

FARM AND DAIRY

AND

RURAL HOME

PETERBORO, ONT.

OCTOBER 19

1911.



FALL PLOWING ENSURES THE LARGEST SUPPLY OF MOISTURE FOR THE CROPS NEXT YEAR
Summer rainfall does not furnish one-half the moisture necessary to properly supply a growing crop. The moisture that ensures against crop failure is the moisture stored in the soil during autumn, winter and early spring. It is wise, therefore, to make every provision to enable the soil to store a maximum amount of water. To fall plow is to make such provision and, furthermore, it exposes the soil to the beneficial action of the weather and saves time and allows the crops to be gotten in earlier the next spring. A gang plow and four-horse team such as here shown in use by Mr. John Salkeld, Huron Co., Ont., enables one to get the work done well and with dispatch before the frost seals the ground for winter.

DEVOTED TO
BETTER FARMING AND
CANADIAN COUNTRY LIFE

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.



Note the heavy base and heavy rigid frame construction

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.

D. Derbyshire & Company

Head Office and Works: BROCKVILLE, ONT.
Branches: PETERBOROUGH, ONT. MONTREAL and QUEBEC, P. Q.
WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

Poultry Books Given Away Free of Cost

Your choice of the following, for securing Only One New Subscription for this paper at \$1 a year: Send us only ONE New Subscription at \$1 and we will send any of the above free of cost. Books on any agricultural subject given away in return for new subscriptions to Farm and Dairy.

CIRCULATION DEPARTMENT
RURAL PUBLISHING COMPANY, Limited
PETERBORO, ONT.

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

Light on New England Agriculture

Many interesting sidelights on agriculture in New England were given the editors of Farm and Dairy recently when in conversation with a gentleman who has spent the last few years in educational work in the United States, principally among New England farmers. "New England is in an unusual predicament," said he. "The people there have great markets, but agriculture is backward. About 40 years ago all who had any gumption went west. As a result the men who stayed at home to till the farms of New England were of the poorest class. A tendency is now noted, however, for men who have made money in the west to return to their New England homes."

Asked as to the financial condition of New England farmers as compared with Canadians we were told that the majority of New England farmers do not live as well as they do in Canada. "They are, however," said our visitor, "making money. There is no reason why they should not, except for their conservatism, for they have great opportunities. There is an unlimited market and a market that will pay well for finest quality. In many of the small cities a good percentage of the population is composed of wealthy men and in such markets the best quality of eggs and dairy produce will command almost exorbitant prices. I have seen men make a specialty of dairying, poultry, vegetables, or fruit or flowers, and they are simply making barrels of money. The thing is to produce finest quality."

BOTH PROGRESSIVE AND OTHERWISE

"In some sections of the States, you will find the best machinery and motive power being used. In other sections all of the work is done by oxen. At some of our New England fairs I have seen 30 yoke of oxen in a drawing contest."

"How about their educational system?" we asked. "Their school system is very poor," was the reply. "Twenty-seven to 33 weeks would be an average. The length of the year is decided by the quality of the teacher. They pay \$300 to a Normal School graduate in a country school, and naturally they cannot get enough teachers as anyone with the same amount of brains can make more low as \$96 offered, but board may have been included in that. In some sections also there are so few children that they can hardly afford to pay a teacher."

ALL BUILDINGS ATTACHED

"One thing that used to amuse me when I first went to the States was the practice of having all of the buildings under one roof. For instance, if a farmer wants to feed his horses very early in the morning, he does not even have to put on his boots."

"They have a most convenient way of handling the manure, though I doubt if the method is to be advocated. The manure pit is just below the cow stable, and in cleaning the stables the litter is pushed through traps in the floor. No lifting at all."

"The average farmer lives fairly comfortably in his own home. The greatest social organization of the country districts is the Grange. It is a social rather than an agricultural organization there, and its influence in politics is great. The Grange is also the strongest organization working for the improvement of roads. Many Granges run cooperative stores. Still more buy feed, fertilizers, coal, etc., at wholesale prices for the patrons."

"Our agricultural college in Maine is doing a great work, last year we had an attendance of 125. The graduates take up agricultural teaching in high schools, some go west, and a large percentage become managers of gentlemen's country estates getting salaries ranging around \$500 a month. A few go back to the farms."

Good Roads at Little Cost

R. Ellis, Colchester Co., N. S.

Could anything be more unpleasant than jolting over an ordinary country road after a hard freeze in the fall? Steering clear of the ruts and hollows before the freeze is bad enough. And yet the expenditure of a little energy in making a split log drag and a little time each month in using it would make all the difference between a good road and a bad one. I comment the following words of a wisdom writer to all who are face to face with the good roads problem:

"So much has been written and said pertaining to the great benefits from the use of the road drag that many people beginning to use it become discouraged before they are well started. They should not feel this as it often takes a whole season for the road to become properly puddled and baked to withstand the rains and to dry. After a road has been worked with a drag only a few times it is well worth the effort to stand up to heavy traffic during a continued damp spell without being affected. However, it will take far heavier traffic than most earth roads receive to more than set up the surface."

"It is not well to consider the benefits from a good road as solely confined to heavy traffic, for the time saved to livestock and the greater pleasure derived from their use over good roads far surpasses the economy in heavy hauling. While driving over a well-crowned, smooth road the team does not have to follow the usual rut, no slacking has to be made for irregularities in the surface, and it matters not whether one or two horses are being driven."

HOW TO USE THE DRAG

"To insure the successful operation of the drag it is necessary for the driver to use careful judgment. Some of the essentials that the blade should be held down so that the drag will cut roots and weeds, while at other times the front edge should not bear too heavily upon the surface as it will dig out a soft place which would be better if left undisturbed. This regulation of the cutting edge can be accomplished by the driver moving back and forth or to the right and left on the drag."

"If the road is to be crowned with the drag it is often well to plow a light furrow along the sides and work this loose dirt to the centre. On roads with heavy traffic the drag should be used much oftener with more care than on roads with light traffic."

"The distance from the drag to the hitch team is hitched affects the cutting. A long hitch permits a sharp blade to cut deeper. Likewise a heavy doubletree hitch. Likewise a heavy doubletree hitch will cause the cutting edge to settle deeper than a light one. Strange as it may seem, the heavier the traffic over a properly dragged road the better the road becomes as it wears."

"There are very few periods of the year when the use of the drag does not benefit the road, but it does the best work when the soil is moist, and it is not too sticky. This is frequently the case with a half-day's time after a rain when the earth is in this condition works the best, and, as a rule, it is working it in the best way. The action of the soil in becoming hard and smooth after rain helps to shed the water during rain but also greatly retards the maturation of dust."

Issued Each Week

Vol. XXX.

A PRIZE

Ideally Situated for Dairy

A FARM with great views. E. Budd, New whose farm stood on the Interprovincial Road, ideal for dairying. The richness of the soil of the Grand Trunk line from Cobourg, cream and milk to Toronto and profitable trade easily be built up. One could also be entered in this section of growing of apples. More are making fortune from a large part of Mr. Budd's farm. The money-making part of the farm are enormous. Budd has not been doing enough to develop abilities, but with well effort along the lines to farm is adapted by education. Mr. Budd comparatively few years increase his income on his farm to an extent enable it to take a high nature competitions. An farm and Dairy here some of the leading of this farm, and some reasons that he gained its possibilities who farm as one of the competing farms.

ROSE PERMANENT

The soil consists of 20 tons a clay loam to a heavy loam has good natural drainage. Mr. Budd has fences on the boundaries as fast as possible is suitable for the interior divisional fencing through the farm. Dairying, horse breeding, and sources of income.

Toronto each morning. It costs a pound but is grown for sale, but this is consumed on the farm that are fed each time.

HORSES REED

Mr. Budd's horses were bred. Most of them were being, one of the most

FARM AND DAIRY

&

RURAL HOME

A PRIZE FARM WITH WONDERFUL MONEY MAKING POSSIBILITIES

Ideally Situated for Dairying and Fruit Growing.—Improvements Already Made.—The Farm of E. Budd, Described by an Editor of Farm and Dairy.

A FARM with great possibilities is that of Mr. E. Budd, Northumberland Co., Ont., whose farm stood fourth in District No. 3 of the Interprovincial Dairy Farms Competition, conducted by Farm and Dairy. The situation is ideal for dairying. The splendid crops testify to the richness of the soil. Situated on the main line of the Grand Trunk Railway and only three miles from Cobourg, the facilities for shipping cream and milk to Toronto are excellent; a large and profitable trade in these products could easily be built up. Other branches of farming could also be entered into with profit. The climate in this section of Ontario is ideal for the growing of apples. Many farmers on the lake shore are making fortunes out of their orchards; a large part of Mr. Budd's farm is admirably adapted to fruit growing.

The money-making possibilities of the farm are enormous. Mr. Budd has not been on the farm long enough to develop its possibilities, but with well directed effort along the lines to which his farm is adapted by climate and location, Mr. Budd could in a comparatively few years greatly increase his income and improve his farm to an extent that would enable it to take a high place in future competitions. An editor of Farm and Dairy herewith sets forth some of the leading features of this farm, and some of the impressions that he gained regarding its possibilities when visiting the farm as one of the judges of the competing farms.

SOME PERMANENT IMPROVEMENTS

The soil consists of 200 acres of land varying from a clay loam to a heavy clay. Part of the farm has good natural drainage, the rest is tile drained. Mr. Budd has recently erected neat fences on the boundaries of the farm, and as fast as possible is substituting wire for rails in the interior divisional fences. A spring creek flowing through the farm affords splendid water. Dairying, horse breeding, and fruit are the main sources of income. The cream is shipped to Toronto each morning. The price realized is 18 cents a pound butter fat. Some fall wheat is grown for sale, but the rest of the farm produce is consumed on the farm. Pigs and a few chickens are fed each winter also to the same end.

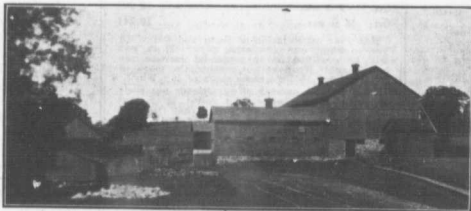
HORSES BRING \$600 A PAIR

Mr. Budd's horses were the best of his farm stock. Most of them were of heavy draught breeding, one of the mares being a registered

Clyde of good conformation. Mr. Budd also exhibited with pride two imported Clydesdale stallions. Two drivers are kept, making eleven altogether. Horses such as those bred by Mr. Budd find a ready market for draught purposes in our cities at \$600 or more a pair.

The dairy herd consisted of 22 cows of mixed breeding, most of them grade Shorthorns. In addition there were 20 head of young stock. This stock does not begin to consume all of the feed raised on the farm and in the fall feeding steers are purchased and fed through the winter. The cows are milked outside in summer in a small yard provided for the purpose. In this yard is a separator house where the milk can be separated as soon as drawn from the cows.

In order to get calves that will make fairly



Part of the Buildings on a Prize Winning Farm

The location of the farm building of E. Budd, Northumberland Co., Ont., is both sanitary and convenient. The buildings are situated near the centre of the farm on a well drained site. Only part of them are here shown. Read a description of this 200-acre farm in the article adjoining.

—Photo by an editor of Farm and Dairy.

good beef, Mr. Budd is using a pure bred Polled Angus bull, and thereby developing a herd of young cattle that will not make as good milkers as their dams. He is making the same mistake in breeding his cattle as do many others who are not specializing very strongly in dairying.

Hog raising is found to be one of the most profitable methods of marketing barley at home. In the fall 50 or more pigs, weighing around 100 lbs., are bought from the neighbors, and fed through the winter on barley grown on the farm. In the summer few pigs are kept, there being only 18 hogs of mixed breeding on hand when the farms were inspected in July.

Mrs. Budd looks after the poultry department. She has 100 hens and 75 chickens. An incubator is used for hatching the eggs.

GOOD GRAIN IN A DRY YEAR

Mr. Budd's grain crops were all in splendid condition. A luxuriant growth had been made in spite of the dry season. There were 62 acres

of grain in all. Oats and barley had the largest acreage. There were 18 acres of fall wheat, twelve of peas, and twelve of corn. Sixty acres of hay, eight acres of roots, and three acres of potatoes completed the list of cultivated crops. Mr. Budd is a believer in the value of good pasture. He had 25 acres of land laid out as permanent pasture in the lowest part of the farm. The spring creek runs through this pasture, affording an excellent summer water supply. Six acres of good bush supply firewood and building material.

No definite system of rotation is followed. Mr. Budd never takes two crops of grain from the same field in two consecutive years. Occasionally, however, two crops of peas are taken. The land is left two years in hay and then one or more years in pasture.

A CONVENIENT LOCATION OF BUILDINGS

The buildings are very conveniently situated for drawing in crops, being almost in the centre of the farm; the farm is square. The main barn is 140 by 40 feet. In the basement of this

barn is the cattle stable with tie-ups for 48 head. Litter and feed carriers are conveniently arranged for doing the work with the least amount of labor, there being 450 feet of tracking. The root house is on one side of the stable, the partition being of slats to allow the animal heat from the stable in to the roots, and thus prevent freezing. One interior stave silo 24 feet by 12, and another outside the barn, 16 feet by 10, afford storage room for most of the corn grown. The horse stable is in an "L" off the main barn, 50 by 26 feet. The stables are kept well whitewashed and clean. They are fairly well lighted. The weakest point of all was the ventilation for which there was no adequate provision.

The basement of a second barn, 120 by 40 feet, is given over to the young cattle and the stallions. At one end of the basement is the drive shed, where the implements are housed. The young cattle are allowed to run loose in a large box stall. Mr. Budd states that this greatly reduces the labor of looking after them, as the manure is removed only once or twice in the winter, the manure spreader being driven into the stall and loaded directly. Mr. Budd has weighing scales for heavy stock and loads of hay or grain.

The eight acre orchard was in a good state of cultivation, and Mr. Budd considers it one of the most profitable departments of the farm. No crop is ever taken off the orchard, except apples. The orcharding end of this farm might be greatly enlarged with profit to Mr. Budd, and would result in a great increase in the value of the farm.

Mr. Budd is not troubled with the labor problem. He has six sons, all big enough to work and all at home with him on the farm. This summer alterations were being made in the buildings and other work was being done in addition to the regular farm work, but no extra help was required.

TOO MUCH WORK FOR THE WOMEN

The farm house, a splendid residence, is situated about 150 yards from the rest of the buildings, and is surrounded by a park of eight acres nicely laid out with shrubbery and shaded by gigantic oak trees. The house was built by an old army officer, and the park and lawns were laid out on a scale to match the house. Both house and park are too large for the farm, and are a source of unnecessary expense. To mention that the reception rooms of the house are about 20 feet square gives an idea of the amount of work required to keep such a house in order. The stables being situated at such a distance a horse and rig is kept in winter in a small stable to the rear of the house for the convenience of the family.

Mr. Budd has an excellent farm, excellently situated. Its possibilities as a money-maker, both in dairy lines and from fruit growing, are almost unlimited. With so many willing hands to aid him, with a splendid market easy of access, and with so many improvements already made, Mr. Budd has every opportunity to make on his farm a great success in the business of agriculture.—F. F. E.

Feeding Concentrates to Dairy Cows

P. H. Moore, Victoria, B.C.

A subject that causes much discussion among our dairymen at this time of the year is the price we have to pay for concentrates. Yet we must use some of these for best results. A cow giving a large flow of milk is working hard, very hard. We do not expect a horse to work hard on hay alone; the same is true, to a certain degree, with the cow. We give her what roughage she can comfortably carry and then add to this grain, depending upon the amount of milk she is giving. The production of different cows will vary greatly, hence the necessity of knowing the herd and watching it closely. One cow may be paying for 10 lbs. of grain, while another may not pay for four pounds.

Bran is probably more universally fed to dairy cows than any other one grain food. It is rich in milk producing elements, and besides is light and fibrous, which allows it to lie lightly in the digestive tract. It helps lighten up such foods as cottonseed meal, soy bean cake, or many of the other heavy foods. In spite of the high price now prevailing for bran it should form at least part of the grain ration of the dairy cow.

Middlings are also used extensively for cows. They give equally good results as bran, but are more costly, more liable to adulteration, and do not mix so well with heavier concentrates.

OATS ONE OF THE BEST FEEDS

Oats are one of the best grains for the dairy cow that we have. Oats have all of the good qualities of bran, but the price is often so high that we have to let them alone and buy some cheaper form of grain. However, if the price will permit, we cannot find a better grain for milk production. They should always be fed to cows in a ground state.

Linseed-cake and cottonseed meal both bear a large quantity of milk-producing elements, and are what we term heavy foods. They are worth much more a ton than oats or bran, and should always be mixed with the latter for economical feeding. From one to four pounds of these heavy meals a day can be profitably fed to the dairy cow at present prices, and give good returns for the money invested.

There are many other foods made from the

by-products of breakfast food factories, breweries, and large seed houses, many of which are valuable and form a basis for economical milk production. Their value varies greatly, however, according to the amount of hulls and fibre contained.

My last point concerns the man who wields the fork and measure. Other conditions being equal the whole difference between economy and waste in feeding rests on the man. The art of feeding economically cannot be learned from books or lectures alone, but from the patient, persevering practise of a man who is observing and careful and knows how to use that part of his anatomy which we generally associate with knowledge.

Weeds

A. G. Johnson, Purdie Exp. Station.

Wherever there are weeds in the fields there can always be expected correspondingly lighter crops. The weeds take plant food and moisture from the soil which should be conserved for the crops, and in many other ways they are detrimental.

In order to fight weeds to best advantage they should be studied and their habits understood. When one has an enemy of any kind it is always desirable to learn its name and as much about it

Farm and Dairy's Circulation Campaign

August 21 the circulation of Farm and Dairy was 9,203

August 28 it was	9,267
Sept. 4 it was	9,334
Sept. 11 it was	9,401
Sept. 18 it was	9,512
Sept. 25 it was	9,737
Oct. 2 it was	9,896
Oct. 9 it was	10,007
Oct. 16 it was	10,241

Has your appreciation of Farm and Dairy led you to watch our circulation grow? If so, you will be gratified at the splendid increase we have made. We have not reached the mark of 10,000 by Oct. 15. We came short of it. Why?

Well, a great number of our friends put their shoulders to the wheel and rolled up a real nice lot of new subscriptions. They received several simple rewards for their work. See in the list of winners (page 9) how many won splendidly last week.

Now we want our total paid-in advance subscribers to exceed 11,000 as soon as possible. All of our people, who read and appreciate Farm and Dairy, who now set to work to get new subscriptions for us will receive rewards as liberal as before. Will you get busy for us? Will you start today?

as possible so as to be able to take advantage of any weak point. Just so with the weeds. They are our enemies. We should know their names so that they may be discerned intelligently. Their habits should be well understood so that advantage may be taken of their characteristics in combating them.

CLASSES OF WEEDS

According to natural duration there are in general three classes of weeds, viz.: annuals, biennials and perennials.

Annuals.—Annual weeds are those that live naturally but one year, i.e., the seed germinates, the plant grows up, flowers and ripens seed and dies all within 12 months. Common examples are: Foxtail, field mustard, smartweed, cocklebur, ragweed, etc.

Biennials.—Biennial weeds are those that live naturally two years. The first year after the seed germinates the plant produces some sort of rosette of leaves on the ground above the root, and the second year a flowering stalk is sent up which bears the flowers and ripens the seed. Then the whole plant usually dies. Common examples of this class are: Evening primrose, mullen, wild carrot, teal, etc. With but few

exceptions, the annuals and biennials depend entirely on seed production for their perpetuation.

Perennials.—Perennial weeds are those that live a number of years or an indefinite period from the same root. Common examples are: dock, buckhorn, Canada thistle, red sorrel, etc. These not only spread by seed but several of this class spread by means of underground root stalks as well, making them by far the most difficult to control, when once introduced.

WEED ERADICATION

In fighting weeds it is not only important to avoid introducing their seeds into the fields with seed grain, which is always to be guarded against with the greatest care, but it is important as well to avoid other sources of weed introduction such as from weedy barnyards, fence rows, roadsides, ditches and waste places in general. The weeds should be kept well out throughout the season as far as possible and thus prevented from ripening seeds to be carried to the fields by wind, water and animals. As far as possible these places should be cleared and cleaned up and a good clean grass sod established. Weed seed infested manure is another source of weed introduction that should be guarded against. Such manure should be well composted before being applied to the fields in order that the weed seeds in it may be killed.

Aside from avoiding weed introduction in the various ways which is extremely important, the weeds now in the fields should be given more attention. The exact procedure advisable depends largely on the circumstances. When the habits of the particular weeds present are understood, methods usually suggest themselves. The important thing is to carry out good methods carefully and persistently.

TO ERADICATE ANNUALS AND BIENNIALS

Since the annual and biennial weeds reproduce only from seeds, any method most convenient to prevent seed formation is practicable; such as repeated cutting, or better still very thorough cultivation in hoed crops or, in some cases, hand pulling or digging. Smother crops are also helpful, these to be followed by clean cultivation in hoed crops. The cultivation and cutting should continue late in the season to prevent the late seeding of weeds, which is so common in our fields after they are "laid by," and in wheat stubble after harvest. All early cultivation should be frequent and thorough, and the hoe used liberally where needed in the hoed crops. Catch the weeds while they are small and keep them down. Many perennials are controlled by the same methods as are the annuals and biennials, but those like Canada thistle, quack-grass, etc., with running root-stocks require more persistent attention and sometimes special treatments, which can not be taken up at this time.

