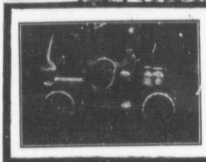


# FARM AND DAIRY

AND  
&  
RURAL HOME

DEVOTED TO  
BETTER FARMING  
AND CANADIAN  
COUNTRY LIFE

Peterboro, Ont., April 2, 1914



A PROLIFIC SOURCE OF BAD EGGS—THE STOLEN NEST

ISSUED EACH WEEK

Rural Publishing Co., Ltd., Publishers

ONE DOLLAR A YEAR

**22 Cows milked twice a day, in less than an hour for each milking, at a cost of 15c.**

That's what the B-L-K Mechanical Milker is doing for one of Ontario's progressive dairymen. Read what he has to say:—

Tavistock, Sept. 22nd, 1913.  
 D. DERBYSHIRE & CO., Brockville, Ont.  
 Dear Sirs,—I have been using your B-L-K Milking Machine every day for six months and must say it has given perfect satisfaction. We have a herd of 22 cows, and have not had a case of sore teats or anything since using the machine. The cows seem to enjoy milking. It is so easy on them, and they are relieved of their milk in such a gentle way. Heifers especially take to it stripping on any of our cows. The milk is clean and sanitary, and our cheesemaker uses our milk for starter. The machine is easy to operate and keep clean, and takes but a few minutes a day to wash it. I think it a great labor-saver. One man can milk the 22 cows in less than an hour. It does not cost me quite a cent a cow per day for gasoline. We are using a 4 1/2 H.P. engine. Who would like to milk by hand 22 cows twice a day for 15 cents.

Yours truly,  
 WM KAUFMANN Tavistock, Ont.

Now, Mr. Dairyman, what the B-L-K is doing for others it will surely do for you.

Would you milk by hand 22 cows twice a day for 15 cents? Well, I guess not.

But we know you wouldn't object to have your milking done in a short space of time as Mr. Kaufmann, corresponding of course to the number of cows you have.

Sanitary milk, higher prices, saving of time and labor, and all of our other features, go hand in hand with the B-L-K. Let us tell you more about them.

Drop us a card NOW before the real rush is on, and we'll send you literature covering any or all of our lines.

**D. Derbyshire & Co.**

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

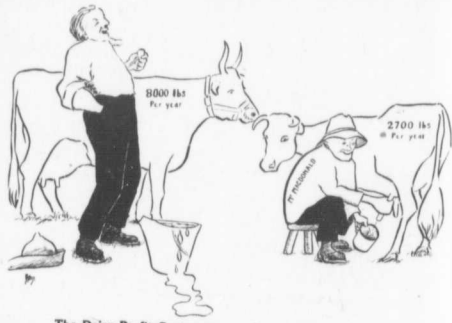
OUR  
**SIXTH ANNUAL**  
**Dairy Magazine Number**

OUT APRIL 9th

**RIGHT ALONG YOUR OWN LINE** of business—Dairying.  
**IT'S THE SPOT** for you to advertise **THOSE SURPLUS CALVES—THAT BULL** you have for sale—**THAT COW** with the big record. Have her photo in this issue. Let our other breeders get a line on your herd.

Drop us a card to-night for the space you will use on the 9th.

**FARM AND DAIRY**  
 PETERBORO, ONT.



The Dairy Profit Controversy as Seen by Our Cartoonist

**Western Interest in Eastern Cooperation**

"I HOPE your meetings will be in every way successful and that Ontario will launch a farmers' movement equal to anything of the kind elsewhere in the Dominion," was the message arriving by night telegram from A. Crearer, President of the Grain Growers' Grain Company, of Western Canada, just previous to the recent meetings in Toronto at which Ontario farmers organized. Ontario farmers are not the only ones interested in the new company and association. The leaders of the farmers movement in Western Canada have long looked forward to the day when the farmers from one end of Canada to the other should be united in defence of their common rights and for the upbuilding of a more progressive, more prosperous Canadian rural population. Previous to the meetings, messages were received in connection with the movement from many others of these western men.

"I am looking forward with a great deal of interest to the reports of the meetings which you will hold on Thursday and Friday next, and only wish it were possible for me to be with you," wrote E. J. Freeman, First Vice-President of the Grain Growers' Grain Company. "I hope indeed that as a result of your deliberations you will become organized as The United Farmers of Ontario, and the many small links throughout the province bound into one solid chain."

Wm. J. Tregillus, president of the United Farmers of Alberta, also expressed his delight. "We are pleased to see this move and can assure you that we send our Earliest good wishes for its successful organization, and sincerely trust that it will accomplish all the work desired. We certainly need to get thoroughly organized, not only in the east or west, but both east and west, and I hope that we shall soon have a powerful organization of the United Farmers of Canada."

Mr. James Speakman, of Penfold, Alta., wrote: "If the farmers in the great province of Ontario get well organized, we shall certainly make an immense stride forward and upward. I heartily wish The United Farmers of Ontario, and their cooperative society God-speed. I hope that I may yet see the formation of The United Farmers of Canada."

A particularly inspiring message was received from Rice Sheppard, a Vice-President of The United Farmers of Alberta. "I cannot express my delight," wrote Mr. Sheppard, "at the action you are taking in Ontario, and the interest that is being created in our great cooperative movement.

Hard has been the fight in the west for years and at times I have felt that my flesh was too frail, though the spirit was determined to continue the battle until victory was the cry of The United Farmers. I trust that all our good and true men of our organization who have put their best with the farmers' cause for years past shall now see the fruits of their labour. Well, do I remember the night in Edmonton, when we were striving to unite the old Society of Equity and the Alberta Farmers' Association. It was one o'clock in the morning before we could decide on a name. I submitted The United Farmers of Alberta.

**Plans at Little Cost**

Owing to special arrangements that Farm and Dairy has made with a large architectural company we are in a position to offer complete builders' plans of the neat bungalow pictured on page 23 of Farm and Dairy last week, for the small sum of \$16. An architect would charge \$25 to \$30 for drawing similar plans. The architect does business on a flat fee, and as they sell many sets of the same plans can afford to provide complete working plans very cheaply. Other house designs will be given in future issues of Farm and Dairy, for which plans may be secured on the same reasonable terms.

our motto 'Equity,' and in speaking of it I said: 'Brothers, one reason why I must submit that name is that I think I see in the near future one grand organization of our fair Dominion. We will grow out and cooperate with our sister provinces until we even unite with the farmers of Eastern Canada, and some day be known as The United Farmers of Canada.'

"What a grand dream. And now the farmers of Eastern Canada have it in their power to say that that dream shall be realized. I pray God that He will help you to decide this great question in the right way."

Messages were also received from C. E. Flatt, Tantallon, Sask., P. P. Woodbridge, Secretary-Treasurer of the United Farmers of Alberta; E. Carswell, Secretary-Treasurer Farmers Cooperative, Limited, of Alberta. Since these letters have been received the farmers of Ontario have organized. Every move that is made will be watched with interest by the farmers of the West. It is "up" to the Ontario organizations to show their western brethren that they do not need to take second place even to the west in their ability to organize and to stay organized.



We Will

Trade Increase

Vol. XXX

HOW can yields? We must buy or grow right time, this cultivate prope

Land intended broken out of being done in three inches. harrowing, rep every 10 days, weeds and mal

sowing. Just second plowing depth of six to

ever having first

If the supply limited, comme

properly applice

to be tested to ac

sults. We ha

ments from 500

following mixtu

50 lbs. S. 250 lbs. Acid P

of Potash.

RESULTS F

The following

sults of a dup

the College in

This experim

quirements of o

other farms d

secured.

- Fertilizer per a
1. No fertilizer
  2. 50 lbs. Nitrate
  3. 50 lbs. Sulph
  4. 50 lbs. Ammonia
  5. 50 lbs. Nitrate
  6. 50 lbs. Sulphate
  7. 50 lbs. Acid P
  8. 50 lbs. Nitrate
  9. 50 lbs. Sulphate
  10. 50 lbs. Acid P
  11. 75 lbs. Muriate
- Mineral fertili
- the spring. Th
- applied just bef
- quantities as ju
- Good seed is
- show high germ
- stock. Our exper
- seed from carefu
- result than last
- Last year the fo
- than the best in
- ness
- The following
- varieties of diff
- \*Extract from an
- of 1913.



*We Welcome Practical Progressive Ideas*

# FARM AND DAIRY



## & RURAL HOME

*The Recognized Exponent of Dairying in Canada*



Trade increases the wealth and glory of a country, but its real strength and stamina are to be looked for among the cultivators of the land.—Lord Chatham

Vol. XXXIII.

FOR WEEK ENDING APRIL 2, 1914

No. 14

# How to Grow Big Crops of Roots\*

**H**OW can we obtain big root yields? It is the old, old story. We must prepare the land well, buy or grow good seed, sow it in right time, thin the plants early, and cultivate properly during the season. Land intended for roots should be broken out of sod, the first plowing being done in August to a depth of three inches. Discing, rolling and harrowing, repeated at intervals of every 10 days, will exterminate many weeds and make work easier in the spring. Just before cold weather a second plowing should be made to a depth of six to eight inches, the manure having first being applied.

**Some Novel Methods of Handling the Root Crop Advocated by a Specialist. Suggestions as to Best Varieties. Hand Work Almost Eliminated by Judicious Use of Wheel, Hoe and Harrow. The Preparation and Fertilization of the Soil**

By PAUL A. BOVINE, Root Specialist, Macdonald College, Quebec

The next table, compiled from four years' experiments, will help us to decide which is the best variety of mangels.

Variety	Tons Roots	% Dry Matter	Tons of Matter	Order of Merit
1. Prize-winner Yellow Globe	36.9	9.12	3.36	4
2. Sugar Mangel	36.7	9.23	3.41	2
3. Our Ideal	36.2	7.42	2.61	12
4. Yellow Leviathan (Ferry)	34.07	9.02	3.07	8
5. Tankard Cream Sugar Beet	34.02	9.42	3.20	6
6. Perfection Red Mammoth	33.4	10.20	3.41	3
7. Yellow Globe	33.3	9.06	3.02	10
8. Giant Yellow Interned	32.6	11.29	3.71	1
9. Mammoth Long Red	32.3	9.91	3.20	5
10. Golden Tankard (S)	31.6	9.61	3.04	9
11. Long Road Mammoth	33.5	10.32	3.15	7
12. Golden Tankard (E)	28.8	9.85	2.84	11

If the supply of stable manure is limited, commercial fertilizers can be properly applied. Each farm should be tested to ascertain its own requirements. We have obtained good results from 500 lbs. per acre of the following mixture: 50 lbs. Nitrate of Soda, 50 lbs. Sulphate of Ammonia, 250 lbs. Acid Phosphate, 25 lbs. Muriate of Potash.



**Roots are an Important Factor in the Feeding of Old Country Cattle**

Wm. Duthie, one of the most famous Shorthorn breeders of the Old Land, was once asked by a Canadian visitor how many turnips he fed to a cow. His reply was, "As many as they will eat; usually one wheelbarrow load to two cows." The Old Country feeder has discovered the value of succulent feeds in the proper development of good stock. Their success in producing some of the best breeds of cattle in the world testify to the correctness of their practice. Scenes such as the one here illustrated are common on English farmsteads.

**RESULTS FROM FERTILIZERS**  
The following table shows the results of a duplicate experiment at the College in 1912:

Fertilizer per acre	Cost of Inc. in Value of ferti- lize- increase. Iscr. Tons.	Inc. of ferti- lize- inc. Prof. Tons.
1. No fertilizer		
2. 50 lb. Nitrate Soda	5.845	113.96
50 lb. Sulphate of Ammonia	83.25	810.61
3. 50 lb. Nitrate Soda	6.780	16.95
50 lb. Sulphate Ammonia	5.30	11.45
4. 50 lb. Nitrate Soda	8.945	22.36
50 lb. Sulphate Ammonia	7.07	15.29
50 lb. Acid Phosphate		
75 lb. Muriate Potash		

Mineral fertilizers should be spread early in the spring. The nitrogenous fertilizers may be applied just before seeding when in such small quantities as just mentioned.

Good seed is an essential. It should not only show high germination but also come from good stock. Our experience has been that home-grown seed from carefully selected roots will give better results than seed purchased in the market. Last year the former gave 1½ tons an acre more than the best imported seed.

Mangels—	Tons Dry Matter.	Tons Roots.
Giant Yellow Intermediate	32.6	3.7
Sugar Mangel	36.7	3.6
Perfection Red Mammoth	33.4	3.4
Prize-winner Yellow Globe	36.9	3.4
Carrots—		
Champion Intermediate	30.1	3.1
Yellow Intermediate	26.1	2.5
Swedes—		
Hall's Westbury	27.7	2.8
Queen	25.7	2.8
Kangaroo	35.9	2.6
Turnips—		
Imperial Yellow Globe	33.6	2.5
White Globe	30.5	2.3

It is to be noted that the varieties yielding the most tons of roots did not always give the most dry matter, on which depends the feeding value. Of course, the dry matter is not the only deciding factor; we must consider crown, shape, prograssness and keeping quality.

**WHERE TURNIPS ARE PREFERRED**

Although mangels yield best with us the same does not hold true everywhere. On heavy, land, swedes can be expected to do better; on light, sandy soils, one can expect fair returns from carrots, provided there is enough moisture. Soft turnips do well in almost any soil. Mangels require a soil that is in good heart.

We may here note that No. 1, while first in regard to yield of roots, comes fourth in content of dry matter, and thus fourth in order of merit. No. 8 in yield is first in dry matter and order of merit. Comparing No. 2 and No. 8, a man would haul four tons more of water from the field in the case of the latter. When feeding only a small quantity of roots, this extra water may be of value, but when feeding 25 to 30 lbs. a day, it need not be considered.

The time of seeding is the next important point. As a general rule carrots should always be sown first, then mangels and swedes. Turnips can be sown to advantage in late June. With us, early seeding has given the highest yields in all cases, as the results of three years' experiments show.

Seeded May 8	Seeded May 22	Seeded June 6	Seeded June 23
23.6	24.3	12.2	...
32.1	26.6	16.6	...
32.3	29.7	20.4	16.5
31.4	28.3	23.9	...

If swedes are sown for table use it is better to sow a little later and get a smaller yield of smoother roots.

Thick sowing ensures a good stand. When the rows are 25 to 30 inches apart, four to five lbs. carrot seed, 12 to 16 lbs. mangel seed, four to five lbs. swede seed and three to four lbs. turnip seed may be considered normal seeding. It may appear heavy, but a good stand is half the crop, and enables us to use the harrows effectively.

In regard to drills versus flat culture, I prefer the latter. The former is advisable in two cases: point. As a general rule, carrots should be sown

(Continued on page 6)

**BEST YIELDING VARIETIES**  
The following table shows the best yielding varieties of different classes of roots, 1909-1913:

\*Extract from an address at the Quebec Winter Fair of 1913.

### Ten Acres Enough

Andrew McCrimmon, Ontario Co., Ont.

"Ten Acres Enough," is the title of a book that has attained an immense circulation, particularly among city people. It tells a story of the city business man who still composition comfortable and stable income from a 10-acre farm. I suppose that that book has given thousands of city people dreams of a country life free from worries, and an income sufficient for all necessities and many luxuries. I feel sure that if not, why are they always preaching the little farm well tilled as the cure for the high cost of living and congestion of population in cities? I will not deny that under certain conditions 10 acres may be enough or more than enough. I know of a few poultry farmers who are making a splendid living on 10 acres or less. I have met several market gardeners who considered a two-acre farm quite as much as they could attend to. The field, however, is limited. Suppose that all of the city people who dream of some day liv- what an over-supply of poultry and garden prod- uces there would be.

#### MOST OF US MUST PRODUCE STAPLES

We cannot get away from the fact that while the small farm may be an attractive enterprise for the few, the most of us who live by tilling the earth must depend on the great staple crops such as wheat, corn, oats, barley, hay and so forth. The majority of us, too, must convert these crops into butter, cheese and live stock. I seriously question the wisdom of advocating the "small farm well tilled," for the general farmer.

The first difficulty that a man with few acres would encounter in general farming is the machinery item. If one is to have a fairly complete outfit of farm implements there would be practically the same investment on the farm of 30 acres as on the farm of 100 acres. For instance, the small farmer would have to invest \$135 or more in a binder that would do the work of a 100-acre farm equally well. Similarly with the manure spreader, the hay loader, the mower, and so on down the list.

Another disadvantage that I believe would trouble the smaller farmer in connection with his machinery would be that he would not be able to use either machinery or men to the best advantage. In these days labor is a big item and the only way to make labor profitable is by having the men work with the largest size of machinery. The 30-acre farmer could not possibly afford to keep enough horses to haul the most up-to-date machinery, and hence his labor would be working at a disadvantage. Even did he keep the horses and the machinery there would not be work enough to keep the men continuously vested, being lying around idle most of the time.

Another drawback that I see to the small farm, which is so much advertised, is that too large a

### FARM AND DAIRY

percentage of the total capital would be invested in unproductive sources. Farmers nowadays are demanding good homes equipped with bath rooms, furnace heating and so forth. All of this represents an investment for the small farm that would not need to be increased on the such as the barns, the cost for outbuildings, the small farm than on the large.

#### SMALL FARMS NOT PROFITABLE

I would advise these city editors who are so strong on small farms to study Professor Warren's conclusions. Professor Warren, as I have

already learned from past issues of Farm and Dairy, conducted an investigation of several dairy farms in New York State varying in size. He found that unless devoted to some special branch of small farming the small farm is almost invariably unprofitable. It takes a farm of 100 to 175 acres to enable a profitable investment in necessary equipment.

I agree that the tendency to large farms is a menace to the well being of mankind. I think, however, that the difficulty will be overcome by over-booming the small farm to the ignorant city dweller.

## Canadian Farmers Should Unite\*

RODERICK MCKENZIE, Secretary, Manitoba Grain Growers' Association

**T**HERE ought to be the closest relationship between the farmers of Ontario and the farmers of western Canada. There are few farmers in Ontario who have not got friends or blood and economic relationship to bind us together.

Your problems are largely our problems. You have to fight the same kind of opposition that we have to meet. All other classes are organized in their boards of trade. The labor men, the railway interests, and all other classes are organized. An organized army can defeat an unorganized mass many times greater in numbers. Unless we farmers unite we are going to be at the mercy of the other organized classes in the community.

In the west we farmers decided to get together and organize on the same basis as the business interests in the towns and cities. Our Grain

in the provincial organizations. The farmers' locals generally meet about twice a month. A meeting is given over largely to the young people to express themselves while on their feet as many of them soon become familiar with the public questions of the day.

#### THE CAUSE OF OUR TROUBLES

Most of our economic problems arise from the fact that we have not given the study to public issues that we should and other interests have taken advantage of our indifference. It is the business of the steel interests, for instance, to obtain the bonus they are now asking the Government for. It is our business as farmers to prevent them from getting it if we can, because we will be expected to pay most of the bonus. Just as soon as we farmers learn to organize and cooperate the men who are enjoying special privileges at our expense are going to suffer. In the west when we have put up bills in the towns advertising our meetings, men have gone around tearing down our bills to prevent us from getting together if they could.

We need an educational as well as a commercial organization. One is thus able to conduct necessary educational campaigns on matters affecting our interests. The commercial organization is left free to look after purely business matters.

Our success has been due largely to the fact that we have confined our membership to farmers. Men at first opposed our efforts to organize. Failing in this we had men try to get inside our organizations so that they could use them for their own selfish purposes. Watch out for such men.

We would not let any one tell us how we are to run our farms. Why should we let others tell us how we should conduct the selling of our farm products? The wealth producers of Canada are exploited because they allow others to come in between them and the consumers.

The economic freedom of Canada has got to be brought about by the farmers of Canada. To do this we have got to train ourselves in the consideration of public questions.

It is interesting to know that during the comparatively short time that the O.A.C. No. 21 barley has been introduced throughout Ontario in connection with the Experimental Union, it has increased rapidly, that it is now grown quite extensively, and that it is rapidly supplanting even the noted Mandschert barley which was introduced by our College in the spring of 1889. It results at the College and throughout Ontario, probably safe to say that, according to the O.A.C. No. 21 barley is the best variety of six-rowed barley under cultivation in the Province at the present time.—Prof. C. A. Zavitz, O.A.C., Guelph.



**A Cold Weather Colt That is Doing Well**

The colt seen herewith, owned by C. L. Shaver, Unltr. Sask., was one day old when the photograph was taken. It was born on Dec. 26th; a belated Christmas present, if you please. "Winter colts are all right," says Mr. Shaver.

Growers' Associations are really the same to us as boards of trade are for city business men. We farmers should take our place in the community and we should fit ourselves to do so. The together and talking things into is by meeting and provincial associations.

In the west we aim to have local associations in every local centre. These are banded together

\*Extract from an address delivered at the Farmers' Convention held in Toronto, March 19 and 20.

# A Reply to Alfalfa Critics

J. P. CAMPBELL, ONTARIO CO., ONT.

WE cannot grow alfalfa, so what's the use in preaching it. Farm and Dairy has lost a nice bunch of money for me of mankind. I don't. My alfalfa crop has never amounted to anything."

"There is a lot of talk like this going around in this section where Farm and Dairy is pretty generally read and where Farm and Dairy articles have induced a lot of people to give alfalfa a trial. Of course a lot of these experimenters have gone after the crop with more enthusiasm than knowledge, and the inevitable result has been many failures. If there are as many kicks on their feet as your alfalfa policy elsewhere as there are in this immediate neighborhood, I fear there is much trouble in store for Farm and Dairy. I would like to have a little heart to heart talk with some of your critics.

In our own neighborhood, on farms side by side, with soil conditions practically the same, I can find two farmers, one of whom has taken Farm and Dairy's advice to try alfalfa, and is extra well pleased with the crop. His first seeding made three years ago has done well. True, there was considerable winter killed one year, but then his clover winter killed equally as bad. His neighbor across the line fence also tried alfalfa and is ready to declare that the crop is "no good." Does this look sensible? If one man can grow alfalfa on his farm, is there any reason why the other cannot? The only reason that I can think of is lack of knowledge of the crop.

almost pure gravel, but I never yet saw a good crop growing on land that was either wet or sour. Good drainage is one of the first essentials to alfalfa success. Where the soil has a tendency to be sour an application of lime may make the difference between alfalfa success and failure.

INOCULATION IS WORTH WHILE  
Inoculation is another point on which I lay considerable stress. Several experiments have

the soil was very rich it was hard to detect any difference in the growth of the two crops, but as a general rule the inoculated plot was much the healthier. It only costs 25 cts. to get alfalfa inoculated from the Bacteriological Department at Guelph, where I secured mine, and it is a precaution well worth while. Some of my neighbors simply haul soil from an old alfalfa field and spread it in the new one. This practice is O. K., but is more laborious and expensive than the use of the laboratory preparation.

If there are any alfalfa critics who have followed all the foregoing practices to the word,

then I have only one further suggestion to make. I noticed that up to last year Farm and Dairy, in common with other agricultural magazines, advocated seeding with a nurse crop of three pecks of barley to the acre. Last year the more general advice was to cultivate thoroughly up to the first of July and then seed without a nurse crop.

