

Issued Each Week Only One Dollar a Year

VOL. XXX.

NUMBER 10

FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

MARCH 9,

1911.



TRULY THE SUGARING SEASON IS ONE OF MANY SIDES AND WITH DELIGHTS FOR ALL

What man or woman cannot appreciate the many phases of sugar making, several of which are so well here depicted! Not the least of these is that of the small boy in the foreground who with evident gusto is drinking deeply of the sweets of the maple. Sugaring, as we know it now-a-days, has become a serious matter-of-fact business, which under proper management yields splendid profits. Some side lights on how to make the most out of a sugar bush, are given in an article, on page 4, by Mr. Andrew Reichardt, Dundas Co., Ont., whose "camp" is herewith shown.

DEVOTED TO
BETTER FARMING AND
CANADIAN COUNTRY LIFE

March 9, 1911.

NEVER HAD AN ACCIDENT

You will have to go a long way to find a person who has had an accident with a "SIMPLEX" bowl. And, what's more! A worn out

Simplex Link-Blade Separator

is as scarce as hen's teeth. There are several reasons why this Separator has the reputation of being a "no break, no wear" machine.

The "Simplex" bowls are made of a very ductile grade of seamless steel tubing, that even if it were subjected to an extreme pressure would stretch, but would not fly to pieces. The spindles are made of a special grade of high carbon steel, heat treated, to increase their toughness.

There is no safer or stronger bowl than the low speed "Simplex" bowl, and this is a point that you should think about especially in these days of cheaply built high bowl speed separators.

Our aim is to make a Cream Separator that is stronger than is actually necessary. When you buy a Separator, buy a good one. The safest way is to get in touch with our nearest agent.



Note the heavy base and heavy rigid frame construction.

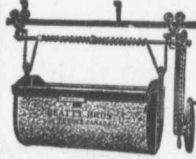
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WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

Keep Your Stable Clean "BT" Litter Carrier



What's work is harder or more disagreeable than cleaning out the stable. A "BT" Litter Carrier will make this work easy, for with it four barrow loads of manure can be removed from the stable at one time—no heavy wheeling, no climbing through snow or mud. If desired the manure can be dumped directly into a wagon or sleigh and save reloading.

The "BT" Line also includes Stanchions and Steel Shells and Hay Tools.

Write for our free catalogue, showing best methods of erecting litter carriers and telling why you should put in a "BT" Litter Carrier.

Write to-day to

BEATTY BROS., Fergus, Ont.

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

Western Shipments of Pure-Bred Stock

During the year 1910, five cars of pure bred live stock were shipped to the west, three long palace horse cars and two short cars. The following is a statement handed out by A. P. Westervelt of the receipts and expenditures in connection with these cars and details regarding the number and kind of animals in each shipment.

Shipment, Feb. 23rd (2 cars)	Receipts	Exp.
Shipment, March 3rd	\$561.67	\$556.62
Shipment, June 1st (2 cars)	459.79	459.79
	709.45	672.37

Horses	Feb. 23rd		June 1st		Total
	Shipped	Received	Shipped	Received	
Clydesdales	1	1	1	1	2
Thoroughbreds	4	1	—	—	5
Shires	—	—	2	4	6
Percherons	—	—	—	2	2
Hackneys	—	—	—	1	1
Cattle	—	—	—	1	1
Ayrshires	1	7	10	1	19
Short-horns	3	2	4	4	9
Herculeans	1	1	—	—	2
Jerseys	—	—	11	15	26
Aberdeen-Angus	4	—	—	—	4
Gallegos	—	—	1	—	1
Holland-Friesian	2	1	—	—	3
Sheep	—	—	1	1	2
Suffolks	—	20	—	—	20
Swine	—	—	3	3	6
Oxford Down	1	—	—	—	1
Sanddowns	—	—	—	3	3
Swine	—	—	—	—	—
Berkshires	—	—	—	6	6
Yorkshires	—	—	—	1	1

Value per Head of Farm Animals

The average value per head of animals on farms and ranges in the United States on January 1, 1911, compared with average value on the same reports in previous years, based upon reports of agents and correspondents of the Bureau of Statistics, follows:

AVERAGE VALUE PER HEAD OF FARM ANIMALS, ALL AGES, ON JAN 1 OF YEARS INDICATED

Kind of Animals	1911		1910		1909	1908	1907	1906	1905
	Jan 1	Jan 1	Jan 1	Jan 1					
Horses	\$111.67	\$108.19	125.65	119.84	87.54	87.19	84.34	80.93	187.02
Milk cows	79.49	85.79	79.49	85.79	107.84	84.88	86.79	76.63	78.65
Other cattle	20.75	18.61	22.56	20.75	17.49	19.09	16.53	19.77	17.54
Sheep	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73
Swine	9.38	9.14	9.38	9.14	6.55	6.55	6.55	6.55	6.55

Rewards of Official Test Work

Editor, Farm and Dairy.—A young breeder writes to ask as to whether I think he will stand any show for winning prize-money, if he takes up the official test work and makes an effort in that direction. As to prize-money, every Holstein-Friesian breeder normally has an equal chance with all other breeders, but the breeding of the cattle and the skill with which they are handled are the all-important factors. It is rarely the case that any animal not strongly backed by A.R.O. breeding makes a notable record; and the greater part of the prize-money is won by those breeders having not only the cattle; but also experience in handling them. However, one must creep before one can walk, and walk before one can run, and those who new have the prize-winning cows and heifers, if they follow this, also had to begin on the lowest step of the ladder.

To win prize-money is a great honor and as the amount of money and number of prizes for the present fiscal year has almost been doubled, while no one herd can win more than three prizes in any one of the four prize-divisions, it is evident that many prizes will be won by breeders making their first efforts. But winning prizes is but a part of the game, it is the gain in the development of the animal, the herd, and the owner himself, that is most to be considered. If this be accomplished, even though no prize be won, the reward is great. Any man who proves the capacity and value of a cow beyond question, not only enhances the value of that cow herself, but also the value of her offspring and near relatives. And the reward is not all to be measured in dollars and cents, for a man derives a greater degree of personal satisfaction in the possession of cows that have proved their capacity and value

by making good under official test, and that are for that reason enrolled in the Advanced Register among the aristocracy of the breed. Let a breeder make a start, thus gaining experience in developing his cows so as to get the best results; and it will not be long before he will be winning a share of the prize money.—Malcolm H. Gardner, Supt. of Advanced Registry, Delavan, Wis.

Swine Registrations Doubled

The swine-breeding industry in making rapid strides in Canada, as indicated by the number of registrations of pure-bred stock recorded for the present year. The total in 1910 was 8,047, as contrasted with 4,435 in 1908, and 4,061 in 1909.

Of the 8,000 registrations for all Canada this year, nearly 3,600 were from Ontario, Quebec stands second, entering 1,429 animals, Manitoba registered 779; Alberta 448; Saskatchewan 383. The Maritime Provinces and British Columbia show very little interest in the raising of pure-bred swine. New Brunswick, Nova Scotia and Prince Edward Island together registering only 880 animals, while British Columbia entered 157 registrations.

The Yorkshires and Berkshires are a long way in the lead, showing more than 3,000 each this year, which is a marked advance on the past two years the Berkshires particularly more than doubling in number in one year. The other breeds are divided among the five or six other breeds. The registrations of the different breeds in 1908, 1909 and 1910, respectively, are

as follows: Yorkshires, 2,126, 1,775, 1,255; Berkshires, 1,475, 1,214, 3,003; Chester Whites, 421, 607, 914; Tamworths, 317, 355, 446; Poland Chinas, 23, 61, 152; Duroc Jerseys, 23, 44, 90; Essex, 30, 5, 11; Hamshires in 1910 (first year recorded) 176.

Items of Interest

All-cement houses, 500 in number, modelled on lines laid down by Ellis, it is said, will be erected in Montreal this coming spring. The houses will be entirely of cement and when they are completed not a piece of wood, apart from the doors and window frames, will enter into their construction. The walls, floors, ceilings, stairs, mantels, partitions, roofs, and outside trimmings, will all be of concrete and will be practically in one piece without joints or other visible forms of connection.

References have already been made in this column, to the new record which is believed to be a world's record, made recently by the two-year-old Holstein heifer owned by E. B. Mallory, of Frankfort. This heifer, Lulu Keves, 10,333 gave 576 lbs. of milk, which was equal to 20.65 lbs. of butter in seven days. She gave an average of 82.10 lbs. a day, her best day being 86 lbs. Since the completion of the seven day test, she has given as high as 92 lbs. a day. This heifer was bred by Mr. Mallory's farm, her mother was Viscount, 2nd Lulu. She also was bred by Mr. Mallory, and every daughter she has had passed the Record of Merit Test. The champion heifer for six weeks before being given one gallon of grain sprang from the same dam, Viscount, 2nd, was also bred on the farm, but was never officially tested. Mr. Mallory is only a young breeder, and his success, therefore, is all the more creditable. He is a son of the well known breeder, Mr. J. B. Mallory.

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FOR WEEK ENDING MARCH 30, 1911.

No. 10

THE UNDERLYING PRINCIPLES OF CROP ROTATION APPLIED IN PRACTICE.

F. C. Good, Brant Co., Ont.

A Prize-Winning Farmer Discusses his System of Crop Rotation Reasons Given for his Practice. Alfalfa for a Hay Crop. Pastures Left but One Year.

THE general objects in view in the observance of any system of rotation are: 1. The growing of maximum crops with a minimum loss of plant food, together with a maintenance of soil fertility; 2. The destruction of weeds and the improvement of the texture of the soil.

Perhaps, a more important question than that of rotation is that of the selection of suitable crops to grow in the rotation. For example, it is more important to see that clover constitutes one of the crops than it is to observe any particular order in the rotation. Granting, however, that the farmer has made his selection (which will be largely determined by the market, soil, and climatic conditions) with a view to obtain the most suitable crop, or varieties of crops, for his purposes, then he has to face the question of rotation. In treating this matter I think I can best throw light upon it by dealing with my own practice, giving reasons for adhering to, or changing, any particular method, and thus discussing in an informal way, some of the underlying principles.

MR. GOOD'S OLD ROTATION

Up to the present time I have been following a five-year rotation: Hay, pasture, oats, roots and corn, mixed grain, seeded down. As I also grow wheat, I have been working that in on the side, on pasture or hay land plowed in July or August.

This rotation is, perhaps, somewhat unusual, and may need some justification. In the first place I prefer not to summer fallow for wheat, as I practically lose one year's crop, and get such a heavy stand of wheat straw that it will probably all go down and not only be difficult to harvest but smother out young clover. I also prefer to put oats upon a late-plowed sod, that has been top-dressed with manure the previous winter, that is the winter before it is pastured. In this way one gets a fairly good crop of oats that does not go down. Oats are, of course, a good crop to follow roots and corn, but for that I prefer the mixed crop, as it gives me bigger returns.

DISSATISFIED WITH HIS ROTATION

In some particulars, however, I have become dissatisfied with the foregoing rotation, and am now changing. In the first place, I wish to use alfalfa as my main hay crop, and thus remove that from the rotation altogether. Last season I thoroughly cleaned a field for seeding to alfalfa, as I have not yet got a really good stand of that most excellent hay plant. Two years ago, however, I cut 17 acres, largely alfalfa, and cut it again last year. But it was not good enough to leave permanently). In the second place, I find that a sod plowed for wheat in midsummer is apt not to get killed, and if there is any blue grass in it, as there usually is, it spreads rapidly and greatly interferes with the growth of young clover.

* Mr. Good's farm was one of the successful competitors in the first year of the Dairy Farms competition as conducted by Farm and Dairy during the past two years. This essay on his own actual practice was written by Mr. Good as requested of him and recommended by the rules of the competition.

er. In the third place, I do not get a sufficient quantity nor a good enough quality of pasture the year after cutting hay, as the clover is mostly gone, and the timothy and other grasses are relatively poor pasture plants.

For these reasons I am working into the following five-year rotation: Pasture, oats, roots and corn, mixed grain, wheat, seeded down. Farm and Dairy readers will notice that the hay crop is not in the rotation, and that I pasture the fresh seeding. By dividing my pasture field with a temporary fence, and not letting the stock on it till June 1st, I have plenty of excellent feed until quite late in the summer, and can carry a relatively large stock on a small acreage. This pasture land is plowed deeply late in the fall and put into oats the next spring. The oats, following upon a clover sod, pastured all summer, have abundance of plant food but not enough immediately available to cause them to grow as rankly

and once across the rows when the corn is about six inches high.

The corn and mangel ground is kept clean all summer and given surface cultivation next spring in preparation for sowing a mixture of oats and barley, with a sprinkling of peas, and about four pounds flax seed to the acre.

PREPARING FOR WHEAT

Immediately after harvest I plow this stubble with the two-furrow plow and roll down. Later, when time permits, I top dress it with six loads of manure to the acre and work the manure in with the harrows. This is given surface cultivation until time for seeding to wheat, and the wheat I seed with a mixture of red clover, alsike, and timothy the following spring. On ground thus prepared, there is no grass to interfere with the growth of the young clover, and the wheat is not supplied with available plant food so fast that it all goes down. The top dressing with manure almost guarantees a good catch of clover, as anyone who has made the experiment can prove for himself. I had a beautiful field of wheat last year on ground thus prepared, and a grand catch of clover which was not at all likely to be smothered out. I would rather lose 20 bushels of wheat to the acre than have my clover crop destroyed.

The rotation described in the foregoing looks after five fields, and the alfalfa hay a sixth. I have a seventh field which I can use for pasture, field crops, rape, or hay, as circumstances advise, besides two orchards, two small fields of alfalfa, and a garden near the buildings.

ROTATION ADAPTED TO REQUIREMENTS

I have selected this rotation to supply me with hay, straw, grain and pasture of the desired kinds, and in the desired quantities for any purposes. I believe it will enable me to maintain or increase the fertility of the soil, prevent the spread of noxious weeds, and give large returns per acre.

I suppose every farmer follows some system of rotation, either by accident or design; and as the desirability of different rotations depends upon a number of conditions which vary in different localities, no one rotation or number of rotations can be claimed to be the best. It is, however, important that the average farmer study the question with a view to discern the underlying principles which determine all good rotations, and then, having in mind his own special conditions, he is not apt to go far astray in applying the principles to his own circumstances.

SILOS.—Stave silos are entirely satisfactory. They should, however, be very carefully and staunchly built on a good cement foundation. The cost will run from \$1 up to \$3 a ton capacity. Cement silos are very durable and quite satisfactory, if well built. They will cost from \$2 to \$5 a ton capacity. Care must be taken to build of good material and to strongly reinforce with wires or bands. The round shape is essential to best results. Where wood is used only one thickness of two inch staves, or one thickness inch dressed lumber in square or straight line walls should be used.—J. H. Grisdale, Dominion Agriculturist, Ottawa.

Warm Words of Commendation

Editor, Farm and Dairy.—Just now when the general press of our country is so overrun with reading matter suppressing our demands for an increased British preference, and trying to make us farmers go against our best interests and oppose reciprocity (much of this matter evidently being paid for by the special interests against us) we farmers owe a double debt of gratitude to you, and to another farm paper, for the way you have stood up manfully for our rights. I wish to commend you for what you have done for us farmers in this fight.—C. F. Marsh, Clarksburg, Ont.

as they would do upon a piece of ground followed the previous year. They will rarely go down badly.

THE OAT STUBBLE AFTER HARVEST

Immediately after harvest the oat stubble is plowed lightly with a two-furrow plow, worked down and seeded with rape. If the season is favorable I get quite a bit of feed for the late fall; and at all events, if the rape does not amount to much, the weed seeds will germinate and be destroyed later. This land I do not plow deeply in the fall but cultivate next spring to clean the surface; manure at the rate of 12 loads an acre, plow under with the two-furrow plow, roll, harrow and roll again. It is then left for a week or two, to allow the weed seeds to germinate, cultivated and harrowed again and seeded with corn and mangels.

I partly sprout my mangel seed before sowing, so that it may come on ahead of the weeds, and so that I may continue the cultivation of the seed bed as late as possible.

The corn ground I harrow once across the rows three or four days after sowing, once lengthwise, just as the corn is coming through the ground,

Two Brood Mares on 100 Acres
G. A. Brodie, York Co., Ont.

The heavy horse outlook has never been more favorable than it now is. The breeding of this class of horses must continue to be one of the greatest factors in profitable agriculture for years to come. The great movement westward, and the expansion in all directions there, will create a new market for a great many horses yearly; the poorer classes of horses to the first settlers, but the good ones when conditions later afford it, thus making a market for all classes of heavy horses. The hurry-bustle in the west during certain seasons, wears out horses much more rapidly than in the east, thereby increasing the demand.

New Ontario also, with its extensive timber areas, with its development in the mining industry, that has created already a large market for our horses, and later its agricultural development, will annually increase in its demands for good horseflesh. Older Ontario also will use more horses in the future, as the tendency to-day is for a system of more intensive agriculture with more thorough tillage; indeed, to combat the increasing weed pests, such tillage is absolutely necessary.

All branches of industry—agriculture, mining, railroading, lumbering and manufacturing—seem to be on the increase. This is Canada's growing time. This century belongs to her, and she is still very young. We can look forward for years to a good healthy horse trade.

FOR 100 ACRES

The breeding of heavy horses is one of the most profitable branches of agriculture. A team of heavy registered mares can profitably be kept on every 100 acre farm. Each can raise a colt as well as do its share of work during the busy season of spring seeding, after which it would have a few months run with the foal, and then do its share of work the balance of the season. Some of our more progressive farmers keep nothing but breeding mares to do the work, relying on some that do not get in foal to do the road work.

An average price for a good foal from a registered, heavy mare would be \$150 for a filly rising one year old. For a horse colt we will get less, except for one extra good, good enough to leave entire, when he is worth considerably more. After paying the service fee, and the cost of keep of the colt, making due allowance for extra feed for the mare, and something for inconvenience, I consider \$100 to be a very conservative estimate of profit for each year a mare breeds. On every hundred acres, therefore, a few hundred dollars can be made yearly, and it requires little or no hard labor.

SUGGESTIONS FOR IMPROVEMENT

To improve the horse industry, I would say, Do not keep too many in a locality, and do little or no intercrossing. It is in intercrossing the culls generally come. Stock judging classes at institutes should do good work, as it is education that is most needed. I believe the high prices for horses at the present time will do much to improve conditions. I notice a great change late-

ly in this locality. Most farmers know their business pretty well. They use the best sires regardless of cost, and are refusing to sell their good mares. An inferior stallion will not get any trade here.

We must import the best, breed the best, and try to induce others to do likewise. When a person once uses a good stallion and sells the colt, he has his lesson; no more scrub stallions for him. Let all who have not tried this experiment do so, and so add your quota to the improvement of the horse industry, and at the same time, improve your bank account.

Maple Products of First Quality

Andrew Reichardt, Dundas Co., Ont.

There is a profit in sugar making, but a man must make an article such as the market demands and will pay the good prices for if he would reap that profit. Pure maple syrup should be of a delicate, clean maple flavor, and be of a transparent amber color, free from the least trace of sediment. Then it will command the highest price. The market is never overstocked with such goods.

There is no use of us talking about the old time method of boiling sap in pots and pans now. Fuel and labor both are too expensive, besides you cannot make gift edge goods in that

spout, for one spring I had half my bush tapped with metal spouts while the other half was tapped with Grimm spouts. Where the metal spouts were used the trees dried up and did not run any sap for 10 days while those tapped with Grimm spouts were running well.

LARGE STRAIGHT PAIRS ARE BEST

I use a 10 quart pail made almost straight. It will then stay on the hooks much better. I am convinced that it pays to use covers for the pails. I use a Champion evaporator 5 by 10 feet. I prefer it to any I have ever used or seen. In the Champion the cold sap is directly over the hottest part of the fire, it is a shallow boiler, easy to operate, and the syphons and inter-changeable pans do away to a great extent with the lime or silica and it is thus easier to keep clean.

For gathering, I use a galvanized iron gathering tank, which strains the sap through a double sieve just as it is gathered. I often put on this a cotton strainer in addition. This straining is one of the secrets in making first-class goods. One must keep every particle of dirt out of the sap, and everything the sap comes in contact with should be made of tin. We boil the sap syrup from the evaporator every five minutes. An evaporator that you cannot draw the syrup out of every five minutes is not what it should be. Long continued boiling injures the quality of the goods. I also prefer to have the raw sap over the hottest part of the fire as the nearer done syrup gets the more liable it is to burn.