PREVENT WEEDS FROM SEEDING

The perennials as well as the annuals and biennials, should, of course, in every case be prevented from seeding, as far as possible. The old trite saying, which is all too true, should never be forgotten, that: "One year's seeding is nine years' weeding."

The killing of weeds by the use of chemical sprays offers possibilities in certain directions.

To fight weeds successfully, then, requires a broad general plan taking in all the factors concerned and such a plan carefully and persistently carried out for a series of years; all sources of weed seed introduction should be avoided as far as possible, and the weeds and perennial roots in the soil killed by painstaking attention. Besides this the soil must be brought to a high state of fertility and proper conditions generally so as to favor the best growth of the desired crops, if the weed problem is to be met to the best advantage.

Practical Lessons

Jas. Hotsco

Three years ago association among the about 200 cows under other several of them dropped out, but of Although our membership organized, yet the factory that only by ing it is possible gently. Our exper years has been a re our favorites among culls, and always a the two extremes. ever, to convince e standing of this or the record of each for us, we at once and which ones are from one year's te demn a cow, as fo not be in working We weigh and ta on the 10th 20th a does not give the each cow in the ye the aim in view. I giving each cow tw milk records were

MILK lbs.	
No. 1.....	7,839
No. 2.....	9,410
No. 3.....	8,110
No. 4.....	8,159
No. 5.....	7,644
No. 6.....	9,069
No. 7.....	7,559
No. 8.....	8,065
No. 9.....	8,815
No. 10.....	8,515
No. 11.....	6,590
No. 12.....	9,645
No. 13.....	6,310

107,342 3
Average profit, \$

this does not allow milc. No. 13 is a little four-year-old, a rare more clear detail:

Cow No. 2, age 6
March 22nd, 1911:

	MILK
Jan.....	310
Feb.....	400
March.....	455
April.....	1,360
May.....	1,290
June.....	1,230
July.....	1,047
Aug.....	1,045
Sept.....	978
Oct.....	810
Nov.....	675
Dec.....	520

Total..... 9,410
Profit, \$35.45.

Cow No. 6 fresh

	MILK
Jan.....	1,090
Feb.....	1,225
March.....	1,060
April.....	969
May.....	850
June.....	745
July.....	775
Aug.....	775
Sept.....	430
Oct.....	430
Nov.....	275

Total..... 9,990
Profit, \$37.25.

Four years ago to the butcher, as keeping. Weighing views

The objections ad ing in this section to weigh and secur

Practical Lessons from Cow Testing

Jas. Hoson, Oxford Co., Ont.

Three years ago we organized a cow testing association among the patrons of our factory with about 200 cows under test. For one cause or another several of those who first joined have dropped out, but others have taken their place. Although our membership is no larger than when organized, yet the conviction is growing in our factory that only by individual weighing and testing is it possible to handle a dairy herd intelligently. Our experience during these last three years has been a revelation to us. We always had our favorites among the cows; we always had our culls, and always a number somewhere between the two extremes. We were often unable, however, to convince even our own minds as to the standing of this or that cow in the herd. With the record of each cow for two or more years before us, we at once see which cows are profitable and which ones are kept at a loss. Poor results from one year's testing is not sufficient to condemn a cow, as for some cause or other she may not be in working order that year.

We weigh and take samples of each cow's milk on the 10th, 20th and 30th of each month. This does not give the exact amount of milk given by each cow in the year, but it is close enough for the aim in view. Last year we milked 13 cows, giving each cow two and a half months' rest. Our milk records were as follows:

	Milk lbs.	B. fat.	Value.	Cost	Profit
No. 1.....	7,833	338.5	\$55.81	\$30.46	\$25.35
No. 2.....	9,410	399.8	71.05	35.60	35.45
No. 3.....	8,110	272.1	63.75	30.32	33.43
No. 4.....	8,180	299.9	71.64	43.62	28.02
No. 5.....	7,644	289.9	60.82	29.02	31.80
No. 6.....	9,990	332.5	63.25	25.00	38.25
No. 7.....	7,659	282.5	60.14	28.12	32.02
No. 8.....	8,065	248.5	62.29	32.16	30.04
No. 9.....	8,915	361.7	71.86	34.28	37.58
No. 10.....	8,535	279.4	65.61	31.10	34.51
No. 11.....	6,990	219.4	45.50	20.40	25.10
No. 12.....	9,645	390.5	71.85	34.28	37.57
No. 13.....	6,210	232.7	54.27	31.12	23.15
	107,242	3,549.3	849.89	438.16	411.73

Average profit, \$31.68; average milk, 8,250 lbs. This does not allow anything for why or skim milk. No. 13 is a three-year-old, while 7 or 8 are four-year-olds. It might make the foregoing a little more clear by giving two record sheets in detail:

Cow No. 2, age 6, calved March 20th, 1910, due March 22nd, 1911:

	Milk.	Test.	Fat.	Value.	Cost of feed.
Jan.....	110	3.5	3.9	1.03	1.00
Feb.....	Dry				
March.....	458	3.2	15	4.15	2.12
April.....	1,260	3.5	44.1	18.56	9.58
May.....	1,300	3.1	42.1	9.22	3.90
June.....	1,230	2.8	34.4	7.67	2.30
July.....	1,040	3.0	31.2	6.18	2.70
Aug.....	1,045	3.4	35.8	8.05	2.70
Sept.....	970	3.1	30.5	7.19	3.10
Oct.....	775	3.5	28.3	6.74	3.10
Nov.....	675	3.3	20.9	5.01	3.76
Dec.....	530	3.3	15.8	4.28	4.56
Total.....	9,410		299.8	71.05	35.60

Profit, \$35.45.

Cow No. 6 freshened January 1, 1910.

	Milk.	Test.	Fat.	Value.	Cost of feed.
Jan.....	1,080	3.3	35.6	10.71	5.74
Feb.....	1,225	3.4	41.6	11.69	5.74
March.....	1,060	3.6	38.1	10.84	6.36
April.....	969	3.7	35.5	10.11	6.36
May.....	969	3.7	35.1	7.63	3.68
June.....	945	3.8	25.9	8.00	2.30
July.....	775	3.5	27.1	5.31	2.70
Aug.....	705	3.8	27.9	6.53	2.70
Sept.....	705	3.8	26.7	5.50	3.10
Oct.....	430	4.5	19.9	4.35	3.10
Nov.....	218	4.4	9.9	2.37	3.00
Total.....	9,990		332.5	82.25	45.00

Profit, \$37.25.

Four years ago this cow was picked out to go to the butcher, as we did not think her worth keeping. Weighing and testing changed our views.

OBJECTIONS

The objections advanced to individual cow testing in this section are: 1st, the time it will take to weigh and secure samples; 2nd, it does not give

a correct account of the product; 3rd, the Babcock tester varies too much and cannot be relied on; 4th, a man knows his my good cows and which the poor ones without testing, and it is not worth bothering with."

My answer to these objections would be as follows:

1st.—We have a clock face spring scale, and by setting the hand on the dial back so it will come to perpendicular with the empty pail, it need not take more than one minute a day or three minutes a month per cow, as the scale will then indicate only the weight of the milk.

2nd.—This system does not give an accurate account of the product, but is far in advance of the old method, and is correct enough to guide us in our work.

3rd.—The Babcock test is just as accurate as the man who uses it.

4th.—We all know, or think we know our best cows, but we are very easily deceived when a foaming pail of milk is given which may test three per cent., while the next pail is only three-quarters filled, without a trace of foam, but may test four per cent.

In 1909 Cow No. 1 gave 9,458 lbs. of milk. In 1910 she gave only 7,838 lbs., and was in letter



The Production of Each of these Cows is Known

A strong believer in the advantages to be derived from testing the milk production of each and every cow in the dairy herd is Jas. Hoson, Oxford Co., Ont., a few of whose cows may be seen in the illustration. Knowing the production, Mr. Hoson feeds and breeds accordingly. Notice the great depth and cautious orders of these cows. In the adjoining article Mr. Hoson writes of his experience in cow testing.

working order than in the preceding year. She had an inferior milker. Weighing and testing stimulates rivalry in the milkers, each one striving to get the largest pail of milk and the best monthly return.

Shall we Plow Deep or Shallow?

Jas. A. Rennie, York Co., Ont.

If I were asked whether I preferred deep or shallow plowing, I should emphatically say "deep," but would make haste to add the qualifying phrase, "as local conditions would justify." Under all conditions we have a surface soil of varying depth, which alone must be our guide as to the depth of the furrow. We also have various conditions of subsoil which in every case must be kept where nature intended it, and not mixed with the surface soil.

The upper soil performs three distinct offices: 1st, it supplies elements of nutrition to the growing crops; 2nd, it holds in suspension moisture for the immediate needs of growth; and 3rd, in a finely divided state it prevents loss of moisture by evaporation. How important it is, then, that we make this surface layer, by the mechanical action of plowing, capable of absorbing the greatest amount of moisture.

If we have a surface soil averaging seven or eight inches deep, why plow only five inches and leave two or three inches in a condition in which it is unable to absorb and hold moisture to the extent it would were it stirred?

Where We Farmers are Weak

E. F. Eaton, Colchester Co., N.S.

Manufacturers and merchants in the city are carrying on their business to a very large extent on the money that we farmers have deposited in the savings bank at three per cent. interest. I was surprised recently to note that of the savings deposits in the banks of Canada, fully two-thirds were deposited by farmers. When we consider the many excellent opportunities that we have for investing this money right on our own farms and getting returns up to 50 per cent. on an investment, depositing our money with bank's looks to me like very bad business indeed. This is one of the points where we farmers are lamentably weak, that is, as business men.

One place where I would prefer to invest my money would be in tile drains. I know that many of my neighbors whose farms are badly in need of tile drains have money enough in the bank to tile, but rather than touch that precious deposit they continue to work wet land year after year and take off crops which they could almost double in value with the investment of a few hundred dollars in tiles.

One of our neighbors has given us a splendid example of the returns that can be gotten from money invested in tile drains. A few years ago one of his 10-acre fields produced nothing but poor hay that at an outside valuation was not worth more than \$60. Last year that same field produced 600 bushels of oats worth at least \$210. The year before that it had an excellent crop of potatoes and mangels, and the crop of clover taken three years ago averaged three tons to the acre, and this also I would value at about \$210.

The drains in this field cost only \$50. Of course the field was not completely tile drained, and both labor and tile were then somewhat cheaper than they are now. Four-inch tile were run through the wettest parts of the field, and the value of the crop increased by four. It seems to me that this man, getting 400 per cent. out of the money he invested in tile drains, is a lot better off than when he had that \$50 in the bank at three per cent.

10 TO 20 PER CENT. IN LIVE STOCK

Another profitable field of investment is in pure bred live stock. We have demonstrated to our own satisfaction the value of pure blood in grading up a dairy herd. When in conversation recently with one of our big dairy breeders, perhaps the most successful one in Nova Scotia, I was surprised to find that in his own immediate neighborhood he is considered a poor man. It seems that in that district a man is not well off unless he has a good large bank account. My friend, however, considers himself quite as well off with a 10 to 20 per cent. investment in his stock as are his neighbors with a three per cent. investment in the bank.

As a side line to our farming operations we have an agency for cream separators. I have returned known farmers to take a separator on time, which means that they were paying six per cent. on their money, rather than drawing on their savings bank account. I know that very few of our neighbors carry on a cash business with the merchants in town. We farmers must realize that we are business men and do things in a business way if we are to get the most out of our occupation.

We should regulate our soil so that we need not buy feed for our cows but grow it instead. Grow alfalfa. Corn alone is not a balanced ration. It must not be fed alone. It lacks protein. Alfalfa is just the food adapted to go with it. It can be grown on practically every farm.—D. Derbyshire, Leeds Co., Ont.



SAVE THE RAIN, YES, EVEN THE DEW

Every drop of water is precious around the farm. You would always have plenty of water if your roof shed every drop that fell. Do you realize how much good water the average roof wastes. Notice how the steam rises as soon as the sun strikes the wooden shingles—what is not absorbed by the spongy wood shingles evaporates—very little reaching the reservoir,—in a light rain, practically none. How different with a metallic roof,—it is perfectly dry a few minutes after the rain ceases, for as fast as it falls, almost every drop runs to the reservoir—no absorption, no evaporation.

A Metallic Roof is not only valuable in saving rain water but a heavy dew will sometimes bring a barrelful of clean, fresh water off the metal roof of an ordinary house or barn—every drop, a clear gain—meaning so much to you in the summertime when the creeks are dry.

How the farmer's wife appreciates the clean, soft water that flows from a metallic roof—so different from the murky, brown fluid, made so impure from draining through the old moss, dust and dirt that quickly collects on the ordinary wood shingle roof.

Eastlake Metallic Shingles

not only make a clean roof but are absolutely Lightning, Rust, Fire and Weatherproof. They can be laid by yourself or anyone cheaper and quicker than any other shingle, and will last a lifetime. Roofs shingled with Eastlake Steel Shingles 25 years ago are in perfect condition to-day—an actual test—the best guarantee.

Write us, enclosing measurements of your roof for estimates of cost. Let us quote you on rat and mice proof sheet metal granary lining.

"A Metallic Roof and Galvanized Corrugated Iron Siding on your barn make it positive proof against fire from outside sources, and greatly reduce your insurance rate."

—The Philosopher of Metal Town.

WRITE US, THE MANUFACTURERS



WESTERN LAND FOR SALE

In areas to suit purchasers, from 160 acres upwards, situated on or near railways in the Best Wheat, Oat and Stock Growing Districts of

SASKATCHEWAN AND ALBERTA

250,000 Acres to choose from

Prices low. Terms generous and helpful. Special inducements given actual settlers, and those requiring blocks for colonization purposes.

Write for particulars. Reliable agents wanted in every county.

F. W. HODSON, & CO., TORONTO, ONT.

Room 100 Temple Building

Branch Office:—North Battleford, Sask.

During 1910 we sold over 133,400 acres; during the past four years we have sold over 400,000.

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

FARM MANAGEMENT

More about Storing Roots

J. H. Grisdale, Dir. Dom. Exp. Farms
Different kinds of roots keep in different ways; some are good keepers and others bad. The roots most difficult to keep are clover and alfalfa. It is very difficult to keep them right. They must be put in clean and dry and kept in a cool place or they will be gone before half the season is over. Turnips are the next most difficult to keep, and the same suggestion applies to them—keep them clean and dry and allow a free circulation of air.

Mangel and sugar mangels are good keepers and require a small amount of attention. It is very seldom you see rot get into mangels, and I never saw sugar beets rot even if you make a pit on the side of a hill. Even if you have not a root house to keep them in there is nothing to prevent you from growing them and keeping them just the same. You can make a pit on the side of a hill and keep your roots in first-class condition right up until March or April, and you will be astonished at the value of these roots in the spring. The animals like them exceedingly well.

Storing roots in this way is very cheap and the material required is a layer of straw on the top and then five or six inches of soil over that with tufts of straw sticking up at intervals of five or six feet to allow for the escape of gas.—Extract from an address.

Advantages of Fall Cultivation

E. Terrill, Northumberland Co., Ont.
How deep shall we plow? Most of us think it depends much upon the quality and condition of the land. We have on our farm all kinds of soil, varying from heavy clay to light loam. We plow our light land quick and shallow, from four to five inches in depth, and the clay from six to seven inches.

We plow the stubble fields over thickly as soon as we can after the crop is off, and then do as much cultivation with the spring tooth cultivator as possible till the first of October. Then we ridge the land as we would for carrots or turnips, and leave it till spring. We believe that by this method the ground is in much better condition in the spring on account of the action of the frost. The land is thoroughly frozen, and the quick roots, if there are any, are killed.

The land also dries up much earlier in spring and works up loose and level. Ground treated in this manner seems much warmer than when the field is plowed flat in the fall, and vegetation starts as soon as seed is sown.

If we would use the cultivator more and the plow less farmers would receive better results.

Favors Deep Plowing

A. W. Foley, Durham Co., Ont.

The best depth to plow depends a great deal on what kind of soil we are working. On the lake front in the county of Durham, when I was a boy, I well remember of plowing a 12 acre field. My father gave me a measure—nine inches good and full—the depth to which I was to plow. The next year the crop on that field was a good one, but when I was plowing a good depth in heavy land, I would call eight or nine inches about the right depth.

The plowing-to-day is done in a slished way compared with what it was 30 years ago, when we used to have plowing matches every spring or fall. In those days every farmer's

son was trying to outdo his neighbor; but that time seems to have passed and gone altogether. Wherever plowing is done it will always pay to do it right.

My experience with part of my land is as follows:

Last year I plowed part of my land early in the season to a depth of about eight inches. We took pains to cut everything clean. After that we harrowed and cultivated twice, and gave it about five loads of good manure per acre, spreading it to the top from the wagon. We seeded the field this spring to oats and we have a good catch, plenty thick enough, but rather small on account of the dry season.

Another field we disked as soon as possible after last season's harvest. About two weeks after we disked and cultivated again, afterwards spreading on eight to 10 loads of manure per acre. In the fall we ridged it, putting the plow down about eight inches and seeded it with barley this spring. This field gave us very good satisfaction. Gangplow, disk, and cultivate as often as possible after harvest, and then put the plow down to a good depth when ridging up in the fall is my rule.

Use Road Drag Now

"Use the road drag now," says Prof. E. F. Ayers, highway constructor expert of the Oregon Agricultural College; and his advice applies in Canada as well as in Oregon. Heavy fall rains, thoroughly wetting down the roads, have made ideal conditions for the use of the drag before the heavy winter weather begins. All pot-holes, mud-holes, and other irregularities can be leveled on the surface of the roads put into first-class condition by using the drag two or three times before the road gets too soft.

The use of the drag, moreover, at this time for crowning the roads will aid drainage and keep in good condition many roads which were very poor last year. The expense of using a road drag is small, and a much wider use of it throughout the State would be very advantageous. There is no better way to keep a dirt road in good condition than by dragging it frequently.

Our Veterinary Adviser

ABNORMALITY IN FIG.—How one month old has but one vent for urine and faeces. I frequently have to remove the faeces. Is this a common occurrence in pigs? Do you think that I can raise it?—C.

This is a very rare occurrence in any class of animal. Nothing can be done to rectify matters. It is probable that you will be able to raise her, but it will be necessary to give her considerable attention.

OBSTRUCTION IN TEAT.—Last season's litter lumps formed in heifer's teat near the top. It appeared movable and interfered considerably with milking. This season the lump is still there. The teat about two pressures empties it, but it soon fills again. It takes a long time to milk her. The teat is not sore—Sub scriber.

There is a little fibrous growth, which is apparently attached to the lining of the milk duct by a neck, which allows some change in position. An operation, which consists in cutting down upon the lump and removing it, might effect a cure, but it is a very delicate and skillful operation, and requires the most careful attention. It will be safer to do the best you can under existing conditions. If you consider the trouble of milking too great, allow the teat to get so dry and do not breed again. Operations for conditions of this kind are very liable to be followed by serious complications.

The Feeder

The Feeder's O...
...are invit...
...or mend i...
...all questi...
...attention.

A Ration for

We have on hand...
...corn ensilage, and...
...sorghum, bran and cor...
...ground. All questi...
...that freshen this fall...
...of milk a day...

A good ration for...
...35 to 40 lbs. of m...
...feeds mentioned v...
...silage, 35 to 40 lb...
...lb.; oat straw, eig...
...pounds; gluten, 1...
...cornmeal, one pou...
...suggest that the st...
...the ensilage sever...
...to feeding time.

The amount of...
...be varied accord...
...tion of individual c...
...the grain mixture...
...pounds of milk...
...sters or if milk...
...price and it is adv...
...cows, the proporti...
...in the ration may...
...creased. Gluten, h...
...feed and needs...
...tion with such h...
...bran.

About C

What is the best fo...
...chase oil cake? O...
...me that he can get...
...nated, or in oaken...
...Out.

Most of the oil...
...sale in this country...
...meal, and you are...
...able to purchase it...
...red or cake form...
...are preferable to...

In the extraction...
...flax seed the resid...
...the form of hard...
...feet long and one...
...cakes are either s...
...broken up into lu...
...eggs, or ground i...
...cake, or the nutte...
...retains a pleasur...
...it very palatable...
...flavor is largely...
...ground to meal...
...distracts of adulter...
...the nutted form...
...said for that in me...
...best form in whic...

Straw As a Feed

Our hay crop has...
...are planning to...
...Would you consider...
...straw to dairy cattle...
...supply of ensilage...
...would you advise us...
...-P.O., York Co., Ont.

Good oat straw...
...York Co. straw...
...advantage to dairy c...
...nutritive value shou...
...in mind, and you...
...straw in the ration...
...amount of concentr...
...be increased. Six...
...of straw a day cou...
...of an equal amount

The Feeders' Corner

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

A Ration for Fresh Cows

We have on hand clover hay, oat straw, corn ensilage, and can purchase gluten meal, bran and corn meal. Please suggest a ration for feeding to dairy cows that freshen this fall and will bring 30 to 40 lbs of milk a day.—S.J.N., Brant Co., Ont.