This I believe to be the preferable plan, particularly where the soil is weedy. Thorough cultivation during the early part of the season to a certain extent cleans the soil of weeds. Its chief value, however, is that the soil is put in first-class mechanical condition and that the store of moisture for the use of the plants is much larger. If you have failed with alfalfa heretofore give this nurse-crop proposition a chance. Above all, do not condemn one of our greatest forage crops until you have tried it time and time again. Scores of us here in Ontario county are growing the crop to splendid advantage.



Getting Ahead of the Meat Trust in the Good, Old Fashioned Way

The time was when the spring and fall bushing were common on every farm in the country. Today there are thousands of farmers who do not know how to kill and dress a hog. They are shipped alive and the meat is purchased at the meat store. Mr. E. A. Macdonald, of Lambton Co. Ont., still holds to the old custom, so this illustration abundantly testifies. In most cases, however, the new plan of shipping alive is the better one.

been conducted in this neighborhood in which alfalfa has been seeded in two plots, one inoculated and the other not. Occasionally where

have tried it time and time again. Scores of us here in Ontario county are growing the crop to splendid advantage.

## The Advantage of Small Fields

WE all know that large fields are the most economical of labor. Few of us are so seized of the importance of large fields that we are willing to spend good time and money in clearing away superfluous fences. Recently when delving through a neglected pigeon-hole in his desk an editor of Farm and Dairy came across an extract from an address delivered by Mr. J. H. Grisdale at Campbellford a couple of years ago that sums up the large versus small fields so nicely that we were immediately tempted to publish it, old as it is. Here is Mr. Grisdale's view of the situation:

"If a man has decided upon the crops to grow and the rotation to follow the next thing is how to do the work. If he follows a short rotation he will in a short time become impressed with the importance of having his farm either divided into large fields or grouped with all the fields that are in one group in one part of his farm and the fields in another group in another part of the farm.

"I notice that your farms here (Campbellford and vicinity) are rather badly cut up by dale, hill, waterways, and roadways, and I was sorry

to note that there were very few square fields between here and Peterboro. In many cases I saw fields evidently belonging to the same farmer that were two, three, five or six acres, and some of these fields divided lengthwise by a huge ditch on each side of which were weeds or grass. There is no necessity for these ditches. If you have to have an open ditch let me give you a pointer on how to get rid of the ditch and have it at the same time.

"For 10 years I wrestled with that question on a certain field I had. I closed up the ditch and opened it and closed it up again, and tried under-draining; but I found we had to have a ditch to take the surface water away because it would lie there so long in the spring after a rain. This is what I did. That ditch was in a field of 40 acres; and it is not convenient to jump a three-foot ditch with the seeder. We dug that ditch to the depth necessary and then we started and each year for three or four years when the crops were suitable we hollowed away the ditch so that starting at the ditch we crowded it back about 50 feet till it made no appreciable difference.

(Concluded on page 7)

### GOOD SEED THE STARTER

I believe that seed of the wrong variety is responsible for much of the trouble with alfalfa. In spite of the fact that hardy varieties, such as Canadian Variegated and Grimm alfalfa, are the only ones advocated for use in Canada, I believe that the larger proportion of the seed used in our section has been of the Peruvian and similar tender varieties. I myself purchase seed directly from South-western Ontario, getting the Canadian Variegated variety, and have had no trouble with getting a good stand and keeping it. I have been told that there is very little good alfalfa seed for sale this year, the most of that offering being imported. If there are many failures with alfalfa this year we will be safe in nine cases out of 10 in attributing them to bad seed. Hence my first reply to alfalfa critics is: Do not go to the grocery store and buy the first seed that is offered you, then call down the crop because you get poor results.

Two conditions of soil that I have found to be detrimental to alfalfa are wetness and sourness. Alfalfa will not grow where it has wet feet. I have seen splendid crops growing on the heaviest clay, and in what appeared to be

# Cream of the West Flour

The hard wheat flour that is guaranteed for bread

It makes great, big bulging loaves of the lightest, whitest and most wholesome bread.

Give Me a Chance to Prove My Flour

We want to make "Cream of the West" flour better known in every locality in Ontario. And with this end in view we offer the following



Special Prices Direct to the Farmer

## FLOURS

	Per 96-lb. bag
Cream of the West Flour (for bread) .....	\$2 90
Queen City Flour (blended for all purposes) 2 50	
Monarch Flour (makes delicious pastry) .....	2 50

## CEREALS

Cream of the West Wheatlets (per 6 lb. bag) 25	
Norwegian Rolled Oats (per 90 lb. bag) .....	2 50
Family Cornmeal (per 96 lb. bag) .....	2 25

## FEEDS

	Per 100-lb. bag
"Bullrush" Bran .....	\$1 30
"Bullrush" Middlings .....	1 35
Extra White Middlings .....	1 45
"Town" Feed Flour .....	1 60
"Cam" Feed Flour .....	1 75
Whole Manitoba Oats .....	1 50
"Bullrush" Crushed Oats .....	1 55
Manitoba Feed Barley .....	1 35
Barley Meal .....	1 40
Oil Cake Meal (old process) .....	1 70
Chopped Oats .....	1 55

**PRICES ON TON LOTS**—We cannot make any reduction on above prices, even if you purchase five or ten tons. The only reduction from the above prices would be on carload orders. There would be a reduction in the freight charges (a carload contains 400 bags.)

**TERMS, CASH WITH ORDER.**—Orders may be assorted as desired. On shipments up to 5 bags, buyer pays freight charges. On shipments over 5 bags we will prepay freight on any station in Ontario east of Sudbury and south of North Bay. West of Sudbury add to above prices 10 cents per bag. To points on T. & N. O. Line, add 15 cents per bag to cover extra freight charges. Make remittance by express or post office money order, payable at par at Toronto. Prices are subject to market changes.

Your Choice of Any One of These Books,---Free To Everyone Who Buys Three Bags of Flour.

The Dominion Cook Book has no less than 1,000 recipes in addition to a large medical department. The books of Ralph Connor, Marian Keith, and J. J. Bell, are full of absorbing interest from cover to cover. You want every one of these good books in your library. Every time you order at least three bags of flour (any brand) you may choose any one of these books free. If you order six bags you may choose two books free, and so on.

### Dominion Cook Book.

Books by Ralph Connor:—  
Black Rock.  
Sky Pilot.  
Man From Gengarry.  
Glenarry School Days.  
The Prospector.  
The Foreigner.

Books by Marian Keith:—  
Duncan Polite.  
Silver Maple.  
Treasure Valley.  
"Lisbeth of the Dale."  
Whither Thou Goest.  
by J. J. Bell.

For each book you choose be sure to enclose 10 cents to pay the postage. Bear in mind that if you order up to five (5) bags we will pay the freight on the flour to any station in Ontario, east of Sudbury and south of North Bay (see terms above.) To get a book at least 3 bags must be flour—the other two bags may be flour, or any other product mentioned in the list printed above. Add 10 cents to your remittance to cover postage and wrapping of each book.

**THE CAMPBELL FLOUR MILLS CO., LIMITED**  
(WEST) TORONTO - - - ONTARIO

## How to Grow Big Crops of Roots

(Continued from page 3)

when the soil is shallow or poorly drained and when it is weedy. Under other conditions I think level culture is cheaper.

We sow on the flat, rolling the land down over each row. Then we use a light harrow or weeder crosswise of the rows which keeps down weeds, and creates a mulch. When sown in drills the harrow can not be used. The harrowing need not be discontinued after the small plants appear. By thick sowing there will always be enough plants.

The wheel hoe should be used on every farm. A double wheeled hoe is better than a single wheeled because it works steadier. It should be followed as soon as possible by the horse cultivator.

Many tons of mangels are lost each year by too late singling, as the following results show:

Tons Roots per acre	Tons Loss by Delay
First Singling . . . 27.6	
Second Singling . . . 25.5	2.1 tons in 1st week
Third Singling . . . 22.4	5.2 tons in 2nd week
Fourth Singling . . . 20.9	6.5 tons in 3rd week

The first singling was done when the first two adventitious leaves appeared. Referring to our former units a loss of 6.8 tons is equivalent to a loss of 24 bush. of corn. When insects are a serious pest it is often well to leave three or four plants in a place to be singled later when the attack is over.

### NO HAND THINNING OF CARROTS

Carrots should not need any thinning with the hand hoe; the harrow will do all that is necessary. The proper distance apart for swedes and turnips is 10 to 12 inches, and eight to nine inches for mangels.

Frequent cultivation, especially after rains to break the crust, is important. In an experiment which I once conducted but conducted with 100 mangels, six cultivations more than doubled the yield of two cultivations under the same conditions.

Although one class of roots may be superior in a locality, it is well to grow more than one kind. Sufficient mangels should be grown for spring feeding where turnips do best, and soft turnips are very desirable for early fall feeding even on the best mangel farms.

The last word I would say: Grow your own root seed, and remember that one pound of dry matter in roots is equal in feeding matter to one pound of grain.

### Items of Interest

Elgin county people are naturally proud of Elgin county, which they term "the best agricultural district in the Dominion of Canada." Recently, to get residents of the district in better touch with the resources and possibilities of Elgin, the Board of Trade and Publicity Association have got out a neat booklet which illustrates attractively the agricultural and industrial resources of the county. Booklets will be mailed to those whose names and addresses are forwarded to the Elgin Board of Trade and Publicity Association, Court House, St. Thomas, Ont.

Joseph Tremblay, who has a large farm at Beauport, Que., has suffered a heavy loss through hog cholera: 130 animals died within a few days from the disease. The Federal Government, through Dr. Gauvin, V.S., gave orders for the destruction of the number. This was done and the carcasses burned. Tremblay's loss will be in the vicinity of \$8,000. The government will reimburse him to the extent of two-thirds of the value of the animals.

## The

"In the opinion of the time last year's interests of Canada, it is frequently in the interest of the farmer to implement a 'mored.' This importance was introduced into the member for the first time in response to our subscribers' gives herewith a case for the farmer though the man who takes reads it.

"The growth of agricultural knowledge, in fact, 'shows' been on an increasing industry. In fact, when the tariff on our exports is removed, amounting to a next revised in our exports amounting to \$6,152,559. This was made tariff on agricultural products reduced from 10 per cent, our more than 13 last year were 13 were when the in 1894, our factored goods not grown to tent. They have a half times as manufactured product of \$7,692,756 692.756. This is half times as a case of agriculture.

"Let us make our exports at all manufacturing we import more than as we export. It is imported to the 1913, and our exports are not one-tenth of our total. We find the case of agriculture last year was worth; that one and a half imported, where turned goods as 10 times as much as Mr. Knowles' reason or justice made it possible for the manufacturer of agriculture to sell their products cheaper than Germans or Australians than Canadian farmers' manufactured that the foreign manufacturer in the world market they claim the protective tax.

In support of implements in Canada. Knowledge resources given by Mr. M. sent the International Co., before the Committee at the session in 1908, it is sworn that it is the same to manufac-

# The Duty on Agricultural Implements

"In the opinion of this House the time has arrived when in the interests of the farmers and consequently in the interests of the whole of Canada, the duties on agricultural implements should be forthwith removed." This resolution, one of vital importance to farmers in Canada, was introduced in the House of Commons recently by W. E. Knowles, the member for Moose Jaw, Sask., and in response to a request from one of our subscribers. Farm and Dairy gives herewith a brief resume of the case for free implements, even though the news may be stale to the man who takes a daily paper and reads it.

"The growth of our exports in agricultural implements," said Mr. Knowles, in support of his resolution, "shows that this industry has been on an entirely different footing than any other manufacturing industry. It can stand free trade. When the tariff was revised in 1894 our exports of agricultural implements, amounted to \$466,479. The tariff on agricultural implements was next revised in the fall of 1906 when our exports amounted to \$2,409,104. Our exports in the last fiscal year, ending March, 1913, amounted to \$6,152,559. Since the great reduction was made in 1894, when the tariff on agricultural implements was reduced from 35 per cent. to the Mackenzie Government figure of 20 per cent, our exports have grown more than 13 times. Our exports last year when the duty was 17 1/2 per cent were 13 times as much as they were when the duty was 35 per cent in 1894. Our exports of other manufactured goods during that time have not grown to anything like that extent. They have grown only five and a half times. Our exports of other manufactured goods in 1894 amounted to \$7,692,755 and in 1913 to \$43,692,708. They had grown five and a half times as against 13 times in the case of agricultural implements.

"Let us make another comparison: our exports and imports. Taking all manufactured goods as a whole, we import more than 10 times as much as we export. Last year we imported to the amount of \$462,461,945, and our exports of all manufactured goods amounted to \$43,692,708, or not one-tenth as much as we imported. We find just the contrary in the case of agricultural implements. Last year we imported \$6,145,484 worth, and exported \$6,152,559 worth; that is to say we exported more than one and a half times as much as we imported, whereas, taking manufactured goods as a whole, we imported 10 times as much as we exported."

Mr. Knowles failed to see the reason or justice in a tariff which made it possible for Canadian manufacturers of agricultural implements to sell their mowers, binders and plows cheaper to Frenchmen and Germans, or even to Russians and Australians than they do to our own Canadian farmers. Canadian implement manufacturers have demonstrated that they can compete with foreign manufacturers on any market in the world and yet for the home market they claim the protection of the protective tariff.

In support of his contention that implements can be manufactured as cheaply in Canada as elsewhere, Mr. Knowles' constructive testimony given by Mr. Metcalfe, who represents the International Harvester Co., before the Ways and Means Committee at the Congress in Washington in 1908-09. Mr. Metcalfe swore that it cost practically the same to manufacture in Hamilton

as in Chicago, and the firm that he represented had factories in both cities. Mr. Knowles then gave specific instances of where machines manufactured in Canada had been sold at lower quotations in the western states than in the prairie provinces. Comparative quotations were then quoted from the Grain Growers' Guide as follows:

Implement	Winnipeg	Minneapolis
8-foot binder	... \$425.00	\$340.00
7-foot binder	... 357.00	325.00
6-foot mower	... 69.50	66.00
5-foot mower	... 56.50	43.00
10-foot hay rake	... 30.00	24.00
12-foot hay rake	... 30.00	24.00
70 bushels manure spreader	... 355.00	125.00
12-inch gang plough	... 75.00	60.00
14-inch still beam	... 17.00	12.00
Walking plough	... 49.50	36.00
Hay tedder	... 49.50	36.00

The question was debated vigorously for several hours without any definite decision being arrived at.

## The Advantage of Small Fields

(Continued from page 5)

ence in the appearance. Where the subsoil had been exposed we brought a little back.

We kept track of the cost and it cost us for labor at odd times when the men would not have been doing anything quite as valuable, \$1 for 300 yards; so you see the expense was not great, and now that field never has any water winter or summer; it all runs away in that ditch. We have a ditch and we have no ditch. We can work right through it and grow corn right through it, and in the bottom were when the duty was 35 per cent and it was just as good a crop as anywhere else.

A PATCHWORK FIELD

"I saw a smaller field about 10 miles from here where a farmer had a big ditch across a field of about 15 acres and it was divided into about 10 acres side and six on the other; and it was a triangular field. By adopting the method I have just described he could have that in one field."

"Do away with all these little bits of fields. There is no longer any necessity for having three or four cows here and four over there a little patch here and another yonder. Get your farms into as large fields as you can. A large field will pay for the labor of bringing a number of small fields into large fields in one year. It concentrates your work and saves you going around with your cows from one field to another, and it enables you to use larger machines. When you have got your farms into large fields and are following the right rotation you will wonder why you did not do it before.

"I know you are not doing it, because I see thousands of farms every year where it is not done. I suppose there is not a farmer in this audience to-day but does not know what good rotation is and what the best rotation that there is not more than about 10 per cent. of the farmers here that are following a good rotation. We know, but we do not do."

The question is frequently asked, "Is it safe to plant potatoes on a field where blight and rot have been destructive the previous season?" The New York Agricultural Experiment Station answers, in Bulletin No. 367, "The fungus causing blight and rot does not survive freezing in the soil; so that, under all ordinary conditions, it is as safe to plant potatoes in a field where these diseases have prevailed during a past season, as in any other place.



## The Massey-Harris Separator Gives Satisfaction

Satisfaction follows the use of this Separator

- It saves more for the labor at all temperatures than any others.
- It is easy to fill—easy to turn—easy to clean.
- It is built to last.
- It is a neat, symmetrical, nicely finished machine—one you will take pride in having and using.

**MASSEY-HARRIS CO., Limited.**  
Head Offices—Toronto, Canada.

—Branches at—  
Montreal, Moncton, Winnipeg, Regina, Saskatoon, Swift Current, Calgary, Yorkton, Edmonton.  
—Agencies Everywhere—

## CLOVER—TIMOTHY—SEEDS

We will deliver in Ontario and Quebec, freight paid for your nearest Rail-Order station, any stock over 100 lbs. Prices good for 1 week from date of issue. Extra No. 1 Red Clover—we have a very special lot of American Bannan and Siberian Extra No. 1 Timothy—Our Diamond and Crescent as far as purity is concerned. They are a shade off in color. Allow 30c for 100 lbs.

ALFALFA	RED CLOVER	Alyske Clover	TIMOTHY
"Gold" Brand. No. 1, Govt. Standard. Grown in Russia. Hardy northern grown seed. We are not buying anything but the Grimm from the U.S.A. Their seed is very fine in appearance, but it kills out too easily. Present price \$10.25 per bushel (market varies).	"Sun" Brand. Fancy sample, thoroughly cleaned. Grades No. 1, Govt. Standard. Present price \$12.90 per bushel.	"Ocean" Brand. Fancy sample, thoroughly cleaned. Grades No. 1, Govt. Standard. Present price \$14.00 per bushel.	"Diamond" Brand. Fancy sample, thoroughly cleaned. Grades No. 1, Govt. Standard. Present price \$4.50 per bushel.
"Moon" Brand. Grades No. 2, Govt. Standard. Present price \$11.25 per bushel.	"Comet" Brand. Grades No. 3, Govt. Standard. Present price \$10.25 per bushel.	"Lake" Brand. Grades No. 3, Govt. Standard. Present price \$10.25 per bushel.	"Crescent" Brand. Grades Ex. No. 2, Govt. Standard. Present price \$4.50 per bushel.
"Silver" Brand. Grades No. 1, Govt. Standard. Grown in Turkey. Present price \$9.25 per bushel.	"MAMMOTH "Sun" Brand. No. 1 G.S., \$13.00 per bushel.	"Circles" Brand. Grades No. 2, Govt. Standard. Present price \$10.25 per bushel.	"Circles" Brand. Grades No. 2, Govt. Standard. Present price \$10.25 per bushel.

SEED CORN—See our catalogue. We guarantee 80% or better germination. SEED OATS—We have still some good, clean O.A.C. No. 72 at \$2.75 bush, at 75c per bush, base free. These are just the thing for that field you are entering in the Field Crop Competition. You take no risk in ordering these.

**GEO. KEITH & SONS,** Seed Merchants since 1860s 124 King St. E., TORONTO

## WHY MAN OF TO-DAY IS ONLY 50 PER CENT. EFFICIENT

BY WALTER WALGROVE

If one were to form an opinion from the number of helpful, inspiring and informative articles one sees in the public press and magazines, the purpose of which is to increase our efficiency, he must believe that the entire Dominion is striving for such an end.

And this is so. The Canadian Man because the race is swifter every day; competition is keener and the stronger the man the greater his capacity to win. The stronger the mind the stronger, his will and brain, and the greater his ability to match wits and win. The greater his confidence in himself, the greater the confidence of other people in him; the keener his wit and the clearer his brain.

The Canadian Woman because she must be competent to rear and manage the family and home, and take all the thought and responsibility from the shoulders of the man, whose present-day business burdens are all that he can carry.

Now what are we doing to secure that efficiency? Much mentally, some of it much physically, but what is the trouble?

We are not really efficient more than half the time. Half the time blue and worried—all the time nervous—some of the time really incapacitated by illness.

There is a reason for this—a practical reason, one that has been known to physicians for quite a period, and will be known to the entire World ere long.

That reason is that the human system does not, and will not, rid itself of all the waste which it accumulates under our present mode of living. No matter how regular we are, the food we eat and the sedentary lives we live (even though we do get some exercise) make it impossible; just as impossible as it is for the grate of a stove to rid itself of cinders.

And the waste does to us exactly what the cinders do to the stove; it makes the fire burn low and inefficiently until enough cinders have accumulated and then prevent its burning at all.

It has been our habit, after this waste has reduced our efficiency about 75 per cent, to drug ourselves; or, after we have become 100 per cent inefficient through illness, to still further attempt to rid ourselves of it in the same way—by drugging.

If a clock is not cleaned once in a while it clogs up and stops; the same way with an engine because of the residue which it, itself, accumulates.

To clean the clock, you would not put acid on the parts, though you could probably find one that would do the work, nor to clean the engine would you force a cleaner through it that would injure its parts; yet that is the process you employ when you drug the system to get rid of waste. You would clean your clock and engine with a harmless cleanser that Nature has provided, and you can do exactly the same for yourself as I will demonstrate before I conclude.

The reason that a physician's first step in illness is to purge the system is that no medicine can take effect nor can the system work properly while the colon (large intestine) is clogged up. If the colon were not clogged up the chances are 10 to 1 that you would not have been ill at all.

It may take some time for the clogging process to reach the stage where it produces real illness, but no matter how long it takes while it is going on the functions are not working so as to keep us up to "conceit pitch." Our lives are sluggish, we are dull and heavy—slight or severe

backaches come on—our sleep does not rest us—in short, we are about 50 per cent efficient.

And if this condition progresses to where real illness develops, it is impossible to tell what form that illness will take, because—

The blood is constant—circulating through the colon and taking up by absorption the poisons in the waste which it contains, it distributes them through the system and weakens it so that we are subject to whatever disease is most prevalent.

The nature of our illness depends on our own little weaknesses and what we are the least able to resist.

These facts are all scientifically correct in every particular, and it has often surprised me that they are not more generally known and appreciated. All we have to do is to consider the treatment that we have received in illness to realize fully how it developed and the methods used to remove it.

So you see that not only is accumulated waste directly and constantly pulling our efficiency by making us blood poor and our intellect dull—our spirit low and our ambitions weak, but it is responsible through its weakening and infecting process for a list of illnesses that if catalogued here would seem almost unbelievable.

It is the direct and immediate cause of that very expensive and dangerous complaint—appendicitis.

If we can successfully eliminate the waste all our functions work properly and in accordance with nature no poisons being taken up by the blood, so it is pure and imparts strength to every part of the body instead of weakness—there is nothing to clog up the system, no billions, duds, and nervously fearful.

With everything working in perfect accord and without obstruction, our brains are clear, our entire physical being is competent to respond quickly to every requisite, and we are 100 per cent efficient.

Now this waste that I speak of cannot be thoroughly removed by drugs, but even if it could the effect of these drugs is so unwholesome, very unnatural, and if continued becomes a periodical necessity.