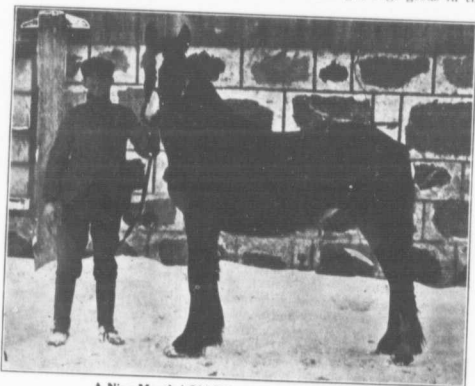
In marketing my syrup I put it up in cans to suit purchasers, and put on each can a neat label containing my name and guarantee of purity. This gives the purchaser confidence in my goods. The maple syrup maker to hold the best custom must equip his sugar camp with the most modern outfit and then do his best to make a better article with each succeeding year. I hold a gold medal diploma from the Louisiana Purchase Exposition, St. Louis, 1901, and yet I try to do better every year.

Our local Government should exempt all maple sugar orchards from taxation and thus encourage the maple industry as well as foster the preservation of the forests. We maple sugar makers ought to have an association in Canada not only to protect ourselves but the public, also, who now use an adulterated article all too commonly. We know that a great many of the so-called maple flavored syrups have not a particle of maple about them.

MAPLE PRODUCERS SHOULD AWAKEN

Dairymen and stockmen have their associations and if it is good for them why not for us? It is time sugar makers awakened to protect their own interests and not allow a can of syrup to have the word "maple" on it that is not pure maple syrup.

But notwithstanding these handicaps, the production of maple syrup and sugar is rapidly growing into prominence in Canada and justly so. Sugar-making comes in a time of year when other farm work is not pressing, and the trees require practically no care. The maple sugar bush is essentially one of our great natural resources and when equipped with a modern outfit for making maple syrup and sugar it is a profitable asset. If we all would equip our sugar orchards with modern machinery the same as we do the rest of our farm we would find in the maple the best paying investment on the farm. The maple takes care of itself the year round, and there is no preparing ground, nor sowing, we simply require to step in and take the sweets; and as soon as we finish all adulterated stuff there will be an excellent market for every gallon of maple syrup that can be produced.



A Nine Months' Old Filly of a Kind Worth Owning

Foals of this sort are sure money makers and ever being sought after by men who want to buy. This filly was sired by "Mascot" and in a class of 17 foals by this horse at the Wingham fall fair last year was awarded second prize. She is now owned by Jno. E. Homuth, of Haron Co. Ont.

way since the process of boiling is too slow. I tap 1,800 trees and they are good ones. With my outfit I can boil my sap in daylight, often turning out from 50 to 60 gallons of syrup in 12 hours. I have it arranged so that we handle the sap only once before it is in syrup. Three men can do all the work in connection with our camp quite easily.

TAPPING THE TREES

As soon as the weather begins to warm about the middle of March or a little later, I start to my sugar bush. I use a 7-16 inch bit and bore a hole about one inch deep. I find that a bore of that size will run as much sap as a larger bore; at the same time it does not injure the tree as much and the smaller the bore the more quickly the tree will heal. I have used a great many different kinds of spouts but I prefer the No. 2 Grimm spout to others. They are made so as to seal the bore from the air and it will not dry after the first few runs are over. Then there are no flanges or projections to close the sap cells and injure the tree. I know by experience that they are better than the old metal

THE SEVENTH PRIZE FARM IN THE PROVINCE OF ONTARIO

Mr. J. R. Anderson's Farm Described by W. F. Stephen, who, along with Mr Simpson Rennie, Placed the Awards in the Second Year of the Dairy Farms Competition Conducted by Farm and Dairy.

THIS farm of 300 acres, owned and worked by Mr. Anderson, is situated in one of the most favored and fertile sections in Prince Edward County. The soil is clay loam and loam; some of it is underdrained. At each end of the farm there are a few acres of swamp, which when drained will make very productive land.

The production of milk is the main business of this farm, and from this source is the principal revenue derived. Mr. Anderson keeps no books. Judging from what we saw, however, there was a good revenue each year. The proceeds from the cheesery for the month of June amounted to \$339.74; being 87½ cents a cwt. for 38,984 lbs. of milk, given by 36 cows. Mr. Anderson operates his dairy nearly all the year, and does something in buying and selling stock as well. He keeps on an average about 70 head of cattle most of the time.

In another place a short distance from the home farm were the heifers and a number of good stokers, many of which were ready for the block. Among the dairy cows were noticed many superior individuals, showing Holstein breeding. A registered Holstein bull, and two pure bred females form the nucleus of a future Holstein herd.

BUILDINGS

The buildings are quite complete. The large barn and stable are nicely painted, as are also the pigery, hennery, implement shed and combined ice house and milk stand. These buildings make an imposing and complete steading. This, to the thoughtful passer-by indicates that there is "something doing" on this farm.

Less wood in the make-up of stalls and partitions in the cow stable would be an improvement. Light and ventilation is fairly adequate, although both could be improved at slight cost, and would improve the stable very materially. There is a large stave silo and corn silage forms a large part of the ration for cattle on this farm.

The conditions of the crops when we saw them indicated that the land was in a good state of cultivation. The crops comprised 10 acres of oats, 17 acres of barley and oats, 24 acres of ensilage corn, two acres of mangels, 1½ acres of potatoes, and 4 acres of orchard. There is also some land seeded to alfalfa, and a large acreage of meadow.

The oat crop was splendid where the land was underdrained; elsewhere the crop was only fair. The corn crop excepting a few weak spots, was good. The mangels were a fair crop.

We noticed amongst the corn some sow thistles, which were being combated with energy. This sow thistle is one of the most persistent perennials and requires constant watchfulness to keep it from getting established. If once it becomes rooted it requires persistent stirring of the surface of the soil to keep it from throwing its growth upward to get a breath of air. Like many other plants, the sow thistle requires plenty of air in order to propagate and flourish.

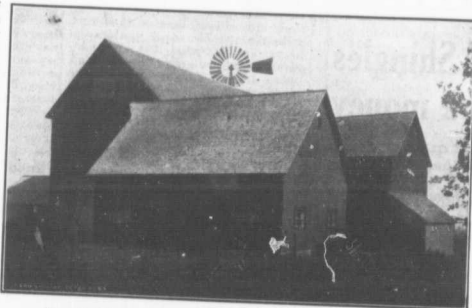
Silage and roots form the succulent part of the ration, alfalfa and clover hay the dry roughage. Oats and barley chop with some buckwheat added, together with bran, a little pea meal and oil cake

go to make up the daily ration of the milking stock.

The most complete ice house, milk stand and cooling device seen on any of the prize farms, was on this farm. It is situated at some distance from the stable. The milk cans are conveyed by a truck, which runs on a track built for the purpose, to the milkstand platform. The platform at the milk stand is covered to protect it from the rain, and is slatted on two sides to allow a free passage of air. Here the milk is cooled by sinking shotgun cans filled with broken ice into the large milk can. Nothing but pure air surrounds this milk stand; consequently the milk is always AI in quality and flavor.

Swine are given considerable attention by Mr. Anderson. From four to six Yorkshire brood sows are kept, the offspring of which are reared, fed and marketed. The pigery, 30 x 50 feet, is divided into eight pens, with swinging partitions, so arranged that they form pens, and by swinging in, leave a passage way at the back by which the pigery may be readily cleaned. A raised floor in part of each pen, insures dry and comfortable sleeping quarters for the swine.

About 100 Barred Rock hens furnish fresh eggs



Farm Buildings on a Prize-Winning Farm That Denote Prosperity (Ont., are here shown. Mr. Anderson's fine hog pen, hen house, silo and combined ice house and milk stand do not appear in the illustration. Read Mr. Stephen's description of this farm as given in the adjoining article.

at all seasons, as well as fowl for table use and for market.

On the farm are 14 acres of orchard and an acre or so of vegetables and small fruits. In favorable apple seasons the orchard is a splendid source of revenue.

Here we found all the needful up-to-date implements required on such a farm, and they were in good order.

The water system is complete. From several good wells water is pumped by wind power to two large tanks over the stable. From these tanks the water is taken to the stables, to the milk platform, and to the house.

THE FARM HOUSE

The farm house, though not laid out according to the latest plans, presents a nice appearance, with its long verandah, fronting on a large, well kept lawn, with a few shade trees and beds of flowers. Hot and cold water (hard and soft) can be had in kitchen and bath room. The sanitation was quite complete, all the waste water and sewage being carried away to a cesspool some distance away. Nearly all the work on this farm is done by Mr. Anderson and his family, although some hired help is employed from time to time. Mr. Anderson has a most favorable section in

which to farm. A large measure of success has followed his efforts. He has made great strides towards perfection since entering in the Prize Farms Competitions as conducted by Farm and Dairy, but he realizes that there is much yet to be done before the goal of his ambition is reached, viz., that of first place in another Prize Farms Competition, (which, by the way, is being arranged for by Farm and Dairy).—W. F. S.

A Shepherd's Duties at Lambing Time

D. Innis, Victoria Co., N. B.

At lambing time the shepherd should be around often to keep an eye on the ewes and give assistance if required. But by all means, let nature do her work without interference, where possible. If lambs come early and in cold weather, there ought to be some preparation made for the ewes in a warmer place for a few days. Warmer quarters are necessary for a short time only. A lamb will stand quite a lot of cold after it is dried off and had a good drink of its mother's milk.

If the ewes are not shorn of their wool before lambing, see that the bits of wool around their teats are clipped off so that the lambs can get at the teats readily. Dock the lambs' tails when eight or 10 days old. Shear the sheep as early as the weather will permit. Ten days after shearing, if there are ticks on the sheep, they will get on the lambs. Then I dip the lambs in Cooper's Dip. If the lambs have salt and sulphur where they can get at it at all times, they will not be infested with ticks.

FEED LAMBS SEPARATELY

In two or three weeks the lambs will commence to eat a little food. Fix a feeding place for the lambs where the ewes cannot go, and feed the lambs very fine clover hay, some oats and a little wheat bran. Be careful, however, in feeding the bran.

The ewes should have the run of a stubble field or scant pasture for a week or two after the lambs have been weaned. Care should be taken that their bags do not get spoiled. Heavy milkers are apt to be troubled in this way when the lambs are moved. When mating, put them into clover or rape. They should be in good condition before the ram goes with them. If the ewes are kept in good condition at the mating period, strong healthy lambs are assured.

To keep up the flock the ewes must be culled every fall. Old and poor milkers should be got rid of. Some of the best ewe lambs should be kept. Better still, some new blood may be introduced into the flock. Whatever may be your object in breeding, be sure and use a pure bred ram. You will then improve the flock and in a short time your ewes will be practically pure bred.

Pointers for Corn Growers

E. D. Eddy, B.S.A., Seed Dept., Ottawa.

Secure seed that is acclimated. The best source is southwestern Ontario.

Secure varieties and strains true to type and adapted to your conditions. Avoid excessively large and late varieties.

Take every precaution against using seed of low vitality, and in making germination tests look for rapid growth as well as high percentage germination.

Insist on purchasing seed corn in the ear, and see that the ears are all of good quality and true to type and variety.

When practicable, purchase direct from the grower by the cooperative plan.

Place your order early so you will have plenty of time to examine your seed and test it before sowing.

Cleanliness is essential to quality in syrup.—C. A. Westover, Missisquoi Co., Que.

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 Such a...
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The Feeders' Corner

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

A Great Combination Cow Feed
 J. B. Gridale, Dominion Agricultural

We supplement our corn with clover hay. We grow about 50 acres of hay every year and we expect it to give us 200 tons. Last year we had 225 tons. But we expect to get four tons to the acre and we almost always get it. We supplement that mixture of corn ensilage and clover with bran, gluten and oil cake meal and a little wheat and I do not know anything that will beat that combination: bran as a basis, 600 pounds, oats about 100 pounds, gluten meal about 200 pounds and oil meal, 100 pounds.

If you cannot conveniently get both gluten and oil cake meal, one will take the place of the other. I would not advise your trying to put quite as much oil cake as you would gluten and if you cannot get the gluten, put in a couple hundred weight of oil cake with the bran and oats and if you cannot afford the oil cake, put in ground oats. This latter is a rather expensive feed and the only excuse for feeding oats with the bran or straw is that it is the most palatable food you can give.

There is no meal food that will be so acceptable under all conditions as the cow as a little ground oats. I have seen what might be considered a very poor ration, giving good results provided it contained a fair supply of oats and if you want to make it exceptionally palatable, put a little whey or on it just before feeding. We do not recommend farmers to wet the food for the cows, but if you want to make a cow eat a lot more meal than she otherwise would, there is no more sure way of doing it than adding ground oats to the ration and putting water on it. She will eat 25 per cent. more than if you gave it to her dry.—Extract from an address at Perth.

Ration for Fattening Steer

I have a large bin of Swede turnips, red clover, ground oats, barley and buckwheat. I also have wheat chaff and plenty of coarse straw. What combination of these feeds would make a well balanced ration? In what quantities should they be tanned? gain from now until spring?

With the feeds mentioned, I would suggest the following ration as likely to give the best results: Swede turnips (pulped) 40 to 70 lbs., according to size of steers; wheat chaff, according to roots, 5 lbs.; clover hay (according to size of steers) 6 to 10 lbs. Meal mixture: corn, 100 lbs.; oil cake meal, 100 lbs.; oats crushed, 200 lbs.; barley, 200 lbs.; buckwheat, 200 lbs.

The amount of meal to feed will depend upon the amount being fed when the change is made. It is not wise to make any very striking change in the meal ration nor in the roughage either for that matter. Supposing the steers to have been getting three or four lbs. of meal a day, then I would suggest giving them four or five lbs. of the new meal ration. Increase from half lb. to one lb. a day each at the end of a week or 10 days. Watch every steer carefully, for any signs of going off feed and slack up at once on the whole lot more than one shows signs of losing appetite. In about two weeks change the proportions of the meal by doubling the corn meal and a fortnight later change again by doubling the quantity of oil cake meal.

Feed half the roots in the morning.

Scatter half the amount of chaff fed on the roots. Scatter half the amount of the meal mixture on chaff and roots. Water after feeding. Give a small amount of salt apart from feed. Keep the steers comfortable by giving lots of bedding. Treat them kindly and curry if possible. Currying should be done at bedtime. Allow steers to lie all they will.

If in habit of feeding very early or very late in the day then a light feed of green hay and a pound or so of meal at noon might be advisable but generally speaking two meals a day is the best plan.—J. H. G.

Suggestion on Calf Feeding

Can I improve on the following ration for calves. I am feeding first in the morning of skim milk from the separator with about one and a half pints of oil cake meal. Then one and a half pints of oil cake meal. Then one and a half pints of ground grain-ot. This a half pint of ground oat meal. Two quarts of pulped turnips and a pound of straw. At night the feeding is the same as in morning. My calves are an Ayrshires. Do Shorthorn calves require anything different feeding?—A. S. Kings Co., P.E.I.

This ration described seems to me about as good as could be given with the following possible improvements: Some of the grain might be fed whole, say the oats, part of the meal ration and part of the meal. The quantity of roots might be increased. The oil cake meal might be replaced to the extent of about half the quantity fed with green meal. Straw is too expensive a feed for calves. It takes too much out of them to digest it.

Shorthorn calves may be expected to do well on a ration that suits an Ayrshire. It is probable however that a Shorthorn would eat slightly more than an Ayrshire of the same age.—J. H. G.

Our Veterinary Adviser

ABORTION—Cow aborted two weeks ago and gives little milk. She would wish to breed in March. Would it pay to breed her again? If I beef her, can I buy a fresh cow for the price I can get for this?—J. W. S., Huron Co., Ont.
 She may gradually increase in milk if well fed and regularly milked. It is probable she would carry her calf to full term next time; but there is, of course, a danger of her again aborting. As the conditions are, as you state, it would certainly be safer to sell her for beef and buy a fresh cow.

CRIPPLED PIGS—What causes pigs to mount and creep? I have a litter of eight that are becoming crippled. I have checked some of them and they seem full of worms. Would worms cause the trouble?—J. W. S., Huron Co., Ont.

Crippling is usually caused by high feeding and want of exercise. Treatment consists in purging with two to four ounces of saltpetre, feeding lightly on milk, bran and new roots, and allowing plenty of exercise. In your case it is probable that worms are causing the trouble. Treatment consists in starving for 12 hours and then giving each about four drams of oil of turpentine and eight ounces of milk. Repeat treatment in ten days.

STRINK HALF—I have a mare four years old, that I have a mare four years old, that I have a mare four years old, that I have a mare four years old, that I have a mare four years old.

Your mare has stringhalt, a form of chorea. It is supposed to be due to a nervous affection. Local applications or the administration of medicines do no good. An operation which consists in severing the peroneus which consists in many cases effects a cure. It requires a veterinarian to operate.

We like Farm and Dairy very much, and would not be without it.—M. Carlyle, Cumberland Co., N.S.

Test The "Bissell" in Field Competition with other Out Throws

To settle all doubt about which out throw harrow has the greatest capacity and lightest draft we ask you to test the "Bissell" Out Throw Harrow in a field competition with other out throw harrows. We know that the "Bissell" will outclass the field, because it is so designed that the hitch is well back, the seat projects over the frame, and the arch is directly over the gang. This construction removes all neck weight—enables horses to do more work. And because one gang is set slightly ahead of the other, the gangs cannot crowd or bump together. The



"Bissell" Out Throw works fast and does clean work like the famous "Bissell" in Thru, it always wins in field trials. We also make Out Throws and In Throws with two levers for hilly work, and in a plate wide cut styles for the West. Sent to Dept. E., for "Bissell" Harrow booklet. Remember, it isn't a genuine "Bissell" unless the "Bissell" name is stamped on the harrow.

T. E. BISSELL CO., Ltd., Elora, Ont.

Northwest Farm Lands

Half a million acres best selected lands in the Canadian Northwest. Special excursion in the spring to see these lands. Write now for particulars as to prices and location.
Stewart and Matthews Co., Ltd.
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INVESTIGATION OF ALL SEPARATORS HAS PROVEN IHC SUPERIORITY

You cannot afford to buy any separator before comparing it with others. You should not take chances. The closer you investigate all separators, the more you will be impressed with the superiority. You will then know how much closer the IHC skims, how much longer it lasts, how much easier it is to clean, and how much easier it is to turn. There are no weak spots in an IHC Cream Harvester.

IHC Cream Harvesters are the only separators with dust-proof and milk-proof gears, which are at the same time easily accessible. The frame and IHC Cream Harvester is entirely protected from wear by phosphor bronze bushings. The IHC has large shafts, bushings, and bearings; it has a perfect oiling system; the flexible top-bearing of

IHC Cream Harvesters

is the strongest and most effective found in any separator, it has only one spring. IHC Cream Harvesters always run steady—without vibration. IHC Cream Harvesters are equipped with a patented dirt-arrester which removes the finest particles of dirt from the milk before the milk is separated. The crank is at the right height for easy turning, and the tank is at an easy height to fill.



The IHC local dealer will be glad to point out the above features and many others. Made in two styles—Dairymaid and Bluebell—in four sizes. Write direct for catalogue, or nearest branch house.

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 Chicago (Incorporated) U.S.A.

IHC Service Bureau
 The Bureau is a clearing house of agricultural data. It aims to learn the best ways of doing things on the farm, and then distribute the information. Your individual experience may help others. Send your problems to the IHC Service Bureau.

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

HORTICULTURE

Experience with Spraying Mixtures

Ernest Robertson, Morrisburg, Ont. A good orchard and one giving good results means lots of work, but there is good money in it. Last year was our off year. We cleared, however, over \$600, but of course we got a good price for our apples. We have

about five and a half or six acres of orchard. The largest orchard consists of about two and a half acres, and is about 40 years old. Another smaller orchard of about an acre is orchard of two acres is 15 years old. We have been spraying for a good many years to a certain extent, but last year was the first year that we really gave spraying a proper test. We used two different kinds of spraying mixture; lime-sulphur on part of the orchard and Bordeaux on the rest. We had good results

from both, but we like lime-sulphur. In other years we have sprayed at the different times, but never used effect. Three or four barrels of mixture at one time was the limit. Last year I used a barrel to 20 or 25 trees to spot more than others. A year ago our apples packed about two lbs. No. 2 to one of No. 1. Last year they ran 75 per cent. No. 1's. The difference was principally due to spraying. Our orchard is very badly in need of pruning, and we find from that little pruning that we have done that it pays. You obtain larger apples and of better quality. We were slack of help last season and did not get as much done as we would like, but intend in the spring to do a lot of it. We know it will be money ahead.

freight reaching Winnipeg on the fifth day in good condition. We pre-cool all cars containing the soft fruits. The great drawback to success is that inexperienced shippers without pre-cooling and icing facilities start in to ship with no experience in loading cars and their cars arrive in bad order in most cases and are a drag on the market. They also break the market for the good fruit. The western market has believed our home markets and kept them more stable than in former years. Those who would ship to the west successfully must secure shipping facilities and be careful as to the packing of the fruit in proper packages.