A good ration for cows giving from 35 to 40 lbs. of milk daily from the feeds mentioned would be corn ensilage, 35 to 40 lbs.; clover hay, 10 lbs.; oat straw, eight lbs.; bran, six pounds; gluten, two pounds; and cornmeal, one pound. We would suggest that the straw be mixed with the ensilage several hours previous to feeding time.

The amount of meal given should be varied according to the production of individual cows, one pound of the grain mixture being fed to four pounds of milk. For very heavy milkers or if milk is bringing a good price and it is advisable to force the cows, the proportion of gluten meal in the ration may with profit be increased. Gluten, however, is a heavy feed and needs to be fed in combination with such lighter meals as bran.

About Oil Cake

What is the best form in which to purchase oil cake? Our grain dealer tells me that he can get it in the form of meal natted, or in cakes.—P.J., Oxford Co., Ont.

Most of the oil cake offered for sale in this country is in the form of meal, and you are fortunate in being able to purchase it in either the natted or cake form, either of which are preferable to the meal.

In the extraction of the oil from the flax seed the residue is obtained in the form of hard cakes about two feet long and one foot broad. The cakes are either sold as they are, broken up into lumps the size of eggs, or ground into meal. In the cake, or the natted form, oil cake retains a pleasant flavor that makes it very palatable to the cows. This flavor is largely lost when it is ground to meal. Also there is no danger of adulteration of oil cake in the natted form, which cannot be said for that in meal; and this is the best form in which to get it.

Straw As a Feed for Dairy Cows

Our hay crop has been very short and our planning should always be kept in mind, and as the proportion of straw in the ration is increased the amount of concentrates also should be increased. Six or eight pounds of straw a day could be fed in place of an equal amount of hay.

The best method of feeding straw is to mix it in with the ensilage 12 hours or more previous to feeding. Mixing it in this manner with ensilage softens the straw and imparts to it a pleasant flavor that makes it more palatable. We have heard of dairymen in seasons of short hay cutting feeding practically no hay at all, oat straw being substituted. Success with this method of feeding, however, necessitates a fairly heavy feeding of concentrates.

Simplifying the Labor Problem

"Employer," Northumberland Co., Ont. If we farmers are to get satisfactory labor we must plan to give steady employment the year round and give to the man a chance to live as any social being desires to do. I and a good many of my neighbors have cottages on our farms where the married hired man can have a home of his own.

I find that the married man is a better workman, and if he has a house of his own he will enjoy himself and be perfectly satisfied with the country. I prefer married men in that they are not of an itinerant

nature, a few months here and a few months there; he stays for ever if you treat him right.

Items of Interest

The prizes at the National Dairy Show this month will amount to over \$15,000. The Guernseys have \$350, besides the regular prizes, Holsteins \$1,520, and Jersey men will add 25 per cent. to all regular premiums.

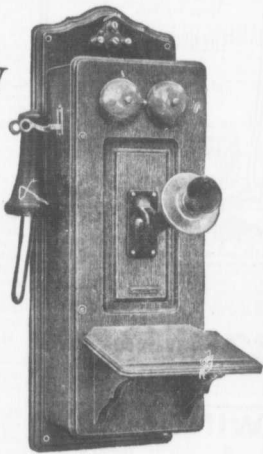
In the students' judging class at the International Dairy Show where members from the various agricultural colleges meet to demonstrate their abilities as judges of dairy cattle, the

competition this year will be enlivened by an extra trophy to be contested for—a cup donated by President Taft.

Production will be taken into account in making the placings in two of the classes for dairy cows at the National Dairy Show, Chicago, October 29th to November 4th. The awards in these two classes will be made on the basis of breeding score plus one point for each 20 pounds of butter fat over 250.5 lbs. produced in one year by a two-year-old, with an additional minimum requirement of one-tenth of a pound for each day the heifer is over two years old.

Our Telephones Chosen by Majority Of New Systems

IN Ontario where the fight for business is keenest—where all telephone manufacturers enter into competition—this company has assumed a commanding position. This year The Majority of municipalities and new companies entering the independent telephone field selected our telephones and equipment.



QUALITY WINS

Price cut no figure in securing the business of these companies. Other telephones were offered for less. SUPERIOR QUALITY won us the victories.

Our telephones were selected not only by new systems, but by those who had been using other makes, because they were proven to be the clearest-talking, strongest-ringing, simplest and best constructed. They were given the severest tests, the most minute and rigid examinations. They established their superiority beyond question.

BUSINESS DOUBLED

Between 400 and 500 independent Canadian Telephone Companies are buying their supplies from us. Our business is again repeating last year's record, when it doubled in volume. What better guarantee of satisfaction

could a municipality or local telephone company want than the evidence of the satisfaction we are giving others?

10 YEARS' GUARANTEE

Everything we sell is guaranteed. Our Telephones are guaranteed for 10 years against defects in material or workmanship. Our Side Blocks and Top Pins are made specially for us, so as to insure uniform quality. In No. 12 Galvanized Line Wire we never carry anything but the best.

We stock nothing but first quality materials. And we stock them in large quantities.

Notwithstanding our large increase in business, our facilities are such that we are able to handle all orders promptly and satisfactorily. A Price List will be mailed on request.

NO. 3 BULLETIN

Our latest book on telephones has just been printed. It contains the latest, most authentic information on construction and operation of telephone lines. Also shows the most up-to-date equipment. Ask for the No. 3 Bulletin.

If you haven't a copy of our famous book, "Canada and the Telephone," profusely and graphically illustrated by a leading artist, we will be glad to mail you one, too.

FREE TRIAL

If your company is going to replace some old phones with new ones, or is just starting a system, ask us about our FREE TRIAL OFFER, whereby the quality and efficiency of our telephones can be judged before spending a dollar.

Canadian Independent Telephone Co.

24 DUNCAN STREET, TORONTO

Limited

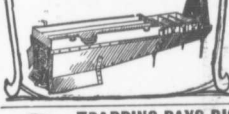
NOW

Is the time to install your **EVAPORATOR**

Don't wait until it is 20 degrees below zero to install a "Champion" in your sugar camp. You can do a better job now with less trouble. Don't have to pay any sooner. The Champion is the most profitable Evaporator on the market, and we can prove it.

Write for Free Booklet

THE GRIMM MFG. CO. LIMITED
58 Wellington St.
MONTREAL, QUE.



TRAPPING PAYS BIG

If you know the inside secrets of the business... Fur News Magazine, published monthly, is a year, tells all about trapping, hunting, fur raising, hunting dogs, traps, cameras, and all pursuits for profit in the wood and fields. Good stories too. Special offer. Send \$1c. for 3 months trial and get 3 issues valuable 64 page Trappers Guide.

FOR NEWS PUB. CO., 46 W. 24TH ST., NEW YORK, ROOM 603

\$3 a Day Store

Send us your address and we will send you a booklet that will show you how to make \$3 a day... The booklet fully explains our guaranteed a dollar gain per day's work... **ROYAL MANUFACTURING CO., BOX 1114, WINDSOR, ONT.**

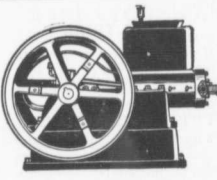
WINDMILLS

Towers Girted every five feet apart and double braced

Grain Grinders
Pumps
Tanks
Gas and Gasoline Engines
Concrete Mixers

Write for Catalogue

GOULD, SHAPLEY & MUIR CO., LIMITED
BRANDFORD, CANADA
BRANCH OFFICE
WINNIPEG, MANITOBA



IT IS EASY TO BUY the wonderful Gilson "Goes Like Slaty" Gasoline Engine on the above plan. Powerful, simple, durable, dependable, cheapest running, easiest to operate of any satisfactory, hold subject to our shipping directions, and we will return every cent of your first payment. Can anything be finer? Made in Canada. Guaranteed to give you 30,000 satisfied users, proving that it is not an experiment but a tried and tested engine. Ask your banker about our reliability; reference 1850. Tell us just what horsepower you have for an engine to do and we will name you price and terms on proper horse power. All sizes. Send for free catalogue. **Big money for Agents—write for our proposition.**

GILSON MFG. CO., LTD.
101 York Street, Guelph, Ontario, Canada.

HORTICULTURE

Some Comments on Box Packing
P. J. Carey, Dominion Fruit Inspector, Toronto

The question is often asked: "Should No. 2 apples be packed in boxes?" To this I would answer, "No, especially at this stage." Later it may be that a grade of apples, defective only as to size, might be packed to advantage in boxes.

One of the chief objections to packing in boxes is the increased cost of packing. Three boxes can be secured for the same price as one barrel, so that the question of cost narrows down to a question of labor. We in Ontario are far from expert in the work of box packing as yet, and we lack proper facilities. As it is, however, I feel safe in stating that it will not cost more than 10 cts. more to pack three boxes of apples than one barrel.

The following advantages are claimed for the box: It insures a better pack. It is a cooler package, and will land fruit in better condition. Brands and press marks on the fruit can be avoided. A box of apples will sell as readily for \$2.00 as a barrel at \$5.00. Box packing should increase consumption, because thousands of consumers are ready to make an outlay of say \$2.00 for apples when they would not care to go as high as \$5.00. Lastly, the box is a handy package, easily stored.

Horticulture in New Ontario

Not only grain and roots, but grapes and apples figured among the products of the New Liskeard district in the display at the Temiskaming Show held recently. The display of roots and vegetables was a striking tribute to the fertility of the soil of New Ontario, and the clemency of its seasons. Potatoes were exhibited 11 inches long, which, on being cut through, were found to be the core, and without a sign of rot or disease of any kind. There were turnips weighing 51 lbs., and a splendid show of ripe tomatoes.

The exhibits in the fruit classes attracted much attention, the presence of home-grown grapes, ripened out of doors being a novelty even there, where men have ceased to be astonished at the wonderful possibilities of New Ontario.

A factory for the manufacture of Rex lime sulphur spray will be erected in Brighton, Ont., the concern to be known as the "Canada Rex Spray Co."

This \$6 Down and balance in easy instalments without interest.

Engine

Demand for Canadian Onions
J. M. Musey, Trade Commissioner, Leeds

Inquiries are being made by local importers as to the extent of the cultivation of onions in Canada with a view to their export to this market. In former years Canadian growers have been at a disadvantage owing to the proximity and consequently cheaper prices quoted by shippers on the Continent. This year, however, the local demand is reported to have been very unfavorable to the crops in Holland and Silesia, which together with Spain, are the chief sources from which supplies are sent to the English market.

The prices quoted by Hamburg shippers already show an upward tendency and during the coming winter onions are expected to command enhanced prices. For shipment to this market it is suggested that onions could be packed in barrels to hold about 168 pounds, the top and bottom being slightly perforated to keep the contents in cool condition.

Cold Storage for Apples

The immense quantities of apples placed in the warehouses for storage each fall have to be repacked before they can be kept in storage for any length of time. This repacking entails great expense, and the apples are bruised in handling. Furthermore, the fruit ripens quickly in a frost proof warehouse and does not stand shipment well.

As the crop of apples is increasing from year to year and markets are opening up in the country and among the Canadian West, a system whereby the fruit can be kept in better condition and the labor and expense of repacking avoided would be a great boon to the fruit industry. It seems natural that cold storage would at least partially solve the problem. The experiments that were conducted by the Cold Storage Branch of the Dominion Department of Agriculture and the results that they obtained from storing apples are, therefore, of interest to fruit men. The high prices which followed when the apples were purchased and the drop in price which prevailed prevented the department from showing a profit on all the apples handled. The losses, however, could have been greater had the apples not been cold stored.

The apples purchased were the ordinary commercial packs of different growers. They were stored at London, Montreal, and St. J. N. The cold storage houses were kept at a temperature of 32 to 37 degrees during the whole storage period. Part of the apples were shipped to England after four months' storage and arrived there in good condition. The apples shipped to Calgary were unpacked in splendid condition.

Although this experiment was not a financial success owing to unusual market conditions the results are very encouraging. They demonstrate that cold storage can be used to advantage in the handling of fall and winter varieties of apples. Some conclusions arrived at from these experiments are the following:

1. Late picked apples have better than early picked apples and have a finer appearance as well.
2. Apples placed in cold storage as soon after being picked as possible will keep better than those where the string has been delayed. Hence the advisability of having the cold storage plant located in the district than early picked apples and have where the fruit is green.
3. The season for Greenings can be extended several weeks if the apples are well matured on the trees and placed in cold storage.
4. Apples stored at low temperatures for a certain length of time directly after picking will damage fruit more

than the same exposure after the fruit has been in cold storage for some time.

Facking Apples in Barrels

The committee appointed by the Ontario Fruit Growers' Association to draw up a score card for judging fruit at fairs has given as well some valuable advice on packing apples for exhibition purposes. The instructions as outlined by T. M. Proulx, chairman of the committee, will be of value to those putting up commercial packs as well as to exhibitors. The hints on the barrel pack are as follows:

When facing a barrel of apples or when beginning to pack a barrel, the apples for the first row should be put carefully in with the stem ends pointing down, the stems having been first cut off so that they will not injure the fruit when pressed. If slightly smaller apples are used in the outside rows, the apples in the center it improves the appearance of the face. A second row is now put in, in the same manner as the first, and these apples should be arranged so they will pass through the spaces between those in the first row. The two rows constitute the face of a barrel. The fruit used for the face should fairly represent the fruit throughout and larger ones in the center in these two rows should present as attractive an appearance as possible. The law in regard to facing, as defined in the Inspection and Sales Act, is as follows: "No person shall sell, offer, expose, or have in his possession for sale any fruit packed in any package in which the faced or shown surface gives a false representation of the content of such package, and it shall be considered a false representation when more than 15 per cent. of such fruit is substantially smaller in size, color, or ripeness than the fruit shown in variety from the faced or shown surface of such package." Apples in barrels for exhibition should be packed as required by law.

FINISHING

By finishing is meant the heading, lining, clearing and marking of the barrel. The heads of the barrels should fit snugly into the chime. The rows which in each head are usually sufficient.

The marking of barrels should be distinct and attractive. It should comply with the regulations of the Inspection and Sales Act, which call for the initials of the Christian names of the packer, his surname, and his address; the name of the variety of the fruit; and the designation of the grade, which may be "Fancy," "No. 1," "No. 2," or "No. 3." Such mark may be accompanied by any other designation of grade or brand so long as that designation or brand is not used more conspicuously than the one of the said four marks which is used on the said package.

All barrels of apples should be racked when being packed so that the fruit will settle and the packer thus be able to tail his barrel so that the fruit will carry well. When the barrel is opened the fullness or slackness of the pack will be seen. If the fruit has been racked. Over-pressed fruit is usually found when apples have not been racked well. This may also be expressed by the terms firmness and compactness. The more solid the pack the better the fruit will carry.

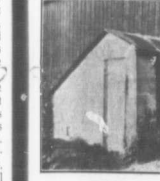
Tailing is meant the putting of the last fruit into the barrel. It is in good tailing is to have the surface as level as possible with the stem end down when the apples are pressed. The care in tailing will be known by the way the barrel is packed in which the fruit has been brought when pressing.

POULTRY

A Portable Poultry House

A portable poultry house can be taken apart and shipped, as illustrated by Mr. J. H. Callend. The walls are built together at the screws. The roof is the entire building asbestos roofing.

The open front is netting. Curtains are such that they can be swung open in case of very severe weather hanging in front of platform can be let down. This building is 4 feet, four feet high at the front, and seven



A Poultry House Covered

The poultry house here is erected or taken down for winter. For further particulars regarding articles.

—Photo supplied

The ridge is two feet of the house. This taken down or erected. Any man with mechanical ability could build a poultry house.

Prevention of Vermin

Mrs. L. C. Hoard says, Co., Ont. Lice are never so common in a hen house, as proper taken to prevent the. We whitewash the interior each year, apply almost boiling hot. We infect a couple of acid to each pair of feet. I have used common pesticides in dealing with the problem, but have found a mixture of two-thirds of

BROW

WRITE FOR CATALOGUE

BROWNS NURSERY
WELLAND COUNTY

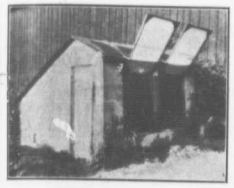
POULTRY YARD

A Portable Poultry House

A portable poultry house can be taken apart and laid down flat for shipment, as illustrated on this page. The house was planned and built by Mr. J. H. Callender, of Peterboro. The walls are built separate, and fastened together at the corners by screws. The roof is in two sections. The entire building is covered with asbestos roofing.

The open front is covered with wire netting. Curtains are arranged so that they can be swung down over the opening in case of storm. For very severe weather a second curtain hanging in front of the roosting platform can be let down at night.

This building is eight feet by 10 feet, four feet high at the back, six at the front, and seven feet to the peak.



A Poultry House Convenient for Moving

The poultry house here illustrated can be erected or taken down in half an hour. For fuller particulars read the adjoining article.

Photo supplied by J. H. Callender. The ridge is two feet from the front of the house. This building can be taken down or erected in half an hour. Any man with ordinary mechanical ability could build such a poultry house.

third erode carbolic is just as effective and costs much less. I apply the mixture with a paint brush around the roots for three or four days. The vermin has been noticed. I find that three such applications are too much for the insects.

We clean the hen house twice a week and the nests every two weeks. In the bottom of the nests I put wood ashes and over that clean straw.

PUBLISHER'S DESK

The Splendid Record Last Week

Well done! We should like to meet personally each of the many friends who helped us during the past few weeks to increase the circulation of Farm and Dairy. We should like to shake hands with you and tell you just how greatly we appreciate the assistance that has been rendered us.

But this we cannot do, so we wish to take this formal means of expressing to you our Thank-You, and congratulations on your success.

The total of 10,500 for which we aimed in our campaign we did not reach by 259. This fact is in no wise disconcerting. We could have reached the total quite readily and have increased our circulation to a much greater extent had we placed paid canvassers out to work for new subscriptions for Farm and Dairy. It has been our policy, however, not to hire paid canvassers. We prefer to have our readers introduce Farm and Dairy to their friends. We wanted each and every subscription to come through our old subscribers, who read and appreciate Farm and Dairy, and who would get their friends and neighbors to read Farm and Dairy regularly. Therefore, while we did not reach the mark for which we aimed we are well pleased with the progress made. Our readers on the whole have done nobly. For this reason we have decided to give our people the necessary extension of time to make up this 259. This they should be able to do in short order.

A pleasing feature of the whole campaign has been the comparative ease with which our people, who have tried, have been able to get new subscriptions to Farm and Dairy from among their friends and neighbors.

TWO LITTLE GIRLS SUCCEEDED

Amongst the winners last week were two little girls, Miss Etta M. Thorn (age 13 years) and Miss Edith Thorn (age 11 years), who live in Ottonabe Township, Peterboro Co., Ont. Both Miss Etta and her sister go to school and they undertook to get new subscriptions for Farm and Dairy after school was out. Miss Etta got six new subscribers and claims as a premium a pure bred Yorkshire sow pig. Her sister secured three new subscribers and in return for her trouble she has selected a 10-piece toilet set.

Our premium pigs, pure bred, and either sex of the Tamworth, Berkshire or Yorkshire breed, were among the most popular of our premiums again last week. Each of the following secured clubs of six new subscriptions in return for which they will receive pigs, as follows: Alexander Edlie, Northumberland Co., Ont., a Yorkshire sow; Ralph E. Wheeler, Norfolk Co., Ont., a Chester White sow; Chas. E. Butler, Oxford Co., Ont., a Tamworth boar pig; Geo. G. Gillespie, Peterboro Co., Ont., a Berkshire sow; F. G. Lewis, Lanark Co., Ont., a Tamworth boar; Arthur Beck, Waterloo Co., Ont., a Tamworth boar, and Thos. Strachan, Wellington Co., Ont., a Yorkshire sow.

Several people have written in since our last issue stating that they have been too busy heretofore to canvass for clubs, but would do so if we would

allow them time after October 15. This time we granted

SOME SUCCESSFUL WOMEN FOLK

Some of the women readers of Farm and Dairy sent in real nice lists last week. Amongst those who sent in clubs and won premiums we make mention of: Mrs. C. M. Firby, Elgin Co., Ont., six new subscribers—she received a cash commission; Vera M. Bent, Oxford Co., Ont., two new subscribers—she selects a Woman's Kitchen Friend; Miss Mildred Campbell, Frontenac Co., Ont.—three new subscribers, for which she gets a camera; Miss Una Buell, Carleton Co., Ont., sent one new subscription; Miss Frances Black, Prince Edward Co., Ont., sent one new subscription and selects a fountain pen; Mrs. D. B. McCoubrey, Charlotte Co., N. B., sent six new subscriptions in return for one of our 10-piece dinner sets, a semi-porcelain; Miss Florence Côté, Chateaugay Co., Que., also sent one and secured one of these handsome and serviceable dinner sets; Miss Katie Zehr, Port Hope Co., Ont.; sent one new subscription and secured a fountain pen; while Mrs. G. E. Smith of York Co., Ont., sent in three new subscriptions and selects a pair of pure bred Rhode Island Red Fowl; Miss Myrtle Fraser, Dundas Co., Ont., sent three new subscribers and claims a camera.