Note the opinions on drugging of two most eminent physicians:

Prof. Anson Clark, M.D., of the New York College of Physicians and Surgeons, says: "All of our curative agents are poisons, and, as a consequence, every dose diminishes the patient's vitality."

Prof. Joseph M. Smith, M.D., of the same school, writes: "The poisons which enter the circulation poison the blood in the same manner as do the poisons that clog the ducts."

"Now, the internal organism can be kept sweet and pure and clean as the external body, and the function without cost to anyone addressing him at Room 351, 220 College Street, Toronto, Ont., and mentioning that this has been done in Farm and Dairy."

Personally, I am enthusiastic on Internal Baking, because I have seen what it has done in illness as well as in health, and I believe that every one who wishes to keep in as near a perfect condition as is humanly possible should as much as possible use Internal Baking. It will also probably learn something about himself which he has never known through the drugging book to which I refer.—Advertisement.

## FARM MANAGEMENT

### Treatment of Smut

John McNab, Bromo Co., Que.

A field of grain badly infested with smut once represented to me an undesirable but nevertheless unpreventable evil. It never occurred to me that it might indicate a farmer who was not as well up to his job as he might be. Now smutty grain is just a representative of carelessness or ignorance, or both. Since I have found that smut is one of the most easily preventable of diseases I feel in a position to smile at the other fellows though it isn't so long since I was in his class.

For the past few years I have been treating all seed grain by the formalin method. This method is simply as brief as it is effective. It is to drive floor. Spread the seed grain three inches deep over the floor, then moisten with a solution consisting of a pint of formalin to six gallons of water. I apply the solution with an ordinary watering can. I then move the grain over with a shovel and water again. When sure that all the grain is moistened I scoop it into a corner, cover it with sacks and rugs in order to confine the gases, and there is no danger of smutty grain from that seed.

This process I have found so simple that I would do it even if there were no smut on the farm. It is cheap as an insurance. Formalin can be secured at any drug store.

### Growing a Balanced Ration

L. K. Shaw, Wexford Co., Ont.

Why buy expensive concentrates to balance the dairy cow's ration? I believe that any farmer in Ontario can grow a balanced ration. I have done so ever since I started farming.

There are two necessary qualities in a good ration: balance and palatability. Both are essential to the best results.

By balance I refer to the relative quantities of protein and carbohydrates and fat. Corn ensilage is exceedingly rich in carbohydrates, but deficient in fat. A good protein corn in order to get enough protein from corn ensilage alone, would have to contain several times as much carbohydrates as she could possibly make use of.

With alfalfa hay the situation is directly opposite. Here the cow would have to eat several times as much protein in order to get a sufficient supply of carbohydrates. A sane and sensible thing to do is to grow both corn and alfalfa and feed the two together. We then have a balanced ration.

Palatability in the ration is of equal importance with balance, for a ration, be it ever so well balanced, will not be consumed unless the cow likes it. I have found that cows will eat well cured alfalfa hay with meal lying at the other side of the manger. They prefer the hay. No one questions the palatability of corn ensilage. Thus we have both balance and palatability in these two feeds.

When asked about this at our Farmers' Club I was asked if it was not too bulky. I had to admit that for a heavy milking cow, one giving 40 to 60 lbs. of milk a day, a more concentrated ration is needed. I myself use bran and oatmeal meal. Most dairy farmers, however, have cows that can be fed very satisfactorily on roughage alone, providing it is good roughage. Where alfalfa is not available, and a cow nears I have not as much as I would like, and clover must be fed, it is advisable to feed a little bran and oat cake or cotton seed meal along with the

bulky ration. I am giving these suggestions as farmers are now ordering their seed for the coming year, and planning their crops. The plan that I have outlined works splendidly in my own case.

### For Better Meadows

A. McKenzie, Wentworth Co., Ont.

In many sections our meadows are not as good as they were some years ago and yield less crops. The plan here are a few of the things that I look for in a good meadow:

In the first place the soil must be well drained. The best quality of hay is never produced on a wet soil. I apply a desirable practice on good drainage will soon pay both principal and interest on the investment.

The soil of a good meadow must be well supplied with organic matter or humus. A meadow in which a regular rotation of crops is followed, and which is not left under too long, will usually have a plentiful supply of humus. Top dressing with a manure spreader, where manure is plentiful, I apply in solution with an aid to the humus content of the soil.

Of course the soil in a meadow must be of good tilth and seed. Many otherwise good crops have sour soils, and the best single improvement that could be made would be an application of lime.

An important point in establishing a meadow is that a good mixture of grasses and clovers be sown. Do not start the seed; 25 to 30 lbs. of seed to the acre is not too much where the meadow is expected to yield both hay crop and pasture.

### Vitality of Seed

Assuming that every acre has been taken up by the farmer to fit to the conditions of culture, it is still important to see that the seed is of good vitality and capable of producing strong, vigorous plants. Great waste of land and labor results every year from the use of seed of low vitality.

Poor seed cannot produce good plants, and poor plants give poor returns or none at all. Seed should always be tested before planting, and seed of low vitality rejected. Some of this poor seed is introduced and spread in this way. The loss from weeds and the cost of fighting them is great and is so well understood as to need no discussion.

Farmers often buy cheap seed, thinking that they are saving money, when as a consequence they are paying two or three times as much for the small amount of good seed obtained as they would pay had they bought good seed in the first place at twice the rate per pound paid for the poor seed.

Farms are selling at high prices; 190 acres for \$20,000, and 90 acres for \$11,000. Some front land has gone at \$1.00 a foot for 80 feet.—Wm. Squire, Essex Co., Ont.

Are there any charity borders in your herd? We hope not, after all the time and money we are spending in Farm and Dairy from successful dairymen who have eliminated the dead beasts from their herds.

I did you read that description of Mr. R. W. Ireland's farm in the Horticultural Number of Farm and Dairy? Mr. Ireland has a division of labor in the management of his farm that we neglected to mention.

His son, Mr. F. Ireland, who has lived with him since a young boy, is handling the farm and dairy part of the business, while Mr. Ireland is devoting himself to the orchards.



You inquire  
Why not?

There is  
your building  
but there is  
tainty that  
you neglect  
well protection

character of  
Some paint  
through to the  
decay and so  
The point of  
protection is

Low  
LIQUID

It adheres  
tough, durable  
moisture and  
and the one  
tests have  
protect protection

Asks your  
dealer—agent  
to mention  
river, interior  
wall

Valuable  
to the  
neighborhood  
—Home  
(Gardens) and  
"Gardens"  
Write today.

LOWE E  
249 E 255  
TORO



CANADA  
PA  
HOMES  
EXCU

MANITOBA  
SASKAT  
Each Town  
Winnipeg and  
Edmonton and  
From Toronto, a  
North Toronto  
from Stations  
Return Lin

REDUCED SE  
COULD WAG S  
EACH TUESDAY

Settlers travelling  
check should take  
THE IN WHICH  
Tuesday during M  
After arrival, the  
Toronto Union S

Settlers and family  
should use REGU  
Toronto, Ont., J  
Conlon and Toron

Through train  
New COLONIST C  
Share of the  
Particulars from  
Wm. G. Chapman,





**You insure against fire—  
Why not against decay?**

There is a small chance that your buildings will be burned, but there is an absolute certainty that they will decay if you neglect to keep them well protected by good paint.

Protection depends upon the character of the paint you use. Some paint permits moisture to go through to the wood, which starts decay and soon ruins the building. The paint that gives complete protection is



It adheres tightly and sets in a tough, durable coat that resists moisture and wears for years. It is the one paint that years of outdoor tests have proved will insure greatest protection of your buildings.

Ask your local "High Standard" dealer-agent to give you Paint Information and color combination for exterior, interior walls, doors, woodwork, etc. Have the best looking home in your neighborhood. Our booklet on "Paints for Every Purpose" and "Hints to Farm Painters" are free to readers of this paper. Write today.

**LOWE BROS., Ltd.,**  
249 to 255 Seranac Avenue,  
TORONTO, Can.



**CANADIAN PACIFIC  
HOMESEEKERS  
EXCURSION**

TO  
**MANITOBA, ALBERTA  
SASKATCHEWAN**

Each Tuesday March 10 to October 17, inclusive.  
Winnipeg and Return - \$35.00  
Edmonton and Return - \$45.00

From Toronto, and Stations West and North of Toronto. Proportionate fares from Stations East of Toronto to West. Returns Limit two months.

**REDUCED SETTLERS' FARES  
(ONE-WAY SECOND CLASS)  
EACH TUESDAY, MARCH AND APRIL**

Settlers travelling with live stock and effects should take **SETTLERS' SPECIAL TRAIN** which leaves **Winnipeg** every Tuesday during **MARCH** Toronto each after arrival regular 10.15 a.m. train from Toronto Union Station.

Sections and families without live stock should use **REGULAR TRAINS**, leaving **Winnipeg** 10.15 a.m. DAILY. Through **Colombia** and **Tourist** Sections.

Through trains Toronto to Winnipeg and West. **COLONIST GARS ON ALL TRAINS**. Particulars from Canadian Public Agents or write **M. G. Murphy, D.F.A., Toronto.**

**Bulls Running at Large**

A deputation representing several of the live stock associations, more particularly the dairy cattle breeders' associations, waited upon Hon. Mr. Duff, Minister of Agriculture for Ontario, on Thursday of last week and asked for legislation imposing a minimum penalty of \$50 on farmers who allow their bulls to run at large, and also that minimum damages of \$50 be allowed wherever a cow is got in calf through bulls being at large. Hon. Mr. Duff gave the deputation a sympathetic hearing, and later the members of the deputation had a long interview with Deputy Minister C. Bailey, who promised to frame a bill covering the desires of the deputation for submission to the Legislature.

It was decided to reduce the proposed minimum fine of \$50 where bulls are found at large to a minimum fine of \$25. Among those on the deputation were Alex. Hume and Wm. Stewart, of Menie, representing the Ayrshire Breeders' Association; the Messrs. Bull, of Brampton, representing the Jersey Breeders' Association, and Messrs. R. F. Hicks, Newtonbrook; W. A. Chemon, St. George; J. W. Richardson, Caledonia; D. D. C. Platt, of Millerville, representing the Holstein breeders.

**Free Drainage Surveys**

Farmers! Have you a field on your place that is too "wet, cold and sour"? Drainage will reclaim it and make it one of the best fields on the farm.

Drainage does four things. First, it removes the surplus water and makes it possible to cultivate and

**Results for Advertiser**

I think I never had so many enquiries, and especially for seed oats. At first the 2 1/2 car of sales was small, but shortly they have increased, and the oats are nearly all gone, with barley going nicely. One thing is very plain—the advertisements will reach the right parties.—Aldrich, Mount Forest, Ont.

seed about three weeks earlier in the spring than on the same land when undrained. Secondly, it makes the land from 10 to 15 degrees warmer than if not drained, and this warmth germinates the seed properly and gives a good stand of grain. Thirdly, it lets plenty of air down to the roots of the plants, which is necessary for satisfactory growth. Fourthly, it makes the soil more porous, and this in turn causes the soil to store up more water for the use of the crops in time of drought.

Frequently the increase of crop in one year pays for the drainage, and then three years or so that drainage pays from \$3 per cent to 100 per cent per annum on the money invested.

Have you difficulties in drainage? The Department of Physics of the Ontario Agricultural College will assist Ontario farmers on an application. They will make you an application survey of the area to be drained, or run a single line of drain, and when done furnish you with a finished map showing location of drains, grade, sizes of the tile, etc.—a detailed guide for the thorough drainage of the land in question. No charge is made for the services of these drainage advisers, nor for the maps, only the applicant pays the travelling expenses in connection with the survey, amounting usually to not more than a couple of dollars.

Drop a card to the Department of Physics, O.A.C., Guelph, for the regular application form.

**Ford**  
THE UNIVERSAL CAR

The Ford—the Lightest, Surest, Most Economical—the very essence of Automobiling—and all Canadian.

Model T \$600  
Runabout  
f.o.b. Ford  
Ontario

Get particulars from Ford Motor Company of Canada, Limited, Ford, Ont.

**THE IMPERIAL OIL COMPANY LIMITED**

**PRAIRIE HARVESTER OIL**

Proved best by years of use.

**PRAIRIE Harvester Oil**

The most durable oil for farm machinery. Unaffected by changes in temperature. Will not gum or corrode. Reduces friction to a minimum. A splendid lubricant.

**STANDARD Gas Engine Oil**

Meets all requirements for a cylinder oil for gasoline and kerosene engines. Lubricates properly under all conditions; practically free from carbon. Equally good on external bearings.

Recommended by the leading engineers and engine builders.

**Eldorado Castor Oil  
Thresher Hard Oil  
Arctic Cup Grease**

**THE IMPERIAL OIL COMPANY, Limited**

Toronto	Montreal	Winnipeg	Vancouver
Ottawa	Calgary	Edmonton	Edmonton
Halifax	S. John	Regina	Saskatoon

# FORTY YEARS REPUTATION

is something that is of incalculable value.

It is plain that we have to be just as careful of the quality of our goods now, to keep up that reputation, as we have been in building it.

And that is your most guarantee of the uniform excellence of

## GUNNS SHUR CROP FERTILIZER

We have an interesting book about fertilizers. It's yours for the asking. **Gunns Limited, West Toronto**

### Seed Corn For Sale

High germination test. White Cap Yellow test. Grow on our own farm. Write **TISDELL BROS., ESSEX CO. TILBURY, ONT.**

### TESTED SEED CORN

White Cap Yellow Dent. Matured early. Germination guaranteed. Apply **ED BATTON - ESSEX, ONT.**

FOR SALE—Iron Pipe, Fencing, Hitting, Rails, Chain, Wire Panels, Iron Posts, etc., all sizes, very cheap. Send for list, stating what you want.—The Imperial Waste and Metal Co., Dept. F. D., Queen Street, Montreal.

### CORN THAT WILL GROW

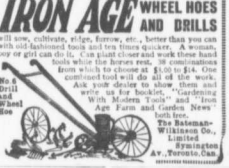
Money back if not satisfied. Send for Price List. **DUKE, RUTHVEN, Ont.**

### A FARMER'S GARDEN

Highly wise to plan for this in your case. Save work and worry, saves having no such goods, gives better satisfaction to the help. A good garden will do much for you in your busy life without proper tools. They cost little and save much hard work.

### IRON AGE WHEEL HOES AND DRILLS

Now, collars, pipes, trawls, etc., better than you can get with old-fashioned tools and ten times quicker. A woman, boy or girl can do it. Can stand close and work three hours. Tools which the horses rest, 30 combinations from which to choose at \$5 to \$4. One combined tool will do all the work. Ask your dealer or write us for booklet, "Gardening with Iron Age." **The Milwaukee Iron Age Farm and Garden News Co., 125 Milwaukee St., Chicago, Ill.**



## BEET FEEDS

**BRUCE'S GIANT FEEDING BEETS**—The most valuable Field Beets on the market, combine the rich qualities of the Sugar Beet with the long keeping, large size and heavy cropping qualities of the Mangel. We offer in two colors, White and Rose. **1 lb. 10c, 5 lb. 50c, 10 lb. \$1.00.**

**BRUCE'S MAMMOTH INTERMEDIATE SMOOTH WHITE CARROT**—The best of all Field Carrots. **1 lb. 10c, 5 lb. 50c, 10 lb. \$1.00.**

**BRUCE'S GIANT YELLOW INTERMEDIATE MANGEL**—A very close second to our Giant White Feeding Beet, and equally easy to harvest. **1 lb. 10c, 5 lb. 50c, 10 lb. \$1.00.**

**BRUCE'S NEW CENTURY SWEDB TURNIP**—The best shipping variety, as well as the best for cooking, handsome shape, uniform, purple top. **1 lb. 10c, 5 lb. 50c, 10 lb. \$1.00.**

**BRUCE'S GIANT KING SWEDB TURNIP**—An improvement on Jumbo, or Elephant beets, forked shaped, large good quality, heavy yielding, and good keeper. **1 lb. 10c, 5 lb. 50c, 10 lb. \$1.00.**

Prices are here—Add for postage. If by mail, 6c for 1 pound, 10c for a pound. Bruce's Giant White Beet, Bruce's Mammoth Intermediate Mangel and Bruce's Giant King Swedeb led all the others in the experimental tests, Ontario Agricultural College for 1913.

**FREE**—Our hand-drawn illustrated 125-page catalogue of Vegetable, Fruit and Flower Seeds, Plants, Poultry Supplies, Garden Implements, etc., for 1914. Send for it.

**John A. Bruce & Co., Limited, Hamilton, Ontario.** Established sixty-four years.

### FOUR BIG STRAWBERRIES

Dunlap, Uncle Jim, Arriest and Williams. These four popular varieties ripen in the order named, and are adapted to practically all soils and conditions. The plants are exceedingly vigorous and productive, berries large and rich colored. Shipping capabilities—**BREED CORN**—An acknowledged excellent. Price post paid. Six plants, 25 of each if desired, for \$1.00; 10 Dunlap, 10 Williams, 10 Uncle Jim, and 25 Arriest, \$2.00. Gibraltar and 12 Gibraltar, for \$2.00. Ask for prices of your order we will mail it "Important Point" to every County. Send for list. **N. E. MALLOY, R.R. No. 2, BLENHEIM, Ont.**

### Seed Corn FOR SALE

A quantity of choice hand selected Longfellow, White Cap, Leeming Seed Corn. Orders solicited. **J. S. WAUGH - CHATHAM, ONT.**

### Club Together On Your Seed Grain

We can supply you with any quantities—all kinds of good grain and clovers—**BREED CORN** and **CLOVER SEED** our SPECIALTIES. You'll be wise to buy before the spring rush. We order low, small for our prompt and careful attention. **SPECIAL RATES TO FARMERS' CLUBS.** Write us for prices. **M. W. SHAW & COMPANY, MERLIN, ONT.**

### A TREATISE on the Horse—FREE!

We offer you for free this book that tells you all about horses and how to take care of them. Call for it at your local druggist or write us. **KENDALL'S SPAVIN CURE** is remarkable. It cures Spavin, Curb, Splint, Ringbone or any other of the ailments of the horse. It is sold by all Druggists, or by mail, 25c per bottle. Write for a free book at your local druggist. Write us. **Kendall's Spavin Cure is sold at the western price of 25c a bottle. Or 10c. If you cannot mail it our free book at your local druggist. Write us.** **Dr. R. J. KENDALL COMPANY, Essexburg, Maine, Vermont, U.S.A.**

**BOOKS** at lowest prices you can get through **Bruce's Farm and Dairy**, including all the latest books on agriculture. Write for our Book Catalogue.

## ORCHARD AND GARDEN

### Orchard and Garden Notes

Watch the hotbeds closely. Ventilate hotbeds on the side away from the wind if possible. Manure may be spread on the garden and plowed in next spring. Be sure the manure is heating evenly before it is put in the frame. If hotbeds made do not heat readily, put on a few buckets of hot water.

Bank hotbeds with manure that is not heating. Dry manure will not be so likely to freeze and take heat from the frame.

When pruning have a reason for every cut made and cut close to the limb or trunk. Leave no stubs. Pruning may be done late in March. Cover all wounds over one-half inch in diameter with white lead or grafting wax.

Inspect all garden tools, sharpen and put them into the best condition. Perhaps there are some new ones that should be purchased. Now is a good time. Look them up.

Grafting wax is made by melting together four pounds of resin, two pounds of beeswax, and one pound of unsalted tallow. Heat this about 15 or 20 minutes, then throw into cold water and pull in the same manner as molasses candy.

### Our Apples in South Africa

*W. J. Egan, Trade Commissioner, Cape Town.* Opinion among the various dealers varies in reference to Canadian apples received in South Africa this year. Durban dealers report; grading and packing of Nova Scotia fruit to be all right in every particular. They complain, however, that Nova Scotian Kings and Wagners on the whole were a great disappointment, as they were poor in color and in keeping qualities. The Ontario fruit, such as Ben Davis, Kings, Russets, and Spies left nothing to be desired.

Port Elizabeth dealers were well satisfied with consignments to them, but state that they did not receive all that had arranged for, one large dealer claiming that although he booked space early last May, he failed to get accommodation for his second shipment.

### A SPLENDID MARKET

The apples which arrived in Cape Town were, with the exception of one lot of Golden Russets on the s. s. Benueña, in very good condition, but were not graded in all cases as they should be for export. The difference in grading of the apples received in Cape Town and other ports must be attributed to the fact that almost all the apples shipped to this port are purchased by local dealers, who visit Canada annually, while the fruit to other ports is consigned by Canadian producers or dealers.

The South African market during October, November, and December is a splendid one for good Canadian apples, and will command high prices. This office invites early correspondence this year with the view of consignments for next year and advise the securing of space in cold storage chambers early in the season.

"The San Jose and Oyster Shell Bees" is the subject of Bulletin 219 from the Ontario Dept. of Agriculture. Mr. L. Caesar, the author of the bulletin, is Provincial Entomolo-

gist, and is in a better position to deal with the subject than any other man in Ontario. The wide distribution of the San Jose Scale through the Lake Erie counties makes the bulletin a timely one. It can be secured on application to the Department of Agriculture at Toronto.

### Fertilizer for Fruit

*F. V. Thompson, German Polish Syndicate, Toronto*

Unfortunately we have not received a number of results of the fruit experiments conducted during the last season. I will quote a few results that have come to hand.

Mr. W. H. Gibson, of Newcastle, Ont., obtained the following results on Baldwin apples: Unfertilized plot, 337½ bus.; complete fertilizer plot, 437½ bus.; plot without potash 350 bus.; plot without phos. acid 400 bus.; and plot without nitrogen 362½ bus. This was the second year of this experiment, which will be conducted over a number of years with several others to give reliable data regarding Ontario orchards. Apples from the complete fertilizer plot were taken in 1912 by the Dominion Government for exhibition purposes.

Mr. Stratton, Port Hope, Ont., obtained the following results on his strawberries: Plot 1, unfertilized, 2,030 boxes; plot 2, complete fertilizer, 3,010 boxes; plot 3, without potash, 2,820 boxes; plot 4, without phos. acid, 2,880 boxes; plot 5, without nitrogen, 2,560 boxes. While this experiment fully shows the value of a complete fertilizer, it also shows that nitrogen was deficient in the soil as the lowest yield of the fertilized plots was from that from which nitrogen was omitted.

The following results were obtained by A. E. Gale, Keatings, B.C., on strawberries, which were only set out in April last year. Owing to bad weather and lack of help the blossoms were not picked and each plot was allowed to bear what fruit it would with the following results: Plot 1, 444 lbs.; plot 2, complete fertilizer, 1,344 pounds; and the plot without potash, 900 lbs.

An experiment on gooseberries conducted under the supervision of the District Representative at Simcoe resulted in the following yields: Unfertilized plot, 11,360 lbs.; complete fertilizer plot, 15,872 lbs. an acre. This shows a gain of 4,512 lbs. an acre in favor of the fertilizer, which you will readily admit is a substantial profit on the investment.