The Western Market for Ontario Fruit

Robt. Thompson, Lincoln Co., Ont. A few of our growers have shipped fruit to Winnipeg and west for 20 years. It may interest Farm and Dairy readers to learn a little of our experience and to receive an opinion as to the future of this market. When we shipped our first cars years ago, we only sent from one to

There is just one cloud on the western horizon. If free trade were given to the Americans in fruits they would rush to utilize their surplus at times that would demoralize the market and our Canadian growers would at such times not obtain more than freight charges, and as a consequence trade would discontinue shipping. The trade would gain drift as of old in to the hands of the American combine dealers and they would demand a 30 per cent. and even 60 per cent. profit.

At present the bulk of our fruit is shipped direct to the retailer. There is a growing demand for box packed fruits and fancy packages, these in many cases bringing double the price of inferior packing. There is room in the west for all of our output for some years to come.



BRUCE'S BIG FOUR FIELD ROOT SPECIALTIES

BRUCE'S GIANT WHITE FEEDING BEET—The most valuable Field Root keeping, large size and heavy cropping qualities of the Sugar Beet with the long life. 1 lb. 30c. 4 lbs. \$1.10, postpaid.

BRUCE'S MAMMOTH INTERMEDIATE SMOOTH WHITE CARROT—The best of all Field Carrots. 1 lb. 32c. 4 lbs. 20c. 1 lb. 50c. postpaid.

BRUCE'S GIANT YELLOW INTERMEDIATE MANGEL—A very close second to our Giant White Feeding Beet, and equally easy to harvest. 1 lb. 35c. 4 lbs. 25c. 1 lb. \$1.10, postpaid.

BRUCE'S NEW CENTURY SWEDEN TURNIP—The best shipping variety, as well as the best for cooking, handsome shape, uniform growth, purple top. 1 lb. 35c. 4 lbs. 24c. 4 lbs. \$1.40, postpaid.

FREE—Our handsomely illustrated 64-page catalogue of Bulbs, Poultry Supplies, Garden Implements, etc., for 1911. Send for it.

John A. Bruce & Co., Ltd., Hamilton, Ont. Established 61 Years

Multiply Your Profits With This Proved Farm Power

YOU have invested a certain amount of money in your farm machines—your separator—fanning mill—ensilage cutter—pump. To make that investment pay dividends, these machines must be operated at highest efficiency and the least possible cost. Years of splendid service have shown that the most efficient operator of farm machines is an

I H C GASOLINE ENGINE

All I H C engines are conservatively rated—each engine easily developing 10 to 30 per cent more than its listed horse power. The I H C is simple—its parts few and strong. This makes it easy to clean and keep in good condition, and gives it lasting qualities not to be found on more complicated engines.

I H C Gasoline Engines are built in all styles and sizes, 1 to 45-H.P., vertical and horizontal—stationary, portable, or tractor.

No matter what work you want done there is an I H C to do it. See the I H C local dealer and pick out the engine you need. Get it to work saving you time and money and increasing your production. If you prefer, write for catalogue and full information to nearest branch house.

INTERNATIONAL HARVESTER COMPANY OF AMERICA
Chicago (Incorporated) U.S.A.



I H C Service Bureau
The purpose of this Bureau is to furnish farmers with information on better farming. If you have any worthy question concerning soils, crops, pests, fertilizers, etc., write to the I H C Service Bureau, and learn what our experts and others have found out concerning these subjects.

A Broken Down Tree Repaired

To have all the main branches broken from a tree does not mean that its usefulness is at an end. By top grafting, as shown in the illustration, the tree will be again producing fruit in a comparatively short time. Photo by Prof. J. W. Crow.

possibly seven or eight in a season, and that with varying success; some seasons we did well and occasionally we lost a car completely. About eight years ago we had become almost discouraged. A number of our members decided the next season to make another effort and work more in the line of special packing. They shipped a few cars the first season. The principal fruits were tomatoes, the peaches, apples and grapes, with a few peaches. Each season we have been more successful and have increased our shipments from year to year until this past year we sent from the Cold Storage and Forwarding Co., 163 car loads by freight alone to points as far west as Edmonton, Calgary, and Lethbridge, with good success, very few complaints being received as to cherries arriving in anything but the best condition. The assortment in the cars has multiplied until now we commence with asparagus, strawberries, currants, gooseberries, and cherries for the first car followed by the old standards as well as peaches, plums, and many vegetables.

UNSATISFACTORY FREIGHT RATES NEEDED.
We feel from our experience of the past four years that the special freight rates could be extended to points west and north of Brandon, that our output could be more than doubled with advantage to the consumers in the west and to our growers. With the experience gained we are sending almost everything by



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Storms, Wear, Tear and Time
Will work summer and winter all the year round.
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ONTARIO WIND ENGINE & PUMP CO.
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40 Leading Varieties sold at Reasonable Price in Advance.
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Large areas of rich agricultural lands, convenient to railways, are now available for settlement in Northern Ontario.
The soil is rich and productive and covered with valuable timber.
For full information regarding homestead regulations, and special colonization rates to settlers, write
The Director of Colonization
Department of Agriculture,
TORONTO

IV. A eggs keep 30 brood brood the Hoot The chick shoul deat three and g a chick plenty We brood ing puttin Grin first th The y in chinc plains two or it also given grit, t AU IMPO FOR SA TWO CE HARDW use G SILVER good li pullets 500 eggs 1911. Jc WANTED in s shied of Send for particular treat. PURE BR in return Farm and subscribe bred sta Manager, Ont. FOR SALE for Dairy the South Agricultur the South difficult Northern vantage in milke greater w market." for sale at \$15.00 mounting the year ville is 1 ersing be Grewitt.

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POULTRY YARD

Brooding and Feeding Chickens

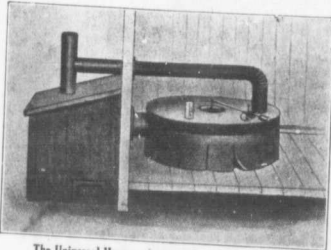
W. H. Efford, Peterboro Co., Ont.
A brooder is a necessity where the eggs are hatched artificially. We keep chickens in the incubator 24 to 36 hours and then transfer to the brooder. For a brooder, we prefer the round Universal Hoover set right in the colony house.

The temperature in the hover when the chickens are put in should be 75 degrees. This temperature is held for three or four days and then reduced gradually. The chickens should get plenty of fresh air. We clean out the brooder every morning without fail, putting in fresh material.

Grit should be fed first to the chicken. The yoke of the egg is in the body of the newly hatched chicken. This explains why they do not want food for two or three days after hatching, and it also explains why grit should be given them immediately. Without grit, the yoke cannot be worked up.

Digestive troubles ensue and the chicks die.

I do not believe that soft feed is necessary for chickens. In fact, it may be positively injurious. I would feed chickens dry feed from the day they are born. The only soft feed I consider advisable at all is hard-boiled eggs taken from the incubator at the first test. These eggs should be broken up finely and mixed with grain. Green feed is also an



The Universal House - Accommodation for 50 Chicks

One of the most satisfactory means of artificially brooding chickens is afforded by this device, which after the chicks can without artificial heat, will afford permanent quarters for the brood.

essential. If early in the season, sprouted oats are a convenient food.

Considerations in Marketing

"I have just purchased 41 turkeys from a lady who refuses to sell them to me for three cents more per pound three months ago," said an extensive dealer to an editor of *Some people will never sell anything* if they see any prospects of a slight advance in price. The labor and feed over are not considered.

"Consider the case of this lady. The 41 turkeys which were purchased from her weighed 525 pounds. We purchased these for 13 cents a lb. As the price when we wanted them last fall was 16 cents a lb., she had a straight loss of \$15.75. In addition these turkeys must have weighed 25 lbs. less than they did last fall. This at 16 cents a turkey for \$4.00. To feed these 41 turkeys for three months would cost \$30. The loss from holding the turkeys over in hope of a slightly higher market was \$49.75 and the labor thrown in. It does not always pay to hold over poultry in the hope of two or three cents more per pound."

Poultry and Eggs

Poultrying in Canada has dropped off. We market only about \$25,000,000 worth of poultry products, when our output should be ten times that amount. Mr. J. W. Flavelle, for whom most of the hens in Ontario work, has written an open letter, in which he shifts the blame to where he says it belongs. He complains that "the farmers of this and other provinces have been diverted from poultry raising." Why? Mr. Flavelle, as the biggest egg-swallower in Canada seems to argue that the farmer does it out of sheer spite, to make a short supply for his string of butcher shops and to cheat the bacon he sends to England for its immemorial accessory. The farmer tells another story. He refuses to increase his production simply because the cold-storage firms and middlemen hold the channels of distribution so strongly that he cannot get adequate returns for his labor. The farmer feels, besides, that increased production would only accentuate the evil.

He will probably find his remedy in co-operative marketing.

Meanwhile, nobody thinks of blaming the Canadian hen. She runs up her capacity. Her triumphs in season are frequent and proud as the cocking she-w. She will pay 100 per cent. her first laying year. But one hen cannot do more than one hen's work, no matter how she tries. As much of a nation's strength is built on her products, we must all be interested in the obstacles that come between the egg and the ultimate consumer.—Collier's

Imported Champion Percheron Stallions for Sale

The winners of all Firsts, Sweepstakes and Medals at Toronto and Ottawa Fairs. Prices below all competitors, quality and breeding considered. Terms to suit the buyer.

Come to the Home of the Prize Winners
JOHN HAWTHORNE
SIMCOE - ONTARIO

GUNNS

"Prairie State" Incubators

Get the Most Chix

because they come closer than any other incubator to matching Nature's own conditions. The hen sitting on the ground is still, on a small scale, the most successful hatcher. But she can't hatch 20 or 30 dozen eggs at a time, and she won't hatch them at the right season to make winter layers or cookerels that are ready for market at off seasons, when prices are highest.

The most successful Canadian poultry raisers therefore use the "Prairie State" incubator because it practically equals, on a great big scale, the hen's success with her little setting.

Gunn's Prairie State Incubators are built not so much to sell, as to hatch chicks. Note that. We are making incubators and marketing them at rock-bottom prices simply because they will help in our campaign for "More and better eggs and poultry"—not because we want to make profits out of incubators.

Gunn's Prairie State Incubators are **honestly made** in our own factory at Ste. Therese, P.Q.—the finest wood-working factory in the Dominion. No poor material or flimsy construction is tolerated, for we have a reputation for 40 years of square dealing at state.

They are designed so that the **heat is distributed evenly** to every egg in the tray. There are no cold or hot spots.

The **correct temperature is maintained**, within a fraction of a degree, whether the temperature outside the incubator be zero or 80 degrees.

The moisture and sand tray gives an **absolutely even and easily regulated supply of moisture** to every egg. This prevents drying up the eggs, and brings out big, strong, healthy chicks.

An **even supply of fresh air**, free from lamp fumes, is provided, greatly increasing both the hatch and the vitality of the chicks.

Thus Gunn's Prairie State Incubator supplies so perfectly the conditions of natural hatching that it not only brings out a very high proportion of chicks, but the chicks live. When

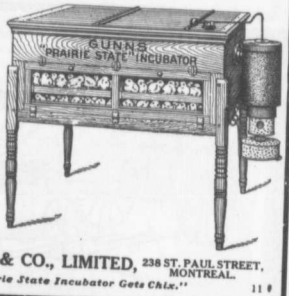
GUNNS UNIVERSAL HOVERS

are used for brooding, results are even better than those secured by natural methods. These Hovers enable you to raise chicks successfully at any season and in any numbers. Gunns Combination Colony House Brooders make the most convenient, practical equipment known.

Write for our book on **Practical Poultry Raising. It tells all about the "Prairie State" line, and how to raise poultry for profit by common sense methods that have proved successful.** Meantime, note these prices:

- GUNNS Prairie State Incubator**
- No. 0.—100 hen eggs—\$18.00
- No. 1.—150 " " — 22.50
- No. 2.—240 " " — 32.50
- No. 3.—390 " " — 38.00

GUNNS Universal Hover
With lamp, lamp case and smoke conductor \$7.00



GUNN, LANGLOIS & CO., LIMITED, 236 ST. PAUL STREET, MONTREAL.
"Gunn's Prairie State Incubator Gets Chix." 11 9

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It is profitable to convert small or large amounts of skim-milk into dry Casein. Write for our proposition and state amount of milk you have daily in flush seasons.
The Casein Mfg. Co.
11 PINE ST. NEW YORK CITY

ELM GROVE POULTRY FARM

FOR SALE — Good Cockerels. Single Comb Black Minorca, & C. White Leghorns, Rose Comb Brown Leghorns and Rouen D'Uck.
J. H. RUTHERFORD, Box 82, Long Distance Phone, CALBDON EAST, ONTARIO.

ANENT RECIPROCIITY

The United States Senate, the term of which expired at noon on Saturday last, failed to reach a vote on Saturday proposed reciprocity compact. President Taft called an extra session of the Senate to consider the matter. The possibilities of the measure passing under the new Senate are said to be brighter than they could possibly have been

with the old Senate. The extra session will be called on April 4th.

Practically the only logical criticism that has yet been offered against the reciprocity agreement was made in the House last week by Hon. Clifford Sifton, who for 23 years has represented Brandon in the Liberal Ministry of the Interior. The sentiments expressed by Hon. Clifford Sifton are directly opposed to the views held by his constituents.

The Grain Growers Association in Manitoba through their executive repudiated the statements in Hon. Clifford Sifton's speech in the House that the grain-growers oppose reciprocity. They further declared for the ratification of the reciprocity agreement, complete abolition of all duties on agricultural machinery, and the increase of the British preference to 50 per cent. on the general tariff.

Senator Cox uttered last week some very plain words about the self-anointed spokesman of the financial interests of the country. He is out and out for the proposed reciprocity measures and states that the farmers of Canada supply the bulk of the money in the banks and if that money could be voted, its vote would be polled for the agreement.

Hon. Duncan Marshall, Minister of Agriculture for Alberta, stated last week that the farmers of Alberta are delighted with the prospect of free trade with the United States. It will give them a wider market. "Protection," said Mr. Marshall, "has not helped the manufacturers, as much as they imagined. It has been the bringing under cultivation of much more land than before, especially in the west, that has helped the farmers of the prairies have bought freely, hence the prosperity in the east. Neither will the reciprocity agreement affect the manufacturers in the main."

The House of Commons was assured last week by Mr. Carvell that it is the practically unanimous wish of the electorate of the Maritime Provinces, Conservatives as well as Liberals, for freer access to the United States markets in natural products. Mr. Carvell pointed out that his own constituency ran for 50 miles along the border line. "In my riding," said he, "during the last few years, hundreds of farmers have gone over to the American side, scarcely a stone's throw away. It was because the land was more fertile or productive. It was because they were hampered by the tariff, and because they sought free access to the larger market.

It has become apparent that from the agitation on the part of the

Grange of the United States, the United States may admit free meat and flour from Canada without restrictions on these products.

Treatment of Oats for Smut

To treat oats for smut prepare a solution as follows: Mix one pound of commercial formalin, 40 per cent strong, with 40 or 50 gallons of water in barrels. This formalin can be secured at a drug store. After the seed oats have been thoroughly fanned, spread them out on a clean floor and sprinkle them with the solution until damp enough to pack in the hands. Turn them with a shovel until all have been well dampened. Then shovel them into a pile and cover with some old sacks or carpets for two or three hours. The oats should then be scattered and turned from time to time until dry. As soon as dry, the oats are ready for seeding at once or they may be left for weeks until they can be used. Formalin solution is poisonous in considerable quantities but as recommended, is very weak. It will not injure the hands and is perfectly safe to handle.

What Ontario Counties Excel in

Editor, Farm and Dairy.—From Crop Bulletin, 106, of the Ontario Department of Agriculture, I have figured out the counties in which each crop is grown to the greatest extent and in the largest quantities per acre and present the results herewith. The county that produced the greatest quantity of fall wheat last year was Simcoe; of spring wheat, Henfrey; barley, Simcoe; oats, Huron; peas, Bruce; beans, Kent; rye, Northumberland; buckwheat Northumberland; corn, Essex; corn for silo, Oxford; potatoes, Simcoe; carrots, Lambton; mangels, Huron; turnips, Wellington; mixed grains, Wellington; hay, Grey; sugar beets, Kent; pasture, Middlesex; orchards, Northumberland; small fruits, Huron; vineyards, Lincoln; garden acres, Middlesex; horses, Simcoe; cows, Middlesex, cattle, beef, Grey; sheep, Grey; hogs, Essex; turkeys, Middlesex; geese, Middlesex; ducks, Huron; chickens, Huron; cattle sold, Middlesex; sheep sold, Grey; hogs sold, Essex; poultry sold, Middlesex; wool sold, Grey.

The counties in which highest yields per acre in various crops, were as follows: fall wheat, Perth; spring wheat, Rainy River; barley, Perth; oats, Perth; peas, Russell; beans, Hastings; rye, Dundas; buckwheat, Stormont; corn, Elgin; corn for silo, (tons) Stormont; potatoes, Sudbury; carrots, Kent; mangels, Perth; turnips, Peterboro; mixed grains, Perth; hay, Stormont; sugar beets, Durham.—J. S. Orr, Middlesex Co.

Farm and Dairy's Proposal to hold another prize Dairy Farm Competition this year and next throughout Ontario and part of Quebec was endorsed recently by the Directors of the Eastern Ontario Dairyman's Association at the time of their annual convention in Perth. The Association reappointed Messrs. Henry Glendinning, of Manilla, and Geo. A. Gillespie, of Peterboro, to act on the committee that will lay out the competition and will pay their expenses while attending meetings. It was decided also to give \$150 towards the expenses of the competition.

Five thousand people visited the good farming special train running over the lines of the Michigan Central last week in one place as many as 1,200 were in attendance. Mr. Putnam and all connected with this new venture in agricultural education are well pleased with its success.

Amatite ROOFING

Saskatoon Fair Buildings, covered with Amatite Roofing, Saskatchewan, Can.

60,000 Feet of Amatite Roofing

The accompanying view shows a series of buildings at the Saskatoon Exposition, all of them covered with Amatite Roofing.

Amatite was selected because it was inexpensive, easy to put on, required no care or attention or expense afterwards, and would give excellent durability.

If ordinary smooth roofing had been used, these roofs would have required painting every year or two at considerable expense and trouble. Amatite, however, has a mineral surface which requires no painting.

Use Amatite for every roof where you want to save expense. It is the most economical solution of the whole roofing problem.

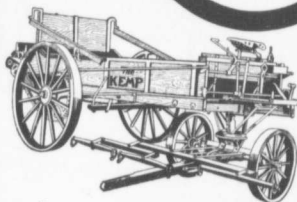
Amatite Roofing requires no skilled labor to apply; it costs no more, (in fact much less) than other roofings; and the fact that it requires no painting makes the total expense far below that of any other type of roof covering.

You can use Amatite for every kind of steep roofed building. We supply galvanized nails and liquid cement for the laps free of charge.

Send for free sample and booklet. Address our nearest office.

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You can only buy one manure spreader with the Reversible, Self-Sharpening, Graded Flat-Tooth Cylinder—and that is the Genuine Kemp.

Because of this Graded Flat-Tooth Cylinder the Genuine Kemp is at least one-third lighter draft than any other spreader.

There is less friction on the Flat-Tooth Cylinder, because the teeth are wide and graded. On that account only one-third as many teeth are required, which reduces the friction when the manure is passing through the cylinder.

The square or round teeth on ordinary cylinders are not wide enough apart and the manure backs up, chokes cylinder, causing heavy draft.

At least one-third
lighter draft
Genuine

Kemp Manure Spreader

The manure cannot back up against the flat teeth, and because the flat teeth are graded they will handle and thoroughly pulverize all kinds of manure from the clear gum to the strawy material.

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But send to us for catalog D. That's your first step. We are sole selling agents.

