, and it shall be done unto you." (John 15, 7). Do these glorious promises indicate that God desires that we shall be deprived of any pleasures or advantages that are likely to be for our good?

The glorious truth is that God will give us good gifts beyond our utmost expectations if we will but trust Him and do His will. His command is that we shall "seek first the kingdom of God and His righteousness, and all these things shall be added unto us." (Matt. 6, 33). When we seek God we will soon realize that earthly riches, when compared with spiritual blessings, are of comparative unimportance. And not until we recognize this fact and wisely control material wealth.

When, therefore, troubles come upon us we must not conclude that God does not intend to give us good gifts, and meekly sit down, fold our hands, and conclude that there is nothing for us to do but be resigned. Such action merely indicates lack of faith in God's promises. Instead, we must recognize that God sees something in our lives that is sinful. If we do not know what it is then we must wait humbly upon God and ask Him to show us what it is and when He has done so we must

immediately put it out of our lives, counting not the cost. It may be pride, lack of faith, selfishness, unworthy aims or some other similar sin. Acting thus we will soon find that even our worst troubles are really nothing but blessings in disguise intended always to draw us nearer and nearer to God and to help us to become worthy to receive His promised blessings. Once we realize this great truth we will be able to say "Thy will be done," with joy in times of adversity as well as while enjoying prosperity for we will realize the great principle that underlies the assurance: "That all things work together for good to them that love God, to them who are the called according to His purpose." (Romans 8, 28)—I.H.N.

Our Winter Sports

"I am sending Farm and Dairy an illustration of my cousin Emma and me and our great White Man. We live in the country about three miles from the town. There are plenty of amusements there, but in the country it is quiet. My little cousin comes to play with me on Sat-



Two Farm and Dairy girls enjoying winter sports. Read how they made their snow man. What other sports have our boys and girls for winter? Write our Household Editor and send snap shots if possible.

urday and we go to school during the week so we have only one day for play.

So this day after a slight snow fall, we were tired of a sleighride, so we made our White Man. We tramped the snow down hard, then we rolled our big ball of snow. We made a second roll. It was a little hard work to lift the second upon the first, but we succeeded. Then we made a little ball for a head which we placed higher up. We hunted for hats which we soon found. Of course it was not the style for nowadays. We marked the man's eyes. I guess there are many girls who would like such a man these days.—Gertie Oldfield, Parry Sound District, Ont.

Mother's Influence

It is hard for a young mother, who has not yet overcome the wayward tendencies of her own youthful nature, to realize the influence she exerts over her little ones. She is constantly surrounded by critical imitators, who copy her morals and manners. As the mother is, so are her sons and daughters. If a family of children are blest with an intelligent mother, who is dainty and refined in her manner and does not consider it necessary to be one woman in the drawing-room and an entirely different person in her everyday life, but who is a true mother and always a tender, charming woman, you will in-

variably see her habits of speech and perfect manners repeated in her children.

Great, rough men and noisy, busy boys will always tone down their voices and stop lightly and try to be more mannerly when she stops to give them a kind word and a pleasant smile, for a true woman will never fail to say and do all the kind, pleasant things she can that will in any way help to lift up and cheer those whose lives are shaded with care and toil. The mother of today rules the world of tomorrow.

Home Remedies

Never be alarmed if an insect enters the ear. Pouring warm water into the canal will drown it, when it will generally come to the surface and can be easily removed by the fingers.

For Little finger-nails anoint the nails at the roots every night with vaseline or dip them in warm sweet oil. This will cause them to grow better, and they will not split.

An excellent remedy for sprains is to boil wormwood in vinegar and apply it hot to the injured part, with a sufficient wrapping of cloths to keep

the sprain moist, renewing the lotion occasionally.

If you shut your finger in a door or bruise it in any way, put it in water as hot as you can bear; in a few minutes change the water for hotter and keep the finger in water at least fifteen minutes. If the foot is bruised, take off the shoe and stocking and immerse it in hot water from fifteen to thirty minutes, adding hot water often.

Anyone suffering from rheumatism should wear woolen clothing always next the skin, and be very careful never to get the feet wet or sit in damp clothes. If very thirsty—which is sometimes the case with rheumatism—drink only milk and soda—no stimulants. Try rubbing the body night and morning with a rough towel.

Thirst and great dryness of the mouth in sickness are often relieved by a teaspoonful of powdered gum arabic, beaten thoroughly with a couple of teaspoonfuls of glycerine, to which is added a glass of cold water and enough lemon juice to make the mixture palatable. The mixture may be taken freely, with great relief to the dryness of the mouth and thirst.

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Before leaving Canada, we want to thank you for the "New Scale Williams" Piano you furnished for the Dresden Orchestra, both in Hamilton and Toronto. This is certainly a wonderful piano, and if we can always have as good an instrument we will be perfectly satisfied. The tone is rich and melodic, and the sustaining powers are equal to anything we have ever heard. Against asking you and congratulating you on your success in producing such a beautiful tone, we are, sincerely yours, WILEY OLSEN, Cond. Dresden Philharmonic Orchestra. VICTOR ILA CLARK, Assoc. Con. Dresden Philharmonic Orchestra

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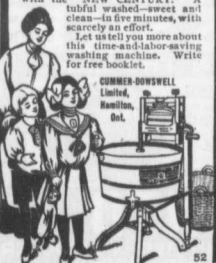


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Home-work in Schools

BY A SCHOOL MA'AM

I know a little about farm work except through the children in my school. I should like to speak about Home-work, its use and abuse in Public Schools.

To make homework of any use I would have it of an entirely different nature from what the children have been doing in school all day.

At night let the girls be taught sewing. This is an accomplishment no girl should be without, and knitting, crocheting and all kinds of fancy work would be of much more lasting value to most girls than any problems of School work that could be set them by any teacher.