### Cloth that wears like Leather

*Remarkable discovery by English Firm*

A remarkable hosiery cloth that will not tear or wear out and yet looks exactly as the finest sweeds and serges has been discovered by the Hosiery Cloth Co., 54 Theobalds Road, London, W.C. Reg. They make from these wonderful cloth a well-known suit for only \$5.50. Brooches for cycling, riding or walking for two dollars, or a pair of well-fitting, smart-cut Trousers for \$1.00, and if a home appears within a month, an advertisement is given absolutely free. See advertisement on page and write for patterns. Write to the firm's Toronto Branch, 175 Huron Street, Toronto, Ont.



### Care of F

Bessie M. M. Before taking brooder room prepare small green plot and sprinkle the plot with coal oil sand. The cost is a week or every week.

I dust the powder before coops and the chickens. The week.

After the chick old I take them in cooping been first washed with li



### English W

what akin to the the flycatcher in appearance. C

cleaned out twice supplied with kiln. I start to kill them they are two of them out of the and they shape for killing keeping poultry roundings clean min.

### Egg Circ

The Live Stock Commission Department all winter been campaign looking of circles for the ing of eggs. M been this man in Mr. Stuart, who cently, dropped in office for a chat, us something of movement. The work this winter organization in O in Lanark, two Victoria, three Leeds, and three Eastern township vince four in Per used and in Pe circles.

"Have these circles," all been to the instrumentally Branch. A gre circles have been



## Care of Brooder Chickens

Bessie M. Main, Victoria, B. C.

Before taking my chicks from the brooder room at two weeks old, I prepare small coops for them on a green plot about 15 yards apart. I sprinkle the floors of these coops with coal oil and then cover with sand. The coops are cleaned out twice a week and fresh sand is put in every week.

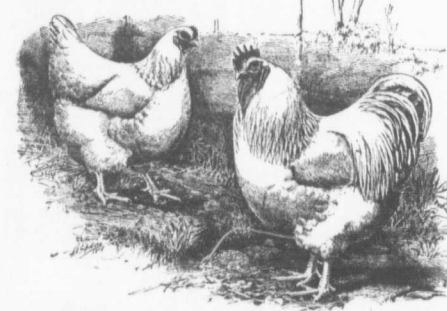
I dust the hens well with insect powder before putting them in the coops and then give each hen 20 chickens. The hens are dusted every week.

After the chickens are five weeks old I take them from the hens and put them in colony houses, these having been first well dusted and white-washed with lime. The houses are

entirely by farmers' clubs of one kind and another. A feature of the life is the changing attitude of local storekeepers towards the egg circles. Last night, for instance, we organized a circle at Reabro in Victoria county, and a local merchant was appointed manager of the circle. Country merchants seem to favor the circle in that it gives them a chance to do what they should have done long ago—pay different prices for eggs of different quality.

In speaking of the results of the work, Mr. Stuart said: "The Live Stock Branch gets a report from the manager of each circle each week. This report gives such information as the number of eggs shipped, the number of members shipping, local prices and the prices paid to circle members. We find that prices have ranged from 15 to 25 per cent. of an advance over the prices paid by local stores. This is the average advance for the six months during which the circles have been working. I consider this very satisfactory when we bear in mind that the local price is often enhanced owing to the opposition of the egg circles."

The work is still going on. Mr.



## English Varieties of Fowl are becoming More Popular in Canada

Orpingtons, White, Black and Buff (the ones illustrated are the former) are some of the Plymouth Rock type that are the most popular in appearance. Classes for Orpingtons at our poultry shows now attract numerous entries.

cleaned out twice a week and always supplied with fresh sand.

I start to kill the chickens when they are two months old. I take them out of the houses just as I find them and they are always in good shape for killing. The main thing in keeping poultry is to keep the surroundings clean and free from vermin.

## Egg Circle Activity

The Live Stock Branch of the Dominion Department of Agriculture has all winter been prosecuting a vigorous campaign looking to the organization of circles for the cooperative marketing of eggs. Mr. J. C. Stuart has been the man in charge of this work. Mr. Stuart, when in Peterboro recently, dropped into Farm and Dairy office for a chat, and incidentally told us something of the success of the work this winter to date has been the organization in Ontario of two circles in Lanark, two in Hastings, one in Victoria, three in Brant, two in Leeds, and three in Lennox. In the Eastern townships of Quebec province four circles have been organized and in Pontiac county four circles.

"These circles," said Mr. Stuart, "have all been organized through the instrumentality of the Live Stock Branch. A great many additional circles have been organized independ-

## Poultry Pointers

Good hens, like good cows, always pay their way.

Failures with poultry are often accounted for by foggy ideas of how much a hen should get to eat.

Some of us clean the roost board each day and the nests each six months. The first is alright; the second all wrong.

A handful of wood ashes in the drinking water soon to prevent roup. An open front house completely exterminates it.

When asked what were the two greatest detriments to poultry success, a prominent poultry editor replied, "Fog and vermin."

Keep the breed you like best, at least until you have proved to your satisfaction that it cannot make good. The hen may be relied upon, but her son never sets.

Wet mashies are becoming a thing of the past. Dry mashies are easier prepared, easier fed and more rationally eaten.

## Heaves

AND HOW TO CURE  
—A standard treatment with years of successful practice that is guaranteed to result in a permanent cure.

Fleming's Tonic  
Heave Remedy

Use on any case—No matter what the cause—In 10 to 15 days the horse falls to relieve, and if three full doses are given, other details in Fleming's Vast Pocket Veterinary Adviser

Write us for a Free Copy & Best Ever Used,  
Dose: Three—Dissolved in one of 1 quart of water. Give one cupful 3 times a day completely cured in 10 to 15 days.  
U. S. P. REGISTERED, LONDON, E. C.  
Per bottle, 75c. 6 for \$4.00

FLEMING BROS., Chemists  
93 Church St., Toronto

## WE STILL HAVE A FEW COPIES OF

## Gleason's Veterinary Hand Book

## Making the Farm Pay

Each of these books retail at more than a dollar.

We will send you one postage paid for one new subscription to

## FARM AND DAIRY

Peterboro, Ont.

## FOR SALE AND WANT ADVERTISING

THREE CENTS A WORD, CASH WITH ORDER  
FOR SALE—Ontario Agricultural College strain of brood-to-lay Barred Rock Eggs—Guelph, Ont.

EGGS FOR SALE—Pure-bred P. P. Rocks bred for years from O. A. C. and Macdonald College brood-to-lay strains. \$1.25 for 15—T. Bell, R.R.D., Cherry Valley, Ont.

WHITE WYANDOTTIE EGGS from my champion male and other matings. Heavy laying strain—H. Rundle, Brighton, Ont.

## INDIAN RUNNERS

The true Pencilled Paven and White English Standard Large white eggs from these ducks (they lay more eggs than hens). \$1.50 and \$2.00 per dozen. One Young Drake for sale.

EDWARD FENNER, WALKERTON, ONT.

AMERICA'S GREATEST LAYING STRAIN OF WHITE WYANDOTTIES—Winners at the principal Egg-Laying Competitions. Hatching eggs, two, three and four dollars per setting—Melrod Bros., Delmar, Stony Creek, Ont.

## BARRED ROCK EGGS

From brood-to-lay stock. Price, \$2.00 per setting of 15 eggs, or \$3.50 for 2 settings.

J. C. STUART  
MAPLE HURST FARM - DALMEY  
R. R. NO. 2, OSOGODE, ONT.

## Baby Chicks

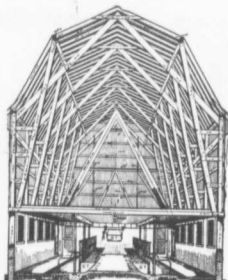
Order your baby chicks now from our splendid laying strain of SINGLE COMB WHITE LEGHORNS.

## UTILITY POULTRY FARM

T. G. DELAMERE, Prop.  
STRATFORD - ONT.

## Bickmore's Gall Cure

This old-time remedy for keeping horses free from sores. Don't lose the services of your horse. Approved remedy for Cuts, Wounds, Scratches, etc. Heavy loads if it will. Sample and 8-page book sent on receipt of a few cents.  
WINGATE CHEMICAL CO., Canadian Dist'rs., 5400 Notre Dame St. W., Montreal, Can.



## A Barn You Can Build Yourself

You can build or remodel your stable yourself. It costs you nothing if you get Galvanized Steel Cow Stalls, and accept the Heavy Plan Service we offer. No high priced carpenters to hire and no board for days—we'll show you how to build a more modern, better ventilated, stronger barn. It will cost less to frame, yet have greater storage capacity and more accommodation for stock.

## BT STEEL STALLS EASY TO INSTALL

We send you blue print plans and cross sections showing best layout for your stable, best widths for cattle, stand, passage, gutters, etc. You can install the BT Steel Stalls in two hours, with only a boy to help, for they come ready to set up from our factory.

## WE'LL MAKE THE PLANS

Write today for full details of our valuable barn-plan service. Get our book No. 21 that tells all about BT Galvanized Steel Stalls, a valuable book "How to Build a Dairy Barn." Either or both books sent free in two hours and address on a postal. Write to

BEATTY BROS., Limited  
1545 Hill St., FERGUS, ONT.

## Tells why chicks die

J. C. Reefer, the poultry expert of 3550 Main St., Kansas City, Mo., is giving away a valuable book entitled "White Diarrhoea and How to Kill it." This book tells you exactly on what diarrhoea and tells how to prevent it. It also contains a recipe for a medicine that cures this terrible disease over night and actually saves 25 per cent. of every brood. All poultry raisers should write Mr. Reefer for one of these FREE books.

## FOR SALE

Eggs from pure-bred B. P. Rocks of the O. A. C. brood-to-lay strain. None better. \$1.50 per 15. Orders taken now.

R. R. 9 A. T. BROWN  
Peterboro, Ont.  
By Parcel Post 10c extra

## EGGS, BUTTER AND POULTRY

For best results, ship your Live Poultry to us also your Dressed Poultry, Fresh Dairy Butter and New Laid Eggs. Egg cases and poultry crates supplied. Prompt Returns.

The DAVIES Co.  
Wm. Davies, Ltd.  
Established 1856 TORONTO, ONT

## 502-6 Bushels Potatoes

### From One Acre of Ground

**T**WENTY DIFFERENT FARMERS in 20 different parts of New England competed the past year in growing potatoes. The crops were widely separated as to climatic and weather conditions. Each one planted, cultivated and took care of his crop in his own way; but all used

## Bowker's Fertilizers

### And No Other Dressing

The winning crop was 502.6 bushels. The average of the twenty crops was 322.8 bushels. The average yield in New England is 131.6 bushels, and of the United States 89 bushels. Our crop-growing contests of the past four years have been so fairly and accurately conducted that they have been accepted everywhere as authentic. Henry Wallace, Editor of Wallace's Farmer, writes: "There is no guesswork about them."

Send for our Book of the Contest. Also tell us what your crops are, and your fertilizer requirements and we will send you our helpful book on Plant Food and our new Illustrated Catalogue.

**BOWKER FERTILIZER COMPANY**  
43 Chatham St., Boston.  
Also New York, Buffalo, Philadelphia and Baltimore

## INTERNATIONAL POULTRY FOOD

### Will Just Double Your Profits

There is more than increased egg production for you in International Poultry Food. This wonderful food—made from roots, herbs and seeds—is purely medicinal. It keeps the roosters and hens vigorous and healthy, cures and prevents disease and sickness, promotes good health, supplies material for bone, muscle and fibre. It is very beneficial during the hatching season. Eggs from hens fed International Poultry Food produce fine, vigorous chicks.

**International Poultry Food** is good not only for the chickens you have now, but also for those you are to buy. International Poultry Food, Royal Curo, Louise Killer and other Poultry Remedies are sold by dealers everywhere. Write for yours, write us. Every preparation sold on a spot cash guarantee basis to give satisfactory results.

**International Stock Food Co.**  
Limited  
92  
TORONTO, ONT.



## Beautify and Protect Your Property

Peerless Ornamental Fencing accomplishes two great purposes. It beautifies your premises by giving them that symmetrical, pleasing, orderly appearance, and it protects them by furnishing rigid, effective resistance against marauding animals, etc.

### Peerless Ornamental Fencing

Is made of strong, stiff, galvanized wire that will not sag. In addition to galvanizing, every strand is given a coating of zinc enamel paint, thus forming the best possible insurance against rust. Peerless ornamental fence is made in several styles. It's easy to erect and holds its shape for years.

Send for free catalog. If interested, ask about our farm and poultry fencing. Agents nearly everywhere. Agents wanted in open territory.

**Dawell Wire Fence Co., Ltd.**  
Waukegan, Ill.—Baltimore, Md.



## The Case for the Taxation of Railways

**C**ANADA has contributed \$935,000,000 towards the building of Canadian railroads. Such was the staggering estimate made by Mr. H. J. Pettypiece of Forest, Ont., in a plea which he has made to the Ontario Government for more adequate taxation of railways in Ontario. This plea was delivered when a deputation waited on the Government at the same time that the United Farmers of Ontario were in session in Toronto. It consisted of Messrs. G. R. Phelps, Holstein; A. M. Chappman, Clerk of Hastings county, Belleville; A. F. Senecal, Prescott; John Douglas, Dundas; H. J. Pettypiece, Forest; Kenneth McKay, St. Thomas. After pointing out the burdens under which the farmer labors, Mr. Pettypiece asked, "What is the remedy?" and answered his own question as follows:

"The removal of unfair and inadequate transportation facilities, and the equalization of the burdens of taxation. The first can be dealt with elsewhere, but the matter of adjusting taxation is largely in your hands. "The granting of our appeal to make railway property taxable, to make railway property bear its fair share of taxation with other property will do very much to solve this problem. That railway property should be, to the least extent, exempt from a fair share of taxation, is a blot on our boasted claim of government by the people. From the earnings of the people and from their natural heritage every mile of railway in this country has been built. "Here are the figures: Cash subsidies, Dominion Provincial, and Municipal . . . \$217,900,000 Bonds guaranteed by Dominion and Provincial . . . 275,000,000 Land grants, 55,000,000 acres at \$5 per acre . . . 275,000,000 Finished line given to C.P.R. Co. . . . 37,000,000 Eastern section G.T.R. cost to date . . . 130,900,000 \$935,000,000 "This is more than \$37,000 per mile for every mile of railway in the Dominion, a sum sufficient to meet the whole cost of construction. "Outside of the land grants at least three-quarters of this enormous amount of railway aid has been granted by Ontario, the cash subsidies mostly by the agricultural class, as has already been shown. "All we now ask is that this great revenue-earning property in the hands of private corporations should bear a fair share of the taxation necessary to carry on the affairs of the province and the various municipalities." In answer to the requests of the deputation Mr. Lucas said that the Government would take the matter into consideration, but he was not able to promise radical changes during the present session.

## Hydro-Electric Power on Ontario Farms

From Annual Report of the Ontario Hydro-Electric Power Commission

**T**HE enterprise shown by farmers and residents in small villages has aided greatly our efforts during the past year to promote the use of electric light and power in the rural districts of Ontario.

A rural distribution system for the use of farms and small villages has been commenced in 10 different townships. In some cases where they are of any size the business is handled by the township. In other cases the nearest town handles the work until the system grows when it is taken over by the township. This arrangement has proved very satisfactory, since it enables a number of demonstration farms to be established in the rest of the township and gives opportunity of seeing electric light and power in operation on the farm. Much useful information has been gained on these farms for determining the most suitable installation of motors and machinery for the average farmer's use and in arriving at the proper system of charge for different kinds of service.

**ELECTRICAL FARM EQUIPMENT** The usual installation recommended for the average farmhouse consists of a complete lighting system, using 25 watt and 40 watt lamps, a 500 watt vacuum cleaner and electric stove, while in the cow stable a row of lights behind the cows, about 1-20 c.p. lamp to every three cows, is usually recommended. Three or four 20 c.p. lamps are usually enough for the horse stable, while two in the hay mow, one in the silo, and one in the drive-shed are most frequently employed. This installation with a good 100 c.p. lamp on a post in the yard gives ample lighting for the farm. A five-horse-power motor is also generally recommended for power purposes. This motor may be used in two ways with good results; either it can be fixed permanently in the barn and made to run a line of shafting, or it can be mounted on a truck and moved from place to place, arrangements being made at the pump, the yard, and in the barn, to connect the motor.

**RURAL RATES** The question of rates in rural districts is influenced more or less by several considerations. In the first place the consumer is generally one who is unfamiliar with the use of electric power, and it is desirable to give him a rate that he can readily understand; secondly, the load factor varies very considerably in different townships, and lastly it is always necessary to make up certain fixed charge on each consumer to cover the annual charges on the invested capital in the township. From the point of view of simplicity to the consumer and to the township in billing, etc., the flat rate has obvious advantages, but any form of limitator, fuse, or other device for keeping the consumer to his contracted load is more or less satisfactory, especially in districts where motors are used to any extent. A meter rate is difficult to determine in a large township as the load factor over the whole township is more or less unknown and the cost of reading meters over a large area involves considerable work for the township officials, who, as a rule, have not the same facilities as towns for carrying out work of this kind. A method which has certain advantages is to give the rural consumer a flat rate and, on those farms where the connected load is considerably above the load contracted for, to install a two-rate meter which will register on one dial the total number of kilowatt hours used and on another dial the number of kilowatt hours used over and above the contract amount. All the above methods are in use at present in one or other of the townships served and in many places an alternative meter rate or flat rate

"Getting Blatch As good as"



100 pounds men Milk Substituted Send for pamphlet Cheaply and

C. A. GILL

## RIDER

enables to ride and will come inside and



REYLL

## You Can

A BOG SPAVIN, AEB

will clear and you will Does not hair. \$2. Will tell Book 4 the antiseptic reduces V. Moxies or L. Wins. Green. Always pay a little at freight. W. T. YOUNG, P.O. 15

## GOOD

YOU can become a very short time to complete Auto Course specialties in their line is most complete. It will be sent free on Y.M.C.A. AUTO COURSE

28 Broadview Ave. Toronto, Ont.



## GASOLINE

is the stationary man



## WIND

Grain graders, New Frames, Patent GOLD, SHAPLEY & Bradford Wind

# "Getting the Last Drop" Blatchford's Calf Meal

As good as New Milk at the Cost



100 pounds makes 100 gallons of Perfect Milk Substitute.

Send for pamphlet, "How to Raise Calves Cheaply and Successfully Without Milk."

At your Dealers or

C. A. GILLESPIE, Peterboro, Ont.

## RIDER BICYCLES WANTED

everywhere to ride and exhibit improvements. We ship on approval to any address in Canada, without any deposit, and allow 10% rebate if it will not suit you a cent! You can see our new and improved models.

**DO NOT BUY a bicycle, before you see ours in person!** Many of our customers have learned our special prices and exclusive appointments.

**ONE CENT in all it will cost you to write us for postal and catalogue and full particulars will be sent to you FREE Postpaid by return mail. Do not hesitate.**

HYVLOP BROTHERS, Limited  
Dist. K. TORONTO, Canada



## You Can't Cut Out A BOG SNAKE, PUFF OR THOROUGHPIN, but

## ABSORBINE

TRADE MARK NEIGH'S PAT. OFF.  
will clean them off permanently, and you work the horse same time. Does not blister or remove the hair. \$2.00 per bottle, delivered. Will tell you more if you write. Book & K free. ABSORBINE, JR., the antiseptic liniment for mankind, reduces Varicose Veins, Ruptured Hernias, Neuritis, Rheumatism, Sprains, Swellings, Bruises, Old Sores, Wounds, Cuts, Ailments, etc. Price \$1.00 and \$2.00 a bottle in droppers or tins. Manufactured only by W. F. YOUNG, P.O. 123 Kymans Bldg., Montreal, Can.

## GOOD JOBS

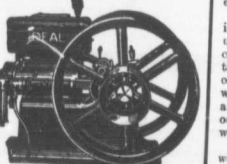
YOU can become a competent chauffeur in a very short time by taking our thorough and complete Auto Course. Our instructors are specialists in their line and our equipment is most complete. Illustrated catalogue will be sent free on request.

Y.M.C.A. AUTO SCHOOL  
285 Broadview Ave.  
Toronto, Ont.



## GASOLINE ENGINES

Stationary Mounted and Tractors  
1 1/2 to 80 H.P.



## WINDMILLS

Grain Elevators, Water Works, Boilers,  
Saw Frames, Pumps, Saws, etc.

GOLD, SHAPLEY & MUNN CO., LTD.  
Brantford Walkopolis Calgary

is allowed. The results are being watched carefully in these townships and, from data obtained, a standard schedule of rates for rural distribution will shortly be compiled.

### LIGHTING THE ROADS

There has always been a very general demand for some form of road lighting in the rural districts, and although it is not necessary to have as much illumination as in towns and cities, lights are sometimes required along the roads and at such places as railway crossings, bridge, culverts, grades, etc., those districts where cost is of primary importance it is usual to install one 100 watt lamp outside the gate of each farmer who is being served with power. This light is placed directly under the cross arm and is controlled by a switch near the front door of the farmhouse, while in districts where a more complete lighting system is required, it is usual to install a series lighting system with 100 watt lamps and radial wave reflectors every 1,000 feet.

Estimates are now being prepared for a series of lighting system along the main roads in Toronto Township and in North Norwich Township, the plan of placing lamps outside of each farmer's gate is being adopted with great success.

### SPECIAL EQUIPMENT

A most important part of the electrical equipment on the farm is the water heater. This heater consists of a galvanized iron tank, capable of holding about 30 gallons of water, surrounded by insulating material and a wooden casing to reduce the heat losses. A 600 watt heating unit is put into the bottom inside of the tank. Most of the farmers are purchasing their current on a flat rate, so that this heater provides a good use for their available current at night. On going to bed the farmer starts the heater and in the morning has a good supply of hot water in the milk house for washing the milk pails, cream separator parts, and milking machine parts as well as for making bran mash or other mixtures for a sick animal. This has been found one of the most useful applications on the farm as the milk inspectors insist on thorough cleanliness in the dairy.

### Harness Items

J. L. Manning, Kings Co., N.S.

There is not much time before spring opens, overhaul, repair and oil harnesses if the work has not already been done. Harnesses cost too much nowadays to neglect them, and if this work has not already been done it had better be done immediately. The contents of the book that our grandmothers boiled at home is the best oil that I have ever used. If you have not a supply on hand it can be got from the hardware store or harness shop. One quart will thoroughly oil a double set of harness if the harness is cleaned properly before oiling.

My method of cleaning the harness is to unhook everything that will unhook. Wipe with a piece of cloth to remove dirt, grease and hair, then throw all the leather parts except the collars into a tub of warm water and soap and thoroughly wash and cleanse by hand. Then thoroughly dry and apply the oil slightly warm.

Each part must be worked and reworked until it absorbs oil enough that it will retain it. Then wipe off all superfluous oil with dry rags. I finish by smoothing it with dry polishing with a good black harness soap. This latter, however, is not necessary to the longevity of the harness.