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SMITH'S FALLS,
CANADA

United States, the may omit free meat Canada without re- to remove the duties.

of Oats for Smut

For smut prepare a v: Mix one pound of ain, 40 per cent. or 50 gallons of water formalin can be as- tre. After the seed thoroughly fanned, a clean floor and th the solution until, pack in the hand- shored until all have ed. Then shovel them cover with some old r or straw. The men be scattered and to time until dry. e oats are ready for they may be left in can be used. The is poisonous in cities but as recom- ak. It will not in- and is perfectly safe

Counties Excel in

and Dairy.—From the Ontario De- culture, I have fig- in which cities the greatest extent quantities per acre, the greatest the last year was wheat, Kenfrew; Huron; peas, ry, Northum- Northumberland; for silo, Oxford; carrots, Lambton; turnips, Welling-; hay, Kent; pasture, Northumber-; vineyards, Middlesex; crows, Middlesex; cat-; grey; hops, Middlesex; geese, iron; chickens, sold, Huron; sex; sheep sold, x; poultry sold, y, Grey. The highest yields were as Perth; spring barley, Perth; Russell; beans, as; buckwheat, A; corn for silo, ates, Sudbury; peas, Perth; tur- grains, Perth; x Co. Durham

Proposal to hold Farms Compete- tions throughout Quebec was on- the Directors of Dairymen's As- of their annual The Associa- s, Henry Glen- and Geo. A. to act on the ave charge of will pay their ing meetings. It \$150 towards mpetition.

le visited the train running Michigan Cen- place as many ndance. Mr. ed with this l- tural educa- with its stu-

APICULTURE

To Control Swarming

Morley Pettit, Provincial Apiarist There are three great problems in bee-management in this country, viz: brood diseases, wintering and swarm control. While the first two are very real, the swarming problem comes home to every bee-keeper whether he realizes it or not. If his bees build up strong enough to gather a good crop of money they are sure to de- velop the swarming impulse if left to themselves. If he cannot control this impulse to swarm, the bee-keeper must either spend a great deal of time watching for and living swarms, or else lose enough swarms to take the profit off his bee business. If he has any other work the swarming is more likely to take place at the most inopportune time, e.g., when he is busy in the hay field at the back of the farm, or when he is on his way to the church. Now all this is very ex- pensive and quite unnecessary.

There is nothing on the farm which requires so little care in proportion to the returns as the bees. This is why because the care they kept at a loss; be- cause that it is utterly neglected. They require only a little attention, but it is to call attention to this bit of work and to help it into its proper place among the other farm duties, that Cooperative Experiments in con- taining the swarm have been under- taken in Ontario.

What might be called full reports were received from 25 experimenters last season. The average number of colonies which these experimenters used in experimental groups was 11.7. Each group according to instructions was divided into two lots, lot A and B, having an average of 0.8 colonies in each lot. Of the colonies in lot A, 13 per cent. cast first swarms. Of the colonies in lot B, 35 per cent. cast first swarms. It will be seen from this that while the experimenters could not be expected to entirely prevent swarming the first year, they have met with a marked degree of success in controlling the swarming impulse, reducing it from 35 per cent. to 13 per cent.

As a result of this control of swarming and the extra attention given to the colonies of lot A, the average re- turn in honey was 83 pounds per col- ony of lot B. Of those who carried the experiment through, 10 experi- menter's said that the colonies of lot A, are in better shape for wintering than lot B. Thirteen said they could see no difference, and two failed to re- port on this point.

The plan for 1911 is to send out the same experiment to those desiring it in the spring, and also experiment No. 2, which will be for the preven- tion of natural swarming in the ex- troduction of Comb Honey. Persons interested in this work may get fur- ther information by writing to Mor- ley Pettit, Agricultural College, Guelph, Ontario.

Foul Brood.—The cause of American foul brood has been found by the United States Department of Agri- culture to be a specific bacterium. European foul brood is also a bac- terial disease. Both of these diseases attack the developing brood, and as the adult bees die from old age or other causes, the colony becomes de- pleted as there are not enough young bees emerging to keep up the num- bers. When the colony becomes weak, bees from other colonies enter to rob the honey and the infection is spread.

Another Record Jersey

Over 1,011 pounds of butter has been made by a Jersey cow, Sophie 19th of Hood Farm. She is now one of four Jersey "pace-makers," Jacoba Irons, Olga 4th's Pride, and Adelaide of Beechlands, all with authenticated

chusets Agricultural Experiment Sta- tion, three different supervisors being sent by the Station at different times throughout the year, during which she produced 14,373 pounds three ounces milk, testing on the average 5.986 per cent. fat, showing her fat yield to be 854 pounds 13.7 ounces, equivalent to

THE SIEGE OF OTTAWA

The complete story of the great delegation of 800 Canadian farm- ers who marched into the House of Commons, Ottawa, on December 16th last, and informed the Dominion Government and the members as to what they wanted, has been published in book form. Farmers book, "The Siege of Ottawa," tells how the great demonstration. This and how it was carried out. Every farmer in Canada who believes in the rule of the people, should have a copy of this book. You should have one.

The contents of "The Siege of Ottawa," includes the farmers' plat- form laid down at Ottawa; the tariff speeches made by delegates at the great convention in the Grand Opera House on December 15th, and copies of all memorials presented to the Government on December 15th.

The book contains also sketches of the Government on December 15th. Ontario and the three Prairie Provinces, as well as the constitution of the Canadian Council of Agriculture, and the names of the officers. The book contains 72 pages and may be had from Farm and Dairy, Peterboro, post paid, for 25 cents each, or five copies for \$1.00.

records of over 1,000 pounds of butter in the year. The year's record which has given Sophie 19th of Hood Farm second place was begun January 1, 1910, at the age of four years and 11 months, after freshening on December 25, 1909, and was authenticated by the Massa-

1,011 pounds five ounces butter 83 per cent. fat, allowing for all pre- cable losses in creaming and churning, a record only eclipsed so far by Ja- cobsa Irons's 1,126 pounds.

Sophie 19th is now six years of age and has the following production to her credit:

Milk		Average		Fat		83 p.c. butter	
Apr. 14, 1907, to Apr. 13, 1908	Lbs. Oz.	P.C.	Fat	Lbs. Oz.	Lbs. Oz.	Lbs. Oz.	Lbs. Oz.
October 1, 1908, to Sept. 30, 1909	7050 3	5.616	392	15.6	463	0	0
January 1, 1910, to Dec. 31, 1910	14373 3	5.751	570	15	674	11	0
Totals	31548 2	5.683	877	15.7	1011	5	0
			1820	10.5	2154	0	0

Sophie 19th was scored 91% per cent. of the perfect scale of points by John O. Couch, and is in the Amer- ican Register of Merit, Class AA.



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RUBEROID Roofing is now far ahead of all other ready roofings in appearance as it has always been in service and durability.

Besides the business-like slate, or natural color, RUBEROID is made in beautiful soft shades of Red, Brown and Green.

These colors, mind you, are not painted on, but impregnated into the roofing. The sun cannot fade them out, nor the severest weather conditions wash or chip them off, for they are right in the body of the roofing.

The only other roofings that can compare with Colored Ruberoid in appearance are stained shingles and tile. The shingles are far less durable than strongly fire-resisting. The excessive weight and cost of tile roofs put them out of the question in almost every case.

For house, barn, stables, anywhere that ornamental effect is not essential, RUBEROID Slate Roofing will give you more service for your money than any other roofing you can buy.

Where you want beauty as well as service you can get the most pleasing effects with Red, Green or Brown Ruberoid. We have devised a special tie effect that is most attractive.

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FARM AND DAIRY

AND RURAL HOME

Published by The Rural Publishing Company, Limited.



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OUR PROTECTIVE POLICY

We want the readers of Farm and Dairy to feel that they can deal with our advertisers with our assurance of our advertisers' reliability. We try to admit our columns only the most reliable advertisers. Should any subscriber have cause to be dissatisfied with the treatment he receives from any of our advertisers we will investigate the circumstances fully. Should the reason be believed that any of our advertisers are unreliable, even in the slightest degree, we will discontinue immediately the publication of their advertisements. Should the circumstances warrant, we will expose them through the columns of the paper. Thus we will not only protect our readers, but our reputable advertisers as well, in order to be entitled to the benefits of our front-page advertising, we will only include in all letters to advertisers the words, "I saw your advertisement in Farm and Dairy." Compliances must be made to Farm and Dairy within one week from the date of any unsatisfactory transaction, with proofs thereof, and within one month from the date that the advertisement appears, in order to take advantage of the guarantee. We do not undertake to adjust trifling differences between readers and responsible advertisers.

FARM AND DAIRY

PETERBORO, ONT.

ANOTHER MARKET FOR OUR PRODUCE

Another market such as we are likely to have for our natural products will advantageously affect more people in Canada than would improved markets for any other line of production. In 1910 Canadian exports of agricultural products amounted to over \$90,000,000, and of animal produce \$24,000,000, a grand total of over \$114,000,000, exported from Canadian farms last year. Next come the products of the forest, other natural products, the exports of which amounted to over \$47,000,000. Next, the mines, the exports from which brought Canada over \$40,000,000 in cash. To this add \$15,500,000 for fish, which brings the total value of natural products exported from Canada last year to

over \$246,000,000. All of these products are on the free list of the proposed trade agreement with the United States; the value of all will be increased by access to their markets.

Compared with the great value of our exports of natural products, the exports of manufactured goods sink into insignificance. In 1910 the value of exported manufactured goods from Canada was only \$31,491,916.

In the light of these statistics, is it not evident why we farmers are demanding access of our products to the United States? What effect can a protective tariff have on the price of natural products produced on our farms, our forests and our mines when we have such a surplus for export? It must be evident to the dullest intellect that the price of our produce is set in foreign markets and the wider these markets are the better the price is bound to be. And what better market could we gain entrance to than that of the 40,000,000 people, our neighbors to the south?

There can be no question as to the value of the United States markets for Canadian farm produce. The strongest argument that can be advanced in support of our position on this question, is to give market quotations at United States and Canadian centres. Just now United States markets are dull and quotations are lower than usual. Nevertheless a comparison of Toronto and Buffalo markets last week show that when prime steers were selling at \$5.80 to \$6 in Toronto, they were bringing \$6.40 to \$6.60 for the same quality in Buffalo. Hogs were \$6.75 in Toronto and \$7.30 to \$7.75 in Buffalo. The average price for cheese in Canada last season was 10% cents. In the United States it ruled three and even four cents higher. Farmers who were exporting cream across the line practically free of duty were realizing 10 to 12 cents more a hundred for milk than they would have had it been manufactured into cheese or butter in Canadian factories. One of our leading apple men tells us that free access to the United States markets will mean 50 cents more on every barrel of apples produced in Ontario. We all know from past experience what it will do for barley.

The trade agreement as proposed does not injuriously affect our manufacturers; yet it opens to Canadian farmers one of the best markets of the world, and one moreover, which is near at hand. Little wonder that our farmers hail with satisfaction the opening of the United States market to Canadian natural products.

WEATHER INSURANCE AND FAIRS

The Ontario Association of Fairs and Exhibitions in annual meeting in Toronto recently approved of a plan, submitted by the secretary, Mr. J. Lockie Wilson, Superintendent of Agricultural Societies for protection against rainy weather or storms at their exhibitions. The Legislature will shortly be asked to amend the Act to include this proposal.

The suggestion is that in case of loss sustained by an agricultural society by rainy weather or snow storms, the Department of Agriculture may, on satisfactory proof, pay the society so affected an additional grant equal to 50 per cent. of the loss sustained; this grant shall be payable out of the annual grant to agricultural societies, and the total sum thus given shall not exceed \$10,000 in any one year. The amount of loss shall be based on the average grade receipts for the three previous years but in no case shall a grant to a society for this purpose exceed the sum of \$300. The \$10,000 apportioned for this purpose is to be taken from the \$75,000, which is now the legislative grant to agricultural societies.

The object sought in this proposition is a worthy one and Mr. Wilson is to be commended for having presented it on a workable basis. It is an exceedingly difficult one, however, to regulate, so as to be of equal benefit to all. For instance, one objection is the limit of \$300, which may be paid out to any one society. A large society might easily lose through bad weather, \$1,200, or more, yet they can only receive benefit from the scheme to the extent of \$300. A smaller society on the other hand might lose a much smaller sum and receive from the Government the full amount or the limit to which they would be entitled. However, the proposal is a worthy one and can be improved from time to time.

CROP ROTATION PRINCIPLES

Rotation is a problem for each man individually to work out and adopt to meet his special interests. The question involves much more than simply following one crop after another and while probably most of us practise something in the form of crop rotation it is abundantly evident that "we of the rank and file" have much to learn in regard to how to rotate our crops that we may secure maximum yields and at the same time maintain or perchance improve the fertility of our soil. Those who are out to "mine" their soil are not so much concerned with the question of crop rotation. Even such farmers, however, can work out rotations suited to their requirements that will be of decided advantage.

A rotation requiring more than five years to complete the cycle, save under exceptional circumstances, is not likely to be advisable. A four year rotation is being adopted by many progressive men and a number of farmers with lighter soils are working wonders thereon with a rotation covering three years.

Clover and other legumes, corn, roots and farmyard manure are the important considerations in maintaining and improving soil fertility and in keeping the land free of weeds and in good mechanical or physical condition. Each of these entering at least once in a rotation of three or four or five years duration are sure to give tolerably satisfactory results. The placing of them and what other crops to grow are questions that each

farmer must decide for himself. The article on crop rotation, page three this week, by Mr. W. C. Good, a prize-winning farmer, is worthy of your careful consideration. It contains many points that may be of interest and of money value to you. Questions in regard to rotation and similar subjects asked of Farm and Dairy will be cheerfully answered by our experts in our farm management columns. Write us of your difficulties in this connection that you have not yet solved satisfactorily.

OUR LOYALTY

It is a significant fact that opposition on economic grounds to the proposed trade agreement has practically ceased. The advantages to the class that it affects, the farmers, are so evident that there can be no disputing them. The growers of tender fruits, it may be said, are determined that this measure shall not go through and have petitioned the Senate to throw out the measure. The fruit growers, we must remember, however, are a very small class in the community and even amongst themselves they are not unanimous; many of them claim that the advantages following upon the proposed agreement will outweigh the disadvantages. The opponents of the agreement unable to oppose it on economic grounds are now calling on patriotic grounds for us farmers to have nothing to do with it. We should, so we are told, trade in our home market, or with the mother country. They tell us that freer commercial intercourse with the United States will eventually lead to political union.

Patriotism has been defined as the last refuge of the scoundrel; many of those who are now making such a noise about loyalty to the empire and so forth are much more concerned about the dollars and cents that they are now enabled to make but may not be able to do should the proposed trade agreement be carried, or worse still, should we, encouraged by our success, carry the fight still further into the territory of the privileged interests.

We once had reciprocity with the United States. The reciprocity bill of 1854 passed the United States Senate because the southern Democratic senators feared that if Canada was not given freer trade with the United States they might wish to enter into political union for the benefit of the United States markets. Such a union those southern senators feared would add to the strength of the northern and anti-slave party, which was at that time fighting for the abolition of slavery.

Reciprocity accordingly was granted to keep Canada from annexing herself to the United States. Notice the inconsistency. We are now told that free trade will lead to annexation. Has human nature changed entirely since 1854?

When is a man more loyal,—when prosperous and contented, or when chafing under the burden of restricted markets for his products? When are Governments strongest in a country? Is it not when everything is going

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well and people are making a good living? The idea that wider and better markets will make the farmer less loyal is absolutely contrary to history, also to human nature. Fear not. Reciprocity with the United States will not lead to annexation.

THOSE AVERAGE COWS

"Oh, my cows are not so bad; they are quite equal to the average and they are as good as my neighbor has." Do you feel that way about your cows? Remember it is those average cows that we can least afford to keep.

Do you recall that chart of Mr. Whitley's, showing the one cow that made as much net profit as 42 poor cows, which chart was published in Farm and Dairy, page 5, January 19th? That good cow, there represented, was only an average good cow. She is typical of over 500 cows in Ontario known to have produced as much profit as is credited to her and she is in all probability typical of 5,000 cows and more in the dairy districts of Ontario just as good as she is. We ought to have all of our cows at least up to her standard. She made only a profit of \$33.08. The cows with which she was compared in Mr. Whitley's chart made each a net return of only 82 cents. Fancy a man milking a cow for a whole year to make 82 cents! Think of him, if you will, milking that cow, or others like her, for a period of 42 years to get as much profit as he would get from a good average cow in one year!

This cow testing business is worth looking into. We need to know the actual net profit from each cow individually. Only then can we know which ones are those low-profit cows, that kind of which we must keep 42 to make as much as we can get from one cow in one year.

The practice of cow testing is becoming more and more popular. Each year sees more men becoming interested in the work. Now to still further popularize cow testing the Department of Agriculture, at Ottawa, is enlarging on their plans as followed during recent years. Three Dairy Record Centres are being provided for. One of these centres was organized two weeks ago at Woodstock. Another was launched last week at Peterboro, and the third is to be established in Quebec, probably at St. Hyacinthe. The men in charge of these centres will interest farmers in cow testing and will gather information to pass on for the benefit of the dairy public at large.

This new departure in dairy record work bids fair to prove itself invaluable. We who read Farm and Dairy, however, need not wait for the information that will be gathered by these centres to be convinced of the practical, money-making, labor-saving possibilities of cow testing. The facts as developed in the foregoing should convince anyone that his best interests lie in knowing, not guessing what profit each of his cows return individually. Let each interested dairyman, who has not already done so, start a dairy record centre of his own. The results will many times compensate the trouble.

FARMERS' RIGHTS

We of the soil, who know how difficult it is, to stand up in public and defend our rights effectively, are fortunate in being able to rank amongst our numbers, Mr. W. C. Good, of Brant Co., Ont. Born and raised on a farm, as a lad belonging to a lodge of the Patrons of Industry, an uncompromising independent in politics, and having had the advantage of a University education, Mr. Good is peculiarly fitted to render, as he does, yeoman service in the cause of farmers' rights and in the present forward movement of organized agriculture.

His father before him, the late Thomas A. Good took an active part in all things locally pertaining to the uplift of agriculture. He was one of the best informed and thorough



Mr. W. C. Good.

farmer of Brant county, where he was well known and where his influence for a better agriculture lives after him. Thus did the son, Mr. W. C. Good, early in life become informed and seized of his responsibility to others in the community and to the cause of the farmers generally.

During 1896-1900, Mr. Good attended the University of Toronto, from which he graduated in Physics and Chemistry, taking also the English course all the way through. About the time he entered the University he became interested in socio-economic questions. This interest grew during his college course, and on graduation he found himself with more real interest in the social than in the physical sciences. After graduation he spent part of another year at the University on research work in Chemistry and at the same time doing some genuine though desultory independent work in economics. It became more and more evident to Mr. Good from his studies that where the work of the 19th century had largely concerned itself with the production of wealth, the work of the 20th century would have to deal in an increasingly emphatic way with the more equitable distribution and more sensible consumption of wealth.

In the spring of 1901, Mr. Good returned to the farm owing to his father's failing health. He made arrangements to take over the farm and had practically settled down when an unexpected offer of a position in the Chemical Department of the Ontario Agricultural College was made to him.

(Continued on page 15)



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Creamery Department

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

Anent Cream Testing

Editor, Farm and Dairy.—Anent your letter asking me to discuss the matter of cream testing, I must confess that a question of this kind coming from Ontario seems to be rather believed that the dairymen of Ontario were as far advanced as those of any other district on the Continent. I learned the dairy business in various creameries and cheese factories in Ontario and graduated in dairying from the Agricultural College at Guelph, specializing along dairy lines, and as I have already said, thought that Ontario was about the same of accomplishment as far as dairy matters, were concerned.

When you suggest therefore that I discuss the merits and demerits of testing cream with the pipette, as compared with the weighing of same,

it suggests that there may be some dairymen in Ontario who are not familiar with the latest methods in cream testing. In fact your letter suggests that in very few creameries are scales used for the testing of cream. If this is the case in Ontario, the butter makers are just a few years behind the times. In all up-to-date creameries to-day the cream is tested by weight. This is the only proper method, and a dairyman who still clings to the old fashion of testing cream with the junk pipe, or should find proper place among the fossils of a museum.

There is absolutely no excuse for testing cream with a pipette. I will guarantee that we can pipette a will less of cream before one of these fellows than one sample tested that the other five will not be any- thing. The proprietors of any creamery spot any man who dares to fire on the foggy pipette method, clings to the old

A discussion of the relative merits of the scales and the pipette for testing cream is so far behind the times, that up-to-date dairymen are discussing the present day. The question of cream. The testing of cream has been settled long ago.—W. J. Elliott, Calgary, Alta.

Mr. Carr Replies to Mr. McLagan

Editor, Farm and Dairy.—On page 14 of the Feb. 23rd issue of Farm and Dairy, was published a letter from Mr. P. W. McLagan, Montreal, criticizing the proposed reciprocity agreement. If it will not be taking too much space I will offer a few remarks concerning this gentleman's arguments.