CLUBS FOR PURE BRED FOWL

Several clubs of new subscriptions, three each, came in, for which pure bred fowl were selected. Those were: Mac Cumming, Glangary Co., Ont.; White Wandotters; W. H. Post, Victoria Co., Ont.; Barred Rocks; Geo. H. Schneider, Oxford Co., Ont.; S. C. White Leghorns; Jos. Goodin, Grenville Co., Ont.; Barred Rocks; Thos. Gray, Muskoka Dist., Ont.; Barred Rocks.

New subscribers were secured by J. A. Ronson, Elgin Co., Ont., for which he selects two pairs of Rose Comb Black Minorcas.

OTHER SUCCESSFUL WINNERS

Amongst the others who were successful and the premiums they selected are: Zetta M. Thurston, Victoria Co., Ont. (two); a special pearl-mounted 14-Kt. gold point fountain pen; J. Arch Lewis, Hastings Co., Ont. (two), another of these special pearl-mounted fountain pens; L. A. Bryant, Hastings Co., Ont. (two), a Tamworth boar pig; Eljalj Benedict, Stormont Co., Ont. (three), a roll film camera; A. N. Deland, St. Johns Co., Que. (one), a fountain pen; Jos. S. Pollard, Oxford Co., Ont. (two), a repeating alarm clock; Bertram Johnston, Dundas Co., Ont. (three), a 10-piece toilet set; Russell Tupper, Oxford Co., Ont. (three), a cash sweepstake; Ralph E. Wheeler, Norfolk Co., Ont. (two), a pearl-mounted fountain pen; Coleman Lee, Leeds Co., Ont. (one), a fountain pen; T. B. Millar, Red Deer Dist.; Alka, (two), boy's nickel plated watch; Chas. Beam, Halimand Co., Ont. (one), a pair of pruning shears; Bertie J. Taylor, Dufferin Co., Ont.; Manrico Pollard, Waterloo Co., Ont.; and J. E. Ness, Howick Que., each (one), a fountain pen; Jas. Luther, Middlesex Co., Ont. and F. G. Lewis, who also won a Tamworth boar, each (two), a pearl-mounted fountain pen.

A. S. Foy, Oxford Co., Ont., sent in six new subscriptions; Chas. W. Cole, Huron Co., Ont., and C. F. Anderson, York Co., Ont., each two new subscriptions and have selected their premiums as yet; Jas. Richardson of Colchester Co., N.S., sent two and has his own subscription extended one year therefor.

Mr. Morrison, who is working on our grand big cash prize, sent in 81 new subscriptions.

A POINT DEMONSTRATED

Our campaign has demonstrated beyond any possibility of doubt that any of our people who really try in the right way can get their friends and neighbors to subscribe for Farm

LIVE POULTRY

For best results ship your Live Poultry to us, also your Dressed Poultry, Butter and Eggs.

Crates Supplied. Prompt Returns

Wm. DAVIES Co. Ltd.
TORONTO

Barred Rock Cockerels

Thoroughbred and from a GOOD LAYING STRAIN. Buyer to pay express charges.

Mrs. William Hadrell, - Bayville, Ont.

S. C. WHITE LEGHORNS

100 selected one-year-old S. C. White Leghorn Hens for sale. Hardy and in best condition, having finished molting. Bred from heavy laying strain. For quick sale will sell at 25¢ each.

Lewis M. Clark, Port Hope, Ont.

Pure Bred Barred Rock Cockerels

BRED FOR SIZE AND EGG PRODUCTION

Also a few S. C. B. Leghorns
Price \$1.00 each, plus expressage

SOLO S. GEHMAN, - Waterloo, Ont.

and Dairy. Won't you try now? You can succeed. We will apply one year for one, two or any number of new subscriptions that you will send us, whether you have sent us clubs before or not. Try your ability anyway. If you have tried before, try again and secure your share of the rewards we offer.

Enclosed find \$1.00, for which renew my subscription to Farm and Dairy for one year. I congratulate you on the great improvement of your paper. Each issue seems better than the last."—Messrs. J. H. Patten & Sons, Yale-Cariboo Dist., B. C.

FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD, CASH WITH ORDER

BARRED ROCKS—Utility-bred on free range from heavy-laying stock. Vigorous, growthy cockerels, 1 1/2-1 3/4 M. McQuaham, Lanark, Ontario.

HARDWOOD ASHES—Best fertilizer in use.—George Stevens, Peterboro, Ont.

WANTED—Working foreman for dairy farm. Married, who thoroughly understands all farm work. Good cooker and feeder. Steady situation to good man.—Apply to Box 43, Farm and Dairy.

SELF-FILLING POUNTAIN PEN. Agents Wanted. Send 25¢ for sample, or Six for Dollar.—Advert. Specialty Co., 23 Scott St., Toronto.

WANTED—Competent farm hand for dairy stock farm. Best wages, with comfortable house, etc. for steady man wanting permanent place.—Apply Box 22, Brookville, Ont.

FOR SALE—Iron Pipe, Poultry, Iron Posts, Rails, Chain Wire, Fencing, Bar Netting, etc. all sizes, very cheap. Send for list, stating what you want. The Imperial Waste and Metal Co., Dept. P. D., Queen street, Montreal.

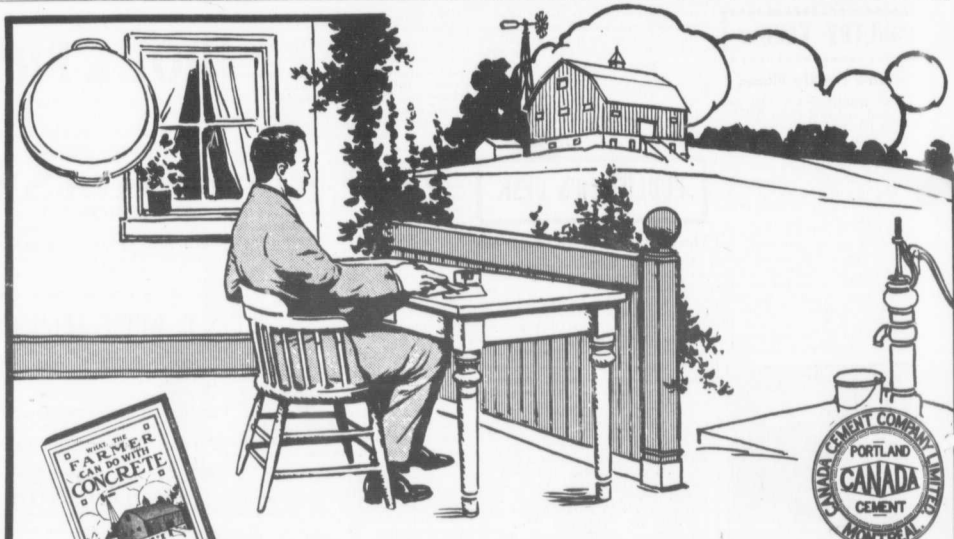
LADIES, to do plain and light sewing at home, whole or spare time; good pay; work sent any distance; charges prepaid; send stamp for full particulars. National Manufacturing Company, Montreal.

REPRESENTATIVE WANTED AT ONCE for work in your locality. Will guarantee \$2.00 to \$3.00 per day. Opportunity to advance rapidly. Will pay liberally for spare time. We're not dummies. Experience not required.—International Bible Press, Toronto, Ont.

"BROWNS TREES"

WRITE FOR CATALOGUE
WRITE FOR AGENCY

BROWNS NURSERIES,
WELLAND COUNTY, ONT.



Send for this free book



\$3,600 in Cash Prizes for Farmers

Tell Us How You Did It

You may win a prize by doing so

SUPPOSE your friend Bob Wilson, on the next concession, "pulled up" at your front gate on the way back from market and asked you about that silo or barn foundation you built, you would be glad to tell him, wouldn't you? And it wouldn't take you long either, would it? And, as a matter of fact, you'd find as much pleasure telling him as he would in listening—isn't that right?

First, you would take him over to view the silo or barn foundation. Then you would start to describe it—its dimensions—the kind of aggregate used—the proportions of cement used—number of men employed—number of hours' working time required—method of mixing—kind of forms used—method of reinforcing, if any—and finally, what the job cost. So that by the time you finished, neighbor Wilson would have a pretty accurate idea of how to go about building the particular piece of work which you described.

Now, couldn't you do the same for us, with this difference—that you stand a good chance of getting well paid for your time?

In Prize "D" of our contest, open to the farmers of Canada, we offer \$100.00 to the farmer in each province who will furnish us with the best and most complete description of how any particular piece of concrete work shown by photograph sent in was done. The size of the work described makes no difference. The only important thing to remember is that the work must be done in 1911, and "CANADA" Cement used.

In writing your description, don't be too particular about grammar or spelling or punctuation. Leave that to literary folk. Tell it to us as you would tell it to your neighbor. What we want are the facts, plainly and clearly told!

Sounds simple, doesn't it? And it is simple. And surely it is well worth your while when you think of the reward in view.

Now, sit right down, take your pen or pencil—fill out the attached coupon—or a post card if it's handier—and write for the circular which fully describes the conditions of this, the first contest of the kind ever held in Canada.

Every dealer who handles "CANADA" Cement will also be given a supply of these circulars—and you can get one from the dealer in your town, if that seems more convenient than writing for it.

Contest will close on November 15th, 1911—all photos and descriptions must be sent in by that date, to be eligible for one of these prizes. Awards will be made as soon as possible thereafter. The decisions will be made by a disinterested committee, the following gentlemen having consented to act for us, as the jury of award: Prof. Peter Gillespie, Lecturer in Theory of Construction, University of Toronto; Prof. W. H. Day, Professor of Physics, Ontario Agricultural College, Guelph; and Ivan S. Macdonald, Editor of "Construction."

Having decided to compete for one of the prizes, your first step should be to get all the information you can on the subject of Concrete Construction on the Farm. Fortunately, most of the pointers that anyone can possibly need, are contained in our wonderfully complete book, entitled "What the Farmer Can Do with Concrete." A large number of Canadian farmers have already sent for and obtained copies of this free book. Have you got your copy yet? If not you'd better send for it to-day. Whether you are a contestant for one of our prizes or not, you really ought to have this book in your library. For it contains a vast amount of information and hints that are invaluable to the farmer.



The Traction Engine

J. M. Shuttleworth.
In the fall of 1906, in the spring we plowed with our gasoline engine, built by Ley & Muir Co., severe test was given a 60 acre field of all been down five years. 12 inch Verity Imp gang plows coupled made a very flexible eight furrows, 1 "swath" of just under and six to six and a few plowmen could good work.
The outfit turned and a quarter and acres an hour, using three gallons gasoline field was level and good footing. Anyo



It U...
The traction engine same work in a few problem of getting a adjoining article Mr. plowing on small far profitable.

ed down alfalfa sod the work done. T was compact, easily man on the engine plow.

The following spring of 26 and 19 acres w was not good and a rise, we used only coupling one of the power has solved, for hardest and most t operation. Plowing g when it should be w number of extra hor done without when it 24 hours'

A 10 hour day is stand, but with this no reason why 20 to should not be done w in shape by having hours on and six o runs about four and a little over an hour w eight-furrow gang.

It may be said th farmer will not benefi There is no reason or contract plowing done on the 100 ac fits might be ma farms of 100 acer, numerous farm operat plowing that can be motive. Better cultivat will result because m given to it, when plo rarely takes days can most as many hours.

Canada Cement Company, Limited, Montreal

Please send for particulars and book

Name.....
Address.....

The Traction Engine in Plowing

J. M. Shuttleworth, Brant Co., Ont.
In the fall of 1909 and the following spring we plowed a large acreage with our gasoline traction plowing engine, built by the Goold, Shapley & Muir Co., of Brantford. A severe test was given the machine in a 60 acre field of alfalfa sod that had been down five years. We used four 12 inch Verity Imperial two-furrowed gang plows coupled together. These made a very flexible gang plow of eight furrows, turning over a "swath" of just under eight feet wide and six to six and a half inches deep. Few plowmen could have done such good work.

The outfit turned over between one and a quarter and one and a third acres an hour, using a little under three gallons gasoline per acre. The field was level and the engine had good footing. Anyone who has plow-

The Value of Courage

Jas. McIntyre, Huron Co., Ont.
We often have trouble here in getting good help. Our young men have left us for the grain-growing west. In reading Hoard's Dairyman recently I see that they have the same trouble in the older states of the United States. The explanation given by the editor is so good that I pass it on.
"There is lots of wisdom in the remarks of some of these old farmers. One day we were asking a farmer, who had been very successful in his farming operations, about a neighbor of his, who started well and then suddenly sold out and went to Canada. 'What was the matter with Jim?' we asked. 'I thought he was going right ahead all right.'
"So he was," replied the old farmer. 'But he lost courage in good farming. He thought land was get-

handle a dairy farm in the older states than it does a grain farm in Canada. And maybe those who emigrate to those regions understand themselves better than we do.

"But it is worth while after all to be a farmer of high courage and ability. We have always noticed that it takes courage to back up ability. Dairy farming at its best really depends upon the young men who educate themselves in that direction. It doesn't flourish very much by immigration."

The foregoing applies equally well to those young men who have left the Eastern provinces of Canada, with their boundless opportunities for an easier kind of farming in the west. After all, doesn't our intensive farming develop better men?

Where Money is Lost

The greatest source of loss in the dairy industry is the feeding of unprofitable cows. For example: A certain cheese factory in one year paid one of its patrons \$277 for the product of eight cows, while it gave another patron 89 less, or \$868, for the milk from 22 cows. The latter dairymen boarded nearly three times as many cows as the other to get less gross return.

In another locality some herd owners secured an average of 900 pounds of butter fat per cow, while others at the same place and in the same time averaged only 80 pounds per cow. An income of \$100 per cow, as in the better herd, gives some margin for profit, but how can \$26 a head result in anything but loss?

Probably some animals in the poor herds mentioned were profitable producers, but it is safe to say that the owners would have been better off at the end of the year, if, before the year began, they had carefully studied their cows and sold one-half of them. It is probable also that in the better herds some weeding out might have been done to advantage, for great individual differences are found even in tested herds bred for years along one line of productivity.

Until the feeder knows his cows through the scales and the Babcock test, he can never claim to be doing a dairy "business," he is merely doing dairy "guess work," and may be feeding into Polly all the profits he should make from Bess and Spot.—New York Experiment Station Bulletin No. 322.

I take a number of farm papers, but Farm and Dairy is the best of all.—Wm. Hull, New Westminster Dist., B. C.

Galt Shingles

The Roof that Protects

"Galt" Galvanized Steel Shingles protect your home from Fire, Lightning and storm.

They last three times as long as wood shingles. The fire protection alone is worth their whole cost.

Example—If there was a fire in your neighborhood on a windy day after a prolonged dry spell and the air was filled with burning fragments of wood, such as the wind was blowing towards your roof, what kind of a roof would you rather have there, a "Galt" Galvanized Steel Shingle roof on which you could safely build a fire wood shingle roof which every shingle is like a ragged piled ready to burn.

You cannot back on the carelessness of your neighbors but a "Galt" Shingle roof prevents your neighbor's fire from becoming your own.

Send for our booklets "Roofing Economy" GALT ART METAL CO. Limited, GALT, Ont.

Watch for the advertisements with the Leap Frog Galt.



SYNOPSIS OF CANADIAN NORTH-WEST LAND REGULATIONS

Any person who is the sole head of a family, or any male over 18 years old, may homestead a quarter section of available Dominion land in the Northwest, or Alberta. The applicant must appear in person at the Dominion Land Office, or sub-office, for the District to which he proposes to apply, and pay a price by proxy may be made at any agency, on certain conditions, by father, mother, son, daughter, brother or sister of intending homesteader.

At least six months' residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 80 acres solely owned and occupied by him or by his father, mother, son, daughter, brother or sister.

In certain districts, a homesteader in good standing may pre-empt a quarter section alongside his homestead. Price \$4 per acre. Justice—Must reside upon the homestead or pre-emption six months in each of six years from date of homestead entry (including any time required to earn homestead patent) and cultivate fifty acres extra.

A homesteader who has exhausted his homestead rights and cannot obtain a pre-emption may enter for a purchase homestead in certain districts. Price \$5 per acre. Justice—Must reside six months to each of three years, cultivate fifty acres and erect a house worth \$300.

W. W. COBY,

Deputy of the Minister of the Interior. F. B.—Unauthorized publication of this advertisement will not be paid for.



It Used to Take Days, Now it is Done in Hours.

The traction engine and gang plows operated as seen in the illustration do the same work in a few hours that previously took as many days, thus solving the problem of getting a large field plowed when in just the right condition. In the adjoining article Mr. Shuttleworth suggests that such an outfit could do contract plowing on small farms where the investment in a power plow would not be profitable.

ed down alfalfa sod will appreciate the work done. The whole outfit was compact, easily handled by one man on the engine and one on the plow.
The following spring, in two fields of 26 and 19 acres where the footing was not good and with a rather stiff rise, we used only six furrows, un-coupling one of the gangs. This power has solved, for us at least, our hardest and most tedious farming operation. Plowing can now be done when it should be without keeping a number of extra horses that can be done without when it is finished.

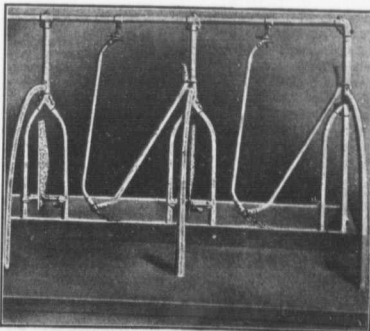
24 hours' work
A 10 hour day is all horses can stand, but with this power there is no reason why 20 to 24 hours' work should not be done when the land is in shape by having two shifts, six hours on and six off. The engine runs about four and a half miles or a little over an hour while hauling the eight-furrow gang.

It may be said that the 100 acre farmer will not benefit by this power. There is no reason why cooperative or contract plowing should not be done on the 100 acre farms. Outfits might be manufactured for farms of 100 acres, for there are numerous farm operations other than plowing that can be done by this motive. Better cultivation of the soil will result because more time can be given to it, when plowing that ordinarily takes days can be done in almost as many hours.

ting too high; cows were too high, and it took too much pluck and good management to farm here. He thought he would do better to go where the land was richer and it took less brains to run a farm. "I guess he had struck his limit."

"There is no doubt but what it takes more brains, more courage, and more skillful intelligence to

STEEL STALLS AND STANCHIONS



There never was a time in the history of Canada when the dairymen were paying so much attention to ventilation, sanitation and equipment of their dairy stables. This is an age for cement and steel. When you are laying your stable floors it is an easy matter to install steel stalls and stanchions.

An increasingly large number of stables are being equipped with Louden's Stalls and Stanchions because they give Perfect Satisfaction wherever they are used. They are made of tubular steel, fastened together firmly with malleable couplings without in any way weakening the stalls. The stanchions will hold the strongest bull, and yet they are so arranged that no weight of any kind rests on the animal's neck.

For prices, plans, circulars, etc., write

LOUDEN MACHINERY CO.
GUELPH, ONTARIO

Haying Tools, Barn Doo: Hangers, Cow Stalls and Stanchions, Hardwax Specialties, Etc.

FARM AND DAIRY

AND RURAL HOME

Published by The Rural Publishing Company, Limited.



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

2. SUBSCRIPTION PRICE, \$1.00 a year, strictly in advance. Great Britain, \$1.20 a year. For all countries except Canada and Great Britain, add 50c for postage. A year's subscription free for a club of two new subscribers.

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

4. CHANGE OF ADDRESS.—When a change of address is ordered, both the old and new addresses must be given.

5. ADVERTISING RATES quoted on application. Copy received up to the Friday preceding the following week's issue.

6. WE INVITE FARMERS to write us on any agricultural subject. We are always pleased to receive practical articles.

CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceeds the actual circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies sent from 10,000 to 11,000 copies. No subscriptions are accepted at less than the full subscription rates. The actual circulation does not contain any dead circulation. The following statements of the circulation of the paper, showing its distribution by counties and provinces, will be mailed free on request.

OUR PROTECTIVE POLICY

We want the readers of Farm and Dairy to feel that they are with our advertisers with our assurance of our advertisers' reliability. We try to admit to our columns only the most reliable advertisers. Should any subscriber have cause to be dissatisfied with any treatment received from any of our advertisers, we will investigate the circumstances fully. Should we find reason to believe that any of our advertisers are unreliable, even in the slightest degree, we will discontinue immediately the publication of their advertisements. Should the circumstances warrant, we will expose them through the columns of the paper. Thus we will not only protect our readers, but our reputable advertisers as well. In order to be entitled to the policy, you must include in all letters to advertisers the words, "My advertisement is in Farm and Dairy." Your complaints must be made to Farm and Dairy within one week of the date of publication 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.