Another thing that should not be neglected is music. If the girls and boys too, had time for the necessary practising, it would soon be a source of joy to them and a pleasure to all the family.

Give the boy a box of tools and teach him to make little things that would be useful about the house or barn. Sleights and little wagons have long been dear to the Loyalist heart, and would they not be much more highly prized if made by the boys themselves? It is in youth that habits of industry are formed and if children can only be taught to keep themselves employed, half the work of looking after them is accomplished.

SCHOOL LIBRARY

All country schools now have libraries. The children are supposed to read books of history, travel, fiction, etc., to supplement their readers. There is little or no time in school for this. Why not encourage the children to bring home good books, and instead of sitting down to lessons, read to the benefit to the children themselves would be very great and lasting. In olden times when light was scarce, one sat by the candle and read and the others worked as they listened. One old New England farmer when asked what he did in the winter evening, said: "Sometimes we set and talk and sometimes we just set." That is not a good way to bring up young people. It is the idle hands and idle minds that are in mischief.

It is those children, who read well, who are the best pupils at school. Their eyes have been accustomed to know words at once and no matter what subject is given them to study, they can grasp the meaning quickly and think things out for themselves.

I do not encourage the reading of cheap novels or useless books that are very apt to make boys and girls discontented with their homes and lives and which in that way often does harm. Good books never injure. Children are true readers only when they are idle and a love of reading—whether out of the newspaper, the farm journal or the library will turn many a restless boy and girl into a quiet happy worker.

The only reason "Home-work" is abused when it is given by most teachers at all, is that most parents demand it. Of course some teachers believe in it and give plenty of it, but if the parents were only willing, I think there would be much less than there is. Unless Mary and Johnnie are kept busy from tea-time till they go to bed, with "readin', ritin', and 'rithmetic," their parents think they surely can't be doing anything at school, and express their opinion quite plainly. Personally, I do not believe in "Home-work" at all in the Public School.

When children have studied with scarcely a break from 9 till 4 and in most cases walk a mile or more to and from school, their minds and bodies should be given complete rest, and with children "a change is as good as a rest."

After sitting still all day indoors, they need exercise and fresh air—

plenty of it. There is usually plenty of work that could be done by both boys and girls out of doors. Interest them in gardens of their own or chickens. Any work or amusement that sends their minds stimulated and sends them back to school next day fresh, full of life, and ready for the day's work.

Don't Neglect Your Boys

BY A FATHER

Every boy is going to have a confidant, some one to whom he can tell his secrets and whisper his hopes and ambitions which he would not breathe to others. We take it for granted that his mother will stand nearer to him than any other person, but every boy will have some male friend who will stand in a peculiar relation to him. This friend, this confidant, should be his father.

You can not afford to have your boy feel that you are too busy or too

ways expects criticism or scolding from him.

DON'T NAG

Some fathers constantly nag, find fault, and never think of praising their sons or expressing any appreciation of their work, even when they do well. Yet there is nothing so encouraging to a boy, especially if he finds it hard to do what is right, as real appreciation of his effort. This is a tonic to youth. Boys thrive on praise. This is why most of them think more of their mothers than their fathers—because their mothers are more considerate, more appreciative, more affectionate, and do not hesitate to praise them when they do well. They are naturally more generous with them; less exacting than their fathers.

I know a man who takes a great deal of pains to keep the confidence of his pet dog. He would not think of whipping or scolding him because he would not risk his affection, but



The living room in a farm home. The furnishings are not luxurious, but simple and useful, well chosen and appropriate. We usually get too much furniture and too much is worse than too little.

indifferent to tell him how to fly his kite or bait his hook or make a toy or to play games with him.

If you begin early enough, it is comparatively easy for you to gain your boy's confidence. From infancy, he should grow up to feel that no one else can take your place; that you stand in a peculiar relation to him, which no one else can fill.

Any business man would be horrified at the suggestion that he would ruin his boy by neglect, that his absorption in business would result in the undoing of his own son. But, it is the easiest thing in the world to forfeit a boy's confidence. It will take only a little snubbing, a little scolding, a little indifference, a little unkind criticism, a little nagging and only an intimacy between you and your boy.

KEEP HOLD OF THE BOYS

One of the bitterest things in many a business man's life has been the discovery, after he has made his money, that he has lost his hold upon his boy, and he would give a large part of his fortune to recover his loss.

I have been in homes where the relation between father and sons were so strained and formal that the latter would no more think of making a confidant of their father than they would of a perfect stranger. They have been reared, snubbed and scolded, so unkindly treated that they would never think of going to him for advice, or with any confidential matters.

It is a most unfortunate thing for a boy to look upon his father as a task-master instead of a companion, to dread meeting him because he al-

ways scolding his boy, finding fault with everything he does, criticizing his conduct, his associates, and telling him that he will never amount to anything. Now, what chance has a boy to grow, to develop the best thing in him in such an atmosphere?

Cultivate Cheerfulness

Cheerfulness will attract more customers, sell more goods, do more business with less wear and tear than almost any other quality. Optimism is the greatest business-getter, biggest trader, the greatest achiever in the world. Pessimism has never done anything but tear down and destroy what optimism has built up.

In the business office, as in society, everywhere, the favorite is always the cheerful person. Good-natured, cheer-

ful people do not waste their vital energy as rapidly as the grumbler or the too sober, too sad people. They work with much less friction.

Good cheer is a great lubricant; it oils all of life's machinery. Shakespeare says:

"A merry heart goes all the day, Your sad tires in a mile—a." There is no other life habit which can give such a prolific return in happiness and satisfaction as that of being cheerful under all circumstances. If resolution to cultivate cheerfulness is strongly made at the very outset, it will not be difficult to form the cheerful habit, and it will be the best protection against suffering and disappointment.—"Success."

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The most popular food in the world because it does most and costs least.