I agree with Mr. McLagan, when he says that the proposed agreement before being passed upon. But doubt, his argument is very much biased in favor of the moneyed buyer. He is like us to believe.

Mr. McLagan informs us that we must not forget that by obtaining an entrance to a market of 90,000,000 people, that we are also throwing our own market of 7,000,000 open to them. Supposing we cut that 90 million in half and say that we will have access to a market of 40,000,000 or 50,000,000 people along our border, does it not seem reasonable to suppose that we will derive more benefit from that 40,000,000 people than they will from our 7,000,000, especially when the farmers of the United States are not producing enough produce for their own needs while we are producing a huge surplus every year?

Mr. McLagan denies that the United States farmers do not supply home demands. He says, there is an over-production of hog products, butter, and so forth in the United States. If this is so why is it that our cheese factories that are close to the border have ceased making cheese and are shipping cream across the line. It is because an American buyer after paying a duty on the cream, can still than can the cheese factories in Canada by the manufacture of cheese.

Live hogs are \$1.00 a cwt. higher in Buffalo to-day than can be obtained the pork packers in this country have such a monopoly that, as every Canadian farmer who ever went into hog in any way they choose, when it comes to paying for the hogs that we have striven to get into first-class market condition. Under the reciprocity agreement, this monopoly would be broken up and the buyers in this country

would have to pay a price equal to that paid in the United States. If the reason for the strenuous objections raised by the pork packers of Canada, Mr. McLagan also says that the United States farmers are pursuing more attention to intensive and scientific methods of agriculture, and we wish us to take it as his opinion that the Canadian farmer upon whom the company he represents, as well as is so far behind for their business former in knowledge, as not to be doing the same thing? We are going to do more intensive farming. It is also to be remembered that Canada has millions of acres of land still unoccupied every year. We are going to increase our already enormous surplus of farm products. Without a larger market, we will be going to do with it except and Christmas whom Mr. McLagan presents?

The gentleman tells us that reciprocity will decrease incomes. I quite agree with him. I quite the farmer's income; his will not be so great. It will be the income of the speculator that will suffer.

Reciprocity will mean much to the Canadian farmer. We do not need to fear competition, even in the British Columbia butter market as Mr. McLagan claims. We can hold our own where the Australian product anywhere.

If Mr. McLagan attempts, as he suggests, ranging over the United States, from Kansas to Maine to test dairy products he will find his profits very much lower than they are at present. He cannot buy in that market at the price he is now paying in Canada. He says, he is writing from a farmer's standpoint. It appears to me more like the last of the struggle plea for mercy from the Canadian farmer who has suffered for years from low prices.

When we look at the buyers of dairy products and the pork packers fighting so strenuously to defeat the negotiations to Canada, the fact that they are reasonably assured that they are not fighting in the interest of the "dear Canadian farmer, but in the interest of Mr. Buyer, Mr. Packer, or Mr. Canner, as the case may be, —H. N. Carr, ex-Manager Underwood Cooperative Co., Ottawa and Butte Co., Brno Co. Ont.

GOOD OPENING FOR DAIRYMAN

There is a good opportunity in our town to buy or operate the Vermillion Creamery. The district has advantages in farming and other lines and the creamery plant can be made a successful one from the start by the right man. Write

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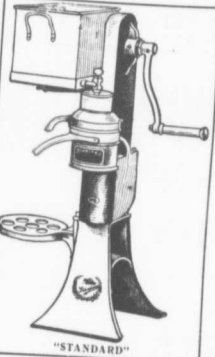
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Made Up To Standard Not Down To Price IS THERE ANY Money in Dairying?



Once heard a farmer say, that, if the cows paid their own way, he had the manure pile for his profit. Easily satisfied wasn't he?

Don't laugh, maybe you are still easier satisfied and don't know that you have even that much profit.

Why plunge along in the dark? For all you know, instead of the dairy making money to keep you, you are making money to keep the dairy.

INVESTIGATE

First look to the QUALITY of milk your herd are giving. This is just as important as the quantity.

Then get a proper way of taking care of the milk. The matter that will decide whether your Dairy is to be run at a profit or at a loss, is Milk. There is only one way that the getting of the Cream from the Milk. There is only one way that the best results only the highest grade machine should be used. "STANDARD" CREAM SEPARATORS. PRODUCE MORE CREAM SEPARATOR. A "STANDARD" will get enough extra Cream over the one season with a herd of 6 COWS, and gets enough extra over the best known Separator TO PAY FOR ITSELF IN TWO AND ONE HALF YEARS.

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Cheese Department

Makers are invited to send contributions to this department, to ask questions on matters relating to cheesemaking and to suggest suitable articles. Address letter to The Cheese Maker's Department.

Cow Testing in New Zealand

J. F. Singleton, Kingston, Ont. Two years ago in New Zealand they started their first cow testing association. This association had 28 members representing 800 cows. The average of the 800 cows for the year, which is somewhat longer than our factory season, was 6,819 pounds of milk testing 4.8 per cent. Here is an explanation of why New Zealand is going ahead in dairy matters while we are standing still or going back. In many sections of Eastern Ontario all of the milk is taken to the cheese factories; therefore, we can determine that the average of milk for Ontario cows during the season is about 3,000 lbs.

Last year New Zealand increased her export of cheese 39 per cent. This cannot be accounted for as it sometimes is by saying that they are going more extensively into cheese and neglecting their creameries, as last year the export of butter increased 18 per cent. over the previous year. An explanation of the high test of the New Zealand milk is found in the fact that practically all of the factories pay for the milk by straight fat test.

Cow Testing Centre Established

Twenty-four good reasons why farmers should take up cow testing were given by C. F. Whitley Ottawa, at a dairy meeting held in Peterboro, Feb. 28, on the occasion of the establishment of Peterboro as a Dairy Record Centre. An outline of the work to be carried on at this centre was given in Farm and Dairy of Feb. 23. Mr. Whitley pointed out that by means of scales and the Babcock test the poor cows could be detected, feeding and breeding could be carried on more intelligently, labor would be lessened, and profits would be larger. Cow testing also has the effect of giving the man greater enthusiasm and greater interest for his work.

The care of cream on the farm was dealt with by Mr. Geo. H. Barr, Chief of the Dairy Division, Ottawa. A fuller report of his address will be given in Farm and Dairy in a later issue.

Mr. Burgess, of Woodstock, who

will take charge of the cow testing work in the vicinity of Peterboro until a permanent appointment is made, gave concrete cases of men who had greatly increased (some of them up to 80 per cent. in three years) the production of their herds. He requested the farmers present to assist him in getting the work started.

G. G. Publow Retires From Dairy School

Mr. G. G. Publow, late Superintendent of the Dairy School at Kingston and Chief Dairy Instructor for Eastern Ontario, after being connected for 16 years with the work of the school has resigned his position as superintendent. Mr. Publow, on account of his health, some months ago asked to be relieved of his work as Superintendent of the school. Mr. L. A. Zufelt, instructor in butter-making, will succeed Mr. Publow in the school work. He entered on his new duties March 1st.

A presentation of a gold-headed cane was made to Mr. Publow by the staff and students of the dairy school.

Farmers' Rights

(Continued from page 13) This position he accepted although at the same time he kept an eye to the farm also. His father's continued ill health and his desire for a more independent out door life soon led him back again to the farm, where he has since remained.

Mr. Good, on coming back to the farm definitely, became actively identified with the Farmers' association, and, since its amalgamation with the Grange in 1907, has been connected with the remodelled Grange. Although he has never sought or occupied any of the chief executive offices, Mr. Good has rendered effective work in committee. In November 1909, he was on the committee that drafted the constitution of the Canadian Council of Agriculture. For a couple of years he has been one of the Grange organizers and has organized subordinate granges at Braemar (Oxford County) and Burford (Brant County). During the past two years, Mr. Good has been president of the North Brant Farmers' Institute; last winter he was out for a short time on Farmers' Institute work.

At the time the tariff commission was sitting in Brantford, in 1905, Mr. Good was one of those who presented the farmers' case. From time to time he has written for newspapers, periodicals and magazines, chiefly on socio-economic subjects.

Considering his position financially, Mr. Good has made no small sacrifices of time and talent in behalf of the

farmers' of Canada. We can assure Farm and Dairy readers and others interested in the farmers' cause that whenever occasion arises Mr. Good can be counted on as a spokesman for the great mass of unorganized, inarticulate farmers. Through his self-

sacrificing efforts together with those of many others who have cast their lot with agriculture, the day is fast coming when farmers generally will be organized, trained, and able to stand up and demand justice, both for themselves and for society at large.

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All over Canada—all over the world—farmers are discarding common cream separators for Sharples Dairy Tubulars.

Why? Because the Tubular skims twice as clean as others—is guaranteed to save enough more butter fat, as compared to any other make, to pay at least ten per cent interest every year on the cost of the Tubular. No business-like farmer is overlooking a sure way to make ten per cent on his money. It is cheaper to throw away a common separator and buy a Tubular than to stand the loss caused by common machines.

Here is another reason: Tubulars last a lifetime—are guaranteed forever by the oldest cream separator concern on this continent. No wonder that farmers are putting Tubulars in place of disk-filled and other complicated machines that are out of fix and in need of expensive repairs half the time.

Tubulars are later than, entirely different from, and vastly superior to all others. You can own and use a Tubular for less than any other in the first place. Our local representative will show you a Tubular, inside and out. If you do not know him, ask us his name. When you can see a Tubular so easily—and own and use it for less than any other, and make more with it—how can you afford to waste time and money on a "peddler" or any other inferior machine? The manufacture of Tubulars is one of Canada's leading industries. Write for catalogue No. 233.

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This Heavy, Hog-Proof "Ideal" Woven Wire Fence has all the best of it with the pigs. Each "Ideal" lock grips the upright and cross wires in FIVE DIFFERENT PLACES—grips them so they simply CANNOT SLIP—and thus the hogs cannot move the uprights at all, no matter how they simply up or down. The uprights are all of large gauge No. 9 wire—HARD (not soft) wire, heavily galvanized, and all in one piece. The strongest hog cannot make the fence yield. He has got to yield where he is put, when you fence with "Ideal." For it is

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WHATEVER betide, every misfortune must be overcome by enduring it.

The Road to Providence

(Copyrighted)

MARIA THOMPSON DAVISS

(Continued from last week.)

SYNOPSIS OF THE ROAD TO PROVIDENCE

Mrs. Mayberry, a country physician's widow, living near the town of Providence, has taken into her home Ellora Wingate, a beautiful young woman and a famous singer who has mysteriously lost her voice. Mrs. Mayberry is much loathe for the skill with which she treats minor ills. Her son Tom is a rising doctor in the city, but among the home neighbors there is a humorous preference for "Mother Mayberry's remedies. In learning to mix a cake "light biscuits" and so on, a poor missionary, Miss Wingate becomes happier than she has been elsewhere. Mother Mayberry takes into her home Martin Luther Hathaway, the little son of a poor missionary. Miss Wingate discovers in the course of getting out of doll he, in an anxious consideration of her future, realizes that his strongest desire and in life is to be able to restore her power to sing.

"WELL," answered Eliza confidently, "I think I can tend to her if Mother Mayberry is too busy to watch for Doctor Tom and home. Deacon, fore the rolls get cold and the scrambled eggs set. Ez hold the plate steady or the butter will run outen the rolls! Please come on, Deacon!"

"Yes, Deacon, go along with her right away," answered Mother Mayberry, as her eyes rested on the serious face of the ministering child with a peculiar tenderness tinged with much respect. "And, 'Liza, Bostick does when I tell me how Mis' and let me know if you need me to help you any."

"Yes'm, Mother Mayberry," answered Eliza with a flash of pure joy shining in her devoted face when she found that she was not to be supplanted in her attendance on her charges. "I was a-coming to see you this morning anyways about the place Mr. Mosbey burned his finger and I tied up last night. Please come on, Deacon!"

"And a little child shall lead them," said Mother Mayberry to herself, as she watched the breakfast party down the road. Martin Luther and now and then the breakfast table Deacon's heels like a red and discontented puppy. Ez held the plate carefully and Billy seemed about sure of at least half the sign destination with "Yes, a little child—but some children are borned with a full-grown heart."

And true to her promise Eliza appeared an hour or two later to hold serious consultation over the black-smithing finger down the Road.

"'Liza," said Mother Mayberry, as she prepared a stall for the finger and poured a cooling lotion in a small bottle for which the child waited eagerly, "you are a-doing the right thing to take nice things to Mis' Bostick and the Deacon and I'm proud of your being so kind and thoughtful. Do they ever ask you where you bring 'em from?"

"I always tell 'em, Mother Mayberry. Deacon said I oughtn't to get things from other folks to bring to 'em, but I told him that you and Mis'

Pratt and Mis' Mosbey and Mis' Peavey would be mad at me if I just took they cooking. I pick out the best light rolls, Mis' Pratt's sunshin chicken and cream potatoes, Cindy's hash. I took the custards from Mis' Elinory to please her; but Mis' Mosbey's is better. I wanted 'em to have they is old and on the Road, 'cause "Bless your dear little heart, she claimed they shall have always!"

"Bless your dear little heart, she hugged her small confere close against her side and wiped away a tear with a quick gesture. "Now you can go fix up Nath Mosbey's finger to suit your mind, Sister Pike," she added with a laugh as she bestowed the bottle.

The rest of the morning was filled to the minute for the Mayberry household, which seemed possessed with a frenzy of polishing and garnishing. After Cindy had done her worst with brush and mop, Mother Mayberry Wingate threw her energies with most artistic scheme of decoration. Some tall jars of white locust blossoms in the hall which shone out mingled lily and cool dusk. Cherry blossoms and narcissus and cherry long vines of honeysuckle over every possible place.

"Dearie me," said Mother Mayberry, as she paused in her busy manoeuvres to take in what Miss Wingate proudly declared to be the completed effect. "Everybody will show. I'm sorry I never thought of inviting in the outdoors to any of my meek folks. I wonder if some of 'em would like to see our dear Lord byways and hedges, mightn't I bring some of the hedge bloom along into the feast with 'em. Thank you, child, for the pretiness they feed everybody's eye, I know, but you'd better run along and get to whinnicks. But there is a Mission Circle by-law to it, a good knifty and if we feel well disposed toward Tom Mayberry, come bedtime, we may feed him a half dozen."

And in accordance with time-honored custom the stroke of one found the Providence matrons grouped about the front walk, in the act of assembling for the good work in hand.

"Come in, everybody," exclaimed Mother Mayberry, as she welcomed them from the front steps. "I'm mighty glad all of you, for I have got the best of things to tell, as I have been saving by the hardest for three mighty like tod-beer, liable to pop the cork and foam over in spite of all."

"I'm mighty glad to hear something good," said Mrs. Peavey in a doleful tone. "Looks like the world have got to astonishin' misery." Did you all read in the Bolivar "Herald" last week about that explode in a mine in Delaware, a terrible flood in Louisiana, six children in Kansas? They said that what we're a-coming to. I don't know went on talking about the good trade Mr. Hoover made in hogs over the Springfield and the fine clover stand they have got in the north field."

By this time the assembly had removed their hats, laid them on Mother Mayberry's snowy bed and settled themselves in rocking chairs that had been collected from all over the house for the occasion. Gay sewing bags and bibles and scissors were laid out in Mother Mayberry still stood in the centre of the room watching to see that

out letting folks already geared round Sister Mayberry? "There came this when only Judy Pike's uncompromising veto could lay Mrs. Peavey on the table."

"Well, what do you think? Tom Meeting-house, following Circle a good big sewing order from the United States Government. Night drawers of things and aprons and all sorts."

"Lands alive, Sister Mayberry, you must be open your head to see that Mrs. Peavey with her usual exclamation uttered States Government have got the matter in hand. "What earthly use can't for night drawers and chimes?"

"Now, Hettie Ann, you didn't let me have my say out," remonstrated Mrs. Mayberry as they all laughed merrily at Mrs. Peavey's scandalized remonstrance. "They are for them poor misfortunates over from the United States Government have sent Tom find the best that makes the disease and stop it from spreading everywhere. While he's a-working with 'em for he has to see that they are provided for. He wants our hands the women and children and Mr. Petway have the order to buy the men's things down in us good for him. He's going to pay will mean a lot of money for the work and the repair fund for the car."

"A quarter apiece for the little night drawers without feet to 'em is good money. He wanted to give us fifty cents but I told him no. I wasn't goin' to let 'em have it. I country for no little child's own lib'ral. A quarter is fair to 'em."

"That it is, Mis' Mayberry, and thank Doctor Tom, too, for giving us the order," answered Mrs. Pratt heartily. "When can we begin? I'll cut 'em all out at home, so that you can give me the pieces to cut children's clothes out with my eyes shut and sew 'em up with my hands if it needs be."

"Betty Pratt, it's a good deal true it comes easy to you. The sewing in the seventeen might be a setback to any kind of co'ring, but maybe—" Mrs. Peavey widened and peered at the blushing widow, her keen eyes curiously in

"Well, it hasn't been a bit to me and Mr. Hoover, Mis' Peavey's eyes and I say to me, mounting up her cheeks. "Looks like all the love, I know, for each other's orphan children we've mixed itself up into a box of pepper to the family, and here's sent everybody. He said to make you have one Mis' Peavey, pass the box!"

With which a general laugh and a box of inquiry went around with the buzz of sweets, provided by the widower.

"Well, we think we'll just build a long, covered porch across the fronts up," answered Mrs. Pratt to a friend inquiring about her future domestic arrangements. "I know it will look better like a broke-in-two over the one house and take the girls with me. We can rent a room in the boys' house to Mr. Petway, as he'll look after them if it need be, though I know I and my Henny Turner are a mighty glad the children for already. I'm so I always did want to match out in pairs, going to have eight pairs and the baby over. I don't think I ever was so happy before."

(To be concluded next week)



Vines One Year From Planting

Many a verandah may be improved in appearance and made into a real attraction, easy pot for summer by planting a few vines. Annuals such as Cucumbers or Morning Glory give the quickest results but one who plants any delay experienced if she plants the better varieties of perennial such as the "Glematis," the "Dumb rose."

all the guests were comfortably seated.

"They were mighty bad happenings, Mis' Peavey, I know all we feel for such trouble being sent on the Lord's people," said Mother Mayberry seriously, though a smile quirked at the corners of the Widow Pratt's pretty mouth and young Mrs. Mosbey bent over to hunt in her bag for an unnecessary spool of thread. Mrs. Peavey's nature was of the genus kill-joy, and it was hard to steer her into the peaceful waters of social enjoyment.

"I don't think any of that is as bad as three divorce cases I read about in a town paper that Mr. Petway wrapped up some calico for me," answered Mrs. Peavey, continuing her lamentations over conditions in general, which she all knew would get to be over and over in particular if something did not intervene to stop the tide of her dissatisfaction.

"Divorces oughtn't to be allowed by the United States," answered Mrs. Pike decidedly. "They are too many people in the world that do seem to be able to hitch up together, with-

wedding cake for the family, and here's sent everybody. He said to make you have one Mis' Peavey, pass the box!"

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The Upward Look

Our Greatest Duty

"With God all things are possible.—Mark x, 27. God is love.—I. John iv, 8.

Love is the greatest power and force in the world. No other power can compare with it. Love is God. If we work in the power of love we work in the power of God, and all things are possible unto us.

When we think of striving to comply with all the requirements set forth in the teachings of the New Testament we may well, at times, feel hopeless and discouraged. The immensity of the task compared with our weakness, is sufficient to make us feel the impossibility of the undertaking. Christ knew how we would feel. For that reason he showed us a more excellent way. He told us that if we would but love and mind and strength, and our neighbors as ourselves, that is all that will be required of us.—St. Matthew xxii, 37-40. Our supreme duty, therefore is to love God and our fellowmen.

Love is the magic talisman that makes hard tasks easy. When our hearts are full of love, and this love is manifested in our voices and in our eyes, we have a power over our friends and over all with whom we come in contact that can be acquired in no other way. "We cannot serve God, we cannot work for God," said D. L. Moody, "unless we love. That is the key which unlocks the human heart. If I can prove to a man that I come to him out of pure love; if a mother shows by her actions that it is pure love that prompts her to assist her boy to lead a different life, not a selfish love, but that is for the glory of God, it won't be long before that mother's influence will be felt by that boy, and he will begin to think about this matter, because love touches the heart quicker than anything else."