## Running water on the farm



A Fairbanks-Morse Pneumatic Water System like the one pictured here, can be quickly and easily installed on any farm.

It will furnish you with an abundance of running water for the bathroom, kitchen, laundry, stables, creamery, and for sprinkling the lawn and garden. At the same time it affords you ample protection from fire. Can be inexpensively operated by hand, motor or small oil engine.

The "Handy" force pump which is a part of this system is easy to operate and will last for years. Tanks are made of boiler steel tested to a pressure of 125 pounds. Any size from 220 gallons up. Send for free booklet, "Fairbanks-Morse Water Systems."

We can supply you with farm engines from 1 h.p. up, sprayers, lighting systems, farm scales, hand and power tools, etc. Particulars on request. Address Dept. 42.

## The Canadian Fairbanks - Morse Co., Limited

Montreal Quebec Toronto Ottawa Hamilton St. John St. William Winnipeg Regina Education Saskatoon Victoria

Canada's distribution House for Mechanical Goods

## Save Money! Buy Your New Fence DIRECT FROM PAGE (Freight Prepaid)

STYLE		HEAVY FENCE				PRICES				
ft.	x in.	No. 9 Post With Throughout in 20				per	22	23	24	
		10	10	10	10					
4	30	22	10, 10, 10,					\$0.16	\$0.18	\$0.19
6	40	22	8, 9, 7, 8, 9					.18	.20	.21
7	40	22	6, 4, 7, 8, 9					.21	.23	.24
8	48	22	5, 5, 7, 7, 7, 8					.23	.25	.26
8	48	22	5, 5, 8, 8, 8, 8, 8					.23	.25	.26
8	48	22	6, 6, 6, 6, 6, 6, 6					.26	.28	.29
8	48	22	4, 5, 5, 7, 8, 9, 9					.28	.30	.31
9	48	22	4, 5, 5, 7, 8, 9, 9					.29	.31	.32
9	48	22	4, 5, 5, 7, 8, 9, 9					.29	.31	.32
9	48	22	4, 4, 5, 5, 7, 8, 9, 9					.31	.....	.....
10	48	22	3, 3, 3, 4, 5, 7, 7, 8, 8					.31	.33	.....
10	48	22	3, 3, 3, 3, 4, 5, 7, 8, 9, 9					.33	.....	.....
10	51	22	3, 3, 3, 3, 4, 5, 7, 8, 9, 9					.33	.....	.....
11	51	22	3, 3, 3, 3, 4, 5, 7, 8, 9, 9					.33	.39	.....
11	54	16	3, 3, 3, 3, 4, 5, 7, 8, 9, 9					.36	.....	.....

MEDIUM WEIGHT FENCE <th colspan="4">No. 9 Top and Bottom, and No. 12 High Carbon Horizontal bars: No. 12 Upright, No. 11 Locks. (Maritime Province prices include painting.)</th> <th colspan="3">SPECIAL POULTRY FENCING <th colspan="4">No. 9 Top and Bottom, Intermediate No. 12 Upright 9 inches apart.</th> </th>		No. 9 Top and Bottom, and No. 12 High Carbon Horizontal bars: No. 12 Upright, No. 11 Locks. (Maritime Province prices include painting.)				SPECIAL POULTRY FENCING <th colspan="4">No. 9 Top and Bottom, Intermediate No. 12 Upright 9 inches apart.</th>			No. 9 Top and Bottom, Intermediate No. 12 Upright 9 inches apart.				
ft.	x in.	No. 12 Horizontal in Inches				per	24	25	26	per	42	44	46
		8	10	10	10								
6	30	16	8, 8, 10, 10					.18	.19	.22	.....	.....	.....
6	30	16	7, 7, 7, 8, 8					.20	.21	.24	.....	.....	.....
6	42	16	8, 8, 5, 5, 5, 6, 6					.22	.24	.27	.....	.....	.....
7	42	16	6, 6, 6, 7, 7, 8, 8					.23	.25	.28	.....	.....	.....
7	42	16	6, 5, 5, 4, 5, 5, 6, 6					.25	.25	.28	.....	.....	.....
8	48	16	8, 8, 5, 5, 5, 6, 6, 6					.26	.28	.31	.....	.....	.....
9	36	12	3, 4, 5, 6, 7, 8, 9, 9					.27	.29	.32	.....	.....	.....
9	36	12	3, 4, 5, 6, 7, 8, 9, 9					.28	.30	.33	.....	.....	.....
10	54	16	3, 4, 5, 6, 7, 8, 9, 9					.30	.32	.35	.....	.....	.....

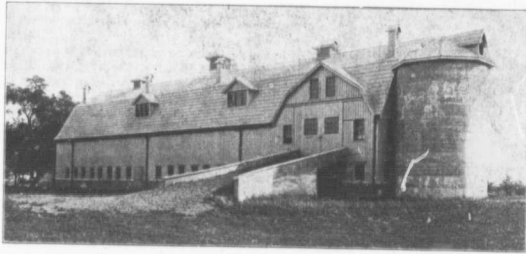
PAGE "RAILROAD" GATES <th colspan="4">48 10-ft. op'ng</th> <th colspan="4">48 12-ft. op'ng</th> <th colspan="4">48 14-ft. op'ng</th> <th colspan="4">48 14-ft. op'ng</th>		48 10-ft. op'ng				48 12-ft. op'ng				48 14-ft. op'ng				48 14-ft. op'ng			
		3.80				4.00				4.20				4.50			
		4.25				4.45				4.75				5.05			
		4.50				4.75				5.05				5.35			

WALK GATE, 48 in. high, 34 ft. opening		3.25	3.55	2.35
STAPLES, 25-lb. box		.75	.85	.95
BRASS WIRE, 25-lb. rolls		.70	.75	.80
STRETCHING TOOLS, Complete outfit.		8.00	8.50	9.00

MAIL YOUR ORDER TO OUR NEAREST BRANCH  
PAGE FENCE CO. LTD.  
114 1/2 King St. West  
Toronto  
Walkerville  
Winnipeg  
WRITE FOR 104-PAGE FREE CATALOG

## "PAGE FENCES WEAR BEST"

# They Know a Good Thing



New Dairy Barn at Ontario Agricultural College, Guelph, Ont. Roofed with Preston Safe Lock Shingles.

When the new dairy barn at the O. A. C. Guelph was erected, Preston Safe Lock Shingles were chosen for the roof.

These shingles give a watertight, weather proof, lightning proof roof which will outlast the building. The first cost is the last cost.

Our new 1914 Edition of "Better Buildings" is about ready for distribution. It is handsomely illustrated and by far the best roofing and barn book we have ever issued.

Send for your copy today—IT IS FREE—Use the coupon.

## The Metal Shingle & Siding Co. LIMITED

PRESTON - ONTARIO

**COUPON**  
The Metal Shingle & Siding Co., Ltd.  
Please send a free copy of "Better Buildings"  
Name \_\_\_\_\_ Address \_\_\_\_\_ P.O. \_\_\_\_\_

### BUILD A SILO THAT WILL LAST FOR GENERATIONS

A silo must have an airtight and moistureproof wall to keep ensilage fresh, sweet, succulent and palatable. Don't put up a silo that soon will need repairs, and, even while new, does not prevent your ensilage from souring or rotting. Build a

#### NATCO EVERLASTING SILO

The silo that's made of vitrified clay hollow blocks, each layer reinforced by continuous steel bands, and that keeps ensilage in perfect condition right down to the last forkful. Build a silo that will last all your lifetime and for several generations after you—a silo that never needs repairs or painting and that stands a monument to your good judgment.

#### Weatherproof—Decayproof—Vermineproof—Fireproof

A Natco Everlasting Silo wall never weeps nor shrinks, never warps nor cracks. There are no hoops to tighten, no continual outlay for repairs—no loss from wind or weather—no proof against them all. Any man can erect a Natco Everlasting Silo and when the job's completed you are through with silo trouble forever.

Write Today for FREE Silo Book We have an attractively illustrated book full of valuable information about ensilage and which also gives a complete description of the Natco Everlasting Silo. May we send you a copy? Ask for Book 6 NATIONAL FIRE PROOFING COMPANY of Canada, Limited, TORONTO.



## Compare the "BISELL" with other disks

Thousands of Farmers have tested the "Bissell" Disk Harrow in the same field with other makes and found that the "Bissell" HAS THE GREAT-EST CAPACITY.

The plates are the correct shape. They cut, turn and pulverize the soil where others

only scrape the ground and set it on edge.

The "Bissell" Scrapers meet the plates chisel fashion and keep the plates clean. Movable Clod Irons—an exclusive feature—keep the space between the plates clear.

The "Bissell" stays RIGHT

DOWN TO ITS WORK. It won't bind, buckle or lump in the centre no matter how stiff or hard the soil may be. It is built to stand hard usage. The simple method of balancing the driver's weight removes neck weight. It is the Harrow you should know more about.

Write to Dept. R for catalogue with description.



T. E. BISSELL CO., LTD., ELORA, ONT.  
JNO. DEERE PLOW CO., LTD., 77 JARVIS ST., TORONTO, AGENTS FOR ONTARIO AND QUEBEC.

### Fertilizer Experiments (Continued from last week)

Down east some large yields were obtained with potatoes, notably that of A. Hutchinson, South Esk Boom, N. B., whose plots yielded the following: Plot 1, 240 bush.; Plot 2, 324 bush.; and Plot 3, 288 bush. per acre. We received an unsolicited report from Mr. Robert Wilson, Little Bras D'Or, C.B.N.S., of an experiment he conducted on his farm during the past season. He applied manure heavily on all three plots. In Plot 1 no artificial fertilizer was applied. On Plot 2 he applied 400 pounds of Basic Slag per acre, and on Plot 3, in addition to the Basic Slag, he applied 160 lbs. Sulphate of Potash. Mr. Wilson reported that the yields from Plots 1 and 2 were just ordinary, but when he came to harvest plot 3 he was amazed at the enormous yield, and called over some neighbors to witness the harvesting of the remainder of the plot. When the plot was finally turned over and the tubers measured they found that the plot had yielded at the rate of 735 bush. per acre, and there were very few small potatoes.

Good crops generally respond readily to good applications of artificial fertilizers and are probably the most suitable crop to fertilize in an ordinary rotation. Mr. P. Proulx, St. Hugues, Que., obtained the following ensilage crops: Plot 1, 9 tons; Plot 2, 18, and Plot 3, 14 tons an acre. Plot 2 gave a profit of \$42.60 and Plot 3 a profit of \$22.85, after deducting cost of fertilizers. In parts of Ontario the season was far too dry to obtain good results in so far as high yields were concerned. Mr. J. G. McPharlin, Essex, Ontario, obtained 37 bush. from Plot 1, 75 bush. from Plot 2, and 64 bush. from Plot 3. The fertilized plot in each of these instances showed a substantial increase over the unfertilized plot. Mr. C. D. Goyette, Cowansville, Que., his unfertilized plot yielded 337½ bush.; Plot 2, "complete fertilizer," yielded 1,666 bush.; and Plot 3, without potash, 840 bush. an acre. Plot 2 showed the tremendous increase of 1,328½ bush. and acre, and a gain of \$253.

Mr. John Riggs, of Merton, Ont., obtained the following results on sugar beet mangels: Plot 1, 420 bush.; and Plot 2, 900 bush.; and Plot 3, 620 bush. Plot 2 showed a gain of 480 bush. over Plot 1, and a gain of \$37.50. Mr. T. W. Lamb, Walkerston, Ont., obtained 619 bush. from Plot 1, 866 from his complete fertilizer plot and 702 bush. from his plot without potash. Plot 2 showed a gain of 247 bush., and Plot 3 a gain of 83 bush.

Some of our experimenters choose grain crops for their experiments. Should the root crop, which is followed by grain have been fertilized, the residue left in the soil will most cases be sufficient for the grain crop; for it must be remembered that the fertilizers are not used up in the first season and the effects are often seen up to the fourth year, and in some instances even longer. Grain crops directly fertilized have to show a very large increase in order to satisfy some as to the undoubted profit from the

use of fertilizer is best when the root crop in "Toubling" will quite so much from a drier to the gra-

Mr. R. Mc obtained the barley: Plot bush.; and Mr. A. G. Oue., obtained Plot 1, and 55 50 bush. from soils, L'Anson 32 bush. of o from Plot 2, 3. Mr. A. C. Alta., obtained oats: Plot 1, bush.; and Plot Mr. J. Osw. Ont., made th in his report hay. The plo ference, which off, especially complete fertili plot is thicker than the unfert being telling m were worth co showed an inc to the acre mo-

### Legislation u

Two bills are sideration of that are of Canadian farme try Hill and the

The most st tween the new d the one that th factories will no gister in futur omitted in the proved itself use the factories in been registered those registered bers. Matters o been omitted' fro will be dealt w Stringent provi the protection of through the prev butter substitute garine.

The cold storag Governor in Coun such regulations sary and expedie supervision of al houses. Such re- ern the length of respective article held in cold st labelling of good ed in the cold l Little oppositio these hills. Some made on the grou left for regulatio

The Ontario Ag- perimental Union duct 30 different grains, foddler clovers and alfalf prepared to distr High quality for poses in every fow Any person in O any one of the ex and apply for the rial will be furnis charge to each ap formation may be tion to Prof. C. Guelph.

We believe in the because we believe great development be along the line greater efficiency in marketing.

use of fertilizers; for this reason, it is best when possible, to fertilize the root crop in order to convince these "Doubting Thomases." However, I will quote some of the results obtained from a direct application of fertilizer to the grain crops.

Mr. R. McKnight, Thornhill, Ont., obtained the following yields from barley: Plot 1, 32 bush; Plot 2, 48 bush; and Plot 3, 30 bush an acre. Mr. A. G. Burrett, Stanbridge East, Que., obtained 35 bush. of oats from Plot 1, and 55 bush. from Plot 3, and 30 bush. from Plot 3. Mr. N. Marshall, L'Assomption, Que., obtained 32 bush. of oats from Plot 1, 61 bush. from Plot 2, and 44 bush. from Plot 3. Mr. A. G. Bennett of Rexboro, Alta., obtained the following yields of oats: Plot 1, 30 bush; Plot 2, 60 bush.; and Plot 3, 45 bush.

Mr. J. Oswald of Vankleek Hill, Ont., made the following comments in his report on the Dominion Experiment, which can be seen a distance off, especially No. 2, to which the complete fertilizer was applied. This plot is thickest and six inches longer than the unfertilized plot. I have been telling my neighbors the longer plots were worth coming to see. Plot 2 showed an increase of nearly a ton to the acre more than Plot No. 1.

#### Legislation under Consideration

Two bills are now up for the consideration of the Dominion House that are of particular interest to Canadian farmers.—the Dairy Industry Bill and the Cold Storage Bill.

The most striking difference between the new dairy industry bill and the one that it is replacing is that factories will not be required to register in future. This provision is omitted in the new bill because it has proved itself useless. Less than half the factories in Canada have ever been registered, and only a few of those registered have used their numbers. Matters of marking also have been omitted from the new bill, which will be dealt with by regulation. Stringent provisions are made for the protection of the dairy industry through the prevention of the sale of butter substitutes such as oleomargarine.

The cold storage bill gives to the Governor in Council power to make such regulations as he deems necessary and expedient to provide for the supervision of all cold storage warehouses. Such regulations may govern the length of time during which respective articles of food may be held in cold storage and for the labelling of good products when placed in the cold storage warehouses. Little opposition is anticipated to these bills. Some objections may be made on the ground that too much is left for regulation as need arises.

The Ontario Agricultural and Experimental Union will this year conduct 30 different experiments with grains, fodder crops, roots, grasses, clovers and alfalfa. The Union is prepared to distribute material of high quality for experimental purposes in every township of Ontario. Any person in Ontario may choose any one of the experiments for 1914 and apply for the same. All material will be furnished entirely free of charge to each applicant. Full information may be obtained on application to Prof. C. A. Zavitz, O.A.C., Guelph.

We believe in the farmers' club because we believe that the next great development in agriculture will be along the line of cooperation for greater efficiency in production and in marketing.

# INSIST ON "LION" BRAND

"LION"  
RED CLOVER

"LION"  
TIMOTHY

"LION"  
ALSIKE CLOVER



"CANADA'S  
GREATEST  
SEED HOUSE"

STEELE, BRIGGS SEED CO. LIMITED

Hamilton

TORONTO

Winnipeg

By sowing reliable seeds you are insured against inferior crops. Don't take chances with unknown brands.

Our "Lion" Red Clover, "Lion" Timothy and "Ermine" Timothy have been favorites for years, and guarantee you best results. Your local dealer can supply you.

PAINTED WITH MARTIN-SENOUR 100% PURE PAINT

ORDINARY PAINT REQUIRES 3 GALLONS MORE

## How To PAINT FOR LESS MONEY

A PAINT is not cheap simply because the price is low—if you would economize on paint, you must look beyond the purchase price per gallon.

The cheapest paint for you to use is the paint that takes the least amount for the job. It may cost a little more per gallon, but because it thoroughly covers more surface, wears better and stays bright longer, it is the most economical in the long run.

**Martin-Senour "100% Pure" Paint—**  
"The Paint for wear and weather", is absolutely the cheapest paint to use, because it goes farthest, and endures longest.

"100% Pure" Paint has a covering capacity of 900 sq. ft. of surface one coat, per gallon, as against a covering capacity of hand-mixed-by-guess lead and oil paint of only 500 to 550 sq. ft. of surface, per gallon, or the lower priced Prepared Paint with a covering capacity of not more than 600 sq. ft. of surface per gallon.

Send us the dimensions of your house—let us tell you how few gallons of "100% Pure" Paint it will take to cover it thoroughly—and send you, free, a copy of "Town and Country Homes", also name of nearest dealer handling Martin-Senour "100% Pure" Paint.

**The Martin-Senour Co.**  
Limited  
**MONTREAL.**

29



# FARM AND DAIRY

AND RURAL HOME  
PUBLISHED EVERY THURSDAY

SUBSCRIPTION PRICE: \$1.00 a year—Great Britain, \$1.20 a year. For all countries, except Canada and Great Britain, add 50c for postage.

ADVERTISING RATES: 10 cents a line flat, \$1.40 an inch an insertion. One inch, one column, 12 inches. Copy received up to the Saturday preceding the following week.

UNITED STATES REPRESENTATIVES  
STOCKWELL'S SPECIAL AGENCY

Chicago Office—People's Gas Building.  
New York Office—24 West 22nd St.

#### CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed 16,000. The actual circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 17,200 to 26,000 copies. No subscriptions are accepted from less than the full subscription rate. Sworn detailed statements of circulation of the paper, showing its distribution by counties and provinces, will be mailed free on request.

#### OUR GUARANTEE

We guarantee that every advertiser in this issue is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading columns, and because to protect our readers, we turn away all unscrupulous advertisers. Should any advertiser herein deal dishonestly with you as one of our paid-up subscribers, we will make good the amount of your loss, provided such transaction occurs within one month from date of this issue, that it is reported to us within 30 days of its occurrence, and that we find the facts to be as stated. It is a condition of our contract that in writing to advertisers you state: "I saw your advertisement in Farm and Dairy."

Business shall not ply their trade at the expense of our subscribers who are our friends, through the medium of these columns; but we shall not attempt to adjust trifling disputes between subscribers and honorable business men who advertise, nor pay the debts of our bona fide subscribers.

The Rural Publishing Company, Limited  
PETERBORO, ONT.

### The Value of Crops

IT is not so much the volume of a crop that counts as its value. Small crops sometimes yield greater return to farmers than do large crops. In the state of Iowa in 1913, for instance, the corn crop was 90,000,000 bushels less than in the previous year, and yet it netted the farmers of Iowa over \$40,000,000 more than did the larger crop. In the same state the oat crop was 40,000,000 bushels less than in 1912, yet it was worth \$200,000,000. Thus the Iowa farmer found himself with more money and less work, because he had been able to market his crop under better conditions.

These are not unusual instances. Every fruit farmer in Canada can recall seasons when big crops have been accompanied by such low prices that much of the fruit rotted on the ground. On several occasions big potato crops have been accompanied by prices that hardly paid for the marketing, and so on down the list. Big crops cause uncertainty. Farmers are more ready to sell than speculators are to buy, and consequently prices are reduced below normal.

The remedy is better marketing conditions. The farmer must have more say in the marketing of his own crop and the speculator less. We need more cooperative enterprise.

### The New Cooperative Company

ONTARIO farmers have taken a long step toward the ideal system of marketing. In The United Farmers Cooperative Co., Ltd., they have an organization through which all their marketing organizations may be co-ordinated. Instead of each man or each association being his own market man as in the past and, therefore, more or less at the mercy of speculators, through the central organization business men who are specialists in their line will attend to the marketing. Farm marketing will be given all the advantages that go with business on a large scale. The trade with the farmers' organizations

of the west, conducted without the intervention of middlemen, should of itself be a source of large profit to Ontario fruit men and dairymen. In time, consumers' organizations in our cities may be formed to meet the farmers' company half way.

This new company has had a most promising start. Ten thousand Ontario farmers were represented by the delegates who gathered in Toronto two weeks ago. All displayed the greatest confidence in the future of the organization. Members of the new organization, however, should guard against over-confidence. There is sure to be opposition and strenuous opposition to the new company. Members will have many temptations to sacrifice future good for present gain. Those who are wise will back the new company with their influence and their patronage in spite of all other inducements held out to them. Who knows but what the organization of this company may presage the day when the farmers of all Canada will be united to guard their own interests and ensure the square deal for all classes of the community?

### Soil Fertility First

AFTER all, isn't the proper management of the soil the basic factor in good farming? Attractive buildings, good fences and hard roads, yes even good stock, are all secondary to this underlying principle. We are new to a realization of this fact and the increasing demand for dairy products, beef, pork, and mutton is all in harmony with the newly inaugurated movement for the conservation of soil fertility.

In the past we Canadians have wasted our soil fertility in a manner that would appeal to the farmers of older lands as both extravagant and sinful. So prodigal have we been with the richness of the soil that the time has now come when thousands of farmers are being forced to change their method of farming because Mother Nature has closed down on them until that which has been taken from the soil is, in some measure at least, returned. This fertility can best be returned by feeding all the raw material produced on the farm to farm stock and carrying the carefully conserved manure back to the land. The great need of many farmers is more corn and roots, more clover and cows and less grain and hay for sale. The good dairy farmer is the best soil conservator.

### Cold Storage Regulation

THE cold storage warehouse men are no longer to run their business as they see fit. The Government proposes to have a hand in the matter. A bill is even now before the House of Commons which will give a commission large powers in the regulation of the cold storage business.

No one now questions the important place held in our system of distribution by the cold storage warehouse. Only by the instrumentality of cold storage is it possible to keep prices for perishable food products at a reasonable level during the season of production and at a price which is within the reach of ordinary folks when production is at a standstill. For instance, were it not for the cold storage warehouses in Canada, butter and eggs would be a glut on the market at certain seasons and luxuries for the rich at certain other seasons.