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Pretty Crocheted Laces

(Continued from last week)
NO. 3. BABY SCALLOP PATTERNS.
Use fine crochet thread; hook No. 4 1/2 or 5. Begin with 9 ch. 1st row—Miss 6 ch and into the 7th work 3 tr, 2 ch, 3 tr, leave 2 ch unworked. 2d row—Turn with 7 ch, and into the space of 2 ch in the 1st row work again 3 tr, 2 ch, 3 tr, 2 ch, and 1 tr on the 3d stitch of the 6 ch. 3d row—Turn with 6 ch, work 3 tr, 2 ch, 3 tr, as before into the space of 2 ch, 2 ch, 1 tr, even times into the loop of 1 ch. 1 d c into the last stitch of the 1st row as yet unworked. 4th row—Turn with 5 ch, 1 d c seven times, each d c in the space of chain of the 3d row, 2 ch, 3 tr, 2 ch, 3 tr as before, 2 ch, 1 tr. 5th row—Turn with 5 ch, 3 tr, 2 ch, 3 tr as before; turn with 7 ch, and repeat from the 2d row, joining each scallop to the former one by a d c.

NO. 4. AN EDGING FOR BABY'S GARMENTS.
Very fine crochet cotton, hook No. 4 1/2 or 5. Begin with 8 ch. 1st row—Turn, leaving 3 ch, and into the 5 ch work 1 tr, 2 ch, miss 2 ch, and work 3 tr in the last. 2d row—Turn with 3 ch, 3 tr, under the first 2 ch of the last row; * 4 ch, 1 tr, and repeat from * four times into the 5 ch. 3d row—Turn with * 5 ch, 1 d c under the 4 ch of the last row; repeat from * three times; 5 ch, 1 tr, on the first of the 3 tr, of last row; 2 ch, 1 tr on the last. Repeat 2d and 3d rows.

NO. 5. A PRETTY TRIMMING.
Crochet hook No. 4 1/2 or 5. Begin with 11 ch. 1st row—1 d c in the 5th chain, 2 ch; 3 tr, 2 ch, 3 tr in the 8th chain, 2 ch, miss 2, 1 tr in the last. 2d row—Turn with 6 ch and work 3 tr, 2 ch, 3 tr in the space of 2 ch of the former row; 7 ch, 1 d c in the 5 ch of the last row. 3d row—Turn with 6 ch and work 1 tr, 2 ch, 1 tr nine times in the loop of 4 ch; 2 ch, 3 tr, 2 ch, 3 tr, in the space as before; 2 ch, 1 tr on the 3d stitch of the 6 ch. 4th row—Turn with 6 ch, 3 tr, 2 ch, 3 tr in the space of 2 ch; 3 ch, 1 d c in each space round the loop, 3 ch; 3 tr, 2 ch, 3 tr as before, 2 ch, 4 tr. Repeat the pattern from 2d row, joining the 7 ch for the loop to the 5 ch in the 1st row.

Courteous Friends

If you want to keep a friend do not get too intimate with her. Have your own thoughts and permit her to have hers. Do not demand too much of her in the way of confidence and do not be too aggressive, wanting to know why she does not do the same thing as you do. If you think your friend's style of dress is not beautiful, do not tell her. You only offend her, because deep in her heart she is convinced that she knows a great deal more about it than you do.

Do not find fault with your friend's friend, and do not expect to be the only one owning a corner in her heart. Be as considerate of her feelings as if she were a stranger, and remember that politeness is an everyday garment, and not one intended only for high days and holidays. To sum it up in one sentence, preserve the courtesy of the beginning to keep your friendship to the end.

Habit of Reading

If you are not a habitual reader, begin now to form the reading habit. Good reading is a great life-improver; it will enlarge your mental capacity wonderfully. It will make you a full man, an interesting man; it will elevate your life standards. Your ideals will be higher; your views of life grander. Good reading will enrich your life immeasurably. You will grow fuller and nobler; you will think more of yourself, and others will think more of you.

OUR SPECIAL SPRING FASHION ISSUE

Realizing the great interest that our readers take in the new spring styles, we have arranged to give special attention to the pattern department and send your orders early. If you do not see the style illustrated, that you would like, number of pattern desired. Address, Pattern Dept., Farm and Dairy, Peterboro, Ont.

FANCY BELTED BLOUSE COAT 6585



The Russian coat closed from left to right is one of the very latest novelties. This one is cut to form the points at the lower edge that are so smart and so fashionable.

Material required for medium size is 5 1/2 yds 27, 3 1/2 yds 44 or 3 yds 52 in wide, with 7 yds of wide and 2 1/2 yds of narrow banding to trim as illustrated.

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

BLOUSE OR SHIRT WAIST 6590



Shirt waists finished with hems are among the novelties of the season. This one includes also wide tucks over the shoulders and is singularly attractive. It can be embroidered as illustrated or left plain or trimmed with banding as liked, but embroidery is always smart.

Material required for medium size is 3 1/2 yds 27 or 28, 3 yds 32 or 2 1/2 yds 44 in wide.

The pattern is cut in sizes for a 34, 36, 38, 40, 42 and 44 in bust and will be mailed on receipt of 10 cts.

GIRL'S COAT 6588



Long coats with deep openings are the latest shown for younger girls. This one can be made in two such different styles that it is practically two in one. With the plaited side portions it is distinctly novel and graceful, without it becomes a simple plain coat.

Material required for medium size is 6 yds 27, 3 1/2 yds 44 or 5 1/2 in wide with 1 1/2 yds of silk for trimming.

The pattern is cut for girls of 6, 8, 10 and 12 yrs and will be mailed for 10 cts.

SEMI-FITTED COAT 6584



The coat that extends over the hips is among the latest and here is a smart example. It is made with deep narrow revers and is held by two buttons only.