EXTEND R. OF P. TESTS

A critical period has been reached in the history of the Record of Performance test movement in Canada. More money is needed to carry on and extend the work. So extensively have breeders of pure bred dairy cattle taken advantage of this test that the present staff of inspectors is quite inadequate to handle the work in a satisfactory manner. For some time past the inspectors have not been able to make the necessary visits to the breeders' farms in anything like schedule time. If the work grows in the future as it has in the past, and we believe it will, it will soon get beyond the control of the present staff of inspectors.

The necessity of some uniform system of official records of the production of pure bred cattle is now recognized by all progressive breeders, and

the Canadian Record of Performance has supplied this necessary test. The interests of pure-bred dairy cattle in Canada have been greatly forwarded by the Record of Performance, and any necessary money for the conducting and extending of the work should be forthcoming and granted willingly.

WHY BUY FEED?

"Can I afford to buy grain feed for my dairy cows?" This is a question which many dairymen, particularly those shipping milk to the city, are asking themselves. Short grain and hay crops over a great part of Ontario, makes the buying of feed this winter a necessity with many if the milk flow is to be kept up.

The buying of grain is regarded as a risky proposition by most farmers. A little experience, however, will convince us that by good management we can generally make a profit buying milk feeds for dairy cows in winter. Last winter we came across a case in point. A farmer who was a good feeder, had bought a pure bred Holstein heifer of good breeding from one of his friends, who did not think that buying grain was a profitable proposition. This heifer was producing twenty-five pounds of milk a day. Our grain-buying friend started in to feed, in addition to the ration which the cow had always received, ten pounds of mixed meal that cost him fifteen cents. In just two weeks, the heifer was giving fifty-five pounds of milk a day, the extra thirty pounds of milk being worth forty cents.

Can we afford to feed fifty cents worth of grain to get forty cents worth of milk? Put in this way the question answers itself. All of us can not get such results as this, but we believe that a little experience in feeding bought meals to dairy cows is all that is necessary to convince the most dubious that when necessary buying grains is a profitable proposition.

ANENT SHEEP PRICES

Live stock dealers in Canada have noted a tendency on the part of Ontario farmers to sell out their breeding ewes and go out of sheep altogether. The low price of lambs and the uncertain condition of the sheep market that have prevailed for the last few months in both Canada and the United States has been almost enough to discourage those of us who have held to sheep and have always regarded the sheep as a profitable animal to have on the farm. A closer study of market conditions, however, should convince us that we are parting with our ewes when they are just about to be of most value to us.

The present low price of mutton products is not normal and cannot last. The low prices that have prevailed since last fall have been due to the immense shipments from the ranches of the western states. Those shipments, however, have not been due to large production; they represent liquidation. For the past three

years sheep breeders in the western states have had unfavorable weather conditions. They are now face to face with bankruptcy and are "cashing in" on what stock they have on hand. Leading United States stock papers, such as the Breeders' Gazette, view with alarm this depleting of the breeding stock of that country.

We may confidently look forward to unusually high prices for mutton products in the near future when the market has recovered from the effect of the present large shipments. Those of us who hold on to our breeding ewes will then be in a position to cater to a high market. Let us not be discouraged by present low prices. They are the matter of a few months only.

POULTRY INDUSTRY NEGLECTED

The poultry industry of Canada is in need of more liberal assistance. From being an exporting country of poultry produce a few years ago, we now import immense quantities of eggs each year. So far practically nothing has been done to encourage and assist this industry in the Dominion. Government assistance to the poultry industry has been followed by gratifying results in several European countries.

"Assisting industry" is a common phrase with politicians. That industry be assisted is taken as an axiom of good government in Canada. And do we assist industry? We spend millions of dollars on it. But were a stranger totally unacquainted with Canadian conditions to look over our list of expenditures he would probably come to the conclusion that agriculture was the least important of all our industries, so little is spent in assisting agriculture. If he were to analyse the agricultural expenditures, he would probably come to the conclusion that the poultry industry was of very small value or that it was not in need of assistance.

Neither assumption would be correct. The annual value of our poultry industry runs into millions of dollars. There is no industry in Canada on which a little wise expenditure on educational and investigation work would bring greater results to the country. Mr. Gilbert, the present chief of the poultry department, has always been hampered in his work by lack of funds, and much valuable work has had to be passed over in consequence.

Assistance given to the poultry industry is not charity. It is good business. Our new Premier, Mr. Borden, has already stated that he favors the granting of liberal assistance for the improvement of agriculture. We trust that the new Minister of Agriculture at Ottawa will see his opportunity and influence his colleagues towards using some of the Dominion's revenue in putting our poultry industry on a better basis.

Man, like boys, are influenced by their associations. If you want to develop, cultivate the companionship of men who know more than you do.

The rains of summer are not half as important to crop growth as many of us think. They are only one of three things as important as

Conserving some of summer's soil moisture rains of summer provide only about one-third of the average moisture required for bringing a crop from the germination of the seed to maturity. The moisture that really counts is that which will be laid up in the soil between now and next spring. Any system of management that will increase the water holding capacity of the soil will also increase the size of our crop next year. We can make a good start towards increasing the yields of our crops next year by plowing the fields this fall. The rough surface of plowed land absorbs moisture that would otherwise run off. The water-holding capacity of plowed land is greater than that of land in sod. This is one of the many reasons why in almost all cases fall plowing is preferable to spring plowing.

If you help make a pie and furnish the filling you surely expect a share when it is done. There are some people so stingy they would eat the whole pie themselves if they got a chance. There

are some advertisers so selfish they would take all the legitimate profit from a sale and a lot more besides if they could get it. Such advertisers cannot buy space in Farm and Dairy because we believe in protecting our readers, as indicated in our protective policy published on this editorial page.

Big men are seldom born that way; they grow with their opportunities—and they make more opportunities as they need them.

Potency of Improved Blood

(Breeder's Gazette.)

The improving effects of good blood in any kind of live stock are as sure as day. Young animals of superior character in the community mark the location of every sire of unusual merit. Whenever one can judge of equally excellent females, the number of high-class young stock is certain to be correspondingly large. It is true in this that one can judge of a community or of any stockman by noting the character of stock in the fields.

Although the fact that blood is tall is clearly demonstrated on thousands of farms, the lesson is not quickly learned by the majority of farmers. Location, climate, feed accidents, and many other influences are blamed by unsuccessful stockmen for the mediocrity of their stock, when in reality the trouble is more often with the ancestry. A few may often waste gold by giving it to waste gold, but for every one that does care, but for every one who waste gold care on stock of inferior breeding, a lifetime spent breeding animals from inferior stock will not gain one small fraction of the success that attends a few years of work built on the best foundation stock.

Only a few men stand at the top of animal breeding. All of them go the same way—by faith that blood will tell.

Capital of

W. C. Palmer, N.

Capital is needed as much as in any other business. It is a very expressive condition that a farmer. The new farms should be planned if he does not wish to occupy a small farm. If he does not have equipment it as well as trouble comes when enough to pay for it. He buys more land in equipping the farm. Any policy is a good deal of money, but he buys another store of stock to put on the land will rise in value. Will the store. Will the working the capacity? The goods on the shelves increase in value. Half-worn farm in value as fast as And when it does not due to any effect but will come a greater demand for up-to-date farmers' farms.

It has been found that the best buildings should be put into buildings as into the position of working to of course, differ a great deal from the more than land to successful farm.

The Farmers and

(Grain Grower)

By a very large number of working farmers, provinces have endorsed reciprocal trade with States. It was the farmers who forced the reciprocity into the fore of the issue. They were not in a manner of imitation. They did party but for a price endorsed that principle. They were not fighting Liberal Government have the tariff wall for farmers of the Prairie Provinces. It will compel every special interests to consideration. Had reciprocity been sufficient to overcome the tariff without being hands to party loyalty would have endorsed of ninety-five per cent.

It has been remarked that the farmers might as well as farmers. If the farmers of Canada had fought to did in the Prairie Provinces would have been why should the farmers be discouraged now they cease their effort stronger and more than ever. The power is solemnly a larger percentage than any government. Not often before the federal government. Liberal Governmentments made to raise higher. Had not the farmers met the tariff that time with most the cost of living, and the farmers' tribute factors would have been the same thing will be. The manufacturers a considerable increase

Capital on the Farm

W. C. Palmer, N. Dak. Agri. College.

Capital is needed in running a farm as well as in any business. Land poor is a very expressive term, and it is a condition that too often exists on farms. The new beginner cannot be blamed if he is short of capital. He does wisely in securing a farm, even if he does not have capital enough to equip it as well as he would like. The trouble comes when this farmer makes enough to pay for his farm and then buys more land instead of thoroughly equipping the farm he has. Such a policy is a good deal like that of the merchant who, having goods enough to occupy a small part of his store, buys another store instead of buying more stock to put on his shelves.

This argument might be used—the land will rise in value—and so might the store. Will this bring in more than working the farm to its full capacity? The store with but few goods on the shelves is not likely to rise in value very fast, and the half-worked farm does not increase in value as fast as the well-tilled acres. And when it does go up in value it is not due to any efforts of its owner, but will come as a result of the greater demand for land or because of up-to-date farmers on the surrounding farms.

It has been found from experience that at least one-half as much money should be put into equipment and buildings as into land. This proportion of working to fixed capital will, of course, differ a good deal, yet it gives an idea of the need of something more than land to make the most successful farm.

The Farmers and the Election (Grain Growers' Guide)

By a very large majority the actual working farmers of the Prairie Provinces have endorsed the principle of reciprocal trade with the United States. It was the organized farmers who forced the question of reciprocity into the forefront and when it became an issue they stood to their guns in a manner that challenges admiration. They did not stand for a party but for a principle, and they endorsed that principle in the Prairie Provinces in nearly every rural seat. They were not fighting to have the Liberal Government sustained, but to have the tariff wall broken down. The farmers of the Prairie Provinces demonstrate in a way that will compel every government and all special interests to give them careful consideration. Had the question of reciprocity been submitted to a Referendum in the Prairie Provinces without being handicapped by appeals to party loyalty the farmers would have endorsed it to the extent of ninety-five per cent. of their number.

It has been remarked that the farmers might as well drop their organization. If the farmers in the rest of Canada had fought their fight as they did in the Prairie Provinces reciprocity would have been endorsed. But why should the farmers of the west be discouraged now? Why should they cease their efforts? They are stronger and more influential to-day than ever, and the Government in power is solemnly pledged to grant a larger percentage of their demands than any government ever granted.

Not often before have the farmers been able to secure concessions from the federal government. In 1906 the Liberal Government had all arrangements made to raise the tariff still higher. Had not the organized farmers met the tariff commission at that time with most decided protests the cost of living would have gone up and the farmers' tribute to the manufacturers would have been increased. The same thing will happen to-day. The manufacturers are anticipating a considerable increase in their protec-

tion. The railway companies are planning to prevent the Government from building and operating the Hudson's Bay Railway. The Retail Merchants' Association will fight to prevent the Government passing the cooperative bill. The elevator companies will fight against Government operation of the terminals and all the big packing interests will do all in their power to prevent any relief being given to the farmers through a chilled meat industry.

Now, if the farmers cease their work of organization and education, what will happen? All the big interests will work day and night to prevent Mr. Borden making good his pledge. They believe that they are now in control of the situation. Never was there a time in the history of Canada when there was so much need for the farmers to organize and educate and to make every preparation for mutual protection.

Points About Weaning Foals

Dr. J. G. Rutherford, Ottawa

It is a good plan to teach the foal to eat out of the same box as his dam, and it is astonishing how little tuition, even with very young colts, is necessary when the food is placed within easy reach. For some time also before the foal is actually weaned he should be schooled to drink milk, if there is milk to be had, and it is well to remember in this connection that milk drinking is an accomplishment of no little value for any horse to acquire. Nothing is more advantageous to an animal suffering from any feeble or debilitating disease than the voluntary absorption of milk in lieu of other fluid when the appetite for solids is capricious, or altogether lost.

As regards the diet best suited for young foals, many different opinions are promulgated, but in the experience of the writer nothing is equal to good sound oats, with a moderate admixture of bran twice a day, and a well-scalded, not too bulky, mash of the same materials, seasoned with a tablespoonful of salt, and perhaps a handful of crushed oil cake for the evening meal. Many recommend crushed oats, but repeated trials have convinced the most successful breeders that whole oats are more nutritious, and if properly masticated, as they generally are when fed with dry bran, more easily digested than chopped feed of any kind.

BALTERS BREAKING IMPORTANT

Colts should be halter-broken and taught to lead when yet with the dam, as this renders them much more tractable and easily controlled during the excitement inseparable from weaning, and also facilitates housing when the accommodation is limited, and there are several to be kept together.

Loose boxes are preferable to ordinary stalls for young stock, but provided the stable is clean, airy and well lighted it will do no harm to have them tied at night, taking it for granted that they enjoy for the greater part of every day the freedom of a rooey, and, in winter, well sheltered yard.

This latter point is of very great importance. Your youngster must have a chance to develop bone and muscle, and in no way other than by lots of exercise can he be reasonably expected to properly assimilate the generous diet recommended above, for despite all old-fashioned ideas to the contrary, without this exercise allowance he will not likely be worth to look at when the sun begins to melt the snow in the spring.

When two or more colts are kept together it is better to have them separated at feeding times, or the strongest of the lot will be apt to wax fat at the expense of the weaker.



You Won't Believe It

There's no use telling you over and over again that the

De Laval

CREAM SEPARATOR

will actually save you one hundred per cent. per year on your investment

TRY IT FREE

Then You Will Believe It

And looking back—won't you be sorry.

SEND FOR CATALOGUE

THE DE LAVAL SEPARATOR CO.

175-177 Williams St.

MONTREAL

WINNIPEG

VANCOUVER

It Will Surprise You

When you find out how easy it is to get a friend or a neighbor to subscribe to Farm and Dairy. Mr. E. Burns, Stansell, Norfolk Co., Ont., got 24 new subscribers for us recently on two rainy days.

You may just as well do a real good turn for your friends or your neighbors by getting them to take Farm and Dairy regularly.

DO YOU KNOW

That there is only one important branch to any business knowledge on the farm or anywhere else—"How to Sell".

Because of this fact it will pay to encourage the boys and girls to go out and get new subscriptions to Farm and Dairy. If they learn the art of selling, while young, they will never die poor.

One of our most attractive premiums for you or for them is

\$15 Cash for 25 New Subscriptions

each to be taken at only \$1.00 a year.

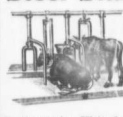
With Xmas time coming on, how nice it would be for you to earn \$15. You can earn it. You can get 25 people in your district to take Farm and Dairy. You can get them in a short while. Perhaps they do not know about Farm and Dairy, so show them your copy of this week.

We have other premiums or a liberal cash commission for you in return for any number of new subscriptions to Farm and Dairy.

Be sure to take them at \$1.00 each. Try your selling ability. Try to-day, or the first day or evening you can get at it.

Farm and Dairy, Peterboro, Ont.

O. K. Canadian U-Bar Patented Steel Stanchions



Are free and easy on the cattle, but strong and durable, being made of high carbon U-bar steel, it is impossible to break or twist them out of shape. Throwing bar will not sag and will not be opened by the cattle. Write for prices and circulars on sanitary Stall and Stanchions.

Canadian Potato Machinery Co., Limited
127 Stone Road, GALT, ONT.

Well DRILLING MACHINES

Over 70 sizes and styles, for drilling either deep or shallow wells in any kind of soil or rock. Mounted on wheels or on sills. With engine or horse power. Strong, simple and durable. Any mechanic can operate them easily. Send for catalogue.

FARM FOR SALE.

160 Acres. Front half of lot 15, Co. 2, 5th Township, adjoining the town-dairy farm for 30 years. Good state of cultivation. For price and terms apply to
JAMES STROTHER,
R. R. No. 4, Peterboro, Ont.

WANTED—FIRST CLASS CHEESE AND BUTTER MAKER for Central Smith Dairy Co. Duties to commence Jan. 1, 1912. Apply stating salary expected and giving references and experience to—
J. A. McCREGOR, R. R. No. 2, PETERBOROUGH, ONTARIO

Water Always at the RIGHT Temperature



and always fresh—automatically supplied with

WOODWARD Water Basins

Save time and labor and increase your dairy profits—see this new way for themselves. Write for free catalogue that shows how.

ONTARIO WIND ENGINE & PUMP CO. LTD.
WINNIPEG TORONTO CALGARY

Cheesemakers Buttermakers

We have a paying side line for you.

Would YOU hustle if it Paid well?

We will make it very profitable for you to call on your patrons during the next few weeks and see them about subscribing to FARM & DAIRY.

Work for spare time OR Steady for the Winter

Write at once to
FARM AND DAIRY
PETERBORO, ONT.

Creamery Department

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

Dairy Methods in Kansas

Editor, Farm and Dairy,—Having been closely associated with dairy work in Canada, previous to 1907, I have been interested in the discussions concerning the different methods used for determining the value of milk and cream as published in Farm and Dairy.

Dairying in Kansas is conducted on what is known as the gathered cream method; that is, a creamery establishes anywhere from a dozen to several hundred stations situated in various towns adjacent to the railroad. At these points they establish an agency and equip the building with necessary supplies for testing and handling cream. The farmers deliver their cream to these places of collection, the agent there pays the farmer for the butter fat and ships the receipts of the day as one lot to the creamery. The creameries hold a check upon the accuracy of the tests made by each operator. They take one representative sample from the entire shipment, the test of the sample multiplied by the pounds of cream received gives the total pounds of butter fat which should be the same as the pounds of butter fat shown by the individual test.

OVER ONE PER CENT VARIATION ILLEGAL

We have a law in Kansas limiting the variation between the butter fat shown by the individual test and the fat the cream actually contains. According to this law the variation between the two must not be more than one per cent. By way of explanation of these sections of law I wish to say that the one per cent variation referred to is on the one hundred pounds of butter fat bought and not the test; for instance, A bought cream from one or more patrons, which cream actually contained 100 lbs. of butter fat, but if by his test he gives the patron credit for less than 99 or more than 101 lbs., the tests would be contrary to the law.

Our law does not demand that the person testing cream shall use the scales. This is unnecessary owing to the provision of the sections mentioned, as no person can accurately check within the lawful limit of variation upon the value of the farmer's cream is determined by a weighed sample. The difference in the specific gravity of cream testing 20 per cent, and that testing 50 per cent, makes it impossible to weigh the sample. Then, too, the condition of the cream when sour or gassy would make it difficult to deliver by pipette measurement the amount that is intended to deliver. Whether or not the cream should be tested by weighed sample by Babcock test is no longer an open question in this state.

The result of the Babcock test is only accurate when the grams weight, or the equivalent thereto, is used (depending upon the style of bottle used). The 18cc. pipette will not deliver 18 grams in weight.

FOR CONVENIENCE IN READING

We have established through this state the use of the nine gram, six inch, 50 per cent. direct reading check the diameter of the neck of this bottle is reduced by one-half, thereby narrowing the limits of the meniscus and making it possible to read the test more accurately. By using a bowl with a capacity of 35cc. on this style of bottle it is possible to add a greater quantity of boiling water at the right time,

which enables one to get a more perfect test.

The only milk and cream that is bought by the gallon is that which may change hands locally for domestic purposes. Our consumers buy milk at so much as 20¢, containing a certain per cent. of butter fat; hence, the price varies in accordance with the per cent. of fat the milk contains. The farmers of Kansas would not tolerate any other method, as they have confidence in the Babcock test.

ABOUT CREAM SCALES

We have experienced a great deal of trouble in getting cream scales that are sensitive enough and at the same time substantial enough to stand the rough usage that they receive. The scales used in determining the charge for the Babcock bottle should be very sensitive, perfectly level and placed upon a solid base made of concrete or some other material that will not be influenced by the vibration of machinery, etc. The reader should be warned by a caveat so that they will not be influenced by wind when in use and when not in use can be covered to protect them from dust or injury. Oil should never be used on cream scales. D. M. Wilson, Dairy Commissioner, Kansas.

Churning—Working—Packing*

L. A. Zujlfit, Supt. Kingston Dairy School

Churning is simply the application of concussion to the cream, which brings two or more of the fat globules together causing them to unite. When sufficient of these have united so as to be visible, we call them granules.

The churning temperature is the temperature at which the globules will adhere to one another. If the temperature is too low, they strike and go by without adhering and the temperature must be raised until the fat is sufficiently soft to stick, the temperature is too high, we are liable not to get an exhaustive churning, the butter will be soft, and an excessive amount of casein may also be incorporated.

No fixed churning temperature can be given. It depends largely on the proportion of the hard and soft fats present and the degree of ripeness and richness of the cream. Each farmer should try to determine this for himself, with this provision—to churn at as low a temperature as is possible, providing it does not take over three-quarters of an hour to one hour to bring the butter. When the churning is completed, the granules should be the size of wheat or slightly larger, not smooth but ragged in appearance.

Sufficient water should be used to wash out all traces of butter milk, and at a temperature to leave the butter sufficiently firm for working.

Working is for the purpose of compressing the granules into a solid mass. Water should be added to the salt and to remove excessive moisture. Salt is added to improve the flavor and add to the keeping qualities of the butter. In working care should be observed that no undue friction be employed as otherwise the grain may be injured and become greasy or salvy.