As we love more our characters change. Selfishness and pride disappear and a new and a lovelier disposition grows up in their place. If we love people as we should we will not scold them, we will not say harsh things about them, we will endeavor to help and aid them, we will return pleasant words for cross ones; good deeds for bad ones. And as we do our power to influence others for good will grow. They will see that a new force is working in our lives, and they will long to learn more about it.

"We cannot work for God without love. If I have no love for God or for my fellow man, then I cannot work acceptably. God is unable to use many of us, because we are full of irritability and impatience. It is easy to reach a man when you love him. All barriers are broken down and swept away."

"There is no way so sure to win our families and our neighbors and those about whom we are anxious to bring to Christ than just to show forth the fruits of love in our lives. If we have peace and joy and love and gentleness and goodness and temperance, not only being temperate in what we drink, but in what we eat, and temperate in our language, guarded in our expressions, if we just live in our

homes as the Lord would have us, an even Christian life day by day, we shall have a most sufficient power proceeding from us that will constrain them to believe on the Lord Jesus Christ."

This quality of love can be acquired in but one way. We must ask God for it. We must study about it in His Holy Word, and pray that it shall be given to us. Half-hearted seeking and praying will not suffice. We must be in earnest. When we are we will soon find a change taking place in our lives. This change will be just in proportion to the intensity of our desire that love, God's love, shall abide in our hearts. "Ye shall find me when ye shall search for me, when ye shall search me with all your heart.—Jeremiah xxix, 13.—I. H. N.

Work yet to be done by Women's Institutes

Miss Ethel Itaby, Hagerman's Corner, Ont.
Some find fault with our Women's Institutes, claiming that we spend too much of our time discussing cooking, pickling, preserving, etc. This should not be the aim and object of our Women's Institute, though some seem to think it is. Recipes are all right, and the majority of us enjoy a well cooked meal, but in this day when help is scarce, would it not be better instead of exchanging recipes and telling each other how to prepare elaborate dishes, which so many have neither time or strength to do, if we should learn how to simplify our cooking and other work, as well, and learn how to save ourselves as many steps as possible. A simple untired mother, at a very simple dinner, is worth more to her family than a weary exhausted one, though the feast she serves be elaborate. The simple meal is better for us. We all know the result which often follows eating rich food.

One successful Women's Institute has a rule that at no meeting shall there be permitted any conversation or discussion of either dress, disease or domesticity. As for disease and domesticity it is very important that we understand how to govern both and could we not do worse than discuss these at some of our meetings, to learn much that would be helpful to us without rehearsing every little ache and pain and symptom, and without telling all that Bridget did, or did not do.

It is not our object to draw women away from their home or have them neglect their duty. Our object is to do all we can for the betterment of conditions in our home life and to get the most and the best out of life that we can by the giving of our very best services to our home and community. I am sure that our meetings are helpful to any woman. To most of us, life is not all sunshine, and if we make our meetings helpful and encouraging, they can help but do good. If a woman is to be shut up in her home she will soon become too narrow minded. It does one good to be able to talk over and exchange opinions of different subjects. In organization and union there is strength. We should accomplish much, then let us as members strive to be as helpful to each other as we can.

It may have been only a cheerful word, a grasp of the hand when meeting, But if hope revived at the message heard Or courage came from the greeting, How grand to think of a soul waxed strong Of a burden lighter growing Because you happened to come along When life made it dreariest showing. For this is the true, good comradeship In the life we live together,

That holds to a friend with a firmer grip Though rough be the way and weather.

I think as a Woman's Institute, our work is without limit. A great trouble to-day is to keep our boys and girls at home. Instead of staying at home as their mothers did, we find our girls going off to the towns and cities and taking different positions, while they could not look after a home if they had one. The greatest question is how are we to get them to take sufficient interest in housekeeping and in the home life to keep them there. So many girls look upon our farm life as simply a drudgery. We must make our home life more interesting, more attractive, get them to take an interest in the work, have different sources of simple and healthful pleasures, which they will enjoy.

The products of our homes are our boys and girls who are to go to make up the rising generation. Herein is our field of labor, and a field in which neither time nor trouble is wasted. How great the responsibility of a mother in training up her children in such a way that in future years as men and women she will be proud of them, and they in turn will look back to their mother and call her blessed. Let us strive to make our home lives as bright as possible. The culture of flowers in one's home helps much to brighten life. It will have an influence which in after years will not be forgotten. Flowers are God's messengers, fragrant without toil, beautiful without art.

Another great field in which we will find plenty of work is the temper-

ance field. Intemperance is doing more to drag down the standard of our manhood than any other evil to-day. We have a chance to do great work here if we are willing. Let us do all we can to help on the good cause.

Let our object and work be in future the uplifting of character, the betterment of our home life, the forwarding of every good work. Let us work so that we will compel people to acknowledge the benefit of the Woman's Institute and so that there will be no such paltry excuses as that a recipe book will take the place of the Woman's Institute meetings.

Letter Writing

Have you any unkind thoughts? Do not write them down. Write no word that gives pain; Written words may long remain; Have you heard some idle tale? Do not write it down; Gossip may repeat it o'er, Adding to its bitter sting; Have you any careless jest? Bury it and let it rest— It may wound some loving breast, Words of love admit no loss, Words of truth and kindness are, Words of comfort for the sad, Words of counsel for the bad— Wisely write them down. Pause before you write a line. Little words may grow and bloom With Litter breath or sweet perfume, Pray before you write them.

When making jelly with fresh fruit the juice should always be allowed to drip into a china or glass dish. A tin one will spill the color.—Mrs. M. L. Winslow, Peel Co., Ont.

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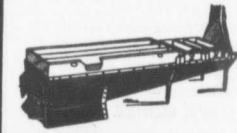
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Rest and Recreation in the Home

Mrs. D. Miller, Peterboro Co., Ont.
The home-maker is the one who orders, creates and carries on the things which go to make a home. This aptitude could the Creator have given mother, than that of being wife and

Life is not merely existing or even just providing food, raising, shelter, all, we were little better than the animals, for they attend to all these things in so far as their needs go. Life is doing, working for God and for others, making the most of every talent we are given. In fact it is to be as God-like as it is possible to be.

Recreation is simply recreation, making ever again, a renewing of strength after toil. Rest is a state free from motion or disturbance. To be able to do her best work, the home maker must fully possess all her powers, physical and mental. No woman can do her best when exhausted, any more than you can do your work with worn out machinery. Leisure for work and recreation is one fundamental principle of life.

Work and hard work, if only in moderation, is in itself a rich source of happiness. We all know how quickly time passes when we are well employed. The busy woman has no time to fret. Unfortunately the woman who loves her home the most, and is

most conscientious in everything she does, is apt to be the one who takes no time to rest. She persists in ignoring the fact that labor should be appreciated by rest. When do we appreciate and the more tired the more we enjoy the rest. That condition of complete exhaustion, when even sleep by the home-maker is more than a respite and is a condition in which no one should ever be. We should do our work and then rest absolutely and completely.

Change of occupation is as good as recreation. To a certain extent this is true. It is well to remember that one piece of work is tiring us too much, when that line by doing something totally different. We often work too hard at our play as at our work but by a different set of muscles and nerve cells is used, and the work is fact recreating. Often this line of recreation is really better for us than is a rest.

A woman, no matter how she may love her home, no dear every one in it may be to her or what pleasure she may take in the work for that home, must have rest. She cannot go on continually at the same monotonous grind. The whole nervous system cries out for something different. The exhausted home maker does not often realize what is the matter with her. The need change may simply be to go to another room and do some other work.

Our men like to see us looking well like to see the hair neatly and becomingly arranged; a neat apron or dress with some kind of neck finish, the woman who cares for her appearance has a much greater influence with men. Besides she feels more comfortable. After the day's work it is imperative to have a few minutes to renew one's appearance. That renewal of appearance, especially brushing the hair and having the hands and face are great strength renewers.

LEISURE FOR READING, ETC.

The home maker should have leisure to indulge in games, music, will unintentionally look her as such a mere drudge and treat her as such. This tends to keep the family together, to make home dear when the mother can join in with and use the amusements. Amusements are alert and do her just as much good as they are the others.

The home maker should have leisure to do a certain amount of visiting; not gossiping, but pleasant healthy intercourse with other people, also in

spite of all her care she may become narrow. It is bad to find a woman who demands intercourse with her prostration and even insanity are caused by lack of outdoor exercise. The home maker should have leisure to inform herself concerning a little world, to still it is to happen. We should have some idea of things outside ourselves. Also current literature. All this knowledge of leisure time but it is wonderful how much can be done in a few minutes, and how much better one feels for the change! How much easier the actual work becomes, when the home maker feels that she and her best sense.

Absolute rest and absolute relaxation of every nerve and muscle ever imperative necessity some time every day. It should come in sleep, but it hard and is intense in work. The more we work and the more intense for absolute rest.

It is certainly better to wear out than to rust out, but do not for the which in the long run would give you yourselves to pieces. Only the bread toler can taste Sleep's glass of repose, but do not become so worn you cannot sleep or rest. Do you not notice brightens you and adds to your comfort, but it is better for your home cheerful for those you love. You have for those you love. Your appearance is studied, visit, all that you may help things for your home.

Then too, some provision should be made for a complete change. Air, nature, even those things made it so quiet rest. It will have much work to do, but all must rest.

To Launder Embroidered Linens

An embroidered piece should not be put in with the regular wash but should be washed by itself in an earthen bowl, to avoid the possibility of rust or other stain. Take fairly pure water and make a light suds of the linen is soiled, rub that portion between the hands, but that portion gently with water and lay the piece flat between two dry towels or thick linen cloths. Roll up in these so that no part of the embroidery can touch any other part of the same linen and will absorb the moisture. Do not put in any solution of bleach. Leave in this condition until the silk is absolutely dry.

Lay the piece face down upon a well-padded ironing board, spread a clean white cloth over the embroidery and iron quickly and lightly with a hot iron, being careful not to press heavily upon the embroidered portions. A hot iron placed upon embroideries in which the silk is wet will produce a steam, which will take the life from the silk and ruin the embroidery. If the linen centre has become too dry, use a dampened cloth to run the iron over. This method will leave the linen sufficiently limp for pressing, and it will hold its natural stiffness.

If the housekeeper is in an especial hurry to heat or cook quickly, before putting the stew-pan on the fire, rub some laundry soap over the bottom several times.

The Passenger Pigeon

The search for the Passenger Pigeon will be carried on for another year. No person was successful last year in finding this finest and noblest of all wild pigeons. Where forty or fifty flocks of great flocks comprising hundreds of thousands, or even millions were frequently observed, much doubt exists as to whether there are any left to-day. Its range extended over the east of the American continent from north as Hudson Bay.

Last year many reports were received to the effect that the long-lost pigeon had been found, but on further enquiry, and on demanding a deposit of \$5.00 as an evidence of good faith and care in its identification before we incurred any expense in confirming the discovery, it turned out that some other bird had been mistaken for it, and nothing more was heard of it.

All finds are to be reported to Dr. C. E. Hodge, Clark University, Worcester, Mass., or to the undersigned. The awards are offered solely and only for information of location of undisturbed nestings. We do not desire to have possession of any birds, dead or alive, but we are working solely to save the free wild population of the world.

To insure intelligence and good faith informants of nestings are advised to enclose, or agree to forfeit, at least \$5.00 in case they have failed to identify the birds correctly. This is only a small part of the costs occasioned by a false report. The money will be immediately returned if the birds are found to be the true wild passenger pigeons.

In sending reports give exact data, date, number in flock, direction of flight, and descriptions of the nest, the eggs and the birds themselves.

Last year the Mourning Dove, the Fan-tailed Pigeon of the Pacific Slope, were mistaken for Passenger pigeons.

Passenger pigeons nest during April or May, making rude scanty platforms of twigs through which the eggs can be seen. The nests are usually from 10 to 30 feet above the ground and are apt to be found in any woodland. There is usually one (sometimes two) elliptical white egg one and a half inches by one inch, in each nest. The Passenger Pigeon is 16 inches long built, and has a long graduated tail, that is, the central tail feathers are



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Pigeon

Passenger Pigeon or another year... about twice the length of the cuter...

about twice the length of the cuter on the head, and ruddy above and the female is duller colored inclining to brownish.

The Mourning Dove is shorter by four inches and both sexes have black spots on the ears and brownish backs.

Observers should be absolutely sure of the identity of the bird before making a report. If the nest contains eggs, haste in reporting is unnecessary as young birds will remain in nest for three weeks or more before leaving.

It should be remembered, too, that the rewards are offered for undisturbed nests. The birds must not be molested in any way, watch them closely from a concealed position with a field glass and ascertain for a certainty that they are passenger pigeons before reporting.

Dish Washing

First in line in every household is the cooking. This occupies about three-quarters of our time. Next is the dish washing. Almost every woman considers herself master of this commonplace work, and every one has a method of her own. The method I follow, and which gives the most satisfactory results, is to neatly pile my dishes in the dish pan, pour over them some soapy water and thoroughly wash them. Then put them in a draining pan and pour sufficient scalding water over them to thoroughly rinse the dishes, let them drain a few minutes, and then dry with a clean, dry towel. I have very little use for a towel at all, only to rub and polish a little, as they drain almost perfectly dry. I can recommend this method to every tired girl who dislikes dish washing and considers it the least pleasing of all work. This method saves washing and drying towels, and if the above rules are practised, one towel will last a week. "COUNTRY GIRL."

No Occupation

(Suggested by the Census Blanks, which place housewives under the classification of "No occupation.")

From the Census blanks we learn, That the one who runs the churn, And that patches up your breeches, In our shirts takes a few stitches, And the one who bakes the bread, And each day makes up the bed, Milks the cows, feeds the hens, Nails the pickets on the fence, Skims the milk and feeds the calves, Makes cough syrups and good salves, Does the cooking, sets our tables, Sings us songs and tells us fables, Makes her dresses, darns the socks, Does the washing, winds the clocks, Spanks the children, rocks the baby, (Knitting at the same time, maybe), Hayting time will help at mowing, And at County Fairs is showing, Just as proud as you can please, Samples of her homemade cheese, Who will gather up the eggs, Brace the wobbly table legs, Sweep and dust, and scrub the floors, Nail the hinges on the doors, Dig, and hoe, and weed the garden, Of the pantry act as warden, Work the mottos on the wall, Put the fire up for us all, Plant and water all the flowers, Tie up vines in shady bowers, See that nothing pinches and wrinkles, Carries makes and crazy quilts, Puts the mothballs in our clothes, Dresses up some new scarecrows, From the store keeps all the tags, Scours kettles, mends the bags, Irons out our Sunday shirt, Ne'er lets the little chicks get hurt, And keeps all of them a-living, Raises turkeys for Thanksgiving, And in sewing circles swags, Clothes the heathens wear as beaux, Carries the fruit up to the pig, And makes lap robes for our rig, Propping up the fence post leaning, Never misses spring housecleaning, Cuts the grass from off the lawn, Keeps the hen house, puts water on, Washes windows, fills the lamps, Cures us of our colds and cramps, Sets the traps to catch the mouse, Whitewashes the chicken house, Kills the bugs on "stick-un" papers, In the morning builds the fire, Ties the rake up with a wire, Carries water from the well or spring, (Half the things I cannot tell) And delights in thrifty shopping, When in town awhile she's stopping, Where she surely won't fail Attons every bargain sale, When she tries to get a vote (From the Census blanks I quote), All the housewives of our nation, Simply have "No occupation."

***** The easiest way to clean carved picture frames is to use a small paint brush.

Gourds

For covering summer houses and arbors the gourds are very satisfactory. They grow like, like--well, they grow like gourds of the Jonah variety--and that you will remember, if you are familiar with that story, was very rapidly indeed, and their leaves will be large enough to serve as sunshades, individually, while collectively they will form a screen that is perfectly sun-proof. I would not advise planting them about the house, however, as they are too coarse in habit and general appearance to be satisfactory at close range.

THE COOK'S CORNER

Recipes for publication are requested. Inquiries regarding cooking, recipes, etc., gladly answered upon request, to the Household Editor, Farm and Dairy, Peterboro, Ont.

OUTMILLED GEMS. To 2 cups rolled oats add 1 1/2 cups sour milk. Mix and let stand over night. Add sugar through a sieve. Add 2 cups soda, a little salt, 1 egg, 1/2 cup sugar, and 1 cup flour.

CRANBERRY MARMALADE. Pick over and wash 2 quart cranberries and put over fire with cold water to barely cover. Cook until tender and press through a sieve. Add 4 pounds sugar, 1 1/2 pounds seeded raisins, and juice and pulp (cut fine) of three oranges. Discard seeds and cook orange peel until tender. Cook all until thick and set away in glass jars.

CRABBLE SOUP. Cook 3 tablespoonsful of chopped green peppers and 2 tablespoonsful of chopped onions in a 1/4 of a cup of butter 5 minutes, add 1/2 of a cup of flour, 1 qt. of brown soup stock, 1 pt. of tomatoes and simmer for 15 minutes. Rub through a sieve and season highly with salt, pepper and cayenne. Just before serving add a 1/4 of a cup of cooked macaroni cut in rings, 2 tablespoonsful of grated horseradish and 1 teaspoonful of vinegar.

MARSHMALLOW FUDGE. If your marshmallows get a little stale before using up, try making marshmallow fudge. Put 2 cups of granulated sugar and 1 cupful milk in a saucepan and let the mixture come to a boil. Add 1 1/2 squares of chocolate, grated, and 2 tablespoonsful of butter. Cook about 10 minutes, and then remove from the fire and beat until the fudge gets rather stiff, but not so stiff that it will not pour easily. Break marshmallows into several pieces, place in the bottom of a dish and pour the fudge over them.

Stuffed Apples

Have on hand half a dozen Northern Spy apples, all uniform in size. Pare very closely, just merely removing the skin, being very careful not to cut into the flesh of the apple. Divide into even halves, dig out the cores so as to leave a cavity in the center of the apple, put a little water in the apple halves, put 2 cups of grated sugar and a liberal cupful of baking. Watch very closely while baking, and do not allow them to break off. The beauty of the dish consists in preserving the halves as whole as possible. As soon as the apples are cooked tender and soft, arrange them neatly on a shallow plate, leaving one piece of apple in the juice, which should be retained in bakes with a cup of brown sugar and cook down until the apple develops into a rich brown sauce. Fill the cavities in the apples with this rich brown sauce and serve with whipped cream.

The Sewing Room

Patterns 10 cents each. Order by number and size. If for children, give age for advice, give bust measure for waists, and waist measure for dresses. All orders to the Pattern Department.

FANCY WAIST, 6555



Waists that overlap at the front, and close at the back, are novelties. The rucks provide fulness enough to be becoming for slender figures. The little trimming portion at the centre front, over which the frons are arranged allows effective use of embroidery, applique or similar trimming. For collar and cuffs, velvet, satin, or all contrasting materials are appropriate, and they could be made to match the waist and embroidered or beaded.

For 16 yrs. is required 3 1/2 yds. of material 21, or 1 1/2 yds. 26 or 44 in. wide, with 1/2 yd. of all-over lace and 1/2 yd. of velvet.

The pattern is cut for misses of 14, 16 and 18 years.

FIVE GORED SKIRT, 6556

This skirt is one of the smartest and best liked for all in the line. It is handy enough to allow of a tailor finish, it is perfectly simple, there is no fulness whatsoever at the waist line. The skirt is cut in five gores. It can be cut a little above the waist line, finished at the upper edge or can be cut off at the waist line and joined to a belt.

For 16 yrs. is required 4 1/2 yds. of material 27 in. wide, 3 1/2 yds. 27 in. wide, 4 1/2 yds. 36 or 44 in. wide.

The pattern is cut for misses of 14, 16 and 18 years.

HOUSE JACKET, 6553

The simple breakfast jacket is one most needed. This one, tucked over each shoulder that provides becoming in the line, is a right front is cut in two big sections, but can be finished plain as shown in the small view, if preferred, and the neck can be made a little higher with a turned over collar. Several sizes below the elbow are found practical, or with long sleeves as preferred.

For medium size is required 4 1/2 yds. 24 or 27 inches wide, 3 1/2 yds. 44 in. wide with 1/2 yd. of silk for bands.

The pattern is cut in sizes for a 34, 36, 38, 40, 42 and 44 inches bust.

FOUR-PIECE SKIRT, 6558

The four-piece skirt is practical, smart and graceful in demand. This one takes straight lines yet is not too narrow. The skirt is cut in the bottom gore. The front and back gores are lapped onto the side portions and attached to give the effect of box plaits.

For 16 yrs. is required 4 1/2 yds. 24 or 27 in. wide, 3 1/2 yds. 36 or 2 1/2 yds. 44 in. wide.