Material required for medium size is 3 1/2 yds 27, 3 yds 44 or 2 1/2 yds 52 in wide with 1 1/2 yds of silk for facing.

The pattern is cut for a 34, 36, 38, 40, 42 and 44 in bust. It will be mailed on receipt of 10 cts.

GIRL'S DRESS 6594



Simple little frocks such as this are always attractive. It can be utilized for the light weight wools of the present as well as the washable materials of the future. It can be made as illustrated, or plainer, with 3 trimming portions omitted, as liked.

Material required for medium size is 5 1/2 yds 24 or 27, 4 yds 32 or 3 1/2 yds 44 in wide with 1 1/2 yd 27 for trimming.

The pattern is cut for girls of 8, 10, 12 and 14 yrs, and will be mailed on receipt of 10 cts.

SEMI-PRINCESS DRESS FOR MISSES 6587



The semi-princess dress is a graceful one and it will be extensively worn throughout the spring and summer. It can be made either high at the neck or without the chemise, and with three styles of sleeves.

Material required for medium size is 11 yds 24 or 27, 8 yds 32 or 7 yds 44 in wide with 1 1/2 yds of 27 in wide for banding; 1 1/2 yd 18 in wide for the chemise.

The pattern is cut for girls of 12, 14 and 16 yrs sizes and will be mailed for 10 cts.

POLONAISE OR DRESS TUNIC 6593



Every form of tunic is being much worn just now and this one is adapted to a great many uses. It can be made of contrasting material and worn over a separate gown, and it can be made either with three-quarter or short sleeves.

Material required for medium size is 5 1/2 yds 27, 3 1/2 yds 44 or 4 yds 52 in wide, with 4 yds of banding.

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

CHEMISE NIGHT GOWN 6575



No night gown is simpler or prettier than this one. The sleeves are cut in one with it and there is consequently very little labor involved in the making. There is no opening, it being drawn on over the head, and the fullness is regulated by means of banding headed with ribbon.

Material required for medium size is 4 yds 36 or 3 yds 44 in wide, 1 1/2 yds of banding, 3 1/2 yds of edging, 1 1/2 yds of banding.

The pattern is cut for 34 to 36, medium 38 or 40, large 42 or 44 in bust, and will be mailed on receipt of 10 cts.

MISSES' SEMI-PRINCESS COSTUME 6574



Semi-princess dresses continue in vogue. The Dutch neck and three-quarter sleeves cut in are becoming to most girls and are greatly in fashion. All reasonable materials that are appropriate for entire dresses can be used for this one.

Material required for 15 yr. size is 9 1/2 yds 24 or 27, 6 1/2 yds 32 or 5 1/2 yds 44 in wide with 1 1/2 yds 27 for the yoke, panel and trimming.

The pattern is cut for girls of 14 and 16 yrs of age and will be mailed on receipt of 10 cts.

BELTED COAT WITH PEPLUM 6588



Belted coats make a novel feature of incoming styles. This one is smart and altogether desirable. It includes a little vest that allows effective use of contrasting materials.

Material required for medium size is 4 yds 27, 3 1/2 yds 44 or 3 1/2 yds 52 in wide, with 1 1/2 yds of silk for trimming, 1/2 yd 27 for vest.

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

COMBINATION CORSET COVER WITH DRAWERS 6513



Combination garments are much in demand. This one has the great merit of closing at the front, and allows a choice of open or closed drawers.

Material required for medium size is 3 1/2 yds 36 or 2 1/2 yds 44 in wide with 2 1/2 yds of wide embroidery, 3 yds of narrow edging, and 2 1/2 yds of banding.

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

SEMI-PRINCESS COSTUME 6582



Semi-princess gowns will be extensively worn throughout the season. This one is attractive, at the same time is simple.

Material required for medium size is 9 1/2 yds 24, 8 yds 27, 6 1/2 yds 32 or 5 1/2 yds 44 in wide with 1 yd 18 for yoke and cuffs; 3/4 yds 44 for sleeves puffs.

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

HOLSTEINS

MAPLE LEAF STOCK FARM
GORDON H. MANHARD
Manhard, Ontario

Breeder of Choice Holstein-Friesian Cattle
At present I will sell 20 young cows, due
to freshen in the early part of the winter.
Also a few young bulls. E-13-10

FOR SALE, HOLSTEIN BULLS

One born Dec. 31, 1908. Dam's official re-
cord at three years old, 496 lbs. of milk and
32 lbs. of butter in 7 days. Butter calf
born March 16th, 1909, 7 dam Canada
Champion of her age; official record at
two years, 454 lbs. of milk and 29 lbs. of
butter.

DAVID GAUGHNELL, Yarmouth Centre, Ont.

RIVERVIEW HERD

FOR SALE 2 Bull Calves, sired by Sir
August Hecks Segre, son of King Segre,
five years old, 5 year old sire, dam Augu-
stine Lily Pieterse Paul, champion Jr. 4
year old—23 lbs. butter 7 days. Dam of
calves a 20 lb. 2 year old. Dams of
year old, 454 lbs. milk and 29 lbs. of
butter. Price reasonable, considering
breeding.

P. J. SALLEY

Lachine Rapids, Que.

E-10-6-10

LAKEVIEW HOLSTEINS

One bull ready for service and a few
ready shortly. Will sell by Count Hen-
gerveld Fayne De Kol, a son of Pieterse
Hengerveld De Kol, who's daughter
De Kol Croamette, has record of 127
milk in one day and 780 lbs. in 7 days.
His dam, Grace Fayne 2nd (25.3) lbs. but-
ter in 7 days). His grand dam, Grace
Fayne, 2nd Homestead, who broke all re-
cords with 35.55 lbs. butter in 7 days, fat
averaging 4.62 per cent. Victors met at
Bronx, G.T.S., or Trafalgar Crossings.
Hamilton Radical. E-11

E. F. OBLER, Bronte, Ont.

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ONE BULL CALF, three months old,
born on a dam that gave 12.70 lbs. last
year, testing 3.5 fat.
One or two YOUNG HEIFERS from good
milkling strains, late. Buyers will do well
to order bull calves for next year.
Will also sell one or two good COWS
at a reasonable price. Speak quick.
Price according to value as producers.