At the same time, the cold storage system is capable of abuse, and has been abused. There are cases on record where eggs have been held in cold storage for three years and meats until they were not fit for human consumption. The object of the bill before the House of Commons is to do away with these abuses and give to the cold storage system its maximum of usefulness. This bill should, and probably will, be made law.

### Crop Rotation

IN the past few years Farm and Dairy has conducted several Prize Farms Competitions. It was notable that every successful competitor in the two provinces of Ontario and Quebec followed some definite system of crop rotation. Only two farmers of all those who entered our competitions did not have a distinct rotation, and their farms were not even good enough to be considered for a prize. District representatives of the Ontario Department of Agriculture have told us that if they were to select a score of the best farmers in their countries, they would find that every one of them followed a crop rotation.

These facts are sufficient proof of the merits of a crop rotation. Even without such evidence, however, an incontrovertible argument could be put forward for a crop rotation merely on the grounds of its reasonableness. A short crop rotation allows of clover seeding every few years, which adds to the fertility of the soil. A change of the crops is good for the soil because different crops have different food requirements, whereas one crop tends to exhaust certain constituents of the soil while leaving it rich in others; likewise different crops feed at different depths. It is also believed that the roots of some plants exude toxic poisons, which in a short time make the soil unsuitable for that particular crop if grown on the same land year after year. A crop rotation that includes a good percentage of hoe crop makes weed elimination possible and the application of stable manure where it will do the most good.

These are only a few of the reasons why regular crop rotation should be followed on every farm. There is no farm so irregular that it cannot be worked to advantage under a crop rotation. There is no method of producing maximum crops that does not include the regular short rotation.

### Homemaker or Housekeeper

SHE was the best housekeeper in the whole neighborhood. All of her neighbors admitted it. They said that they had never dropped in on Mrs. Blank when the house was not spick and span from kitchen to parlor. Her own family admitted it. One of her sons expressed it thus: "yes, ma's a great housekeeper. She makes us eat in the kitchen and sleep in the garret to keep the rest of the house lookin' fine for company."

This example illustrates the difference between the housekeeper and the homemaker. In the house of the homemaker there are no chairs which father is afraid to sit down on for fear of disarranging the "tidy" on the back. There are no special rooms which the boys enter with fear and trembling and on their good behaviour. The whole home is for the benefit of the whole family. The housekeeper gets much praise from the outside. The homemaker gets her praise and gratitude from the inside. Which is preferable?

### Farm Furrows

Blacksmith bills are cheaper than horse flesh; a well shod horse is always the more economical worker.

Other conditions being equal the early seeded grain crop will give the heaviest yield. To determine just how far we may go in neglecting the preparation of the seed bed in order to get the seed in early is one of the finest points in crop management.

One could well afford to spend a few hours with the file and grindstone one of these days. The disc harrow does better work if the discs have been sharpened. The same is true of the spring tooth cultivator, the scuffler, and even the common drag harrows.

THE SC...  
on We...  
inter...  
of the...  
club has...  
is to ge...  
of the...  
the def...  
tom, and...  
means of...  
what we...  
and to...  
ties un...  
labor.

To be p...  
schools...  
ing the...  
one thi...  
exper...  
high p...  
positi...  
cases a...  
work that...  
most m...  
first d...  
in the...  
of the...  
period of

### Justice

Do you...  
guarant...  
ers of...  
note of...  
forced...  
not meas...  
Guarantee"

You will...  
that this...  
ment of...  
all...  
ing.

During...  
creased...  
is that...  
clients...  
of a "sh...  
suits in...  
Then, t...  
growing...  
the squ...  
vanced...  
adopted...  
that we...  
"tidy" a...  
farm fi...  
with the...  
vertising...  
ica, in...  
Dairy...  
adopt thi...  
to have...  
honesty...  
or a...  
we have...  
entirely...  
tising...  
sanship...  
certaint...  
that thi...  
and our...  
confident...  
ment bes...  
During...  
plaints...  
one that...  
repute...  
Most...  
inabili...  
hundred...  
crease...  
of these...  
years...  
about...  
Write...  
vertizer...  
and h...  
We kn...  
perfect...  
yet, fo...  
turned...  
shady...  
But co...  
and we...  
are gla...  
the good...  
work."

In plac...  
Farm...  
and Da...  
know...  
confide...  
in DA...  
FARM AND DA

"A 4331 Pa



## Problems of the Rural School and Church

Chas. Andrews, York Co., Ont.

THE Scarboro Farmers' Club met on Wednesday, the 18th ult., to discuss the rural school situation. The topics were of a general interest to all who have the welfare of the school children at heart. This club has no special grievance; its aim is to get the expression of the minds of the farmers themselves regarding the defects of the present school system, and by frank discussion means of improving what is good in what we have at the present time and to plan for removing the disabilities under which the rural people labor.

To be perfectly frank, the rural schools of the province are not meeting the situation as they should. For one thing, the teachers are not the experienced men or women that their high position calls for. In too many cases a mere girl or boy is given the work that tasks the resources of the most matured man or woman. For five days in the week, for seven hours in the day children, at the most plastic period of their lives, are under

### AD. TALK

CCXXXIII

#### Justice to the Reader

Do you realize what it costs us to guarantee our advertisers to the readers of Farm and Dairy?

Two years ago we kept a careful note of all the advertising we were forced to turn down in that it did not measure up to our "Absolute Guarantee" standard of reliability. You will be surprised indeed to know that this amounted to over 20 per cent. of all our commercial advertising.

During the past year this has decreased steadily. Our reason for this is that our agencies find that honest clients pay best and that the account of a "shady" advertiser usually results in loss.

Then, too, people generally are growing more and more interested in the square deal, and as they have advanced so, too, has all advertising advanced. We must frankly admit that we believe the "Guarantee Policy" adopted by our papers in the farm field has had a great deal to do with the movement to truthful advertising that is sweeping over America. In the Canadian field Farm and Dairy was the first Farm Paper to adopt this policy. We do not pretend to have discovered the principle of honesty, or even reaffirmed it, but we have shown our readers that it is entirely possible to have clean advertising columns through a strict certainty that our readers appreciate this and our advertisers are always confident of having their advertisements beside "honest copy."

During the past season our complaints have rapidly decreased—only one that we believe was open to dispute. Most of them were due to the inability of human nature to be one hundred per cent. perfect. The decrease of these complaints in other years makes us pretty optimistic about our absolute Guarantee Policy. Write us for a copy if you are an advertiser and have not one on hand.

We know that human nature is not perfect yet, for only this week we turned down some copy that looked shady. But conditions are improving and we are glad to have helped in the good work, and hope to do more.

In placing your advertisement in Farm and Dairy we want you to know that "Our People" have every confidence in our columns—in fact FARM AND DAIRY is

"A Paper Far and Near By"

the direction of this immature person of whose principles of conduct the parents are practically ignorant. That things are as well with us as they are in this respect is due to good fortune rather than to the good judgment of parents.

#### THE APPOINTMENT OF INSPECTORS

It may be relied that these teachers are kept right by the inspectors. But who are our inspectors but men who are chosen largely from the ranks of high school teachers and by a vote of the county council. Let the facts again be faced. These men are not chosen because they have any special fitness for their work, but because they have the power of securing the vote of the county council. The average county council is no more qualified to judge of the qualifications of a public school inspector than it is capable of deciding upon the merits of an engineer. Some personal whim or the caprice of the moment, and, most likely of all, because he has been "seen," are the usual qualifications that the average county councillor possesses for placing an inspector at the head of the educational affairs of a county. A more stupid method can scarcely be thought of. That the inspectors of our province are as capable as they are is the result, not of a good method, but of something over which the people most interested exercise no control. The pity of it hitherto has been that the people seem to love to have it so.

#### THE COUNTY COUNCIL

Another meeting that is almost as significant is the approaching meeting of the theological alumni of Knox College, Toronto. At this meeting, at which will be present graduates and students from other colleges in the city, a great part of the time will be devoted to the discussion of the problems of the rural church. Too often the rural church is conspicuous by its being, next to the rural school, the blindest and ugliest building on the rural landscape. For six winter evenings every week its windows are dark. In the summer months the grass grows unshorn in its lawns and weeds hold their foul dominion everywhere. Yet here it is that thrifty farmers meet to praise God from whom all blessings flow. There are exceptions to this, but the neglected "Meeting House" is all too common even at this date.

Worse still, the minister is frequently a discouraged man who toils on as best he can in the hope that one day he will find a place alongside of his more fortunate city brethren. Yet from the country whose educational system is at so low an ebb, and from the ill-nourished country church are coming the men who are making of the nation. That so much is being done under circumstances so discouraging is the warrant that encourages folks who believe in their kind to hold meetings of the character that have been mentioned. For country schools and country churches will improve when country people demand and show a willingness to pay for better things. Country life is just what country people make it.

The charges that law-makers have hitherto brought against farmers is that they grumble but ask for nothing definite. While the rural vote is large enough to determine the political destiny of the democracy, it lacks coherency and hence its inefficacy. There are evidences that there confidence is likely to be a little more discussion among farmers of the problems that are arisen in their experience, and from this discussion we may look for team play.

# What a DE LAVAL CREAM SEPARATOR SAVES over any other separator or creaming system

QUANTITY of cream that no other separator will recover completely, particularly under the harder conditions of every day use.

QUALITY of cream as evidenced by De Laval butter always scoring highest in every important contest.

LABOR in every way over any gravity system, and also over any other separator, by turning easier, being simpler, easier to clean and requiring no adjustment.

TIME by hours over any gravity system, and as well over any other separator by reason of greater capacity and the same reasons that save labor.

COST since while a De Laval Cream Separator may cost a little more than a poor one to begin with it will last from ten to twenty years while other separators wear out and require to be replaced in from one to five years.

PROFIT in more and better cream with less labor and effort, every time milk is put through the machine, twice a day, or 730 times a year for every year the separator lasts.

SATISFACTION — which is no small consideration, and can only come from knowing you have the best separator, with which you are sure you are at all times accomplishing the best possible results.

EASILY PROVEN—These are all facts capable of easy demonstration and proof to any user or intending buyer of a cream separator. Every De Laval agent is glad of a chance to prove them by a De Laval machine itself—without the slightest obligation on your part unless entirely satisfied.

If you don't know the nearest De Laval agent simply address the nearest main office as below

## De Laval Dairy Supply Co.

MONTREAL PETERBORO WINNIPEG VANCOUVER LIMITED

80,000 Branches and Local Agencies the World Over





That places himself neither higher nor lower than he ought to do exercises the truest humility.—  
Colton.

## Stirring Up Ann

(Farm and Fireside)

By NINA PURDY MACDONALD

I HAD just finished doing my dinner dishes when I looked out of the window and saw the Higginsses' grey horse coming up the road on a good, swift trot. Mandy was driving. She sat well forward on the wagon seat, a rigid figure, with her arms straight out high above her lap, holding the reins tightly. Her hat was little on one side, and stray rings of hair hung carelessly around her face. I saw from these signs that she must have some mighty important plan in her head.

When I came to live in Gregory Hollow a few years before, I thought I was going to bury myself alive. I had always lived in a large town. Then my aunt died and left my uncle alone in his old age, with a farm to manage. As my husband was dead and my son married, I decided it was my duty to take care of my uncle and to put up with the loneliness and narrowness of the back-country life for his sake. But a year before I knew Mandy Higginss, and before I knew about the Neighborhood Improvement Society.

Gregory Hollow is a little creek valley nestled between two ranges of the Catskills. In it there are some twenty-odd farms with their meadow lands in the valley and their pastures running far back into the hills. The head of the hollow is about six miles from its foot, where there is a little village which is the centre of trade and amusement for all the surrounding hollows.

Mandy Higginss was the wife of a well-to-do farmer. She lived pretty well down to the foot of the hollow. She was the president of the Neighborhood Improvement Society, which she had organized with the purpose of making things better for women. I hadn't lived there long before I decided that life everywhere is the same; its main object is to keep to a higher standard, to set a higher standard for folks, and to help them live up to it. So, instead of sitting back and mourning because I wasn't in the swim and jostle of a large town life, I joined the Neighborhood Improvement Society, and aimed to help Mandy Higginss in her work in that hollow.

My uncle took her horse, which was streaked with perspiration, and Mandy came hurrying into the house, her eyes shining and her manner eager.

"Well," said I, smiling, as I got a chair for her and sat down with some berries to hull, "whom are you going to improve this time?"

"She took one of my aprons from its nail behind the door and began to help me hull.

"I am going to keep Ann Simmons from being an old maid," she said quickly; then she began to laugh as she saw the surprised expression on my face.

Ann Simmons lived two miles far-

ther up the hollow from me. About two years ago her father and mother had died within three weeks of each other. Ann, being the youngest of the family, had spent her forty-odd years of life caring for her parents, mothering them and humoring their whims. And now, since they had gone, she had nothing to do but tend her cats and dogs and chickens, and her home. She lived in a spoolless little house, all white save for its



The First Home in a New Country—A Dauhber Cottage in the Canadian West

dark green blinds. The inside of the house was painted white, too. Ann had her own paint brushes and cans of paint, and as soon as a spot got the least speck dirty she would paint it over. She had always been a careful housekeeper, and since her folks had died she tended her house as if it were a live thing. Since she had a comfortable income she had no financial worries. Her brothers had tried to get her to live around among them for a while. But she decided that everything about the house would go to rack and ruin without her, and that she was better off in her own home. Her trouble had sort of soured her. She wouldn't visit among her neighbors; she stopped going to church; and what hurt us women most of all, she wouldn't join our Improvement Society.

When Mandy said she was going to keep Ann from being an old maid I snorted.

"Where do you suppose you will find a man for her?" I asked. "You know she has never looked at one, and that she is not the taking kind among them. You had—"

"Wait," Mandy's tone was commanding and I stopped. She went on: "Ann doesn't have to have a man in order not to be an old maid. Lots of women to-day aren't married and never will be, but you can't call them old maids. That's because they have real interests in life and real things

to do. It's because they keep up with the times and what is being done around them. A single woman doesn't have to be an old maid. Lots of married women who haven't much to do think of except their own little ways and whims get to be the old-maid kind, too."

"Well," I said, "Ann has had enough to do with caring for old folks and running the place. She needs a rest."

"Yes," Mandy agreed. "She has had enough to do; that isn't it. It's what she hasn't got to do now. She keeps herself shut in at home, eats, works, knits, and then she up her house, all at a set time every day. And look at the difference two years have made in her. She has got into a rut and needs stirring up."

"Do you mean to stir her up by getting her to join our Improvement Society?" I asked.

"No, we aren't designing; but if the plan works she will join."

"Well, what is the plan?" I inquired, getting curious.

Mandy shook her head thoughtfully. "It isn't a sure-working one yet," she admitted, "but I am going to write a letter to my boy, David, and see what can be done. Then she lowered her voice. "Is there anyone around—because it is delicate in its nature, and I am not going to let

read the letter, and I decided that she had hit upon just the right plan to take Ann out of her rut. She left the letter with me to mail, as I had to go to town in the morning; to do some treatise ways

After she had gone I sat thinking over what she had written about Ann being a motherless woman and not having anything to mother now except some animals and a little white horse. And one line of her letter stood out, the one where she said that the cause of many of life's troubles was that lots of mothers are not mothering women and lots of mothering women are not mothers. Poor Ann was getting into a narrow way of living just because she didn't have anything worth while to mother. When I thought how Mandy, mothering woman, was undertaking to help Ann I remembered the old saying that God had made mothers, because He loved us everywhere Himself, and I rejoiced in it.

Next morning I took the letter down to the post office when I went to do my trading. Mandy called me up on the telephone before I started, so as to make sure I wouldn't forget to mail it.

I stopped at her place a few minutes on my way home. When I got to the house I could hear her singing, high and strong and sweet, coming from one song to another as she went from one piece of work to another. She met me at the door. Her face was flushed and there was flour on her arms and nose, and I knew that her mind wasn't on her housework but on improving Ann, and that she was endeavoring to control her excitement until she could hear from David.

"When do you suppose we shall hear?" she said to me.

"Like as not in two or three days, or it may be a week or two," I answered truthfully; then, as I saw her face fall, I suggested, "Why can't you and I do some sewing or something while we are waiting?"

Her face brightened. "Can you go to town with me this afternoon? We'll pick out some stuff to sew on, and to-morrow we will make something for Ann's improvement," she laughed happily at the thought.

The next day she came up to sew with me. We worked until late in the afternoon. We talked long and quietly when we handled the soft, pretty things, and I felt as I think a man must when he takes off his hat at a Decoration Day service. It seemed there was something sacred in the shade-drawn parlor with the dainty sewing, speaking of improving and loving, and we earnest-working women trying to make things better, and doing that trying, not in a man's way, as so many of the women's aim is, but in a woman's.

As we came out of the parlor the telephone rang. It was Mandy's ring. Knowing there wasn't anyone in her house, she answered it. It was the station agent, and he had a telegram for her. It read: "All O.K. 10.30 to-night.—D.H."

It happened fortunately that it was lodge night, and both John and my uncle were going. The hired men were going to a dance.

Mandy went home and got supper for the men. Then, after they had all gone, she hitched up the horse and drove up to my house. We took a short cut over the hills to the milk station. David got off the ten-thirty train, and since my house was nearer Ann's we drove back to the house.

As soon as we got inside and I had shut the door Mandy opened the basket David had been carrying. In it was a fat, red, wrinkled boy, sleeping contentedly in his cotton-lined nest.

David explained that it was only

(Continued on page 20)

The

Goodness

One of the able of the Service Con Professor Gr The centric dress was in good in the Church. think of call have the Ch He gave one illustration of

Some mine od in a mine up" on acco within it. G that their tinguished, s them out, as coal damp th was also put One old ma one, suggesti of their pre man declar the strongest lieved in the than the right it be given to it.

Sitting there someone aske No one could, led, while the grand old by

## The Upward Look

### Goodness Outside the Church

One of the most earnest and forcible of the speakers at the Social Service Congress held recently was Professor Graham Taylor, of Chicago. The central theme of his evening address was that all must recognize the good in people that are outside of the Church. Many who would never think of calling themselves Christians have the Christ-likeness within them. He gave one pathetic and impressive illustration of this point.

Some miners, he said, were entombed in a mine which had been "sealed up" on account of fire breaking out within it. One of the men, seeing that their torches were becoming extinguished, suggested that they blow them out, as he well knew that the coal damp that was putting them out was also putting out life.

One old man began to moan. Some one, suggesting that he be given some of their precious water, one brute man declared it ought to be kept for the strongest. But another, who believed in the might of right rather than the right of might, insisted that it be given to the feeble one needing it.

Sitting there in that awful darkness someone asked if anyone could pray. No one could, but one who could sing led, while the others followed, in that grand old hymn:

"Abide with me, fast falls the evening;  
The darkness deepens, Lord, with me abide;  
When other helpers fail and comforts flee,  
Help of the helpless, oh, abide with me."

They were in the mine eight days before a rescuing party reached them. Three men at the mouth of the mine were so anxious to save some of their fellow-workers that in the very face of almost certain death, they went down in the cage. When it came up, it contained only the charred, blackened remains of these heroes. All that Professor Graham could say over them was:

"Greater love hath no man than this, that he lay down his life for his friend."—J. H. N.

\*\*\*

### A Hard Task Made Easy

With the Household Editor

If there is one task above all others on wash day that causes the housewife to shiver and look forward to with dislike, it is that of hanging out the clothes on a cold frosty day in winter. This is not such a dreadful undertaking if one dresses warmly and has gloves on the hands, providing there is a good path shovelled to and around the clothes line. Is it any wonder we dislike hanging out the clothes when it necessitates tramping through the deep snow and standing in it while we hang the clothes on the line? When this subject is

broached to the men folk, they no doubt excuse themselves by saying that they are usually around to shovle a path, but as a matter of fact when Monday morning comes they have forgotten all about that path, and the same unpleasant task is experienced by the women folk.

There are several ways out of this difficulty. One is to have a clothes reel instead of the long clothesline, with a board walk laid from the house to the reel and a small platform built on which the housewife can stand while hanging the clothes, enabling her to hang all the clothes without walking around in the snow. Another good idea is to have a pulley arrangement attached to the house. All that is then necessary is to step outside of the door and hang the clothes, moving the clothes line along by means of the pulley.

During the winter there is always a great deal of stormy weather when it is difficult to get the clothes dried properly and quickly. By hanging lines in the attic, then opening the windows to allow the fresh air to circulate through the room, the clothes will dry splendidly. This does away with the danger of tearing the clothes on account of the frost when removing them from being torn and also saves them from being torn and whipped with the wind.

While our rough and cold weather is over for another year, why not get on the good side of the men folk and plan to have a more convenient arrangement for hanging the weekly

washing before the cold weather sets in next fall.

### The Family Income

Josephine T. Berry

What is the family income? Are you accustomed to estimating it in terms of wages, salary, or the profits of business only? Or, do you think of it as one of these increased by many other things which a family has to use and to enjoy, and which are chiefly the product of the labor and skilled management of the home-maker? The latter is the accepted economic view. There is a genuine money value to be placed upon the home-maker's care of a family; upon the increase in value of money wisely expended over money unwisely spent.

There is an increase in value—a genuine earning—when a dirty, disorderly house is made clean and put in order, when raw food materials are made into well-cooked and attractive meals, when garments out of repair are repaired, or when soiled linen is made clean. From the economic standpoint a family is an enterprise of two departments, each contributing its share toward the family income. The head of the family is the wage-earner. But—the home-making woman is also an earner and the business manager of the housekeeping department. Wage-earner and home-maker together produce the family income, together support the family.



Peep again in your oven.  
See those loaves, those *pleasing* loaves you've made.  
How fat—rounded—substantial.  
No, they won't fall when colder.  
Because the *Manitoba strength* that is in FIVE ROSES will hold them up till eaten.

This sturdy *elastic* gluten has kept them from dropping flat in the oven.

No unsightly holes 'twixt crust and crumb—*never*.

All risen *easily*—to stay risen.

Never heavy—sadden—soggy—indigestible.

Yours are the FIVE ROSES loaves—

Crinkly and *appetizing* of crust.

Golden brown and tender.

Snowy of crumb—light as thistle-down.

FIVE ROSES helps a lot.

Try it soon.

# Five Roses Flour

Not Bleached



Not Blended

**WONT WEAR OUT SUITS 550**

**MARVELLOUS DISCOVERY WILL SAVE YOU DOLLARS!**

**IF YOU WEAR SMALLEST HOE (AS OUR GUARANTEE) WE REPLACE FREE!**

*A Sensational Discovery! Save you Dollars! A truly remarkable cloth, that will not tear, or wear out, absolutely! Perfect! Like exactly as fitted twelve and seven, made in all the most up-to-date designs and suitable for farm and rough wear or office and best wear.*

**TROUSERS \$1.50. BREECHES, \$2. (5 PAIRS, \$4.50) DUTY & POST PAID (2 PAIRS, \$3.00) and instructions. Receive a pair of well-fitting, well-matched and handsome suits, in all sizes, for only \$5.00. Money refunded if you are not satisfied. Send your order today. With every garment we send a special guarantee check which says that if the smallest hole appears on any of our FREE SAMPLES. Need merely a 10 cent stamp for grand free mailing, order and shipping. No need for money. THE HOLEPROOF CLOTHING CO. LTD., 219 HILTON STREET, TORONTO, ONT. or send 50c for sample pair. This sample pair \$3.00, with waist and leg measure and colour, sent to you. Don't waste money to wear out.**

**THE HOLEPROOF CLOTHING COY**  
54, THEOBALDS ROAD, LONDON, W.C., ENG.

**"Stirring Up Ann**  
(Continued from page 18)

three weeks old, and that its mother who was a wail of the streets, had died in the hospital that morning. He had made inquiries, but there was none to claim the baby. And when he received his mother's letter he decided that he had Ann's improvement all ready.