No other article of food, by its appearance, affects our senses more than does butter. Too much pains, therefore, cannot be taken to make the butter have an attractive appearance. If we are making bricks see that they are square and neatly wrapped. If we are making solid, have the boxes clean and the butter packed solid, without any holes or vacancies in the corners. The air

*An address delivered before the last annual convention of the Western Ontario Dairymen's Association at Perth, Ont.

should be thoroughly excluded and the butter stored in a clean place, where the temperature can be maintained at or near freezing point, to be kept for any length of time.

Discussion on Salting Butter

"One of the difficulties we have as butter buyers is to get a carload of butter evenly salted," said Mr. J. B. Muir, of Ingersoll, at a meeting of creamery men from various points in Western Ontario at Guelph. "The makers will claim that they all use the same percentage of salt, but the difference of the salty flavor in the butter product is wide, although we notice that the salting of butter from the same creamery is uniform." These statements of Mr. Muir led to an instructive discussion on the salting of butter, and we here reproduce some of the ideas of the creamery men present for Farm and Dairy readers to compare with their own methods.

"We estimate how many pounds of butter we will make when the cream is put in the churn. We know the weight of the cream and the percentage of fat. From this we calculate the amount of salt required. The size of the granules and the time allowed to drain affects the salt content of butter. When butter is not well drained there may be enough water left in the churn to wash a quantity of salt out of the butter and uniform salting cannot result."—Jas. McFeeters, Grey Co., Ont.

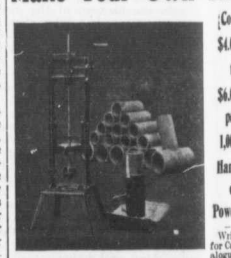
"The condition of the butter when the salt is added affects the moisture content. The larger the gathering of the more salt will be retained in the butter, as there is less free moisture to wash it out."—W. Taylor, Wellington Co., Ont.

"Four to five per cent. of salt added to butter is best for the Canadian trade."—J. B. Muir, Oxford Co., Ont.

"Another feature other than the quantity of salt that we butter makers should pay attention to is the quality of the salt. Some of my salted butter at Toronto last year scored 95 and 96 per cent., while non-salted butter scored 98. The difference was due to bad flavored salt."—R. M. Player, Bruce Co., Ont.

Patrons are standing in their own light when they permit a creamery to start up in a section where there is already one that is giving satisfaction in the hope that by competition they will get more satisfactory terms. Small production invariably means higher cost of production in the creamery business. By encouraging more creameries in a limited section, patrons are causing loss to themselves as well as to the creamery man.—M. J. Lewis, Victoria Co., Ont.

Make Your Own Tile



Farmer's Cement Tile Machine Company
WALKERVILLE, ONT.

Cheese

Makers are invited to this department matters relating to suggest subjects for letters to The Cheese

Cheese Facts

Cheese factories are increasing in business; they have dairying which "is" was often similar that broke the car ways had plenty of husband, son. When in addition make butter than work in summer at the pans or creamer bowl, and the that enter into far almost more than

Now the milk is in the cans and factories will be in the supply in the bottom of a for household purposes of big 30-gallon 10 minute comparison with under the old system. If there is any Canada who should factories with growth on the Hastings Co., Ont.

Maker Boosts

J. J. Hogan, an Imperial factory is an impressive machinery in combining cheese or butter for four years with ing. His own used for the first time to cool the room and thing like the results of the cheese that ice in two large pans out of the room; it is full of ice hung from there through. The results, however compared with the cooling or in the shrinkage or in the cheese.

It cost us four hundred dollars. Our make 2000 lbs. of butter. The cost was about \$24 chamber. It might other factories, as miles. From the river the cutting ourselves \$2 a day for man their board. I believe our plant in shrink seasons.

GREAT IN NOVEMBER. In the four months ther we consider that 25 per cent. better previously. In the the weather is very our ordinary cow rooms are just

FOR SALE AND W.

TWO CENTS A WORD, CHEESE FACTORY I. For sale or rent. Building almost new. Making cheese surrounding country. Interested financially. If you have amount money needed are going to reside in day: Right opportunity now for less than he

Cheese Department

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

Cheese Factories a Blessing

Cheese factories are an unmixed blessing to the women folk on the farm; they have freed us from home dairying which "in the good old days" was often similar to that last straw that broke the camel's back. We always had plenty to do with housework and feeding the hungry maws of husband, sons and hired men. When in addition to that we had to make butter three or four times a week in summer as well as to wash up the pails and creamers, the churn, butter bowl, and the numerous utensils that enter into farm dairy work, it was almost more than we could stand.

Now the milk is taken from the cows to the cans and in the cans to the factory. All we ever see of it in the house is the supply that is brought in the bottom of a bucket to be used for household purposes. Washing a couple of big 30-gallon cans is only a matter of 10 minutes or so, and, in comparison with the work entailed under the old system, is nothing at all. If there is any class of people in Canada who should look on cheese factories with great favor it is the women on the farm.—"One of Them," Hastings Co., Ont.

Maker Boosts Cool Curing

J. J. Hogan, Peterboro Co., Ont.

A cool curing room in a cheese factory is an important part of the machinery in connection with making cheese or butter. I made cheese for four years with the ordinary curing room. I used about one-half of the ice then that I do now, trying to cool the room and didn't have anything like the results in the quality of the cheese that I get now. I had ice in two large pans, one at each side of the room; also several bags full of ice hung from the ceiling here and there through the curing room. The results, however, were not to be compared with those obtained from cool curing either in saving in shrinkage or in a better quality of cheese.

It cost us to install our cool curing plant four hundred and sixty dollars. Our make of cheese at that time was about 80 tons a season. It costs us about \$20 to fill our ice chamber. It might cost more at other factories, as we are only two miles from the river and do most of the cutting ourselves. We figure on \$2 a day for man and team with their board. I believe we paid for our plant in shrinkage alone in two seasons.

GREAT IN HOT WEATHER

In the four months of warm weather we consider that our cheese are 25 per cent. better in quality than previously. In the fall and spring the weather is very changeable, and under ordinary conditions curing rooms are just as changeable;

FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD, CASH WITH ORDER

CHEESE FACTORY AND CREAMERY—For sale or rent, Western Ontario. Building almost new. Near town. Big price for making. Large, rich level surrounding country. Some farmers are interested financially and will double their cows if cheese is made. Small amount money needed to secure it. Owner going to reside in west permanently. Very light operation. Will be sold at one for less than half value. Write to day.—Box 650, Farm and Dairy.

cheese, therefore, are not properly cured and are not worth as much money as cheese cured in a cool curing room, where the temperature does not vary more than five or six degrees from spring to fall. Any one who knows anything about cheese, especially anyone who has had practical experience with both ordinary and cool curing rooms, will bear me out in this.

THE MANUFACTURER'S SIDE

Then consider, as manufacturers, our side of cool curing. It is a comfort to know that if our cheese are properly made and placed in a cool curing room, where we have the temperature under control, the cheese are going to go off our hands in good shape. With an ordinary curing room we may make our cheese as well as they can be made, but if put in an ordinary room and a week or 10 days' hot weather should come along, as is often the case, what are the cheese like? The grease is often running down on the floor. The off flavor. It is "up to" either the cheese maker, the proprietor of the factory, or the patrons to pay the luts on the cheese. A few of these cuts would go a long way towards installing a cool curing plant. I consider that the cost of our plant was money well spent.

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

Whey a Source of Contamination

R. W. Ward, Peterboro Co., Ont.

I most decidedly object to the practice of carrying whey in the milk cans. Whey is as clean as milk, say some, but it does not work out. Those of us who have seen the whey running over the floor in the cheese factory would hate it in preference to milk even were it as agreeable to the taste. Putting the whey in the milk cans, therefore, does not clean them. It is a source of contamination.

The actual dirt in the whey, however, is not the great objection that I have to taking it home in the cans. Whey is a carrier of injurious bacteria. If in a factory with 60 patrons only one patron has milk in which is a dangerous fermentation, carrying the whey the milk cans may spread this fermentation to the whole section. In one section of Eastern Ontario some years ago all of the factories had to be closed up. Good cheese could not be made. The chief dairy instructor visited the factories and the premises of the patrons and ordered a thorough cleaning up, also the abolishment of the practice of carrying the whey in the milk cans. The factories then opened up and there has been no further trouble. Pasteurization would have to be most thorough to obviate this danger; more thorough than most cheese makers can be depended on to do it.

To know and not to know often

"PURE BRED"
SHARPLES
Tubular Cream Separators

Tubulars are "pure bred" because logically built on a principle absolutely different from all others. No disks. Double skimming force. Wear a lifetime. Guaranteed forever.



Others driven by Tubular super- only, attempt to imitate our low supply can or self oiling system, while being absolutely prevented by law from imitating the modern tubular principle. "Cross bred" separators—nine parts old style and one part imitation—are being discarded. Write for catalogue 23.

30 yrs

THE SHARPLES SEPARATOR CO.
Toronto, Ont. Winnipeg, Man.

make the divergent point on the roads to success or non-success. The dairyman who knows what each individual cow in his herd is doing will weed out the unprofitable ones and raise the heifers from heavy producers. There is no way in which this can be so well and easily accomplished as through the Cow Testing Associations. —C. F. Whitley, in Charge of Records, Ottawa, Ont.

READ ABOUT THIS
BIG SKIRT BARGAIN

"THE LEADER"

A LADIES' STYLISH VICUNA SKIRT OF FINE QUALITY

Great pains have been taken to secure this leading BARGAIN. The skirt is seven gored, pleated back. The gore on each side of the front panel is a direct copy of the Parisian Models. The gore twenty-three inches from the waist line crosses to the front panel with a tailor-stitched hem, above which is trimmed with two straps of taffeta silk, finished with silk buttons. From this point down to the bottom the gore is made with two deep pleats, and each inside seam is piped and finished. Colors black and navy. Stock sizes only.

\$1.90 POST PAID

STOCK SIZES

BAND 23, 24-25, 25-26, 26-27, 27-28 28-29-30
LENGTH 38, 39, 40, 42, 43, 43

NOW THEN

We want you to see our big Fall and Winter Style Catalogue. It is a work of art, and shows the very latest in Ladies and Children's Wear. Also, a beautiful line of Furs.

IT IS FREE FOR THE ASKING

And you should get one without delay.

We are the people who make your Suit or Coat to your own measurement, guarantee a fit or refund the money.—
Everything Prepaid.

DO IT TO-DAY — YOU MIGHT FORGET TO-MORROW

MONTGOMERY ROSS & CO.
MONTREAL



M 1054—"THE LEADER"



A HOUSE BLESSING
THE beauty of the house is order. The blessing of the house is contentment. The glory of the house is hospitality. The crown of the house is Godliness.

The Second Chance

(Copyrighted)

NELLIE L. McCLUNG

Author of "Sowing Seeds in Paper"

(Continued from last week)

Pearl, the eldest daughter of John Watson, a C. P. R. section man living in Millford, Man., receives a large sum of money from the relatives of a young Englishman she had nursed when ill. She decides to educate herself and the rest of the family. The Watsons are joined by their Aunt Kate, who proves not an unmitigated blessing. Pearl proves an efficient and clever scholar and has dreams of being a school teacher. She sees that her small brothers are learning bad habits in the town and gives up her ambition to be a school teacher and suggests moving the family onto a farm, to which John Watson agrees. We are introduced to the children at a country school. Tom Steadman, a bully, in a game of eblany, intentionally strikes with his club Libby Anne Cavers, for which he is thrashed by Bud Perkins. Libby Anne does not dare to say the blow was intentional, as her father owns Mr. Steadman money. Bud Perkins is angry, but forgives Libby Anne, as he understands the circumstances. In the meantime the Watsons are getting established on their farm. The Watson family begin to attend the country school. Pearl becomes anxious about the spiritual welfare of the people.

MRS. DUCKER was the president of the Ladies' Aid Society, and given to serious thinking; so when she read an article in the "Fireside Visitor" dealing with the relation of the minister's wife to the congregation, she was seriously impressed with the fact that the congregation was suffering every day by not mentioning the minister's wife on the ground. Mrs. Ducker thereupon decided that she would bring the matter forward at the very next meeting.

Now, it happened that the "rubberman" came to Millford the very day before the Ladies' Aid meeting was held, which may seem to be a very unimportant and irrelevant fact; but it really had a significant bearing on that meeting of the Ladies' Aid, for little John Thomas Forrest, dazzled by the offer of three lead-pencils for two rubbers, sold his mother's only pair, and being a cautious child, and not fond of disputatious conversation, did not mention the matter to his mother, but left her to discover her loss herself, which she did the day of the meeting.

It was a sloppy day in November. Mrs. Forrest had a cold, and she could not walk away over to Mrs. Ducker's without rubbing her nose. Mrs. Forrest did not go to the meeting. If Mrs. Forrest had gone, she would have, beyond doubt, raised objections. She always did, and usually very successfully.

But when Mrs. Ducker, after the business was over, breathlessly declared that she thought Mrs. Burrell should come and join her husband, she found Mrs. Francis and Mrs. Bates quite imbued with the same idea, for they likewise were subscribers to the "Fireside Visitor." Mrs. Francis also gave prominence to the fact that Mr. Burrell needed someone to take care of him, and she had been in that way very day without his rubbers. Having no children of her own, Mrs. Francis did not know that the day after Mrs. Francis had been in town quite a few people were care- less of their health either, but because

they had thoughtlessly left them in the front porch, where little boys can easily get them.

Half an hour after they began to discuss it, everybody felt that not only was the church suffering severely



The Home of One of Our Prize Winning Farms

The house here illustrated is the home of E. Budd, Northumberland Co., Ont., who has secured fourth place in the No. 3 of the Dairy Farms Competition conducted by Farm and Dairy. The park surrounding the house, eight acres in extent, is planted to evergreens and oaks. The house was built by a retired officer as a country seat and represents an expenditure that would be impossible on most of our farms.

Photo by an editor of Farm and Dairy.

By that they had been the unconscious witnesses of a domestic tragedy. They formed a committee on "ways and means," another one to solicit aid from country members, and a social committee to get up a pie social to buy a new stair-carpet for the parsonage, and they appointed Mrs. Francis and Mrs. Ducker to approach Mr. Burrell on the subject of his wife's coming.

The unconscious object of their solicitude was quite surprised to receive that evening a visit from Mrs. Francis and Mrs. Ducker. Reverend John Burrell did not look like a man who was pinning for the loved and lost—he was a small, fair man, with a pair of humorous blue eyes. A cheerful fire was burning in the Klon-

dike heater, and an air of comfort pervaded his study.

The ladies made known their errand, and then waited to see the glad look that would come into their pastor's face.

He stirred the fire before replying. "It is very kind of you ladies to think of fixing up the parsonage," he said. "Mrs. Burrell is having a very pleasant time with her mother in Toronto."

"Yes; but her place is here," Mrs. Ducker said with decision, feeling around in the shadowy aisles of her mind for some of the "Fireside Visitor's" arguments. "It is lonely for you, and it must be for her."

Mr. Burrell did not say it was not.

Mrs. Francis was filled with enthusiasm over the idea of fixing up the parsonage, and endeavoured, too, to give him some of the reasons why a church prospers better spiritually when there is a woman to help in the administration of its affairs.

When the women had gone, the Reverend John Burrell sat looking long and earnestly into the fire. Then he got up suddenly and rattled down the coals with almost unnecessary vigour and murmured something exclamatory about sainted womanhood and her hand being in every good work, though that may not have been the exact words he used!

The work of remodelling the parsonage was carried on with enthusiasm, and two months later Mrs. Burrell arrived.

Mrs. Ducker, Mrs. Francis, and Mrs. Bates went to the station with Mr. Burrell to meet her, and were quite surprised to see a large, handsome, auburn-haired woman, carrying two valises, alight from the train, and greet their minister with these words: "Well, John Burrell, I declare if you aren't out this raw day without your overcoat, and you know how

told Pearl to have a seat in the par- lour.

When Mr. Burrell came in he was pleased to see Pearl, who said in response to his friendly greeting: "We're doin' fine, Mr. Burrell. We're goin' to have a crop and potatoes, and lots of things. There's seven of us goin' to school and teaming."

And she went on to make a list of Jimmie's long division. "I'm just finishing 'The Lady of the Lake,' Danny's doing digits, that's another name for figures, Patsy's readin' at the Sweet Pea lesson, who ten of the basket weavers."

That's all right, but there's no church or Sunday-school. We left town to get a better chance to bring up the boys right, and the farm is fine only for what Mr. Burrell," she every Sunday the other children trap gobbers, and the people sleep or visit. I do be hearin' them tellin' about it at school, and last Sunday, mind ye, we went out and Buey wanted to make a kite, and of course ma wouldn't let them, but Jimmy up and says—he was in it, too, do you mind—he says: "Let's make it out of an 'Onward,' and that will be all right; sure that's a Sunday paper."

Mr. Burrell laughed sympathetically, but shook his head, too; so Pearl knew he was with her on the proper observance of the Sabbath. "I'm worried about Danny—he's all right and deep—'ever a child should be learnin' 'verses he's the van. Yesterday he hit his thumb when he was hammerin' in the little hammer, and instead of just yellin' and stickin' his finger in his mouth the way he did before, he said right out plain—well, you know what the beavers build to broaden out the water?"

"Is it as bad as that, Pearlie?" Mr. Burrell asked in a shocked voice, which was contradicted by the twinkle in his eye.

"It is," Pearl answered, "and I was wonderin' if you could come and preach to us on Sunday afternoons, and encourage them to get a Sunday-school. There's lots of room in the school, and there's a fine big shed for the horses if you're raisin' 'em, and there's no need of so many services here," she concluded with alarming frankness. "What I mean is," she explained in answer to his look of surprise, "there's lots of churches here, and all kinds of preachin' goin' on, with only a few scatterin' people out at each one."

Mrs. Burrell came in hastily and listened to the conversation.

"How far out is it, Pearl?" Mr. Burrell asked.

"About five miles, I think; just a nice drive for you and the missus."

"Does she want you to take another country appointment, John?" Mrs. Burrell asked; and Pearl noticed for the first time that her hair was just the colour of their horse's home—the one that was cross.

"That was Pearl's suggestion," he answered. "It was raining."

"Well, indeed, he is not going to do any such thing; I should say not," and Mrs. Burrell shut her mouth with a click. "And, besides, nearly every Sunday it rains."

"Well, that's good for the crops," said Pearl, thinking of the twenty acres of wheat in front of the house and of the oat field behind the bluff; "and, besides," quoting a favourite axiom of her mother's, "he ain't sugar or salt, and he won't melt."

"Well, what would happen out congregation if we had only one service a day? They would all be glad to go."

"That won't hurt 'em," Pearl said hopefully. "They'll get good sermons from Mr. Grantley."

Mrs. Burrell could not think of what she wanted to say.

(Continued Next Week)

The Upward

What We Mean

Beloved, if our hearts are not here, then have we come to God. And when we have the assurance of Him, because of His commands, and that are pleasing, John 3, 21, 22.

The statement in this department in the past few months has been willing to give us the time to overcome the things that beset us.

prevent us from our spiritual and missionary lives have to God's service do.

ceive great earthly for their efforts on the mission of God's.

here below. Their Christ when He was tended to show the important things that are more acquiring of having of a good and women are lay selves treasures in earth. But even my families, but that of which trust is in God expect that God will they are provided things for themselves.

turnish liberal and of money for the work here below.

When we pray for purposes, how ever, that our mind pure, and that it is glory that this is at this point there are many of us, even in our churches.

for instance, pray required to enable to handsome new edifices, and even of which he glorified by all unconsciously, that the real reason to pray is a congregation may commodious building or rival congregations, in the case of which he can succeed in talk about how successful in his work, and lead to his being of larger congregations, our inmost thoughts.

Whence of such prayer, if he be disappointed, if he be victorious, such a motive a.

When, however, we pray for such blessing as we may, that we may know and we that our prayers work. To doubt, it means it to dishonour this way that the frequently when God would lead us, and unexpected of them for the work.

Those of us who are engaged in professional duties, mothers, have the best blessings, but have the assurance hearts are right we feel that humble

The Upward Look

What We May Pray For

Beloved, if our hearts condemn us, then have we confidence towards God. And what shall we ask we request of Him, because we keep His commandments, and do those things that are pleasing in His sight.—1, John 3, 21, 22.

The statement has been made in this department frequently during the past few months, that God desires to give us good gifts, and that He is willing to give us the power we need to overcome the difficulties of all kinds that beset us. Sometimes these prevent us from obtaining material and spiritual blessings. Ministers and missionaries and others whose lives have been consecrated to God's service do not expect to receive great earthly wealth in return for their efforts on behalf of the cause of God's spiritual kingdom here below. Their lives, like that of Christ when He was on earth, are intended to show that there are more important considerations than the mere acquiring of wealth, and the having of a good time. Such men and women are laying up for themselves treasures in heaven and not on earth. But even ministers and missionaries and Christian workers, whose trust is in God, have a right to expect that God will not only see that they are provided with all essential things for themselves and for their families, but that on occasion He will furnish liberal and even large sums of money for the extension of His work here below.