E. B. MALLON, Brantford, Ont.

LYNDALE

Offers for sale 10 Bulls sired by a
son of the highest record cow ever owned
in Canada.

SARA JEWEL HENGERSVELD 3RD.
A. R. O. 30.59 lbs. butter in 7 days, 121.27
lbs. in 30 days. These bulls are all from
official record dams, some of them from
daughters of "Count De Pieterse
Paul," one out of a daughter of "Bright-
est Canary." E-12-10

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This year it has produced the champion
Canadian bred butter cow for 7 days re-
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old of Canada, for young production, we
have some younger ones that promise to
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ten fine heifers, all in calf to an import-
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Come and make your selections AT
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and

WINNERS AT THE PAUL

See Our A.R.O. Records

Just think we'd want you. They combine

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Our Winner.

"LES CHENAUX FARMS"

Vaudreuil, Que.

Dr. Harwood, Prop. D. Bode, Mgr.

HOLSTEINS

FOR SALE.—Six Holstein bull calves, 8
months old, dams all have good 7 day re-
cords; also good 2 year records; all sired
by Cornelia's Poach, five times first prize
at Toronto and London fairs. Also a
few females. E-12-10

THOS. HARTLEY, Downsview, Ont.

HILL-CREST HOLSTEINS

Bull calves fit to head any herd for
sale. Sired by "Pontiac Hermes" and
"Sara Jewel Hengerveld's" cows. Dams all
grand young cows, with good udders and
are from one of two months old. Price
will be delivered at your station. Also two
year service bulls, one out of a 72 lbs.
per day dam.

G. A. BRETHEN, Norwood, Ont.

NORTH STAR HOLSTEINS FOR SALE

Bulls ready for service, out of high test-
ing A.R.O. dams, sired by Count Hen-
gerveld De Kol, a son of Sara Jewel Hengerveld
3rd, the highest tested, (38.38). High
set females cow ever in Canada. Also a
few heifers in calf to same bull. E-11

J. W. STEWART, Lyn, Ont.

HOMESTEAD HERD OF HOLSTEINS

Present offering—bull calves from high
record cows and Dutchland Colanthis Sir
Abbott, (Imp.) dam, officially over 32 lbs.
dam average 31.8 lbs. butter in 7 days.

EDMUND LAIDLAW & SONS

Aylmer West, Ont. Box 254 E-10-11

SUNNDALE

Offers G-gones of Pieterse Hengerveld
De Kol, the champion bull of his
breed, the only one that has two daughters
that have made officially over 32 lbs.
butter in 7 days. Book your orders now
from good official record dams in our
Helsa family. E-10-10

A. D. FOSTER, Bloomfield, Ont.
Hawell Station E-10-10

AYRSHIRES

SPRINGBROOK AYRSHIRES
Are fine producers of milk, testing high
in butter fat. All sired by imported
breeds, bred for calves of 900 lbs. and
female. Prices low. Write or call on
2-24-10 W. F. STEPHEN, Huntingdon, Que.

AYRSHIRES.—Record of Performance
work a specialty; young bulls from B
of F. cows, and cows that will go on
at next freshening. Milk reports of
dams, for everything. Milk reports of
JAMES BEGG, Box 88, St. Thomas

FOR SALE—AYRSHIRE BULLS

From one month to two years old; all
bred from large, good-milking stock. Also
forshire pigs. Apply to

DANIEL WATT on to HON. W. OWENS,
Manager, Proprietor,
2-19-10 Riverside Farm, Montebello, Que.

SPRINGHILL AYRSHIRES

Imported and home bred stock of all
ages for sale. See our stock at the
showing this fall. Write for prices.

ROBT. HUNTER & SONS

Long Distance Phone. Masville, Ont. E-14-10

SUNNYSIDE AYRSHIRES

Imported and home bred, are of the
choicest breeding, of good type and have
been selected for production. THREE
young bulls being sold by
"Nether Hill Good-time"—3654—(Imp.)
for sale. Write or call on
J. W. LOGAN, Howick Station, Que.
(Phone in house.) E-12-10

STONEHOUSE STOCK FARM

Is the home of most of the
coveted honors at the leading
eastern Exhibitions, including
first prize old and young herd.
FOR SALE a few Choice Young
Cows, also Bull Calves.

HECTOR GORDON,
Howick, Que.

RAVENSDALE STOCK FARM

Ayrshires, Cydenates
and Yorkshires
If in need of good
stock, write for prices
which are in every
way reasonable.
W. F. KAY,
Phillipsburg, Que.

6-5-1910

As our population and the cost of food
products increase, milk as one of the
most valuable of food products, will also
increase in price, and in the near future
it will be as customary for dairymen to
milk cows three times a day during the
earlier portion of the lactation period as
it is now to milk but twice. Indeed, owing
to the wonderful milk-producing qual-
ities of Holstein-Friesian cattle, in order
to avoid congestion of the udder, it is the
common practice among those having the
better cows to milk their cows daily for
many weeks after freshening.

M. H. Gardner, Supt. A. R.

HOLSTEIN-FRIESIAN COWS ACCEPTED
IN RECORD OF PERFORMANCE

Sherwood Ethna's Favorit, (6199), at 3
years; 15095.25 lbs. milk and 394.73 lbs. fat in
365 days; average per cent. fat, 3.13.
Owned by C. H. Shaver, Davisville, Ont.

Mary Anderson 3rd (7823) at 2 years;
9382.5 lbs. milk and 358.47 lbs. fat in 368
days; average per cent. fat, 3.82. Owned
by G. W. Clemons, St. George, Ont.