"But what if she won't take it, mother?" he asked anxiously. "Mandy, who was fondling the baby's fat, pink toes, looked up confidently. "She will, David; she just can't help it."

Mandy folded the little clothes which he had made, and put them into the basket beside the baby, and I wrote a note in fancy writing and pinned it to the little blanket. "I know you are a good woman. Please care for my baby as your own, for I cannot, and I have no people with whom I can leave him."

We were going up to Ann's with it, but Mandy stopped long enough to put in a bottle that used to be David's.

"Probably Ann won't have any in the house," she explained, smiling. Finally we started. David left us when we got about half-way, and went cross-toes down the hill to the station. We drove up under the trees below the house, and Mandy stoke up to the porch quietly and carefully with the basket while I held the horse. She set it down just outside the door. Then she came back to the wagon, and we waited.

We could look through the windows into Ann's kitchen. The nickel of the range and the tea kettle gleamed white in the lamplight, the table cloth shone like a mirror, and even the woodwork. Ann came into the kitchen from the dining-room and her spectacles from off the clock shelf. She put them on and went around the room looking long and closely at the point. When she got to the board above the sink she, as her head, then went out into the woodsshed. A few minutes she came back with some paint brushes which she put into some tins, and she and I knew what she intended to do the first thing in the morning.

In about twenty minutes the baby began to cry a little, tiny cry at first, then loudly and lustily. Ann came to the door and leaned forward, peering out into the darkness. Then the baby gave a louder wail. She jumped back. "Great Everlasting!" she exclaimed, caught up the basket and ran to the right. Mandy and I wanted to stay longer, but the horse began to paw and snort, and we didn't dare. So we hustled off.

Next morning when Tim Gray, a lad that draws milk for the farmers living in the head of the hollow, and began to call. He told me that Ann Simmonds had come running out to the wagon when he was driving past her place. She wanted him to stop and tell me to be ready to come up to her house with Mandy. People always sent for Mandy when there were in trouble or when anything unusual happened, and since I had been so intimate with her they had been it for me, too. Tim said that Ann did not seem like herself—she talked so fast, and her hair wasn't combed.

I hurried to get my work done and was ready by the time Mandy came for me. When we drove up in front of Ann's house she came running out on to the porch to meet us. She looked much like the capable, loving Ann who used to care for the old mother and father. Her hair, in-

stead of being slicked down close to her head, was put up carefully. Her dress was turned down at the throat and her sleeves were rolled up above the elbows.

"Mandy," she said, half crying, "Mandy," someone has sent me a baby."

"A baby!" Mandy exclaimed, in a surprised tone. "Who—what do you mean?"

We went into the house then. There in the old-fashioned cradle in which all the little Simmonds had been rocked lay the baby, tucked in under a little piecework quilt, blinking and cooing.

"Who sent it, Ann?" I asked. "I don't know, Julie. Here's the note that was in the basket." She handed it to me and began telling me how she heard the baby cry the night before.

"But—" and as I listened I knew for a certainty that Mandy was right when she said a woman knew how to do things. "But, Ann," said Mandy, "are you going to keep it? You don't know anything about its folks, and after working hard all your life it's time you took a rest. It will be quite a task to bring up that boy."

"I'm going to keep it, Mandy Higgins!" Ann cried excitedly, an expression of outraged surprise spreading over her face. "Of course I am going to. Didn't it mother give it to me, and doesn't it smile at me already. Our '1900' she continued, "don't I need something to work for the same as you other women? I haven't known what to do with myself since Pa and Ma died. I haven't wanted to go out with you other women because I hadn't anything real to do as you had. I wasn't needed anywhere; but now I know I am, and that God him and her need me. She stopped with a sob. We put our arms around her and all cried together, which is characteristic of women.

"These aren't enough clothes for him," she said. "No, I s'pose not," Ann agreed. "How would you like to have the Improvement Society come up to-morrow afternoon and make some for him?"

"Do you s'pose they would?" said Ann anxiously. "You know I wouldn't join a spell back." "Shucks!" Tim said he was glad to. "Why don't you join now?" asked Mandy.

"Oh, do you think they would have me? It didn't seem any use to join when I felt so sure you folks, but somehow this little baby makes me feel different toward everybody."

That day on the way home Mandy chuckled to think that Ann would never be an old maid now, and I kept rejoicing when I thought that the women were able to make this hollow a happier place.

**Keeping Smoked Meats**

By Andrew Boss  
During moderate weather, smoked meat may be left in the smoke-house for some time. The house should be kept perfectly dry, and well enough ventilated to prevent dampness. A necessary to wrap them in dry, cool collar or attic, with free circulation, will be a satisfactory place for smoked meats at all seasons, if in kept dark and the flies are excluded.

If to be held only a short time, hams and bacon will need only to be hung out separately, without covering. For longer keeping, it will be necessary to wrap them first in oiled paper and then in burkap, canvas or muslin, and to hang above a airy, cool place; the object being to gain a uniform temperature and to keep away insects.

**KODAK**

Keep a Kodak picture record

of your methods of drainage and tillage and of your growing crops—with and without fertilizers. Such a record will enable you to study and improve the conditions governing their growth and will help you to better profits next year.

Let the Kodak at \$7.00 and up, or the Brownie from \$1.00 to \$12.00 keep the record.

Your dealer has them. Ask for a catalogue, or we will send it free by mail.

**CANADIAN KODAK CO. LIMITED**  
588 King St. W., Toronto

**FARMERS OF ONTARIO**

Are you requiring help this Spring? Partly of Young Men and Boys are now coming forward.

For full particulars apply  
**BOYS FARMER LEAGUE**  
Drawer 188 Winona, Ont.

**WE WILL PAY YOU \$10 to distribute religious literature in your community. Retail duty work. Experiences not required. Men or women. Opportunity for promotion. Spare time may be used.—International Bible Press, 122 Spadina Ave., Toronto.**

**CHALLENGE COLLARS**

Acknowledged to be the longest-lasting of Waterproof Collars we make. All sizes. All stores. All over the Dominion.

**THE ARLINGTON CO. BROS. LTD.**  
60 FARRER AVENUE  
TORONTO

**HAWK BICYCLES**

An up-to-date High Grade Bicycle fitted with *Koller's Chain, New Entrance Coaster Brake and Hub, Enamelled Wood Frame, Detachable Fenders, high grade equipment including Indestructible Pumps, and Tools.* All sizes.  
**\$22.50**

For **FREE 1914 Catalogue**, 90 pages of Bicycles, Sundries and Repair Material. You can buy your supplies from us at Wholesale Prices.

**T. W. BOYD & SON,**  
27 Notre Dame St. West, Montreal.

**See this Bow Lever**

**THIS is a special feature of the Maxwell "Favorite" Churn. No other churn has it. You can adjust the handle to centre, right or left, whichever is easiest for driving.**

**Maxwell "FAVORITE" CHURN (with Bow Lever)**

—makes churning a pleasure. It's so simple to drive—requires no help in effort to produce the butter. Agricultural Colleges and Government Inspectors recommend it. Used in Denmark, Australia, New Zealand, S. Africa, and all over Canada.

Light, rigid steel frame. Rolled transmission. Roller bearings. Best flour throughout.

Dept. D  
**MAXWELLS LIMITED ST. MARY'S, ONT.**

*Call all your dealers and let them show you the splendid unique features of the Maxwell "FAVORITE" Sold in eight sizes.*

A MAN tried it. It was a fine horse, with a good mouth. An know the man who either.

Sold him for the horse for \$1.00. I paid my first and second and third horse. The horse isn't all.

I was afraid I wasn't all right. I might have lost my money if I don't go with it. Now, this thinking.

Yes, I'm making Wash Machines. I know Gravety Washers and about 20 of my Washers. And I said to me. But I never would tell me. Machines by mail. I don't know what that way. So, said I to let you for a month, before I want to try the 'em. Now, I know who will wear or tearing or wear. I know they can be machine.

I know it will be any washing ever invented can clean. Our '1910 work every so that will be a strong we clothes, fray the other all each machine. I just drives so, said I to you. I know it will be any washing ever invented can clean. Our '1910 work every so that will be a strong we clothes, fray the other all each machine. I just drives so, said I to you.

Ask me. I'll offer off every thing. I know it will be any washing ever invented can clean. Our '1910 work every so that will be a strong we clothes, fray the other all each machine. I just drives so, said I to you.

Let me send you a month's free trial. My own pocket, as thin after you've back and pay for the wash, isn't it.

Don't let anybody else tell you. Wash must be all your. You can pay you get will have in wear and tear on clothes. I have a list of washwomen's wages that will save the money that it gives you every week. I send you 50 cents you take the money for the machine free in advance. Wash clothes in advance. Address me here.

K. N. MORSE  
Washers Co., 35

**Peck, Kerr & Barristers**

415 Water St. E.A. Peck J.D.

**Send us your FREE JOHN HALLAM'S**

**FR**

HALLAM'S French  
A book of 68 pages  
with 250  
and where to buy  
the value  
Ray's Handy  
minutes for quotation  
FR FREE for the  
address JOHN H  
Mail Dept. B  
111 Front St. East

THIS WASHER MUST PAY FOR ITSELF.

A MAN tried to sell me a horse once. He said it was a fine horse and had nothing the matter with it. I wanted a fine horse, but, I didn't know a thing about horses. And I didn't know the man very well either. So I told him I wanted to try the horse for a month. He said "All right, but pay me first, and I'll give you back your money if the horse isn't all right."



I was afraid the horse wasn't "all right" and that I might have to waste for my money if I once parted with it. So I didn't buy the horse, although I wanted it very much. Now, I see me thinking.

You see I make "Washer Machines" the "1900 Gravity" Washer. And I want to myself, lots of people may think about the horse, and about the man who owned it. But I'd never know, because they wouldn't tell me. You see I sell my Washer Machines by mail. I have sold over half a million that way. So, thought I, it is only fair about to let people try my Washer Machines for a month, before they pay for them, just as I wanted to try the horse.

Now, I know what our "1900 Gravity" Washer is. I know it washes the clothes, without wearing or tearing them. In less than half the time they can be washed by hand or by any other machine. I know it will wash a tub full of very dirty clothes in six minutes. I know no other machine ever invented can do that, without wearing the clothes. Our "1900 Gravity" Washer does the work so easy that a child can run it almost as well as a strong woman, and it doesn't wear the clothes, fray the edges, nor break buttons, the way all other machines do.

It just drives soapy water clear through the fibres of the clothes like a force pump. Just. So, said I to myself, I will do with my "1900 Gravity" Washer what I wanted the man to do with the horse. Only I will do for people to do for me. I'll offer first, and I'll make good the offer every time. Let me send you a "1900 Gravity" Washer on a month's free trial. I'll pay the freight out of my own pocket, and if you don't want the machine after you've used it a month, I'll take it back and pay the freight too. Surely that is fair enough, isn't it?

Doesn't it prove that the "1900 Gravity" Washer must be all that I say it is? And you can pay me out of what it saves for you, and will save its whole cost in a few months in wear and tear on the clothes alone. And then it will save 50 to 75 cents a week over that in washwoman's wages. If you keep the machine after the month's trial, I'll let you pay for it out of what it saves you. If it saves you 50 cents a week, and me 50 cents a week, I'll pay for it. I'll take that cheerfully, and I'll wait for my money until the machine itself earns the balance.

Drop us a line today, and let me send you a book about the "1900 Gravity" Washer, that washes clothes in six minutes.

Address me personally: K. N. MORRIS, Manager 1900 Washer Co., 367 Yonge St., Toronto.

Peck, Kerr & McElderry

Barristers, Solicitors, etc.

415 Water St., Peterborough

E. A. Peck F. D. Kerr V. J. McElderry

Send your Raw FURS to John Hallam

Sixty Thousand Trappers now send us their Raw Furs. Why not you? We pay highest prices and express charges, no commission and collect money same day made or returned. Millions of dollars are paid trappers each year. Don't miss a reliable house. We are the largest in our line in Canada.

FREE HALLAM'S TRAPPERS GUIDE

French and English. A book of 96 pages, fully illustrated. Game laws revised to date. Tells you how, when and where to trap, but with traps to use, and other valuable facts concerning the Raw Fur Industry, also one of "Trappers' Notes." For questions, send ABSOLUTE- LY FREE for the asking. Write to department: JOHN HALLAM, Limited Mail Dept., 111 Front St. East, TORONTO

Value of an Ideal in Home and Community

Alice A. Ferguson, York Co., Ont.

My ideas on the value of an ideal to the individual, appeared in a recent issue of Farm and Dairy. What an ideal does for the person it does for the home. You picture what you wish your home atmosphere to be and that very purpose will help to keep down many unpleasant words or acts, and will help to keep a clear and sunny atmosphere. Good feeling grows in a sunny atmosphere, but dies in the chill and mist of unpleasantness.

Then an ideal is necessary if we wish to improve our surroundings. In our minds we picture how we want our home furnished, or our lawns laid out, or our garden planted. And we plan and work to bring about that purpose. Having ideals before us will keep us out of ruts, and will give zest to life.

What ideals will do for the individual and for the home they will do for the community. The community is the sum total of the life of our homes. The home training shows when people congregate. We desire the life of our surroundings to be peaceable, helpful, kindly and progressive. We want it to be the cleanest, purest and best that can be, so we try to favor everything that will aid in bringing about this result. All that is base and vulgar we disdain, and strive to bring about the reign of righteousness.

HAVE PURPOSE IN LIFE

People long married, who are happy, are often said to become more like each other in character and even in physical features. We grow like that which we love. The Christian who takes as his pattern the Lord Jesus, grows like Him. We would not attempt to cut out a garment without either a pattern or some picture in our mind as to how we want it to look when we finished it. So we should not attempt to live a life without some formal purpose.

Having a purpose puts iron in the blood, starch in the backbone, and the light of a living energy in the eye. It sweeps the cobwebs from the brain, sluggishness from the liver, and chases manyimps of darkness from the heart.

Many of our foremost men have attained the positions they hold because of the high purpose formed in youth. By all means have the ambition fired by having and holding before the mind some high resolve, a vision only to be reached by persistent climbing. Then only do we reach the best of manhood and womanhood.

\*\*\*

A Shiny Skirt.—One of the many problems of the woman in the matter of dress is that of the skirt that has acquired shine through wear. Oftentimes a skirt is perfectly good except for the very noticeable gloss it bears after being worn for a considerable length of time. Unfortunately this fault cannot be remedied entirely, though there are several methods which improve the skirt for a time at least. One is to rub the shiny portions gently with emery cloth or fine sandpaper, rubbing after with a warm, silk handkerchief. Another method is to rub with a bit of flannel dipped in turpentine, or sponge with a solution of common washing blue and water; press while still damp under a thin cloth.

\*\*\*

The sunny smile is more than money in the bank. It makes friends that coin cannot buy. You may be shy on the long green, so develop a big smile, just for the sake of having a little business capital.

WANTED

Five Hundred Answers are wanted to this advertisement.

I want every boy and girl who reads this announcement to fill in the coupon below and send it to me immediately.

WHY?

Because I have a number of fine English Imported Bicycles that I am going to give away free to some of the energetic boys and girls who send me a coupon.



- Ladies' the same except in the frame. Frame—18-24 inch. Pedals—Solid Rubber. Finish—Black and Striped. Handle Bars—Perfection. Rims—Dunlop. Tool Bag—Tools and Pump. Chain—Roller, 1/2 inch. Mud Guards—Black and Striped.

These are perfect bicycles and they are something that most boys and girls have been most anxious to get for a long time.

Now you have this splendid chance to get one absolutely free. If I were you I would not let it get away. I would fill in this coupon to-right and send it right along, so you will get full particulars by return mail.

Be Independent—Own a Bicycle

FILL IN THIS COUPON CIRCULATION MANAGER, FARM AND DAIRY, PETERBORO,--

Dear Sir,—I would like very much to get a bicycle, and I would like to get it free. Please send me full particulars by return mail.

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

### Get More Cream

The fine bearings on a cream separator need the best of oil. Separators lubricated with

### STANDARD

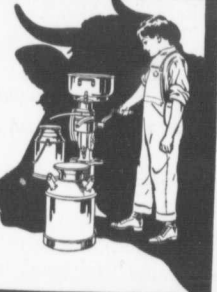
### Hand Separator Oil

give perfect results, without noise or vibration.

Uniform in quality. Never gums or corrodes. Feeds into finest bearings. Lengthens the life of your separator.

For sale at all chief points.

THE IMPERIAL OIL CO., Limited  
Windsor Edmonton Calgary Saskatoon  
Regina Vancouver Toronto Montreal



## Fashions for Spring Coats and Skirts

Farm and Dairy patterns shown in these columns are especially prepared for Farm and Dairy's Women Folks. They can be valued when to be later made up to the latest modern features of the better pattern. When sending Farm and Dairy your order please be careful to state just what measure you desire. Children and the number to pattern desired. Price of all patterns is Our Folks, see each Address all orders to Pattern Dept., Farm and Dairy, Peterboro, Ont.

The coats this season show a silk. Three sizes: Small, medium and large. A radical change from ideas that have long been accepted by the majority of us. For a considerable

tailored suit has always taken a prominent place in the outfit of the well dressed woman, in many cases the expression "a tailored" meaning a plainness of the suit that might almost be called stiff. Now, however, the styles are decidedly changed. The coats are loose and flowing, and a great many have a decided ripple, in fact rippled skirts are one of the most striking features of this year's styles. The coat models for young girls are very youthful, being quite short and their looseness suggests youth and slenderness. These new coats when worn with the peg top skirts or the new three-tier style of skirt, are considered by authorities of fashion to obtain a soft and graceful effect.

A good style for your little girl may be taken from the model 9924. A dressy school dress could be derived from this design of dark olive green cheviot, with trimming of red. For more dressy wear black velvet with trimming of some lighter material would be very attractive. The dress is closed at the side under the pleat. Four sizes: 4, 6, 8, 10 years.

Another good style for a frock for mother's girl is illustrated in model 9830. This dress was featured in brown serge, with a girldie and finish of plaid silk. A jaunty collar finishes the neck edge. The sleeve is joined to the drop shoulder and is finished with a neat cuff. Four sizes: 6, 8, 10 and 12 years.

No. 9834 shows a new and stylish model of lady's shirt waist. The shirt waist is ever popular, as it is one of the most convenient and necessary parts of the woman's wardrobe. In this design the collar may be rolled open at the throat or closed high. The sleeve may be finished with a simple band or with the pointed cuff added. Seven sizes: 32 to 44 inches bust measure.

In 9831 we show the new popular three-tier skirt model of which we spoke in the second paragraph. Silk, charmeuse, cashmere, pongee, and other seasonable fabrics may be used for developing this style.

A simple, practical and becoming model for a lady's house dress is shown in design 9838. The fronts are slightly low at the throat and finished with a neat rolling collar. The simplified skirt has a tucked and inverted plait at the centre back. Seven sizes: 32 to 44 inches bust measure.

A charming and popular design of lady's costume, with plain or full chemise, is shown in design 9837. This style is especially suitable for the brocaded materials which are so much in vogue this season. Six sizes: 32 to 42 inches bust measure.

**CREAM WANTED**

Toronto consumes daily the milk and cream from over 14,000 cows and the butter from over 70,000 cows. We need your cream.

**Toronto Creamery Co., Ltd.**  
13 Church St., TORONTO

FOR SALE - First-class Dairy Farm, 120 acres. Owned by the late Wm. Shunk. York county, 10 miles from Toronto. Apply Nelson S. Shunk, 129 Shuter St., Toronto.

Make Butter We Furnish Cans  
We Want CREAM We Pay Express  
We Pay Every Two Weeks

Write us  
**BELLEVILLE CREAMERY, LTD.**  
Belleville, Ontario

**595**  
AND UPWARD  
ON TRIAL

**AMERICAN OIL SEPARATOR**

A BOLD PROPOSITION, to fully guarantee, a new milk separator, perfect in design, which will separate the cream from the milk in less than 10 minutes. It is made of brass and is absolutely approved.

The best in sanitary quality. It is different from all other separators, which illustrate the latest in separator design.

FORN SALE - CANADA  
BY JOHN N. B. GIBSON  
1001 Water Street, Toronto  
Write for our handsome Free Catalogue. Address: AMERICAN SEPARATOR CO., Box 1200, BAINBRIDGE, N. Y.



## International Harvester Cream Separators



A DAIRY farmer who does not use a cream separator is losing up to \$15 per cow per year. Complete your dairy equipment by the purchase of an International Harvester cream separator—Lily, Bluebell or Dairymaid. These separators skim closely—leaving barely a drop of cream in a gallon of milk—and they will do it for years.

These machines are furnished with pulleys for the use of power. Belted to a small I H C engine, you have the best outfit it is possible for you to buy. Note the low supply can on I H C separators, the height of the milk sput which allows a 10-gallon can to be used for the skim milk, the strong frame with open base which can be kept perfectly clean, and the dozen other features which make these I H C machines the best.

Your local dealer should have one of these machines on sale. If he has not, write us before you buy and we will tell you where you can see one; also send you an interesting book on separators.

THE I H C LINE  
GRAIN AND HAY  
MACHINES

Roads, Reapers  
Mowers, Mowers  
Rakes, Stacks  
Hay Leaders  
Hay Presses

CORN MACHINES  
Reapers, Pickers  
Mowers, Cultivators  
Grainers, Cutters  
Shellers, Shredders

VILLAGE  
Combination,  
Pug and Spring-Tooth,  
and Disk Harrows  
Cultivators

GENERAL LINE  
Oil and Gas Engines  
Oil Tractors  
Blower Separators  
Cream Separators  
Iron Works  
Motor Trucks  
Bridges  
Crab Drills  
Feed Grinders  
Kale Grinders  
Baler Trucks

International Harvester Company of Canada, Ltd  
At Hamilton, Ont.; London, Ont.; Montreal, P. Q.; Ottawa, Ont.;  
St. John, N. B.; Quebec, P. Q.



## An Ex

PROF. C. Laminating Canadian Convention of seed of all said there was value of the is a deep-rooted and storing in soil and furnish for stock of all

During a period of 15 years we they had realized tons of green tons of dry m to be used 18 acres more with ley and to take occurred about and again late believed the erosion of soil to be adequate, sufficient, and plenty of lime it

During the last a decrease of o to winter killing were too tender was not an unlikely draw the growing the more as Ontario Vae alfalfa.