The pattern is cut for misses of 14, 16 and 18 years.

CARE IN ORDERING

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

Here's a Home Dye That ANYONE CAN Use. HOME DYING has always been more or less of a difficult undertaking--Not so when you use DYOLA. Send for Sample Card and Story Booklet to THE PATENT DYE WORKS, RICHARDSON, LONDON, Ontario, Canada.

CANADIAN HOME JOURNAL. CLUB NOW for the four best Canadian Magazines. All 4 For Only \$2 or your choice of Farm and Dairy \$1.00 \$1.10 Poultry Review \$1.00 \$1.15 The Home Journal \$1.00 \$1.15 Farm and Dairy \$1.00 \$1.15 The Poultry Review \$1.00 \$1.15 Canadian Home Journalist \$1.75 or Poultry Review... \$1.75 Address, Circulation Manager FARM & DAIRY Peterboro - Ont.

CLUB NOW for the four best Canadian Magazines. All 4 For Only \$2 or your choice of Farm and Dairy \$1.00 \$1.10 Poultry Review \$1.00 \$1.15 The Home Journal \$1.00 \$1.15 Farm and Dairy \$1.00 \$1.15 The Poultry Review \$1.00 \$1.15 Canadian Home Journalist \$1.75 or Poultry Review... \$1.75 Address, Circulation Manager FARM & DAIRY Peterboro - Ont.

OUR FARMERS' CLUB

last 20 years, but we have had very little stormy weather. Feed is plentiful. There is a good demand for horses. Beef is very scarce.—Tom Brown.

NOVA SCOTIA

ANTIGONISH CO., N.S. Feb. 25.—During the past month we have had more frost than during the same length of time in the

PRINCE EDWARD ISLAND

KING'S CO., P.E.I. Feb. 23.—Winter on P.E.I. has been the coldest for many years, several times going 20 below zero since 1905. Most people have their win-

ter's wood hauled, and are hauling mud over six inches of snow on the level—G. A.

KENSINGTON, Feb. 27.—On January 23th snow. This is the only eight inches of roads to date. The best for many years. It has been very dry and steam-trains are unable to keep up. Daily commutes from Cape Traverse, P.E.I. to Charlottetown, N.B., a distance of nine miles by iceboats is very slow. The markets are good. Beef cattle are getting the sold out at \$2.50; pork, 7 1/2c to 8 1/2c; eggs, 87c to 92c; butter, 21c—J. C.

ONTARIO

GRENVILLE CO. ONT.

PRESCOTT, Feb. 25.—We have more snow than for three or four years. Our crop year has been running all winter. There are quite a number of new milch cows in this district. Timothy has sold for \$10 to \$12 a ton; hay \$25; milkings, \$25; eggs, \$7.50 to \$8.00; butter, 55c.

HALIBURTON CO. ONT.

KINMOUNT, Feb. 27.—We are coming to the end of a long winter unique in its way. There has not been any thaw; only heavy storms to block roads on the level and the sleighing is good. There are plenty of feed crops. The winter with the horses are very scarce. The average price is \$175, some farms going at \$500. Hay is \$10, oats 37c, potatoes 20c, eggs 28c—L.T.

NORTHUMBERLAND CO. ONT. EDVILLE, March 2.—The coating of slipmats is very difficult in some places. They walk upon the road without injury to themselves from the ice. Some cases of foot falls in the past have been known to result fatally or with serious injury.

HASTINGS CO. ONT.

SIDNEY CROSSING, Feb. 27th.—Winter crops will be short and considerably dry. Feed is holding out well. There will be abundance of hay this spring and everything is well pleased for the prospect for reciprocity. The farmers are very anxious to get up the manufacturers took it is about time to get the farmers. Timothy has sold for \$12 a ton; clover hay 25c to 30c; barley, \$6.50 to \$6.75; butter, 55c.

CHAPMAN, Feb. 27th.—The farmers are leaving Ontario and going to Saskatchewan this spring. Dairy cattle are selling high, having averaged over \$10 at an auction sale recently. Hogs have dropped to 6c to 7c. The supply of H. S. is sufficient for local demands.

WELLAND CO. ONT.

STONE QUARRY, Feb. 27.—The Beattie Cow Testing Association was instrumental in securing the assistance of G. A. Puttison, Superintendent of Ontario Agricultural Course on Feb. 25—a two-day judging decided success; about 150 took it. A number of dairymen are in the act of selling horses were taken up in light and heavy and H. G. feed. Nearly all the apple orchards have been insured. The price varying from \$10 to \$25 an acre. Eggs are 20c; butter, 55c—E. J. G.

NEW WESTMINSTER DIST., B.C.

GHELLIWACK, Feb. 21.—The weather continues to be fine with frost at night and sunshine in the day. The snow is disappearing. The horses are coming back and animals begin to awaken as they learn from the early start of spring here and there. Pruning time is also here and there. The spraying season for British Columbia has the spraying season for the year. Hay is \$16 a ton. Eggs and butter are each 40 cents. The ground is not frozen.—J. C.

GRANGE NOTES

GRANGE ORGANIZED AT STEWART'S HALL The forward movement of organized agriculture took root in a tangible form when in the County last Friday night when the Stewart's Hall, Ontario, met and organized a new Grange. The Canadian Horticultural and the staff addressed the meeting and did the 20 who were present officers are: Worthy Master, R. M. Hatcher; Lecturer, W. A. Wilson; Secretary, J. W. Smith; Treasurer, Overseer, Brewster, Livingston Bie. The wonderful organization of the Grange amongst the farmers of New York State and throughout the United States, are united in this organization, was explained by Mr. Marsh, who is now the

editor of The Canadian Horticulturist, and who for the past five years has been the Agricultural Editor of the Pennsylvania Railroad, and the Grange movement, N.Y. He traced the history of the Grange movement in the State, where every Bill affecting the farmers in any way, before it was submitted to the Legislature at Albany, was first

The meeting at Drayton, Ont., in the interest of the Grange, was fairly successful, and those present decided to organize a Grange on March 4.

Farmers everywhere are well pleased with the new law, and a demonstration of the stimulus is given through the organization of the Grange. The farmers in Grey, Dufferin, and Simcoe, well as in other parts of the province, are active organizations.

SALE AT GUELPH The annual sale of pure bred Shorthorn bulls held at the Guelph Fair on the auspices of the Guelph Fair, Guelph, proved successful. The sale was a record for the year. The highest price realized was \$725.00 a head. The highest bidder was H. A. Cornick, of Arthur, Ont. The sale was held on the 27th of February. The average price for the sale was \$450.00. The stockmen agreed that the quality of the animals did not average up quite so high as last year's sale.

HELP WANTED At once for work on Stock and Fruit Ranch Man and Wife. Furnished House Single Man or good strong man. Also with 10 years of experience, salary expected etc.

CRESCENT VALLEY RANCH, Crescent Valley, B.C. Via Nelson. CHEESE FACTORY, good buildings and equipment, good dwelling above curing room. For further information address D. C. FLOTT, 171 BALDWIN STREET TORONTO, ONT.

AGENTS WANTED \$5.00 a day easy. No experience needed. Write on eight. Absolute necessity to farm. Home work of 30 men. Pays for itself MACHINERY CO., Box 77, Oshawa, Ont.

SYNOPSIS OF CANADIAN NORTH-WEST LAND REGULATIONS Any person who is the sole head of a family, or a man over 18 years of age, may homestead a quarter section of available Crown land in Manitoba, Saskatchewan or Alberta. The applicant must appear in person at the Dominion Land Agency, or its Agency, for the District where the land is situated. Entry by proxy cannot be made at any time. A certificate may be made at any time of intending homestead, brother or sister of the homesteader. The homesteader's residence upon and years. A homesteader may live within one mile of his homestead on a farm of at least 80 acres, wholly owned and occupied by him or by his father, mother, son, daughter, or brother, or sister. In certain districts a homesteader's good standing may pre-empt a quarter section alone. Homestead, Price \$3 homestead. Duties—Must reside on the land each of six pre-emption six months and on the homestead the time required to earn homestead patent) and cultivate 15 acres extra. A homesteader who has exhausted his exemption may enter for a pre-emption in purchase of land. Price \$30 per acre. Duties—Must reside six months in each of three years, cultivate 15 acres and erect house worth \$500.

Deputy of the Minister of the Interior, N.B.—Unauthorized publication of this advertisement will not be held for. It pays to advertise. Try it.



The Safest Fence to Buy

Safe because it will stand shocks and ill usage. Safe because it is a complete barrier against all kinds of stock. Safe because its tough, springy steel wire will give real service.

PEERLESS The Fence that Saves Expense

is built of No. 9 galvanized wire of guaranteed quality. To this best of wire add without a rival. We've built Peerless fence twice as good and twice as strong as is necessary can affect it. It saves you money because it is long lived and never requires repair. We know there is no fence made that will give you more lasting satisfaction. Write for particulars.

We also make poultry and ornamental fencing and Gates—all of it of a quality that our customers appreciate and we are proud of.

THE BANWELL HOXIE WIRE FENCE COMPANY, Limited, Dept. H, Winnipeg, Man. Hamilton, Ont.

SEED : OATS

No doubt your most important grain crop is the Oat crop. NOW IS THE TIME TO GET YOUR CROP READY. If you have a clean, pure seed and a variety that yields you a crop than your own granary. BUT on the other hand, if you are not SATISFIED with your own seed, its purity, and its yielding quality, then WE THINK WE CAN HELP YOU. The mill with its riddle and wind will improve grain 50 per cent, but no free from weeds in the first place.

THE PRICES WE ASK ARE REASONABLE As it is impossible for you all to call and see our stock we will be glad to send you samples of identical lots of the varieties you want and quote prices delivered at your nearest railway station.

- ORDER ENOUGH FOR A FIELD Prices per bus. f.o.b., Toronto, in 5 bus. lots or over. Bags free. Lincoln 50c. Canadian grown Regenerated Abundance 90c. Canadian grown, Regenerated Banner 90c. Scotch grown, Regenerated Banner 90c. Early White Cluster 1.25. White Wave Cluster 90c. Daubney (extra early, suitable for mixing with six-rowed) 90c. Barley 90c. Grow only one variety of barley. Our stock of O.A. No. 21 Barley is going fast. The price for our best sample is \$1.10 per bush. (Five bushel lots.) Ninety-nine times out of one hundred we can save you money on Red Clover, Alfalfa Clover and Timothy. This week's prices per bushel for our best brands Clover and Timothy are (up till March 15th, we will pay freight on orders of 20 lbs. or over of Clover and Timothy) "Sun" Red Clover 92.50; "Sun" Mammoth Timothy at \$6.50; "Diamond" Timothy at \$7.00. These all grade No. 1 Government Standard. Alfalfa 25c each for bags. Before you order your Corn and Roots see our Catalogue. We handle Murrate and Sulphate of Potash, Nitrate of Soda and Acid Phosphate.

GEO. KEITH & SONS Seed Merchants Since 1866 124 King St., East, - Toronto, Ont.

MARKET REVIEW AND FORECAST

Toronto, Monday, March 6th.—We never expect either the wholesale or retail business to be rushing at this time of the year and this year is no exception to the rule. With bad roads in most of the country sections, there is not a great deal of business doing and few ventures are coming in. Wholesalers all ways calculate on this, however, and as a fact that business is not as brisk as it was a couple of weeks ago worries one.

In spite of the fact that boards of trade and business men have come out and condemned reciprocity, none of them have been able to advance strong arguments in support of their position on economic grounds. Business is still going on as merrily as ever in spite of their predictions. To the farmer the advantages of the proposed agreement are unquestioned under reciprocity are already evidenced by the stiffening in prices of peas, rye and barley. Of wheat generally, are too sensible to take any stock in the announcement "bug-a-boo" raised because a couple of families in the United States happen to hold up this scarecrow for our inspection. Call money rules here at 5% per cent.

WHEAT

The price of wheat has been seen-sawing somewhat during the past week, but values have kept a fairly uniform level. In the middle of the week some buying to cover shorts by speculators and extensive buying by a few milling concerns on the Chicago market tended to stiffen prices here. Quotations soon dropped to the old level. It is becoming evident to all dealers in the United States that supplies of wheat on hand, no considerable advances can be looked for. No. 1 Northern is quoted here at 97 1/2c, No. 2, 96c, and No. 3, 92c. Ontario wheat is still quoted from quotations in Ontario flour, No. 2 winter wheat is selling at 80c outside. On the farmers' market the ruling price is 73c to 80c, and for some wheat 75c.

COARSE GRAINS

The volume of coarse grains coming in is small and prices have been steady. Corn and barley on the decline with barley \$1.75 for three bushels.

Wagon Paint

Makes the Wagon Last longer

The wagon maker smiles when he sees the way some farmers neglect their wagons.—It means more business for him. But he admires the wagon with foreign tires, which keep his wagon well painted and it lasts longer than the wagon. The wagon maker knows the value of paint—that is why he covers the wagon he makes with the best wagon paint he can get, so it will protect the wood and iron during the life of his guarantee.

MARTIN-SENOUR WAGON PAINT

is made expressly for painting lumber wagons, sleighs and all kinds of farm implements and tools. It resists snows from the brush, is most used body and dries hard—will not blister—resists the wear and tear which wagons are subjected to—stay bright and makes the old wagon look new.

It out the coupon, present it to any Martin-Senour agent for a free half pint can of paint. If no agent near you, send coupon to us—we will see that you receive can and farm book free. Be sure to write today

A Can of PAINT FREE

This coupon entitles you to a free can of paint. Write to us today.

The Martin-Senour Co., Limited Montreal

COUPON

Present this coupon to any Martin-Senour agent for a free half pint sample can of RED SCHOOL HOUSE PAINT to be used on any wooden surface when presented. The Martin-Senour Co., Limited

stiff at the old quotations. The Toronto No. 2, quoted: Oats, Canadian Western No. 2, 30c; No. 2, 32c; No. 3, 31c, outside, 30c to 31c; rye, 65c to 66c; corn, 55c to 56c; outside for milling, 50c to 55c for feed; No. 1, 50c to 55c. On the farmers' market oats are 30c to 40c; barley, 50c to 55c; rye, 60c to 70c; buckwheat, 55c. On the control market, course 65c. On the control market, course 65c. On the control market, course 65c. On the control market, course 65c.

MILL FEEDS AND MEALS

Outside of a slight decline in Manitoba barley quotations for mill feeds are unchanged. Manitoba bran is 22c on track here; shorts, 24c; Ontario bran, 22.50; shorts, 24.50. On the Montreal market mill feeds are scarce, some being reported as overvalued. Manitoba bran is quoted at 23c to 25c and shorts 22.50; Ontario bran 22c to 23c, and shorts 23c to 25c.

Corn meal is quoted here at 27.50, oil cake 33c, and oat meal 23c per 100 lb. sack. In Montreal, corn meal is quoted at 35c and oat meal at 31.25 to 32c.

SEEDS

The following prices are being paid by seed merchants to growers: Alsike, No. 1, bus. 85.50 to 87c; red clover, No. 2, bus. 85.50 to 86.00; red clover, No. 1, bus. 87.25 to 87.75; red clover, No. 2, bus. 85.50 to 85.75; red clover, No. 3, bus. 85.00 to 85.40.

POTATOES AND BEANS

Prices for potatoes are unchanged from a week ago. Wholesale quotations range from \$1 to \$1.10 a bag out of store and 80c in car load lots. In Montreal, an easier feeling is noticeable owing to increased supplies and there has been a further break in prices, sales being made at 80c to 85c.

Beans here are quoted at \$1.90 a bus. for prime and for hand picked. Montreal markets for hand picked beans are more liberal. Quotations are \$1.72 to \$1.75 for three bushels.

HIDES

No. 1, 8 1/2c; steers and cows 9 1/2c; No. 2, 8 1/2c; calves 10c; skins, 15c. No. 2, 8 1/2c; country steers and hides cured 70c to 80c; calf skins, 10c to 12c; sheep skins, 1 1/2c; and horse hair, 30c to 35c a lb. On the Montreal market, No. 1, beef hides are quoted at 10c; No. 2, 8 1/2c; calf skins 10c to 12c; lamb skins, 8 1/2c each.

HONEY

Wholesale prices for honey are as follows: buckwheat, 50c to 70c a lb. in tin, and 45c to 60c; strained clover honey, 10 1/2c to 16c; tin honey, 10 1/2c to 15c. In comb honey is quoted at \$2.50 a dozen.

HAY AND STRAW

The demand for hay in Toronto is good. Quotations are as follows: No. 1 Timothy, 81c to 83c; mixed hay, 80c to 81c; on track here, straw is quoted at 85c to 87c a ton. Little hay is being received on the through of at least 24 a ton, following an advance in the country in anticipation of reciprocity. No. 1 hay is quoted at \$15.00 to \$16.00; No. 2, 8.50 to 10.00; and No. 3, 6.50 to 8.75.

DAIRY PRODUCE

Trade in dairy produce this past week has been brisk. The volume of cream is large but strong demand kept prices firm. Creamery prices are quoted at 20c to 25c; solids 25c to 24c; separator prints 22c to 23c; dairy prints 15c to 19c; inferior grades, 15c. On the farmers' market, choice dairy butter sells at 25c to 27c. 15c for twins large and

EGGS AND POULTRY

There has been another slight break in the egg market this past week but considering the large volume of eggs in, prices have held fairly steady. Strictly fresh laid are quoted at 22c to 25c and cold storage stock 15c to 17c. Eggs on the farmers' market bring 21c to 25c. On the Montreal market large shipments of American eggs have been received. Buyers are quoting 25c to 26c for new laid and No. 1 storage 18c to 20c.

Dressed poultry here are as follows: chickens 12c to 15c; fowls 12c to 15c; live weight, one to two weeks less on the Montreal market the supply of poultry has been limited with an increased demand but prices are still nominal. Turkeys are quoted at 17c to 18c; geese 15c; ducks 17c; chickens 12c and fowls 10c to 11c.

HORSE MARKETS

The demand for horses from the Canadian West is opening up a little and a few car loads are being shipped to our country points. The going forward from the West, however, is anything but lively. Quotations are as fol-

lows: Good heavy drafters \$250 to \$300; medium weight, \$190 to \$240. Good agricultural horses bring \$150 to \$200, and fair quality ones \$100 to \$150. Express horses are quoted at \$170 to \$200; drivers, \$150 to \$300; and saddlers, \$150 to \$200.

LIVE STOCK

A week ago trade here in live stock was duller than it has been for a long time, prices being so low that drovers refused to part with their choice export steers. All grades of cattle were affected by the tone of the market. Things did not improve through the week as those who had held over their cattle realized that the recent decline in prices was natural and there was nothing better for them. Many lots were sold on the market for 25 cents less than prices at which they were purchased in the country. The outlook for the remainder of the present time is not bright. Brokers were purchased last fall at \$1 more a cwt.

than in the fall of 1909 and at present prices for export cattle are \$1 lower than they were a year ago. Low prices on the English market can be explained to some extent by greatly increased shipments from the Argentine. The only bright feature of the situation is the probability of reciprocity with United States in the near future. Prices on United States markets are rising higher than on Canadian markets and the probabilities are that the United States will soon cease exporting cattle altogether. In the last year their exports of live cattle were only a little over one-third as much as was exported five years ago. Choice export cattle are quoted at \$5.75 to \$8.75. Choice butcher cattle are quoted at \$5.75 to \$8.75 with medium grades at \$5.50 to \$5.75. Choice butcher cattle are quoted at \$5.75 to \$8.75 with medium grades at \$5.50 to \$5.75. Choice butcher cattle are quoted at \$5.75 to \$8.75 with medium grades at \$5.50 to \$5.75. Choice butcher cattle are quoted at \$5.75 to \$8.75 with medium grades at \$5.50 to \$5.75.



Have You Seen The New "Galt" Shingle? In justice to yourself, you should at least investigate "Galt" Steel Shingles before deciding on the roof for your new barn or the new roof for your old barn. Present wood shingles are failures and are being discarded—to use them is a step backward. Don't put a fourth-class roof on your first-class barn. "Galt" Galvanized Steel Shingles is the roofing now and for the future. Roof your new barn with "Galt" Steel Shingles and you won't have to apologise for it now or at any time in the future. Listen, you won't have time two months hence to investigate this roofing question. And yet the roof of your barn is an important part of your real estate and should be selected carefully. Won't you drop us a card now for our booklet "ROOFING ECONOMY" telling all about "GALT" shingles? If you haven't paper and ink handy, tear out this advertisement, write your name on the line at bottom and mail to us. We'll know what you mean. You'll never have a better chance than right now.

Name _____ Address _____

THE GALT ART METAL CO., Limited, - GALT, ONT.