Laura Albino De Kol (7044) at 2 years;
9074 lbs. milk and 329.47 lbs. fat in 365
days; average per cent. fat, 2.90. Owned
by R. Honey, Brickley, Ont.

Lulu Glasco (5924) at 4 years; 15097.97
lbs. milk and 463.172 lbs. fat in 369 days
average per cent. fat, 3.70. Owned by S.
Lennon, Lynden, Ont.

Julia Arthur 2nd (6977) at 3 years; 9019
lbs. milk and 312.17 lbs. fat in 365 days;
average per cent. fat, 3.46. Owned by G.
W. Clemons.

Lilly Westwood 2nd (5966) at full age;
11593.35 lbs. milk and 370.59 lbs. fat in 323
days; average per cent. fat, 3.19. Owned
by Thomas Hartley, Downsview, Ont.

Lucy Staple (7816), at 2 years; 10212.5
lbs. milk and 380.96 lbs. fat in 342 days;
average per cent. fat, 3.70. Owned by
Wm. E. Mason, Tyrrel, Ont.

G. W. Clemons, Secretary.

Quebec Holstein Breeders

(Continued from page 10)

Quebec to the merits of the Holstein
cow. Holstein breeders were building
better than they knew at the day is
coming when there will not be enough
Holstein milk for the babies of the
country.
Letters were read from Hon. Sydney



ROCK SALT for Horses and cattle, in tons and
calds. Toronto Salt Works, Toronto.
G. J. CLIFF, Manager

Dr. Bell's Veterinary Medical Wonder cures
kidneys. The south country breeds, Agents wanted
in every county. Write for a free trial of 50 cents. This
offer only good for 100 days. Limited to one bottle.
DR. BELL, V.S., Kingston, Ont.

AYRSHIRES

"La Bois de la Roches" Stock Farm
Here are kept the choicest strains of
AYRSHIRES, imported and home bred
WHITE ORINGTON, WHITE WYAN-
DOTS and BARRED Rock Polnary.
HOB L. J. FOREY, J.A. BIRSEAU,
Proprietor, Manager
E-5-26-10 St. Anne de Bellevue, Que.

BURNSIDE AYRSHIRES

Having disposed of my 1509 importation,
I intend to have about March 1st, for
another lot. I expect to have a number
of bulls through quarantine by first week
of June. Orders entrusted to me will be
carefully attended to. We have a few
young bulls fit for service, on hand, of
choice breeding, and females of all ages.
Phone, etc. R. R. NEBB, 29-35-10
Burnside Stock Farm, Howick, Que.

MISCELLANEOUS

TAMWORTH AND BERSHIRE SWINE-
loars and sows for sale at W. Fedd,
Corinth, Ont. Maple Leaf Stock Farm.

CHESTER PIGS

I am offering for sale the improved
Chester White pigs, all ages; 100 under
weight old. The largest kind is what I
import.

J. H. M. PARKER

Willowdale Stock Farm, Lennoxville, Que
Importer Q-3-21-10

Fisher, Minister of Agriculture, Mr.
George F. O'Halloran, Deputy Minis-
ter of Agriculture; Mr. J. D. Caron,
Provincial Minister of Agriculture;
Mr. J. H. Grisdale, Mr. Milton Her-
sey, Provincial Analyst; Mr. Joseph
Ainey of Montreal, and Mr. J. J.
Forget, of Montreal, regretting their
inability to be present. Mr. Hersey
stated in his letter, that the rumor
that he was prejudiced against Hol-
stein milk was unfounded, as he was
acquainted with the good qualities of
such milk.

A number of those present told
of their experiences handling Holstein
cattle. Speeches were delivered in
both French and English. The speak-
ers included: Mr. Ogden Sweet, of
Sutton, Quebec; A. N. Deland; Mr.
Neil Sangster, Mr. Forget, Hon. J.
Benoit, Dr. Harwood, Mr. Rev. Rev.
Father Godin, of Vaudreuil, Rev.
Father Godin spoke of the splendid
work being accomplished in the sec-
tion by Dr. Harwood through the im-
proved methods of agriculture which
was introducing. The members of the
association expressed their apprecia-
tion of his efforts. Dr. Harwood
pass of pleasantly by mentioning
an Honorary Director of the Associa-
tion.

Others who spoke were Mr. H. E.
Channell and Dr. E. Bull, represent-
ing the Sherbrook Exhibition, who
assured those present that the man-
agement of that exhibition intends
to do everything it is power here-
after to encourage the Holstein breed-
ers to exhibit at the Fair. A dairy
test will be held at the next exhibi-
tion.

OFFICERS ELECTED

The election of officers resulted as
follows: Pres., Dr. De la Roche Har-
wood; 1st vice-pres., Ogden Sweet;
Sutton, Que.; 2nd vice-pres., Neil
Sangster, Ormstown, Que.; 3rd vice-
pres., Jos. Ferland, Sorel, Que.; 4th
vice-pres., J. Gillespie, Ablo-
tsford, Que.; Directors, J. Gillespie,
Lachine Rapids; A. Forget, Felix
Ashley, Marieville; J. E. Pettis,
Brome; J. E. K. Herriek; Andrew
Boa, Lachine; Dr. E. P. Ball, Rock
Island; and Achille Gaud, Herby;
sec., F. E. Came, Montreal.

Mr. Forget complained that many
of the judges sent to the fall fairs
throughout the province knew so little
about Holstein that they were incap-
able to judge them, and suggested
that the Association should endeavor
to have competent judges attend as
many of the fairs as possible. On
the motion by Mr. Came, seconded by
Mr. Boa, the directors were instructed
to nominate judges for the fairs.