When we pray for money for such purposes, however, we must be careful that our motives are absolutely pure, and that it is solely for God's glory that this money is needed. It is at this point that Satan deceives many of us, even ministers. Ministers and church members sometimes, for instance, pray for the means required to enable them to build a handsome new church, or to enlarge their present edifice. They tell themselves, and even believe, that God will be glorified by their so doing. All unconsciously, however, it may be that the real reason which impels them to pray is a desire that their congregation may worship in a more commodious building; that neighboring or rival congregations, or a belief, in the case of a minister, that if he can succeed it will lead people to talk about how successful he has been in his work and that, perhaps, lead to his being called to some still larger congregation. God, who reads our inmost thoughts, knows the holiness of such prayers, and we need not be disappointed or surprised; therefore, if petitions impelled by such a motive are not answered. When, however, we are led by God to pray for such blessings and we know, as we may, that it is God who is impelling us to pray, then, we may know and we may rest assured that our prayers will be answered, if we will but do our part and trust and work. To doubt, under such circumstances is to dishonor God. It was in this way that the Israelites sinned so frequently when they doubted that God would lead them into the promised land, simply because some new and unexpected difficulty confronted them at the crucial moment.

Those of us who are farmers, or who are engaged in business or in professional duties, or are wives and mothers, have the same right to expect blessings from God, when we have the assurance within us that our hearts are right with God. When we feel that humble though our duties

may be they are what God has willed us to do, and when we are ready at all times to undertake gladly to perform still more humble duties, as Christ taught us we should be when He washed the feet of His disciples, or still harder ones, as He again taught us that we should be when He set up an example by going to death on the cross, then we may know that we are working in harmony with God and that He will be glad to bless all our efforts on His behalf.

If under these circumstances we know that we would gladly become ministers or missionaries, or servants or laboring men or women if God called us to such service, but we feel that God has called us to be business men or farmers or housewives, then we may rest assured that as long as we are doing His will He desires and expects us to obtain a due measure of success as farmers or business men or as wives and mothers. If we are not progressing and honoring Him in the performance of our duties, then we had better get down on our knees before Him and ask Him to reveal to us the sin that is hindering us from receiving the blessing we desire, not that we may be exalted, but that He may be glorified.

A farmer who is a professing Christian, but who farms in a careless, un-



Out with the Sheep and Lambs for Their Pictures

Mr. Sandy Matchett's little girls, who live in Peterborough, Ont., may here be seen as they are captured unexpectedly by the camera after they had rounded up the sheep and lambs for an editor of Farm and Dairy.

thrifty manner, is not as good a Christian as he should be. Neither is the Christian business man who neglects his business, or the Christian doctor who does not keep himself posted in regard to the latest advances in the practice of medicine, or the Christian mother who does not exercise wise and firm control over her children, and in the management of her household. God will give us the wisdom and strength to perform all such duties wisely and well if we will but trust His promises and strive through Him to perform His will for us.—I, H. N.

Laundry and Creamery

Laundries operated in connection with creameries promise to relieve the farmer's wife of that bugbear—the weekly washing. A laundry might be a profitable sideline to a creamery. The following from a U.S. publication will be of interest:

We notice that 250 farmers in a Minnesota community have installed a first-class laundry in connection with their creamery and it is estimated that the washings can be done for the patrons at an average cost of \$1 a month.

Just think what this means in the way of removing from the home one of the heaviest drudgeries! From the standpoint of health and sanitation there is not one home in 50 in which the washings can be done through the winter months without being a menace to the health of that household. There is not a graveyard in the land that does not contain several mounds that can be

directly traced to the blue Monday. The combined creamery and laundry is sure to become popular, and when it does housewives and daughters may well be pardoned if they sing hymns in honour of their emancipation from a work of drudgery.

The Golden Opportunity

Among the persons who have recently made provision for old age when it comes are two sisters, aged respectively 33 and 34 years. They had purchased from the Canadian Government a Last Survivor Annuity, that is an annuity which will give them together an income of \$600 a year so long as they both live, and to be continued to the survivor so long as she lives. The cost of this annuity, \$3,645.65, had been invested at five per cent, and had brought in less than \$185 annually, with the difficulty and annoyance of investment. The annuity becomes payable when the younger sister attains the age of 55, and should both die before that time the purchase money will be refunded to their heirs with three per cent interest.

Each is now earning her own living, and the sum paid is the fruit of their labours for a number of years. They were thus able the better to appreciate their splendid opportunity. A card of enquiry addressed to the Superintendent of Canadian Government Annuities, Ottawa, will secure for you any information you desire on the subject.

The Housewife and the Fly

By Adalena F. Dyer.

"Don't come into my parlor," said the Housewife to the Fly.
"There's a screen at every window, and your entrance I defy.
There are microbes in your footsteps and a crust upon your head.
Which, if not so microscopic, would fill our hearts with dread.

"You carry germs of typhoid and diphtheria consumption's lane,
And our sanitary teachers paint your crimes in language plain.
Don't come into my parlor; and for safety I would pray.

If you straggled into my dining-room upon some sunny day.

"There are seeds of vile distempers hidden in your tiny wings,
And your many feet have travelled over nameless filthy things.
You're a menace to our safety, you are powerful though small,
And the mischief your accompish would the bravest heart assail.

"If you enter, I have poison all prepared for you to eat,
And paper, spread to tangle your germy-laden wings and feet.
I will poison, trap, or smash you if you do not leave my door;
For our modern sanitation will endure your calls no more."

Household Truths

Some men think that they are doing a great deal toward remedying this world's wrongs by reciting them.

The men and women who are lifting the veil upward and onward are those who encourage more than criticize.

It is as much the test of discipline to wash or mend a net on the shore as to catch a great draught in the open sea.

There's nothing comes without calling in this world, and after you're called you generally must go and fetch it yourself.

Whoever looks for a friend without imperfections will never find what he seeks. We love ourselves with all our faults; we should love our friends in like manner.

WHY?

Why go through all that old time torment getting ready, slow and tedious work, to give away at

CHRISTMAS

You can get serviceable and acceptable presents for your friends and relatives much more easily than heretofore you have gotten them.

Do a real good turn at the same time to others by seeing them and getting them to take Farm and Dairy for a year. Then claim the premiums we offer and use them for Xmas presents.

Our premiums will delight you and your friends. Women folks find it easy to get subscribers for Farm and Dairy, so you will have no trouble to get us a nice lot of new subscribers such as will entitle you to several premiums.

Women's Kitchen Friend for 2 New Subscriptions to Xmas Christmas, 10¢; a Repeating Alarm Clock for 5¢; a Repeating Alarm Clock for 10¢.

Write us about other useful articles we have for you, and about our CASH Commissions.

FARM AND DAIRY
PETERBORO, ONT.

SPECIAL

This Handsome Guaranteed

FOUNTAIN PEN

FOR YOU

Special arrangements have been made whereby we can give our readers during the next few weeks while our special campaign is on one of these elegant Fountain Pens, exactly as pictured.

For Only Two (2)

New Subscribers

to

Farm and Dairy

taken at

Only \$1 a Year

The illustration is an exact full size reproduction of this Pen. It is pearl mounted with two handsome gold bands, fitted with a solid 14 kt. gold pen and safety pocket clip. Every pen is guaranteed by the manufacturers to give absolutely satisfactory service in every particular, and will be replaced or satisfactorily adjusted in the event of any dissatisfaction within one year. A guarantee certificate goes with each pen.

This excellent pen will repay you handsomely for the little effort it will require to get two people to subscribe to FARM AND DAIRY.

We have a very good fountain pen as a premium for only one new subscriber taken at \$1 a year. The pen is guaranteed by the manufacturers to give absolutely satisfactory service in every particular, and will be replaced or satisfactorily adjusted in the event of any dissatisfaction within one year.

The Boys and Girls would be tickled to earn one of these Pens. Tell them about this offer.

FARM AND DAIRY
PETERBORO, ONT.



The Boy—Why He Leaves the Farm

John G. Dickinson, Perth Co., Ont.

Some time ago a number of boys, farmers' sons in particular, started to study in the Manual Training School of Stratford. May I ask: "What prospects have these boys, or what are

they going to receive in return for their studies?" Many who are engaged in studies in colleges, universities or technical schools are there for the hope of obtaining good positions in later years, or a fairly decent wage or salary at the end of their working terms.

What does the farmer pay his son? Next to nothing in the majority of cases. And still they wonder and pull a long face if they find upon waking up some morning that the boy has packed up and gone. I say it serves them right. I have known farmers pay their hired men \$25 to \$35 a month and during harvest time as high as \$2.75 to \$3.00 a day. The son has a hard time if he can so much as secure a dollar a week or occasionally that a month. I know of instances where the son has a little tobacco money and his church money at the week end. The farmer also promises his son the farm when he dies. There are few boys these days with any ambition at all who will stay at home and put up with these conditions. Is it any wonder that they go to large cities where \$5.00 a week looks good to them with work not nearly so hard? If they secure work as helpers in a foundry, or as packing and shipping clerks in large establishments and receive \$1.50 a day, they think they are on the road to fortune. Many whom I know are willing workers and have no trouble to obtain \$12.00 a week, pay \$3.50 for board and 25 cents for washing and have a fairly good balance left. Then they can attend the Music Hall or the show. These amusements seem to them a great attraction for this class of men and no wonder.

Farmers, pay your sons. Treat them as you treat the hired man in the matter of wages. Do not be mean. Show some encouragement to stay with you and manage your affairs right. Offer them the first year a dollar a week after leaving school. If they are of service to you raise their pay each year. If at the end of a couple of years they are as valuable as a hired man, pay them accordingly. Then they will not want the city life. They can pay a visit to the city because they have the means. They will be glad to return home and secure their \$25, \$30 or \$35 and all found except their clothes. This is the secret of keeping your sons on the farm. Don't be a slave or nigger driver. Make some set hours some days in the week for work to be done. Don't make chores for them up to eight and nine at night and they expect them

Household Jots

When washing out glass and a little ammonia to the suds. This gives a brightness to the glass that nothing else can.

To set green, blue, lavender and pink colors in wash goods soak in alkali water before washing, then pour in a tub of water.

A kitchen golden rule is to clean as you go, and so save unnecessary labor and fatigue.

To get an obstinate glass stopper out of a receptacle, tap it around with another glass stopper.

A simple remedy for mths is to place white cloths among the clothes or pieces of cotton wool or lint saturated with oil of clove.


Never leave a metal spoon in a saucepan if you wish the contents to boil quickly, for the spoon is the

Water Supply in

The survey made on Lands of the Government in Canada farms in the various Dominion—an average of 100 farms for each covered the fact that per cent. of the farm

Well, Well!

THIS IS a HOME DYE that ANYONE can use



I dyed ALL these DIFFERENT KINDS of Goods with the SAME Dye. I used

DYOLA

ONE DYE FOR ALL KINDS OF GOODS

CLEAN and SIMPLE to Use.

NO chance of using the WRONG DYE for the Goods you wish to color. All colors from your Druggist or Dealer. FREE Color Card and STORY Booklet by The Johnson-Richardson Co., Limited, Montreal.

It Is Worth The Difference

costs the dealer more than ordinary sugar, but it is worth the difference.

St. Lawrence Sugar

St. Lawrence

"Crystal Diamonds"

are absolutely the perfection of sugar refining—brilliantly clear and sparkling—and an ornament to every table.

Ask for "St. Lawrence Crystal Diamonds"—in 5 pound boxes—also sold by the pound.

The St. Lawrence Sugar Refining Co. Limited
MONTREAL 30

"THE TWEED" SANITARY LIQUID CHEMICAL CLOSET

"The Tweed" is a Sanitary Liquid Chemical Closet which can be installed in any dwelling without water works or plumbing.

It is perfectly odorless and with ordinary care one attention will last for years.

Nothing to get wrong or put out of order.

No self-respecting father or husband would permit his wife or children to use a "death trap" after he reads this announcement.

The Tweed Sanitary Liquid Chemical Closet brings health and happiness to all rural dwellers.



A DEATH TRAP
The greatest death trap ever invented by man is unsanitary, draughty and disgusting out-of-doors closets.

Dedicate women and tender-hearted men to go all winter into a cold barn of a place called a closet and they become very easy prey to disease germs. Colds are frequent, tuberculosis often finds an end to a precious life which might have been saved if they had known of and used the Tweed Sanitary Liquid Chemical Closet. Write for particulars to-day.

Send for Pamphlet

TWEED CLOSET CO., TWEED, ONT.



Everybody Works, even Father.—A Fall Scene on Glenock Farm

When the camera is around who would not get interested? The photo for this illustration was taken on Mr. J. S. Anning's farm in Grey Co., Ont.

to be out in the morning at 7. This also applies to other members of your family, who wish they had never seen a farm.

The farmer of to-day,—his only object is to save, grind and save and then retire, a most miserable specimen of a citizen he makes when he goes to town. He is himself out of place. He votes all live movements down, because he may have to pay a few more taxes and then bewails his lot, grumbles at prices and forgets how he made his miserable fortune such as it is. He boasts of how he worked himself and forgets the labor and the miserable time his daughter had to secure a yard of ribbon and finally the slave he made of his son. (A conclusion learn to live, stay on the farm and be happy.)

Note.—Mr. Dickinson's remarks hit home in too many cases but most decidedly they do not apply in general. What have our readers to say about the points raised in this article?—Editor.

Awakening the Farm Women—I am convinced that the reason why the women of the town have made more advancement than their sisters in the country is because they have had better social advantages and have taken a hand in the matter and banded together for mutual betterment. It has been a matter of environment, and not natural ability. How often, as I have seen present at meetings of farmers, and noticed timid women slip modestly into back seats and drink in with much eagerness the new theories about plowing and silos and all these important matters regarding farm improvements, have I thought that little did we realize the latent powers that lay within the breasts of these women; powers only needing the awakening touch to bring into existence thoughts and plans that would revolutionize the conditions in rural communities, beginning with the women themselves.—Mrs. John T. Burns.

means of carrying off a great deal of heat.

Always keep on hand a sheet of clean glass to protect sittings or jellies from dust or germs when placed on a window sill or outdoors to cool.

Most mothers find it hard to put on the children's overshoes. If you will use a shoe-horn, you will find that there is no trouble and will save many fingers from being bruised.



There is no need to place the cover of the COX NEAR BALL BEARING WASHER at dripping wet on the kitchen floor, because it is hinged and will open the water drips back into the machine.

No post is the centre of the tub to raise the clothes and take up the room.

Made of Cypress Lumber, and built to last a life time.

Easy to work Runs on Ball Bearings and will wash anything from handkerchiefs to blankets.

Why should you struggle in the same old way, when you can get it half the time and with half the labor by using Coxon Ball Bearing Washer.

Write to-day.

J. H. Connor & Son
OTTAWA, ONT. Limited

CAPABLE OLD COUNTRY DOMESTICS

carefully selected, arriving weekly. Apply now. The Guild of Ironmongers, Montreal, or 36 Park Street, Toronto.

Be F
or ba
P

SOME
CITY
about
to be fair
FLOUR



you
Su
rest
ob
usin
isting ex
high-grade
best West
berries.
And reme
account
strength
ity, PUR
requires m
shortening
accustom

"More
Buy a bag
it for a wa
Add PUR

Water Supply in Farm Homes

The survey made by the Committee on Lands of the Commission on Conservation in Canada in 1909 of 985 farms in the various provinces of the Dominion—an average of rather more than 100 farms for each province—discovers the fact that only about 10 per cent. of the farmers have running

water in the kitchens, most houses depending on wells at some distance.

One of the means of conserving time, strength and pride in their houses, of the women in rural homes, would be the provision of an adequate supply of pure water on tap in the house. In most cases, including the cost of a windmill where that is the best power, the cost need not exceed

\$125, including power, tank and piping.

The drinking of impure water has the effect of depressing the vitality of the whole family, making them more liable to disease and resulting in loss of efficiency. These are evils in addition to the occasional cases of fever, which come from drinking well water into which the seepage from house or stables has found its way.

Real Education for Girls

Every girl should be so educated that if called to fill the position of wife and mother, she may preside as a queen in her own domain. She should be fully competent to guide and instruct her children and to direct her household affairs. It is her duty to understand the mechanism of the human body and the principles of hygiene, the matters of diet and dress, labor and recreation and a countless other things that intimately concern the welfare of her household.

Many women accounted well educated, having graduated with honors at some institution of learning, are shamefully ignorant of the practical duties of life. They are destitute of the qualifications necessary for the proper regulation of the household, and hence essential to its happiness and well-being. They may talk of woman's rights and her elevated sphere; yet they themselves fall far below the true sphere of woman.

THE COOK'S CORNER

Recipes for publication are requested. Replies requesting cooking receipts, etc., gladly answered upon request, to the Household Editor, Farm and Dairy, Peterboro, Ont.

PUDDING—APPLE AND LEMON

Four eggs, whites of three to be kept for the top; six apples stewed or grated fine, four ounces of butter, six ounces of white sugar, juice and rind of one lemon. It is nice cold.

OATMEAL GRIDDLE CAKES

One cup oatmeal, one cup flour, one teaspoon sugar, one teaspoon good baking powder, one-half teaspoon salt; sift the baking powder in with the flour; add cold water to make a batter of the consistency of buckwheat cakes; beat very well together and bake immediately. This receipt is sufficient for a family of three.

ORANGE CAKE

Two cups of flour, two cups of sugar, one-half cup of water, two teaspoons of good baking powder, yolks of five eggs, whites of three, bake like jelly roll. Dressing: Whites of two eggs, grate the rind of two oranges, add the juice, sugar to thicken; put this between the cakes and set back in the oven for a minute.

CHOCOLATE PUFFS

Ingredients—One-half a lb. of double refined sugar, 1 oz. of chocolate, one egg. Beat and sift the white of an egg. Beat and sift the sugar, scrape into it very finely the chocolate and mix well together. Beat the white of an egg to a stiff froth and strew in the chocolate and sugar beat stiff as paste. Then sugar beaten, drop them in very small quantities and make in a slow oven.

POTATO CAKE

Crush cold boiled potatoes with butter and salt; mix in a small proportion of flour and a little yeast (the last may be omitted at pleasure), and with milk work the whole to the consistency of very firm dough; roll it out to the thickness of an inch and a half or two inches; cut it out the size of your frying pan, previously greased, and in it lay your cake after flouring it all over; bake covered with a plate, shake and turn it a little from time to time to prevent burning; when half done turn it, and cover with a plate again.

The Sewing Room

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

GIRL'S COAT, 7186.

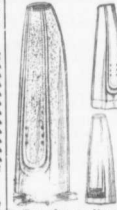


The double breasted coat always is a becoming one to little girls and it is in the height of style this season. This one includes two patch pockets that are both smart and convenient. It can be made with a fancy collar and cuffs or with a higher neck, narrow collar and without cuffs.

For the 10 year size will be required 4 yards of material 27, 2 1/2 yards 44, 2 yards 52 inch wide with 5 1/2 yard of velvet for collar and cuffs.

This pattern is cut in sizes for girls of 8, 10 and 12 years of age.

SIX GORE SKIRT, 7166.



The skirt with panels at front and back is an established favorite. This one can be treated in several ways. It can be made as illustrated with the double panels and attached, or the panels can be cut straight and edged with fringe or single panels can be used; or the skirt can be made without the front panels and with the back ones only.

For the medium size will be required 6 1/2 yards of material 27 or 36, 5 1/2 yards 44 inches wide if material has fringe or nap, the width of the skirt at the lower edge is 2 1/4 yards.

This pattern is cut in sizes 24, 26, 28 and 30 inch waist measure.

GIRL'S DRESS, 7168.



The little girl's dress that is made with a fancy collar is always a becoming one. This model can be treated in two or three distinctly different ways. It can be made as shown in the large view, with the collar arranged over the blouse portion, or it can be cut out as shown in the small view.

For the 10 year size will be required 4 1/2 yards of material 27, 4 yards 36, 3 1/2 yards 44 inches wide with 7 1/2 yard of silk and 6 yards of braid to trim as shown in the illustration. This pattern is cut in sizes for girls of 8, 10 and 12 years of age.

PEASANT BLOUSE, 7177.

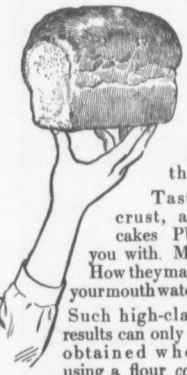


The blouse that is made in peasant style and closes at the left of the front is one of the latest and smartest. This one is embroidered in Bulgarian style with wool threads in oriental colors, but the trimming can be any preferred one.

For the medium size the blouse will require 3 yards of material 27, 3 1/4 yards 36, 1 1/4 yards 44 inches wide with 1 1/4 yards 3 inches wide for chemisette and under-sleeving, 3 yards of banding to trim as shown in back view. This pattern is cut in sizes 34, 36, 38 and 40 inch bust measure.

Be Fair. Buy a sack or barrel before judging PURITY FLOUR

SOME people have attempted to judge PURITY FLOUR before knowing the facts about it—before using it. So we ask you to be fair and to buy a sack or barrel of PURITY FLOUR and give it a thorough try-out before attempting to arrive at a judgment.



Look at the beauty and loftiness of the golden-crusted, snowy-crumbed loaves, fit for a king. Count them and see how many more of them PURITY yields to the barrel than ordinary flour does.