Watch for the advertisements with The Kids from Galt.

CREAMERY MEN The Dominion Government will pay you \$100.00 bonus on condition you equip your Creamery with a satisfactory Refrigerator. The following letter fully explains what you are doing and who are doing it. UREKA REFRIGERATOR CO. Imperial Creamery, Jarvis, Ont., 1910 Messrs. The Eureka Refrigerator Co., Toronto, Ont. Dear Sirs:—Regarding the large Refrigerator you placed in my Creamery last June, I would be glad to say it has given entire satisfaction. All through June, July, and August, the thermometer registered from 27 degrees to 42 degrees, which temperature was very satisfactory for a Creamery, and it stayed dry and sweet, with no sign of mould or rot. It was so satisfactory in every respect that the Government has already paid me the bonus of \$100.00. I think myself quite fortunate in having secured a "Eureka" in preference to any other make. Yours truly, WM. PARKINSON. With those catalogue and information.

Eureka Refrigerator Co. Ltd. Toronto

HOLSTEINS

If you are wanting HOLSTEINS, say so, and you will receive a list of names and addresses of breeders...

FOR SALE

Holsteins of the choicest breeding, and individuals of all ages, male and female... CLARENCE R. BOLBERT, Zora Lodge Farm, Tavistock, Ont.

WOODCREST HOLSTEINS

A few choice Bull Calves for sale; six to ten months old. Some of Homestead Girl De Kol Sarcastic Lad, and grandsons of Pietje...

WOODCREST FARM

RIFTON, ULSTER CO., - NEW YORK

LYNDALE HOLSTEINS

BROWN BROS. LYN, - ONT.

LYNDALE HOLSTEINS

FOR SALE - Holstein Bull, Korndyke cow in his pedigree that average over 23 months, dam 23 1/2 lbs. Also pair of cow and bull...

LAKEVIEW HOLSTEINS

Bull calves sired by Orest Hengerveld Faysse De Kol, who is brother of the two 55 lbs. butter 7 days...

FAIRVIEW FARMS HERD

Sons of Pontiac Korndyke - This is the world's record cow Pontiac Glotilde De Kol... 2nd sire of seven daughters...

HOLSTEIN CATTLE

Illustrated Descriptive Booklets Free... HOLSTEIN-FRIESIAN ASS'N OF AMERICA 18-11

HOLSTEINS

HOLSTEINS-Cows and heifers for sale. Also young bull from Record of Per Formance cow-W. J. Cwiec, Locust Hill, Ont.

"LES CHENAUX FARMS"

HOLSTEINS-Winners in the ring and at the past. Gold Medal herd at Ottawa Fair...

ABSORBINE

Removes Bursal Enlargements, Thickened Swollen Membranes, from all Inflamed Surfaces, Strains, Sprains, Lacerations, Bruises, Pains, Swellings, Eruptions, Itch, Hair or Itch, Bores, Ulcers, etc.

W. F. YOUNG, P.O. 123 TEMPLE ST., SPRINGFIELD, MASS. LYMAN'S Ltd., Montreal Canadian Agents

bring 850 to 970, and common to medium \$30 to \$60. The trade in lambs is dull with the average price at \$6.40. Sheep are steady...

MONTREAL HOG MARKET

Montreal, Saturday, March 4th.-Live hogs continue to come in very free and the market here in consequence...

EXPORT BUTTER AND CHEESE

Montreal, Saturday, March 4th.-There is rather more doing along export lines...

YOU MAY IF YOU WILL

You may sell your surplus pure bred stock if you will; no need for you to keep it long...

at various points throughout the country. There is no doubt that these water setting late for hogs...

Individuals should feel that they are members upon having their names placed on the list...

Metal Stock Ear Labels with name and numbers for each sheep or hog...

AYRSHIRE NEWS

Farm and Dairy is the recognized exponent of the Dairy Industry of Canada. Breeders of Ayrshire Cattle and all members of the Ayrshire and Shorthorn Breeders' Association are invited to send interesting Ayrshire breeders for publication in this column.

MENIE AYRSHIRE BREEDERS

An enthusiastic meeting of the members of the Menie District Ayrshire Club was held at Campbellville Ayrshire Club...

"One of the weaknesses of pure bred Ayrshire breeding in Canada," said Mr. Stephen, "has been the manner in which our breeders of all kinds have been scattered through the country..."

To advertise effectively you should test Ayrshires who is now getting down to work among them...

Individuals should feel that they are members upon having their names placed on the list...

BREEDER'S DIRECTORY

Cards under this head inserted at the rate of \$4.00 a line per year. No card accepted under two lines, nor for less than six months, or 25 insertions.

LUNNYSIDE HOLSTEINS

Young stock all ages-J. M. Montie & Son, Stanstead, Quebec.

CYDE HOUSES, SHORTHORN CATTLE

Young stock for sale at all times-R. F. Redmond, Peterboro, Ont.

CYDEDALE SELECTS, SHORTHORN CATTLE

Large selection of pure bred stock, reasonable-Smith & Richardson, breeders and importers, Columbus, Ont.

EDGEMONT HOLSTEINS and Tamworths

Young stock for sale. Quality good, price reasonable-George H. McKenzie, Thornhill, Ont.

HOLSTEINS

For Quick Sale

Sight grade Holstein cows and three one-year-old heifers in calf. Seven of the cows have been in the Cow Testing Association and average 1.07 milk, 3.2 per cent fat for season 1910. I am disposing of my grade cows. Write to me for particulars and price, or come to see me.

W. R. SHIELDS, Mount Pleasant, Ont. Bell Telephone.

EVERGREEN FARM HOLSTEIN HERD

Has at his head Voltra Tri-umph (Imp.) 3771, whose dam gave in 1 day 1910 lbs. milk, and his sire's dam gave 104 lbs. milk. His progeny all show his wonderful cow with what can supply our cow with what wanted as either sex. All stock guaranteed as represented.

MERTON LODGE STOCK FARM

Offers 14 two year old heifers whose sire is a son of the Mutual Bull, who sire Kol the 2nd's 2nd year calf, who sire Daugald 1 lb records, and the De Kol family. Also a few young cows and bulls...

W. W. GEORGE, - CRAMPTON, ONT.

ELMDALE DAIRY HOLSTEINS

FOR SALE-One yearling bull and bull calves, sired by "Paladin Ormsby," the best 2 nearest dams average over 23 with good records, one 19.60 lbs. in 6 weeks and 7 day A. R. O. record 20.69 butter 60 days after calving.

FRED CARR, Box 115, ST. THOMAS, ONT.

Holsteins, Clydesdales and Oxford-down Sheep

Holsteins, Clydesdales and Oxford-down Sheep. Present offering includes two choice fillies rising a year old. EDGAR DUNN, 100 NEWMARKET, WILLOWDALE FARM, ONT.

Brookland Holsteins

For Sale, Holstein Bull, 11 months old, will grow and thrive. Sire Paul De Kol, Albany, Ont. is in the advance Registry. Dams of this bull are Write for price and full particulars or better come and see them. Price reasonable.

J. W. MCCORMICK, Dundas Co. Box 30, MORENO, Ontario

RIVERVIEW HERD

Offers Bull calf born February 14th, 1910. Sire Sir Azzule Besta Regis. Six dams in pedigree average 26 lbs. in seven days.

P. J. LALLEY, Lachine Rapids, Que.

HOLSTEINS

I am offering my Stock Bull, son of Prince of Sir Hengerveld Thebe, one year old, from P. M. cow. Telephone 100-1000. C. R. JAMES, Thornhill, Ont.

Partial view of other advertisements on the right edge of the page, including 'WOODCREST HOLSTEINS', 'HOLSTEINS', 'MIS', 'Nor', 'Long Di', 'TAMWORTH', 'Bear', 'champion', 'class', 'and two', 'Prices', 'P. O.', 'PI', 'Fa', 'W', 'C', 'A', 'W', 'F', 'Pete', 'gi'.

Cow Sale

Cows and three calves... Cow Testing... Pleasant, Ont.

STAIN HERD

W. J. BALD... Holstein Bull calves... Woodland Holsteins

WOODLAND HOLSTEINS

Choice bull calves by a son of Netherlands... Don't Write

DON'T WRITE

Unless you want to Imp. Imported and High Testing registered Holstein cows or calves... Holsteins for Sale

HOLSTEINS FOR SALE

15 two year old heifers. A select bunch... Burnside Ayrshires

BURNSIDE AYRSHIRES

1 AM LEAVING FOR SCOTLAND early in March to make a large importation... Norman Montgomery

Norman Montgomery

EXPERT PURE BRED LIVE STOCK AUCTIONEER... Long Distance Phone. WOOLER, Ont.

TAMWORTH AND BERKSHIRE SWINE

Boars and sows for sale. J. W. Todd... HOLSTEINS AND TAMWORTHS

HOLSTEINS AND TAMWORTHS

FOR SALE Seven bulls from 6 months to 18 months... BERTRAM HOSKIN, The Gully, Ont.

TAMWORTHS AND SHORT HORNS FOR SALE

Best choice yearling boars... PIGS & CALVES WANTED

PIGS & CALVES WANTED

Farm and Dairy would like to purchase Yorkshire Boars, Poland China Sows and Boar, and Ayrshire Heifer Calves from 6 to 8 weeks old.

IMPROVED CRUMB'S PATENT STANCHION

Send for my booklet and learn why these stanchions are being installed in the stables of many of our best breeders.

PUBLIC INSTITUTIONS

WALLACE C. CRUMB, 10 Forest Hill, Ont., E.A.A. All correspondence should be addressed to the above office.

Holsteins for Sale

Two highly bred Holstein bulls fit for service, sired by the great Merona's Sir Poch 2nd. Prices moderate for quality sale.

W. J. BALD, Sebringville, Ont.

WOODLAND HOLSTEINS

Choice bull calves by a son of Netherlands... Don't Write

DON'T WRITE

Unless you want to Imp. Imported and High Testing registered Holstein cows or calves from same, sired by Imp. Sir Honorific

HOLSTEINS FOR SALE

15 two year old heifers. A select bunch... Burnside Ayrshires

BURNSIDE AYRSHIRES

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FARM AND DAIRY

responsibility and tried to live up to it, their club would not be so successful as it might be.

The bulls used by members of some of the associations had to be tested for tuberculosis... Only by breeding certain breeds in certain districts could the best results be obtained.

Mr. Hume advised giving heifers a little longer rest before having them freshen in order that they might attain their maximum growth.

A constant club thought that the half year's age at least... The objects of the club include the holding of auction sales.

HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the official organ of the Canadian Holstein Breeders' Association, all of whose members are readers of the paper.

SUNNYSIDE HOLSTEINS

An editor of Farm and Dairy paid a visit recently to the famous Sunnyside Herd of Holsteins... With water constant before them.

Mr. Foster purchases offering ten animals at the joint auction sale of the Belleville District Holsteins... The stock was sold up to the famous foundation cow old Helena.

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Two heifers, coming two and three years of age... Paul and on her side of Pauline

Pauline De Kol Second will also be sold... This is a large, fine individual and a heavy cutter.

Two young bulls will be offered... Helena's Butter Bull 9227, born August 24, 1910.

This is a son of Korndyk Queen... straight and level with about

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SELECT AYRSHIRE BULLS

A pair of choice calves dropped in March and April, 1910, both from Record dams testing high in butter fat.

W. W. BALLANTYNE Stratford, Ont.

CHOICE AYRSHIRES

Aro Brod at "CHERRY BANK" A few young bull calves for sale. Write for prices.

P. D. McARTHUR, North Georgetown, Howick Station on G. T. Ry. Quee

STONEHOUSE STOCK FARM

Is the home of most of the coveted honors at the leading Eastern Exhibitions, including first prize old and young herd.

HECTOR GORDON, ROWICK, QUE.

'La Bois de la Roche's' Stock Farm

Here are kept the choicest strains of AYRSHIRES, imported and home bred YORKSHIRES of the best blood type.

MOR. L. J. FORGET, J. A. BISSEAU, Proprietors, Anne de Bellevue, Que.

THE SPRINGBANK HERD OF AYRSHIRES

First choice bull calves for sale... Address: A. STERNER & SON, Ryckman's Corners, Ont.

BULLS I HAVE 4 AYRSHIRE BULL CALVES

They are nicely marked—two mostly white two mostly black... WOODLAND STOCK FARM

CHOICE AYRSHIRES

Write for prices, etc., on Imported Ayrshires... ROBT. HUNTER & SONS, Maxville, Ont.

RAVENSDALE STOCK FARM

Ayrshires, Clydesdales, Yorkshires... W. F. KAY, PHILIPSBURG, QUE

SUNNYSIDE AYRSHIRES

Imported and home bred, are of the choicest breeding... JAMES REGG, R. R. No. 1, St. Thomas, Ont.

COMMERCIAL AYRSHIRES

Five yearling bulls fit to breed any complete set for service... LAKESIDE AYRSHIRES

LAKESIDE AYRSHIRES

Special offering of four young bulls, different bloods from imported stock. Write for particulars.

LAKESIDE FARM, PHILIPSBURG, QUE

Two bull calves, good butter strain, for sale at reasonable price... HOLSTERS

HOLSTERS

Two bull calves, good butter strain, for sale at reasonable price... ARMSTRONG, JERMYN, ONT.

POULTRY AND EGGS PURE BRED

Pure breeds have many advantages over scrabs. Pure bred fowls eat no more, they lay better, sell better, their eggs may be sold for hatching purposes—in every way they are more profitable than fowls of non-descript breeding.

Why don't you keep pure bred poultry? Farm and Dairy will start you right. Our proposition is: In return for a club of four new yearly subscriptions to Farm and Dairy taken at our exceedingly low rate of

Only \$1.00 a Year

we will in return give absolutely free a pair of pure bred fowls of any of the well known standard varieties of fowls included amongst which are those best suited and most profitable for the farm.

FREE

Start in To-day



To Get the Best

FREE

A SETTING OF EGGS

any standard variety you choose

GIVEN AWAY

for only (2) New Subscribers to FARM AND DAIRY

GET BUSY NOW

Premiums sent out any time as requested.

There is no need for you to keep inferior stock any longer. Show this issue of Farm and Dairy to your neighbors. Show them your special Numbers. Show them your cents. Tell them that you get MAGAZINE NUMBERS and all the several ILLUSTRATED SUPPLEMENTS of Farm and Dairy, all of extra cost to our subscribers at no extra cost to them. They will surely subscribe. Ask them about it. Start in right away to win it. The pure bred stock you want.

For nine new subscribers to Farm and Dairy, we will give you a pair of PURE BRED PIGS. For 25 new subscribers, we will give you ABSOLUTELY FREE—a PURE BRED AYRSHIRE CALF. Write us about other premiums you may want and get and Dairy.

Circulation Department

FARM & DAIRY
Peterboro, Ont.

I Wish YOU Were Like Mr. Fraser

I WANT you to do as he did—for your own good. Like a great many other people he had seen many of my advertising tiseiments. Had read some of them, just as you are reading this one. The time came when he was figuring on a new My ads. said that Oshawa Steel Shingles were very carefully, same as wood shingles and were less expensive to put on. That sounded promising. Further he read that slate cost six times as much as such. That Oshawa Steel Shingles cost thirty-three times as much, so called "ready roofing" cost were fire-proof, leak-proof, rust-proof, rot-proof, rain-proof, and wet-proof, need no painting, no patching.

In fact Oshawa Steel Shingles, according to my advertisement, seemed to be everything a man could desire in a roof—roof make good?" Then he read my guarantee: "Will the pressed him as being very straightforward, dependable. "If that means all it says: "A perfect roof for 25 years, or a

new one free," he thought, "why this advertisement is no idle boast." By using Oshawa Steel Shingles I settle the roofing question definitely for at least 25 years. My guarantee seems to cover everything. "Guess I'll send for their booklet, anyway, and look into the facts a little further, And he did. He got all the facts, before deciding. That's where I wish you were like him. I want you to get all the facts about Oshawa Steel Shingles. THEN you can decide. You only fool yourself if you doubt one word I say about our Steel Shingles. You take no risk. My guarantee protects you against disappointment—absolutely. You'd not think of using any other kind of roofing if you actually KNEW how good a roof my Oshawa Steel Shingles make.



Do Send for My Book of Facts About Roofs

Be like friend Fraser.

Look into the facts.

The book is free.

Write to our nearest office for a copy.

How Do You Figure?

Figure the cost now, material and time, for every kind of roof you know anything about. Oshawa Guaranteed Steel Shingles you'll find are as cheap to begin with as the most wood shingles. It's a fact. Compare the present year of each kind of roof. Figure the cost estimated life of other roofs with the guaranteed life of Oshawa Steel Shingles, and you'll figure will show you which is the best and cheapest roof for you to buy.

When I say "Guaranteed for 25 years," I mean it—No "ifs" About it

Some makers of metal shingles (notice they don't say "steel") talk boastfully about roofs years back. But do they positively guarantee holes, no need for paint, no "other whatever" for the NEXT twenty-five years? That is for the NEXT 25 years. Do they? Pedlar does.

Can You Afford Any Roof which is NOT Guaranteed?

Can you afford to put on a roof that will need some thing next year more than any other following year, and so, until it needs so much fixing that you are obliged to use metal necessary? Can you afford to use metal shingles that are said to be good when you get steel shingles that are guaranteed for 25 years—actually good for a hundred? Why, it actually is as good as Oshawa Steel Shingles?

Here Are Two Patterns of Oshawa Steel Shingles

They come in squares 10 x 10 ft.—covering 100 square feet of roof. They are stamped from heavy sheet steel—26 gauge steel—then galvanized with zinc, so thoroughly that all kinds of weather can't make a rust-hole in them for longer than your lifetime. They are made in the highest factory of its kind in the British Empire—and there's a \$36,000 capital and 50 years of excess back of the guarantee that goes with them.

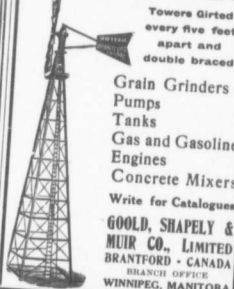
PEDLARIZE All Your Buildings, Inside and Out.

By "Pedlarizing" I mean doing for the whole building what Oshawa Steel Shingles do for the roof. I make other kinds of steel metal materials—for ceilings, side walls, fire-proof, more sanitary, more beautiful, and pictures that tell the whole story? It's free. Write for it to-day.

The PEDLAR PEOPLE of Oshawa

Established 1861
 HALIFAX 15 Prince St. ST. JOHN 42-46 Prince William St. QUEBEC 127 Rue de Mont MONTREAL 211-3 Craig St. W. OTTAWA 423 Sussex St. TORONTO 111-113 Bay St. LONDON CHATHAM
 PORT ARTHUR WINNIPEG REGINA 45 Cumberland St. 70 Lombard St. 1201 Railway St. S. Room 7, Crown Block CALGARY 415 Fifth Ave., North of Jasper VANCOUVER VICTORIA
 311A ADDRESS OUR NEAREST WAREHOUSE. WE WANT AGENTS IN SOME SECTIONS. WRITE FOR DETAILS. MENTION THIS PAPER. 6

WINDMILLS



Towers Girted every five feet apart and double braced

- Grain Grinders
- Pumps
- Tanks
- Gas and Gasoline Engines
- Concrete Mixers

Write for Catalogues
GOOLD, SHAPELY & MUIR CO., LIMITED
 BRANTFORD CANADA
 BRANCH OFFICE
 WINNIPEG, MANITOBA

You Can't Grow Crops without Nitrogen

You've got to give it to them in some way, and the Quickest—Cheapest—Cleanest way is to use

Nitrate of Soda

Because: The Nitrate will act at once. It is the form of nitrogen the plant may take up without previous or delayed soil nitration. All its nitrogen is available. It is pure plant food. It is as clean to handle as sand.

It will pay you to top dress your meadow with 50 lbs. per acre, and to add some Nitrate of Soda to your complete fertilizer.

Get Our Prices

CHEMICAL LABORATORIES, Ltd.
 148 Van Horn Street TORONTO, CANADA

APRIL 6th

Is the Day Our Big Dairy Special Will Appear will give you an ADVERTISEMENT to receive the best class of Farmer in the country at a time when they need your goods, and you want to sell them. THIS SPECIAL NUMBER for Dairy Supplies, Gasoline, Remedies, Sijos, Cream Separators, Roofing, Fences, Sticks, Fods, Gattle Benolies, and anything that a farmer can use at this time of year.
MARCH 30th IS THE LAST DAY WE CAN RECEIVE COPY.

FARM AND DAIRY
 PETERBORO ONT.