On motion of Dr. Harwood, second-
ed by Felix Ashley, the Directors
were asked to arrange to publish ar-
ticles about Holstein cattle and milk
in French for the benefit of the French
breeders and farmers.

Another motion was passed urging
Hon. Sydney Fisher to arrange to
have Holstein cattle kept at the Ex-
perimental Farm at Ottawa.
Dr. Harwood, Dr. Godieau and
Messrs. H. L. Lafleur and F. E. Came
of Montreal, Dr. Kingston of Mon-
treal and Mr. Neil Sangster, Orms-
town, were appointed a Committee to
wait on the officials at the City Hall
in Montreal to confer with them in
regard to the sale of standards for milk.

Dr. Harwood, Messrs. Sangster and
Came were appointed to select judges
for the county fairs and to interview
the railway companies to see if re-
duced rates could be obtained for
the annual meetings of the Associa-
tion. Much of the success of the meet-
ing was due to the efforts of Messrs.
J. E. K. Herriek and F. E. Came, who
are doing much to advance the Hol-
stein interests in the Province of
Quebec.

A description of the visit to Dr.
Harwood's farm will be published next
week.

OUR FARMERS' CLUB
Contributions invited.

ONTARIO

GREVILLE CO., ONT.
CHARLEVILLE.—There is a very heavy demand for work horses and very few are to be had even at good prices. Some farms have been changing owners, prices ranging from \$300 for 20 acres to \$3500 to \$4000 for 65 and 75 acre farms. Farmers are not increasing their herds of cows. Already there are some enquiries for hay. Timothy sells for \$15 to \$16 a ton; straw, \$6 to \$7; oats, 45c to 50c a bush; bran, 55c a ton; middlings, 85c; gluten feed, 82c; gluten meal, 87c; eggs, 22c to 25c; creamery butter, 22c to 25c; springers, \$40 to \$50; hogs, 8c to 9c a lb.; dressed hogs, 11c to 12c; dressed beef, 7c to 8c; hides, 10c a lb.—G. W. C.

HASTINGS CO., ONT.

TURRIFF.—Hay is scarce, and is being imported. Butter is unusually scarce, and is being shipped in from Toronto. The local price is 25c. Mr. D. Munro of Saskatchewan, shipped a carload of hogs from North Hastings to the east. The prices averaged \$125 each. Some agricultural editors criticize farmers for investing their surplus away from home. We do not think the blubke is needed often in North Hastings. Merchants and farmers alike invest at home and are finding it profitable. Hog farmers are nearly all last meeting decided to purchase a pure bred Clydesdale stallion.—W.R.W.

NORTHUMBERLAND CO., ONT.

EDVILLE.—The annual meeting of the cheese factory was held on the 21st of Feb., and was largely attended by the patrons. All seemed to be well satisfied with the returns of the season. This factory which has now been running 37 years without a break, gathers the milk in the country about Edville, Dundonald and Penryn. It has been the means of bringing a good deal of money to the patrons during its long career, which has fortunately been free from losses by fire or otherwise during the time.—H. S. H.

DURHAM CO., ONT.

FLEETWOOD.—The snow is keeping on the ground in good shape, and fall grain and clover will surely be in good shape for the spring. A few farmers are getting scarce of fodder, and have been looking for hay and straw, but report it as being very scarce, and nearly impossible to get. Hogs are nearly all sold, and as several sows are missing, the scarcity will be great next summer. Hay is selling at \$12 for oats, 45c; buckwheat, 60c; barley, 60c; wheat, \$1.65; straw, \$4 to \$5 for a load; hogs, \$8.50 to \$9.75; beef, \$7 to \$8 a cwt.; eggs, 25c; butter, 25c, and potatoes nil. Clover threshing is about done; the seed has been turning out fine.—A. G.

OXFORD CO., ONT.

GOLSPIE.—The great depth of snow makes it almost impossible to do any teaming. A great many stock sales are being held. Dairy cows and horses are very high, cow going from \$40 to \$80, and some even higher. Horses are selling very high and not many for sale. Hogs are very high, too. At an auction, one of the other day two sows, with very little breeding sold for \$105. Our Farmers' Institute meetings are over, and were well attended. We were given a demonstration in judging dairy cattle and horses. The men in charge of it really knew their business. Farmers should learn very much from their experience.—A. M. McD.

WELLINGTON CO., ONT.

ELORA.—Turnips at 12c a bush, still continue to be placed on cars here, and

by keeping an oil stove burning during the time of loading, no injury to the turpids occur. The price looks low for this time of year, and there is a possibility that before spring the goods will be of as much value right in the stables. Cattle (especially exports) are keeping up well in price both here and in England, and the scarcity of good ones would seem to indicate this class will continue to command good prices. Hogs are a little lower but still high enough to be good paying stock. The prices paid for breeders look as if the near future would furnish increased supplies, which would be well for all concerned.—G. W.

BRUCE CO., ONT.

CLONY.—The weather has been very cold. The snow on the roads has not been as deep for several years. Horses are in good demand. There are a great many men down from the West, who are taking horses back with them. There was a meeting in the village of Underwood to get the feeling of the people towards getting a rural telephone line in Bruce Township. The meeting was well attended. Men were appointed in each ward to make a personal canvass of the same. Cement has been used in horse partitions, a mould to form the post, and a few feet of concrete, leading to do cementing next summer are hauling their gravel now.—J. Mack.

WATERLOO CO., ONT.

NEW HAMBURG. Farmers' Institute meetings are well attended. Delegates to this township are splendid practical men. Horses are selling high. Good teams sell for \$45 and upward. \$50 was paid a day or two ago for a nice carriage team. There are very few fat cattle moving out yet. This community has many splendid cattle feeders. We have several log buyers for maple logs 22 inches in diameter. They are paying \$13 a thousand. A piece of good well attended woodland is a rare proposition and it affords something to do in the winter season. Farmers' Club has been organized, and are popular and will soon become a potent factor for the farm community.—A.R.G.S.