Taste the creamy, flaky pie crust, and the deliciously light cakes PURITY FLOUR rewards

you with My! How they make your mouth water!

Such high-class results can only be obtained when using a flour consisting exclusively of the high-grade portions of the best Western hard wheat berries.



And remember, that, on account of its extra strength and extra quality, PURITY FLOUR requires more water when making bread and more shortening when making pastry, than you are accustomed to use with ordinary flour.

PURITY FLOUR

“More bread and better bread”

Buy a bag or barrel of PURITY FLOUR. Test it for a week. Then pass judgment.

Add PURITY FLOUR to the grocery list right now.

The Buying Price of Hogs

It is probable that the practice of sending out weekly the prices which packers will pay for hogs the following week, has been the chief cause for the widespread impression that the price named is fixed through arrangement and understanding between the packers. In view of the recent attacks made upon packers, a statement which will explain why a price is sent out, and the conditions associated with it, may serve a useful purpose.

For the most part the cattle and small stock (sheep, lambs and calves) which come to the cattle markets in Toronto are bargained for on arrival. If the market is favorable, the drovers make a profit. If the market is unfavorable, they suffer a loss. The price of cattle and small stock, therefore, is determined each market day by the ordinary competitive conditions prevailing upon public markets. The price which the drover pays in the country the next week is determined by his view of what he hopes to receive when the stock is offered for sale by him upon either of the markets in this city or in Montreal.

The hog situation is entirely different. After the manner of well organized market conditions, there has been no public market in Ontario upon which hogs have been offered for sale. For thirty years 80 to 90 per cent. of the hogs on the Toronto Cattle Market have been delivered on the market for one buyer, and at a price agreed upon before the hogs were shipped. Five-sixths of the packing houses in Ontario have not only not bought hogs upon the Toronto Cattle Market, but they have not bought hogs upon any public market, because there have been no markets upon which hogs have been offered for sale. The Union Stock Yards Company at Toronto Junction are now endeavoring to establish a competitive open market upon which hogs will be offered for sale. Time only will determine the success or failure of this effort.

As, therefore, there has been no open market for hogs, the price which the packer pays for his hogs has had to be determined by a different method, and under different circumstances than the open market conditions have established for cattle and small stock.

The pressure of these circumstances has developed the practice which causes each packing establishment to depend chiefly for its supply of hogs weekly upon drovers who ship regularly to it. To establish this regularity, the respective houses have found it necessary, at the end of each week, to advise drovers the price they would pay for hogs shipped to them the following week. This custom is followed in Denmark and Ireland, the weekly price, however, being sent to farmers in place of drovers.

In accordance with these conditions, the officers of this Company determine on Friday afternoon of each week the price they will name to drovers for shipment the following week. This advice covers a price free on cars at the shipping point, or delivered into the yards at our factory, or for fed and watered hogs delivered on the Toronto Cattle Market. In reaching this determination we are governed by our reading of the domestic and export markets, by cable advices covering Danish and Irish billings, and cable advices telling of the quantity of American products which have been landed at the various ports in Great Britain. We also have to interpret from these conditions, which are common to the trade, how the judgement of our competitors will be affected by them, and what conclusions they will likely reach as to the buying price they will name for the following week.

Having decided the price we will name, we communicate it to drovers by telephone or telegram, to points East as far as Montreal, West as far as Chatham, and North as far as hogs are raised in sufficient quantities to give weekly deliveries.

In all the foregoing we have neither conference, understanding nor arrangement, directly or indirectly, with any other packer, nor have we had any such connection at any time during the past twenty years.

If other packers offer a higher price, we learn of it through telegraph or telephone communications from drovers in various parts of the country, who advise they are unable to buy at the price we have named, because drovers from competitive houses are paying a higher price. Each packer in the trade doubtless has similar advices when the circumstances warrant it.

When such advices reach us, we determine our conduct by a variety of considerations, and we will, as will other packers similarly placed, refuse to follow the lead set by others, or accept such lead as inevitable, as we may have a favorable or unfavorable view of the market.

The effect of the decision either way is reflected in the volume of deliveries. If we or others similarly placed refuse to advance, while other packers are active, there will be a shrinkage of from 10 to 50 per cent. from the normal receipts of hogs. If we follow the advance, we will secure our normal quantity, with possibly some surplus added.

It is alleged that the trade generally await information as to the buying price named by this Company before sending out their own advices. On reflection, it will be recognized that this is not an unnatural course to follow. By reason of the extent of our operations, the price named by this Company is known in every part of the Province, and authoritatively establishes the minimum price which can be paid. For necessitous reasons no other house can buy at a lower price. Inasmuch, however, as the aggregate purchases by other packers represent 70 per cent. of the total deliveries of hogs in Ontario and Quebec, there is no reason why after our price is known, a higher price should not be named by some or all of our competitors, if their reading of the market differs from ours. As a matter of fact this is precisely what occurs, and probably there are as many weeks in the year when our price is exceeded and we must follow others, as when our price is accepted and others follow us.

We would welcome conditions which would establish the purchase of hogs upon public markets on an openly competitive basis. If packers would buy hogs after the same manner as cattle are now bought, they would always have the measure of their competitors, whereas under existing conditions we have to guess at their measurement. Moreover, when we desired to take hogs freely, we could do so, and when we desired to step aside from the market, we could do so. Under existing conditions, no packer can afford to break with his regular shippers, and frequently has to take stock when he would prefer to leave it alone.

The tendency under the present method is for packers weekly to estimate how high a price they dare pay, rather than how low a price they will name. For it must be borne in mind that the aggregate capacity of the houses greatly exceeds the supply of hogs, and that practically the profit or loss of the operations of a packing house are determined by the volume of business secured. Therefore when we are seeking to determine each Friday evening the buying price we will name for the following week, back of all else is the pressure which demands quantity of hogs, and the anxiety felt that if we do not name a price high enough to command quantity, we may find our supplies cut off.

The popular view of commercial sagacity would suggest that the remedy for such difficulties would be found in an understanding being reached by agreement between the packers. The significant fact is that the packers have refused to do so. Probably no business in Canada is more completely free from either the letter or the spirit of what is known as a Trust, than this much-abused packing business. The real relation of the packers to the hog industry has been an honorable one of high merit.

THE WILLIAM DAVIES COMPANY, LIMITED

MARKET

Toronto, Monday, weather recently has and the volume of business. This is merely a statement, never, and a depression not expected.

Thrashing conditions improved, and the crop in fairly good condition. Anticipated that the Government crop per cent. short of production for the 43 per cent. loss in and hay, 16.

The most notable drop market this past week appears progress in Eggs and butter as live stock is on a week.

WH Hard wheat is down week's quotations. R in the west interfe were greatly exagg of some who we price. The weather brook in prices. Millers are buying fashion. The visible America has increas from 5,500,000 bush, compared with 46,325 does not look to the near future. On 1 Northern is quot 8103 1/2; No. 3, 8100; tario wheat are smafed at outside point

COARS Harley has change expected that dealer to advance their qu a share of the trad are taking a hand and have now put on port basis, although the Buffalo price by 8115 to 8125. Feedst are to be economical. are down and Ontari are no other change are as follows: R malling; feed, 70; western No. 2, 46 1/2; tario No. 2, 45; to track here; rye, 7; peas, 87c to 88c; and On the Farmers' mark to 51c; buckwheat, 80c; and barley, 90 Cans and barley, real Canadian Wh at 8c for No. 2; 4 cal white, 46 1/2; No. 2, 7-15c to 77c; malling barley, 92 5/8; and buckwheat

MILL M'stuffs are: Man 87; Ontario bran, 74; trial prices are: shorts 83; Ontari about 87.

HAY A The market for with wholesale from last week. N tracks here; infer straw, 85 to 86.50. tall for 81c to 82 1/2; and straw, bunding on all grades of firm. American bing and Liverpool ing. No. 1 hay, 81 1/2 to 81.50; No. 2, 81 1/2 to 81.50.

An average of bids at country low: Cured, 11-14; and pelts, 50c to 14c; horse hides, 10 to 20c. Quotation are as follows: 11 1/2; No. 3, 11 1/2.

EGGS A The market for to four cents, and get at that. Strio at 26c to 28c in ea 25c to 26c. The ro At Montreal the sups falling off 21c to 22c at c Stock, 25c.

Quotations here

Quotations here

Quotations here

Quotations here

OUR FARMERS' CLUB

Correspondence Invited
PRINCE EDWARD ISLAND.

KINGS CO. P.E.I.
CARDIGAN BRIDGE, Oct. 3.—Threshing is about over. The grain crop is very poor. Heavy showers of rain have freshened the meadows and pastures...

LOWER MONTAGUE, Oct. 9.—Our exhibition is over and was a complete success. Stock was much better than of year especially in the Ayrshire and Holstein classes...

NOVA SCOTIA

ANTIGONISH, Oct. 9.—The Antigonish exhibition was held on October 2 and 3. The weather proved rather unfavorable for it was wet and rainy throughout the day...

ONTARIO

NORTHERMBERG CRO. ONT.
WICKLOW, Oct. 3.—Threshing is nearly done. Grain, especially oats, has not varied out as much according to the order of the day...

BASTLETON, Oct.—Apple picking is in the order of the day. They are only a fair crop. Potatoes that were put in late are a good crop...

QUEBEC

HALLBURTON CO. ONT.
KIMMOUNT, Oct. 7.—Threshing and potato digging are in the order of the day. There are not an even crop, some very good, some equally as poor...

KIMMOUNT, Oct. 9.—Minam Fair, held on the 3rd, was well patronized by a large crowd. The exhibits were excellent; the vegetables were well beaten at any other show; cattle were well worth seeing...

ONTARIO

WELLINGTON CO. ONT.
GUELPH, Oct. 9.—Fall work is progressing favorably. The soil has been in good condition for plowing throughout the fall...

WENTWORTH CO. ONT.
KIRKWOOD, Oct. 10.—The fall fair is now nearly all over for another year, and have been a success in that the weather was very favorable...

nearly every farmer is doing his fall plowing. Fall wheat looks splendid and is growing very fast. Soil falling is over for another year. A great many farmers did not have even sown all their oats...

NORFOLK CO. ONT.

ERIE VIEW, Oct. 6.—The frequent heavy rains are doing much to help the farmer. Grain crops are threshed and stored. Corn is fairly good. Farmers are filling silos. Early apples are picked...

GREY CO. ONT.

MAPLE LAKE, Oct. 10.—We have had a good season. Crops are generally pretty good, although some second growth appeared in places and took down the averages. On about Oct. 10 have threshed...

MANITOBA

MARQUETTE DIST. MAN.

KELLOE, Oct. 4.—Since our last report it has rained almost steadily. It is also very cold and windy. Very little grain has been done in our section. It is almost impossible to move around the steam tractors...

HOLSTEIN-FRIESIAN NEWS

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

OFFICIAL TESTS OF HOLSTEINS FOR SEPTEMBER

- Lee Keves DeKor (10442), at 3 yr. 2 m. of age; 12.99 lbs. fat, equivalent to 15.74 lbs. butter; 270.3 lbs. milk. Owned by P. R. Mallory, Frankfort, Ont.
Lucy Tessen DeKor (9038), at 4 yr. 2m. of age; 13.99 lbs. fat, equivalent to 17.37 lbs. butter; 354.8 lbs. milk. Owned by G. H. Manhard, Manhard, Ont.
Bessie's Queen (5226), at 2 yr. 1m. 2nd. of age; 15.73 lbs. fat, equivalent to 19.66 lbs. butter; 469.09 lbs. milk. Owned by R. J. Kell, Tillsonburg, Ont.
Sneekle (2244), at 9 yr. 11m. 21d. of age; 13.65 lbs. fat, equivalent to 17.06 lbs. butter; 437.56 lbs. milk. Owned by A. C. Hardy, Brockville, Ont.
Ina de Feralde (11299), at 2 yr. 3m. 2nd. of age; 8.14 lbs. fat, equivalent to 10.17 lbs. butter; 220.7 lbs. milk. Owned by A. C. Hardy, Brockville, Ont.
Topsy Ormsby (31345), at 2 yr. 5m. 19d. of age; 11.98 lbs. fat, equivalent to 14.99 lbs. butter; 354.4 lbs. milk. Owned by T. W. McQueen, Tillsonburg, Ont.—G. W. Clemons, Secretary.

OFFICIAL TESTS OF HOLSTEINS FOR SEPTEMBER

- Olevna Patroness (6560), at 6 yr. 10d. of age; 21.69 lbs. fat, equivalent to 27.37 lbs. butter; 694.8 lbs. milk. Owned by Neil Sanger, Tillsonburg, Ont.
Rethelund DeKor Wilsday (7665), at 5 yr. 11m. of age; 17.88 lbs. fat, equivalent to 22.36 lbs. butter; 561.49 lbs. milk. Owned by J. M. Van Patter, Aylmer, Ont.
Dekol Imperial Duchess (7655), at 8 yr. 1m. 18d. of age; 17.57 lbs. fat, equivalent to 21.91 lbs. butter; 507.9 lbs. milk. Owned by Lakewave Farm, Bronte, Ont.
Magie Dorliaka (7259), at 9 yr. 1m. 4d. of age; 17.37 lbs. fat, equivalent to 21.91 lbs. butter; 507.9 lbs. milk. Owned by David Caughell, Yarmouth Centre, Ont.
Aagle DeKor Wilsday (6440), at 7 yr. 10m. 20d. of age; 17.37 lbs. fat, equivalent to 21.91 lbs. butter; 547.73 lbs. milk. Owned by Thirday record at 7 yr. 10m. 24d. of age; 65.35 lbs. fat, equivalent to 81.67 lbs.

- butter; 232.9 lbs. milk. Owned by J. M. Van Patter, Aylmer, Ont.
Dirkje Pei Burke (4961), at 6 yr. 2m. 19d. of age; 15.99 lbs. fat, equivalent to 19.99 lbs. butter; 454 lbs. milk. Owned by Lakewave Farm, Bronte, Ont.
Tilly Pauline (702), at 5 yr. 1m. 14d. of age; 15.96 lbs. fat, equivalent to 19.95 lbs. butter; 494.59 lbs. milk. Owned by W. C. Stevens, Philippsville, Ont.
Manor Coral Koradyke (11742), at 6 yr. 2m. 6d. of age; 15.01 lbs. fat, equivalent to 18.77 lbs. butter; 446.28 lbs. milk. Owned by W. C. Stevens, Philippsville, Ont.

- Helens Steplje (6683), at 6 yr. 0 m. 4d. of age; 14.29 lbs. fat, equivalent to 17.87 lbs. butter; 499.4 lbs. milk. Owned by Lakewave Farm, Bronte, Ont.
Betsy Jane DeKor (1621), at 9 yr. 8m. 14d. of age; 15.96 lbs. fat, equivalent to 17.45 lbs. butter; 389.9 lbs. milk. Owned by C. B. Boller, Tavistock, Ont.
Bewanda August Mercedes (7231), at 5 yr. 1m. 23d. of age; 15.31 lbs. fat, equivalent to 16.59 lbs. butter; 422.1 lbs. milk. Owned by D. Caughell, Yarmouth Centre, Ont.
Jenny Bonerose Ormsby (8216), at 4 yr. 9m. 15d. of age; 24.13 lbs. fat, equivalent to 30.16 lbs. butter; 613.25 lbs. milk. Thirday record, at 4 yr. 9m. 15d. of age; 100.35 lbs. fat, equivalent to 125.44 lbs. butter; 2,580.25 lbs. milk. Owned by C. D. Platt & Son, Millgrove, Ont.
Aagle Mercedes (7667), at 4 yr. 3m. 6d. of age; 21.60 lbs. fat, equivalent to 27 lbs. butter; 623.65 lbs. milk. Thirday record, at 4 yr. 3m. 6d. of age; 88.169 lbs. fat, equivalent to 110.86 lbs. butter; 2,661.23 lbs. milk. Owned by M. Van Patter, Aylmer, Ont.
Lucy DeKor Poeh (8326), at 4 yr. 1m. 5d. of age; 15.74 lbs. fat, equivalent to 19.67 lbs. butter; 526.96 lbs. milk.

Note.—The records of June were not published earlier, as the first copy of the tests sent to us was lost in the mail. The omission was not discovered until some of the breeders began to inquire as to why the tests of their cows had not been published. We immediately secured the records and publish them here.

EXECUTIVE COMMITTEE

- ROBT. MILLER, Pres.
MARTIN GARDHOUSE, Prof. G. E. DAY
C. F. TOPPING, Secretary

SECOND ANNUAL BRUNO FAT STOCK SHOW

PRINCE OF GEORGES STATION, TORONTO
MONDAY AND TUESDAY
DECEMBER 11-12, 1911
CATTLE - SHEEP - LAMBS - HOGS
ENTRIES CLOSE DEC. 1st, 1911
WRITE FOR PREMIUM LIST, ENTRY BLANKS, ETC.

ABSORBINE

Removes Bursal Enlargements, Swollen Testicles, Swollen Glands of the Neck, Enlarged Prostate Glands, Enlarged Spleen, Swollen Lymphatics, Ailments of the Urinary Tract, etc. It cures the disease or lays up the horse, and cures him, and restores him to his former health. ABSORBINE is a liniment for manning, for general medicinal purposes, for rheumatism, neuralgia, sciatica, etc.

THE 'BAKER' BACK-GEARED WIND ENGINE



It is built for Heavy Duty, Neat and Compact in Design, Do Perfect Work, Because they are Built on Principles that are absolutely correct, and the East is Running Mill Made.

The wheel is built on a hub revolved on a long stationary steel spindle. As a result there is less friction, and the hub will never become worn and cause the wheel to sag toward the lower. 'BAKER' wheels have large numbers of small sails, without rivets, as compared with other makes. The small sails develop the full power of the wind and enable 'BAKER' mill to pump in the lightest breeze. The engine is so constructed that the gears cannot wear out of mesh. All working parts are covered with a cast iron shield, thus protecting same from ice and snow. We make a full line of Steel Towers, Galvanized Steel Tanks, Pumps Etc. Write for Catalogue No. 58.

THE HELLER-ALLER CO. WINDSOR, ONT.

BREEDERS' 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 16 insertions during twelve months.
FOR TARRANT SWINE—Write John W. Todd, Gorinth, Ont. R.F.D. No. 1.
SUNNYSIDE HOLSTEINS—Young Stock, all ages—J. M. Montie & Son, Stansted, Ont.
YORKSHIRE AND TAMWORTH HOGS—Plymouth Rock and Orpington Poultry—Thames, 424 Parkville Ave.
HAMPSHIRE WIRE—Canadian Champion bred, Royal bred, heavy, Rows three months and under—Hastings Bros., Ormshill.
HOLSTEINS—Young stock, for sale, bred by Imperial Pauline DeKor, whose 18 daughters average 620 lbs. butter in 7 days—A. W. Walker, Utica, Ont.

CLYDESDALE HORSES, SHORTHORN CATTLE—Large selection of best Stock, Prices reasonable—Smith & Richardson, Breeders and Importers, Columbia, Ont.

HOLSTEINS AND TAMWORTH—All ages, also B.O.W. Leaghorns Young stock for sale at any time—J. McKenzie, Willowdale, Ont.

TAMWORTH SWINE—Choice stock for sale at all times at reasonable prices—J. W. McKeith & Son, Litchford, Ont.

CLYDESDALES—Horns of Aomys (Imp.) Holsteins and Yorkshire Fawn Spotter, Dotted, nearest 7 dams by the best per week, and Broken by G. T. R. A. F. O., Manchester, Ont., Myrtle, O.P.S.



THIS BEAUTIFUL CATALOGUE is handsomely printed on fine quality paper of extra weight and finish. It shows many hundreds of different designs in Men's and Women's Fine Furs and Furlined Garments. Eighty pages of elegant half-tone engravings, with truthful descriptions and PRICES—and such prices! Never before have the people of Canada been offered an opportunity to buy

PAQUET FURS

at the actual MANUFACTURER'S PRICES of Canada's Largest Fur Factory. And REMEMBER—you don't need to pay one cent in advance! We'll send the Furs, PREPAID, to any Express Office in Canada for Free Examination. If you are not convinced that the value cannot be matched, return them, at our expense. If you are pleased—and we KNOW you will be—pay the Express Agent the catalogue price and the Furs are yours. Could anything be fairer?

THE COAT ILLUSTRATED HERE
 No. 208—Man's Coat, in Genuine Raccoon, very good quality, well matched skins, length 50 inches, shawl collar, quilted lining. Special **\$50**

THE PAQUET COMPANY

LIMITED

QUEBEC,

CANADA



Books for Farmers

Do you want to secure a good book on Dairying, Stock Raising, Poultry Raising, Farm Crops, or anything in relation to farming? We can supply you with the best books of this nature, (get a copy of our book catalogue. It is free.

Book Department
 FARM & DAIRY, PETERBORO

Don't put off seeing your friends and having them join in right away for a club of subscribers to Farm and Dairy.

LOW COST, BIG RETURNS

THIS SIZE SPACE (one inch) costs 9 cents per insertion in the display column of Farm and Dairy. This is a flat rate giving small advertisers the same advantages as users of larger space, and avoiding the confusion discount cause. 2 cents a word per insertion is the rate for For Sale and Want advertisements.