ELGIN CO., ONT.

FALBOUTW.—Mr. E. Penty is feeding 25 head of beef steers, besides 11 horses, a number of cows and young cattle. His plan of managing his steers is as follows: They run loose in the cement stable, underneath one of his barns. Here they have plenty of room and are always warm and dry. Each steer is allowed about four feet of manger space, and their feed during the first month of winter consists of unhusked corn. This they feed up sleek and clean, especially on cold days.

Later on, when the corn is all done, they'll feed on hay with a grain ration of oats and barley chopped together. This is continued until the grass comes. Then they'll get grass and chop. This finishes them up properly for market. Mr. Penty has a unique and humane way of saving his cattle from the torture of being allowed to stand at all times free access to their winter quarters. He also places blinds over the windows, thus darkening the stable. Here the cattle rest in joy and contentment, and are unmolested by their summer enemies. The owner considers this a paying investment for his cowboys, who work wonderfully fast in the cool of the day, then burry away to their quarters for protection.—J. E. O.

MIDDLESEX CO., ONT.

DELAWARE.—Steady sleighing for over two months with heavy snow is thought by many to give promise of an early spring and bountiful crops. The demand for heavy horses for the West has been keen and complaint is made that there is not enough of the right sort to be had. Consequently many inferior ones are being bought. The supply of storage eggs is reported low in London. The supply of new laid is scarce owing to the steady cold weather. Egg being still paid for new laid.—E. M. H.

ESSEX CO., ONT.

KINGSVILLE.—The fields are almost entirely covered with ice and people are fearful that wheat and clover will be completely killed with the ice as it was about three years ago, when not a single plant of clover was left on a ten acre field. East and north where there is more snow there would probably not be so much danger. The large amount of corn fodder together with a good hay and straw crop, ensures abundance of feed. Horses are being shipped in greater numbers than in any previous year, and at record

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
\$9.00 a Cwt.
FOR HOGS WEIGHING 100 TO 250 LBS.

THE GEO. MATTHEWS CO., LIMITED
PETERBOROUGH, - HULL, - BRANTFORD

prices. The great bulk of horses shipped from here are Percherons, and they certainly bring the highest price going.—L.P.

BRITISH COLUMBIA

NEW WESTMINSTER CO., B.C.
MATSQUI.—An excessively wet fall, immediately followed by freezing weather, caught many potatoes undug, where they still remain. A few may come through all right, but 20 degrees of frost will not leave many. Stock are wintering well. With an ordinary spring, there is plenty of food. Hay sells at \$18 to \$20; oats, \$25 a ton; potatoes, 50c; beef, 8c to 10c a lb.; 12c; pork, dressed, 12c to 15c; eggs, 40c to 50c; cream, 50c a lb. There is a growing demand for better milk, and 30 gal. is being offered for certified milk. A number of herds are being tested with tuberculin preparatory to entering the trade.—B.

SASKATCHEWAN

HUMBOLDT CO., SASK.

ETHELTON.—This part of the province is well adapted for mixed farming. I sold this week eight head of cattle. Two of the steers weighed 3500 lbs., after being driven 20 miles. These cattle had never been stabled this winter. They got some grain to finish with.—M.

The fence that's strong all through

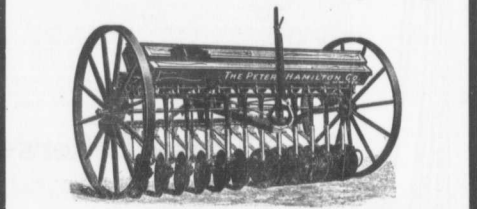
Every wire in our heavy farm fence is No. 9 hard steel, with uniform strength and lasting qualities in each strand. A fence with any small or soft wire in it is short lived. A chain is no stronger than the weakest link. Then PEERLESS FENCE made from English wire is rust-proof—that withstands more than double the endurance of other makes.

Peerless the fence that saves expense

The PEERLESS does not cost anything to keep—there are no repair bills—it is not affected by changes of temperature. The horizontal wires being crimped make ample provision for all contraction and expansion. PEERLESS FENCE, once well stretched, is always tight—no shocks to fear. We are manufacturers of high grade farm, poultry, ornamental fence and gates. Write for Free Book. A sample of PEERLESS FENCE and a simple method of testing any make of fence.

THE HAMILTON WIRE FENCE CO., Ltd., Box B, Hamilton, Ont., Windsor, Man.

Need a New Drill this Spring?



If so you had better try a Peter Hamilton Lead Drill, because you cannot buy any other that will give you as good satisfaction. We can give you which ever you need.

Either Hoe or Disc

ANY SIZE
There is no other Drill like it, none so admirably adapted for all conditions of work, none so enduring or easy to operate, none so light of draft.

See our agent or send for catalogue and find out more about it.

THE PETER HAMILTON CO., Limited
PETERBOROUGH, ONT.

Black Remarkable
Wach and pleasing
flavor. The big black
plug chewing tobacco.

2267

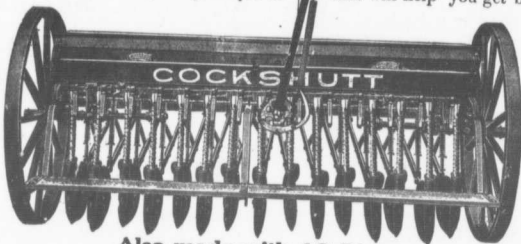
BIGGER CROPS — BETTER GRAIN MORE MONEY

IS THAT WHAT YOU WANT?

LIKE 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



15
Disc
Drill

Also made with 13 Discs

THE 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 riveted 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, 1909

Cockshutt Plow Co. Ltd.,
Brantford, Ontario

Thorndale, July 20th, 1909

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.

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. **BRANTFORD**
LIMITED