HEARD HAD of Maryland made the best alfalfa east of the Mississippi around Utica, N. place. Prof. Z could be grown lower basin of Lambton County south-western Ont

# Comments on a Fertilizer Experiment

Jan. Hunter, Lincoln Co., Ont.

My attention was called the other day to a fertilizer advertisement in which a district representative of the Ontario Department of Agriculture allows his name to appear as sponsor for the result of an experiment, which, we are asked to believe, proves the superiority of a factory-mixed over a home-mixed fertilizer. One wonders what could have induced this man, who is a graduate of an agricultural college, to have his name to the perpetration of such a fraud on unsuspecting farmers or to insult the intelligence of those who know something of the principles of fertilizing.

The Canadian agricultural colleges impart no instruction on the essential use of fertilizers and on the essential conditions required for comparative tests? In order that a fair test be assured, it is necessary that the plots should be located in the same field and that the soil conditions throughout are in every respect similar. yet the test, cited in the advertisement, was conducted on two different farms. On one farm 200 pounds of a home-mixture, composed of 100 lbs. of nitrate of soda, 300 lbs. basic slag and 200 lbs. potash (presumably together with eight loads of manure per acre, were employed; while on the other farm 500 lbs. of a "factory-mixed" fertilizer, analysing 3-6-10, supplemented by six loads of manure per acre, were applied.

Now the same amounts of nitrogen, phosphoric acid and potash, contained in 500 lbs. of this 3-6-10 mixture could be supplied in 400 lbs. of nitrate compounded of 100 lbs. nitrate of soda, 200 lbs. acid phosphate and 100 lbs. muriate of potash, which, according to to-lot prices on the separate materials, as quoted to me, would cost \$7 or \$8. It appears quite obvious then that, besides the necessity of having equal soil conditions, it would also be essential to supply in the home-mixture amounts of plant food corresponding to those in the factory-mixture, if the experiment is to be of any value as such. Again in one instance eight loads of manure per acre were used, while six were used in the other. The nature of the two soils was not mentioned, but doubtless the dissimilarity was as pronounced in this as in other respects. So glaring, in fact, are the inequalities of conditions in every direction that one is forced to the conclusion that a fair test was perhaps perfectly avoided. This is particularly so of those responsible for the preparation of the advertisement in the sections of the fact that in 99 cases out of 100, given a fair field and no favoritism, the indisputable advantage of home-mixing would be demonstrated. Is it not a significant fact that extensive employment, home-mixing is almost exclusively practiced, and not all experiment stations and agricultural colleges, both in the United States and Canada, advocate the practice?

Ordinarily, I should not trouble to comment on such exaggerations, which not infrequently appear in advertisements, but I must confess surprise at seeing the statements (misleading in the extreme) supported by a representative of the Ontario Government, whose duties, as I understand them, are to give the farmer reliable information on all agricultural subjects.

## An Expert on Alfalfa Seed Production

PROF. C. A. Zavitz gave an illuminating paper at the recent Canadian Seed Growers' Association Convention on "The Production of seed of alfalfa in Canada." He said there was no question about the value of the alfalfa plant, which is a deep-rooted perennial, gathering and storing nitrogen to enrich the soil and furnishing excellent forage for stock of all kinds.

During a period of experimentation of 15 years with alfalfa at Guelph, he said he realized an average of 19.9 tons of green crop per acre or 4.3 tons of dry matter. Their practice was to use 18 to 20 lbs. of seed per acre more with a nurse crop of barley and to take early cuttings which occurred about June 21st, July 31st and again late in September. He believed the crop was adopted to all kinds of soil that had good drainage, sufficient richness of soil, and plenty of lime in it.

During the last year there had been a decrease of over 22,000 acres, due to winter killing of varieties which were too tender for this country. This was not an unmix evil, as it would likely draw the farmers' attention to growing the more hardy strains, such as Ontario Variegated and Grimms' alfalfa.

ONTARIO HAS BEST SEED DISTRICT He said he had heard Prof. Smith of Maryland make the statement that he considered the Niagara Peninsula the best alfalfa seed growing district east of the Mississippi, with territory around Utica, N.Y., as the next best place. Prof. Zavitz thought seed could be grown well all along the lower basin of the Grand River, in Lambert county and imports of south-western Ontario profitably.

The highest yields obtained in the province had been seven bushels an acre, but the average per acre was not more than two bushels. He said the time to cut alfalfa for seed was judged by the color of the seed pods and it could be harvested with a mower, with or without a table attachment, a reaper, or a binder. The seed is usually obtained from the second growth when the weather conditions are those usually for seed production. It is threshed with a clover huller.

There are four kinds of alfalfa, of which the common or violet kind is scarcely hardy enough for our northern conditions. The Variegated and permanent value to Canada, although some of the common alfalfa strains seem to become fairly well acclimated.

Besides those parts of Ontario where alfalfa seed can be produced, parts of southern Alberta and Saskatchewan seem to be adapted to seed production. Reference was also made to Prof. Hansen's introduction of a yellow alfalfa from Siberia, which is being tested out now for northern conditions in the United States and Canada. Summing up, Prof. Zavitz said that

- (1) Alfalfa can be successfully grown in many parts of Canada.
- (2) Seed can be produced in Canada.
- (3) Ontario Variegated and Grimms should be the strains to grow.
- (4) Seed growing centres should be organized.
- (5) The C.S.G.A. could be an agent both for the encouragement of seed production and its distribution.



# Use Salt that does make good butter - Withosor Dairy Salt

**BUILD CONCRETE SILOS**  
Any size with the London Ad-justable Silo Carbs. Send for Catalog. We manufacture a complete line of Concrete Machinery. Tell us your requirements. LONDON Concrete Machinery Co. Limited, Dept. C. LONDON, Ont. Largest Manufacturers of concrete machinery in Canada.

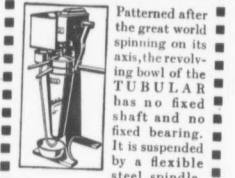
**SILOS SILOS SILOS**  
SOMETHING NEW  
Write to-day and Save Money  
We sell direct  
The Farmers' Silo Mfgs. - Markham, Ont.

**HARTSHORN SHADE ROLLERS**  
Beware the script name of "Sweet's Hardware on label. Our "Empire" no tacks required.  
Tin Rollers  
WOOD ROLLERS

TRY OUR BUTTER WRAPPERS - McMillen Pig Co. London

**NATIONAL MACHINE CO.**  
Brighton, Ont.

# SHARPLES TUBULAR CREAM SEPARATOR



Patterned after the great world spinning on its axis, the revolving bowl of the TUBULAR has no fixed shaft and no fixed bearing. It is suspended by a flexible steel spindle, its weight being borne by a resilient ball bearing permitting the bowl to run practically without rocking, with ease, smoothness and precision. Increases the centrifugal force without increasing the speed. The TUBULAR skins clean, easily and quickly cleaned, is built sturdily in all of its few parts. All gears are enclosed. It is constructed to afford a lifetime of durability and consumes little oil. Its suspension is natural and is not eccentric to its center of gravity.

# SHARPLES MILKER



The MILKER is in daily use under widely varying conditions in dairies of different classes, in all dairying sections of the United States and Canada. The teat cup with its upward squeezer is the most human in its ability to adapt itself to the proper way of milking cows of different temperaments. The fresh and heavy milker, the hard milker, the light up milker - all are milked as they should be milked.

The SEPARATOR CATALOG and the MILKER BOOK give full details regarding the construction and utility of these dependable SHARPLES products.  
The Sharple's Separator Co. West Chester, Pa.  
Chicago Kansas City San Francisco  
Minneapolis Omaha Portland, Ore.  
Dallas Toronto Winnipeg  
Agents everywhere

**FREE**  
Now is your chance to make your home attractive. Until March 1st we will tell you, free of charge, how this may be done. Write at once to any room you want to fix up and how much you want to spend (no limit, no wonder), and until March 1st we will send you free, samples of material with information how to get them, where they may be bought and at what price. Write at once, ask us anything you want to give you the benefit of our experience free until March 1st.  
SMALL HOME DECORATING COMPANY  
1 Liberty Street, New York, N.Y.

# \$15.00 and Upwards

Whether you have but one cow, or if you have fifty cows we have a High Grade Cream Separator suitable for your requirements, at a price you can afford to pay.  
We send you a machine, on FREE TRIAL, anywhere in Ontario or Eastern Canada, and prepay the freight. The night guaranteed. LOW PRICES. EASY PAYMENTS. You take no risk whatever. You settle for it only if satisfied. Send for Circular "D" To-day, giving particulars of our Free Trial Offer, please, etc. Agents wanted.  
**DOMO SEPARATOR**  
St. Hyacinthe, Que.

## TURN LOSS INTO PROFIT WITH A SPRAMOTOR

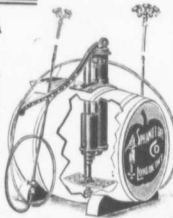
You can do it! The Spramotor has improved fruit yields in different sections of the country fully 50 per cent. It has increased potato crops from almost nothing to 400 bushels an acre. These are not estimates or guess-work but actual results.

By direction of the Minister of Agriculture for Ontario spraying tests were conducted at 36 different places to see what increase of fruit could be effected by spraying. The result showed 2,977 barrels of good fruit from sprayed orchards against 300 barrels from the same number of trees not sprayed. We have more proof. Do you want it?

Write us, giving information as to your spraying needs, and we will send you full particulars of a Spramotor that will fill the bill, also a copy of our valuable illustrated treatise on Crop Diseases, FREE.

We make Spramotors at prices all the way from \$6 to \$350—a machine for every requirement.

**HEARD SPRAMOTOR CO., 1786 King St., LONDON, CAN.**



## The Value of Sweet Clover and Its Uses

CANADIAN seed houses are receiving numerous inquiries regarding sweet clover, its value and uses. Probably this interest is due to the favorable reports that are reaching Canada from United States districts where sweet clover is not regarded as a weed, but as a very valuable farm crop. Numerous experimental stations in the United States are growing the plant and reporting favorably on its value.

There are three varieties of white clover, the white sweet clover, the yellow sweet clover, and Melilotus Indica, a yellow-flowered annual species. The white sweet clover is the strongest grower and best of the three varieties. When young, it resembles alfalfa to such a degree that it is often mistaken for it, but when mature, which is during its second season, it attains a height of five to eight feet, and blooms from June to October.

The roots of all varieties are large, fleshy, and much branched, and go down to considerable depth. In the Biennial Species down with the tops, large enough to make anything like The plant is quite widely distributed, but is found growing most luxuriantly in limestone soils. Hence we find it growing well where fertility has become exhausted through constant cropping. This indicates its value in the reclamation of worn-out fields and hillsides, which have washed badly. It is of great value in this respect, and the demand for seed is increasing rapidly. The following information on its culture is given in the Iowa Homestead, a United States paper published in a district where sweet clover is extensively used:

**SOWING OF SWEET CLOVER**  
Under ordinary circumstances, sweet clover will do well if seeded at the rate of 30 lbs. per acre early in the spring along with a nurse crop. There is some advantage in sowing with a crop that matures early, like early oats or barley, because, in that

case, there is not the same danger of the nurse crop drying out the soil, thereby endangering the young clover plants.

"In some cases sweet clover is seeded early in the spring without a nurse crop, but the objection to this plan is that under ordinary circumstances there will not be enough weeds to thin the stand. Furthermore, by sowing in this way, it practically means that one must give up the use of his land for a year because in all probability there will not be sufficient growth of sweet clover the first year to make a good cutting. Wherever the plan of sowing the clover without a nurse crop is carried out, seeding should be done in the fall, some time between the middle of August and the 10th of September.

"The variety of sweet clover that produces a yellow blossom should be done in the fall, some time between the middle of August and the 10th of September. The variety of sweet clover that produces a yellow blossom should be done in the fall, some time between the middle of August and the 10th of September. The variety of sweet clover that produces a yellow blossom should be done in the fall, some time between the middle of August and the 10th of September.

"Apart from its great value as a nitrogen gatherer and producer of humus, sweet clover is being used most extensively in Kentucky as a pasture grass. Once stock becomes used to it, it is eaten as readily as red clover, and the stock appear to thrive on it equally as well. It is especially good as an early pasture. For hay it cut just as it is coming into bloom, and is handled in a similar way to alfalfa.

Sweet clover is one of our coming plants, both as a soil improver and as a nurse crop, and it will grow on soils which are too poor to support either clover or alfalfa, and eventually brings them up to a high state of fertility. It also inoculates the soil and puts it in excellent condition to grow alfalfa. Where soil conditions are right for clover and alfalfa these are, of course, the preferable crops.

The best and easiest way to use  
**Eureka Harness Oil**  
is with the Eureka Harness Oiler.

No waste. Nothing to get out of order. Ask your dealer.

**THE IMPERIAL OIL CO., Limited**

Montreal  
Toronto

St. John  
Halifax

Winnipeg  
Vancouver

## FOR SALE

About 10 Bus. Wisconsin No. 7 Choice Seed Corn. Selected and rack cured pure. Also quantity of high-class Seed Oats, Irish Victor variety, weighing 4 lbs. per bus.

**R. O. L. SCRATCH**

WHEATLEY ESSEX CO. ONT.

## Holstein-Friesian Association of Canada

Applications for registry, transfer and membership, as well as requests for blank forms and all information regarding THE FARMER'S MOST PROFITABLE INVESTMENT should be sent to the Secretary of the Association.

**W. A. CLEMONS, ST. GEORGE, ONT.**

## Ploughs—Wilkinson

TRADE MARK  
REGISTERED  
U.S.S. Soft Centre Steel Mouldboards, highly tempered and guaranteed to clean any soil. Steelbolts, steel handles and high carbon steel coupler. Chisels can be used either stiff or swing. Each plough is fitted especially with its own pair of handles—trick, strong and heavy and thoroughly lacquered. The long body makes it a very steady running plough. Shows all the down to a beautiful finish, with brass oil and narrow flanges for castings.

The Bestman—Wilkinson Co.,  
491, Wellington Ave.,  
Toronto, Ontario,  
Canada.



## Compliment for "Our Lady of the Snows"

John Smith, Dufferin Co., Ont.

THIS is not a poetical eulogy of "Our Lady of the Snows." It is a practical compliment to her by a practical farmer. It is inspired by reading an editorial in a United States paper. Here are a couple of paragraphs from that editorial:

"In Missouri two farmers, living in separate counties, but at an equal distance from the cotton market, learned by telephone—by the way, there is no more important factor in profitable marketing than the telephone—that cotton had gone up in price a dollar a bale. One of these two farmers lived on a very bad road. He could haul just one bale of cotton. The other farmer, living on an improved road, hauled four bales. The rise in price gained the first farmer \$1, the second farmer \$4.

"A farmer living in Sullivan county, Tennessee, a few miles from Bristol, had a hundred bushels of potatoes which he proposed to market during the winter. But the roads were so bad he was unable to do any hauling whatever, and the potatoes rotted in his cellar. In the meantime, the price of potatoes in Bristol went up to \$1.40 a bushel. During the winter ten car loads of farm produce, including wheat and potatoes, were shipped into Bristol daily to feed not only the town, but the surrounding country. In this case the townspeople were not only obliged to pay a higher price, because of their daily supply coming from a distance,

but this one farmer alone lost \$140 because of his inability to haul his potatoes to town, the roads being too bad."

### OUR WINTER ROADS

These farmers lived in a country where their winter is a rainy season. I have no doubt they pity us up here to call "Our Lady of the Snows." But it is we who should pity them. "Our Lady of the Snows" provides us with roads that for hauling produce are far better than the roads of our macadam. True the drifts are a nuisance, but the increasing popularity of wire fences will soon do away to a large extent with this impediment to country roads in winter. Let us not grumble about our climate when it supplies us with several months of fine roads.

"I would just like to add here that "our road problem" is not a farmers' problem so much as the problem of the automobile owner. During a normal winter we have good roads for marketing produce or for visiting our friends. During the major part of the summer even dirt roads afford choice wheeing. The worst roads are in the spring, and if we are forehanded we can arrange our work so that there is practically no hauling to be done while the roads are bad. When it comes to building \$10,000 a mile roads it strikes me that the proportion the farmer should pay is a small one.

**The "ACORN" Farm**  
Barns, sheds, stock shelters, outbuildings, tanks, silos, houses—all roofed with Preston Safe Lock Shingles and sides of Acorn Quality Corrugated Iron.

The products that go out with this trade mark are up to the standard in weight and will give the best satisfaction. The galvanizing is right, and the products are made on the latest and most modern presses and machinery. The lasting quality is there and it is backed up by the company's guarantee.

**A NEW BOOK—"Steel Fireproofing 65,"** is now ready for distribution, and we want the farmers of Canada to send for copies. This new book shows what other farmers have done in Canada during the past year.

**The Metal Shingle & Siding Co., Limited**  
Preston Montreal  
Associated with  
**The A. B. ORMSBY CO., Limited**  
Toronto  
ADDRESS YOUR NEAREST OFFICE

THE M  
Butter a  
visited to  
department  
and to su  
sion.

Watch

The chess  
ardent cham  
por R. W. W  
Pard, when  
of Farm and  
wally blue  
future of the

"I have be  
years," said  
must take b  
No business  
be so careles  
many chessm  
why. When  
dairy instru  
exciting him  
send every la  
these factor  
was his impo  
But condition  
stock is not  
sequently the  
on skim milk  
tion. Hence t  
ery and of the  
"I am firm  
Mr. Ward, "th  
cared for at  
very desirable  
and pigs  
almost take th  
and it is up  
the they tank  
they pasturin  
the best of co  
proper atten  
these business

**Milking M.**  
Prof. H. H.

We have not  
advocate of the  
cows, after ou  
O. J. College  
years these ma  
much improved  
perience of farm  
of cows indicate  
to solve the prob  
herds, and it loc  
factory districts  
are likely to pr  
day has gone  
management can  
wide territory o  
little "dabs" of  
much more than  
ing, let alone co  
O. J. College  
Larger herds m  
and the milk del  
by the owner of  
vans driven by  
electric power se  
ing.

During the p  
Grimsby distric  
engine hauling  
fruit farm thro  
cal with tomato  
ning factory. O  
need also to adop  
order to reduce th  
ing milk to the fa  
of better cows m  
and the milk haul  
less cost seems to  
modern cheese  
from address.

With properly m  
boxes to begin w  
close supervisi  
labor is necessary  
cal and up-to-dat  
possible for load  
breakage and dam  
cheese boxes con  
minimum. — A  
Cargo Inspector, I



**The Makers' Corner**

Butter and Cheese Makers are invited to send contributions to the department, to ask questions on matters relating to cheese making and to suggest subjects for discussion.

**Watch the By-Product**

The cheese business has no more ardent champion than Dairy Instructor R. W. Ward. And yet even Mr. Ward, when conversing with an editor of Farm and Dairy recently, was palpably blue when he talked of the future of the industry.

"I have been telling the boys for years," said Mr. Ward, "that they must take better care of the whey. No business can stand for long and be so careless of its by-products as many cheesemakers have been of their whey. When I first started out as a dairy instructor, every farmer was exacting himself to the utmost to send every last drop of milk to the cheese factory. The cheese whey was his important source of income. But conditions are changed. Live stock is now high in price, and consequently the value that farmers place on skim milk is increasing in proportion. Hence the growth of the creamery and of the cream shipping trade."

"I am firmly convinced," continued Mr. Ward, "that when properly cared for at the cheese factory, is a very desirable food for young stock and pigs. Good sweet whey will almost take the place of skim milk, and it is up to the boys to see that the whey tanks are kept clean and whey pasteurized and sent home in the best of condition. It is only by proper attention to this detail that the cheese business can hold its own."

**Milking Machine for Patrons**

Prof. H. H. Dean, O.A.C., Guelph

We have not been a very strong advocate of the machine for milking cows, after our experiences at the O. A. College, but within recent years these machines have been very much improved. The practical experience of farmers with large herds of cows indicates that they are likely to solve the problem of milking large herds, and it looks as if in our cheese factory districts none but large herds are likely to prove profitable. The day has gone by when the factory management can send teams over a little "dabs" of milk, which do not much more than pay the cost of hauling, let alone cost of manufacturing and leaving a profit for the producer. Larger herds milked by machinery and the milk delivered at the factory by the owner of the cows or on large vans driven by horses, gasoline, or electric power seems to be the coming plan.

During the past summer, in the Grimby district, we saw a traction engine hauling daily from a large fruit farm three to five wagons loaded with tomatoes and fruit, to a canning factory. Our dairy farmers will need also to adopt some such plan in order to reduce the expenses for hauling milk to the factory. Larger herds of better cows milked by machinery, and the milk hauled to the factory at less cost seems to be the tendency in modern cheese dairying.—Extract from address.

With properly made and well fitted boxes to begin with, with proper care and close supervision where manual labor is necessary, and with mechanical and up-to-date appliances where possible for loading and discharging, breakage and damage to Canadian cheese boxes should be reduced to a minimum.—A. W. Chief Cargro Inspector, Liverpool, Eng.

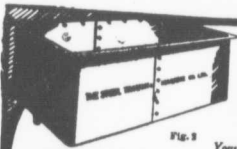


Fig. 3

**STEEL** has supplanted wood. It is more sanitary, easier to clean, We feature four lines for the up-to-date cheese factory.

The "TWEED" Steel Cheese Vat, Fig. 1.—Of heavy galvanized steel, perfectly rivetted and soldered. Our patent draining system insures perfect draining to the last drop. Water and steamproof asbestos lining, a perfect heat holding device, if not as represented when they reach your station, send back at our expense. Sent on approval. Fig. 3 speed desired. Works smoothly and efficiently on steam connected from boiler.

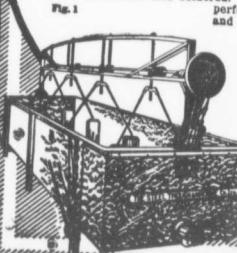


Fig. 1

**TWEED DAIRY APPLIANCES**

Your greatest profit lies in keeping pace with the times

The "LEAL" Milk Agitator, Fig. 1.—Does away with costly equipment. Run steady agitator fitted with engine of his own.

COPPER STEEL WHEY TANK, Fig. 2.—Practically acid proof. Sulphuric acid test fluid to do without. Very sanitary and easily cleaned. Each man gets amount of whey due him when the milk is passed through our weigher. Practical and easy to use. Adopted by Dominion Government.

We manufacture a very full line of Tanks, Creamery Equipment, Food Cookers, Heaters, Troughs, Lavatory Gasoline Pumps, Evaporators, etc.

Write for Tweed Dairy Catalogue and Prices.

**THE STEEL TROUGH & MACHINE CO., LTD.**  
131 JAMES STREET, TWEED, ONT.

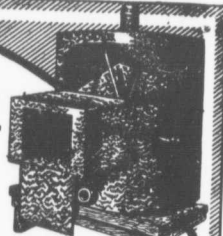


Fig. 2

**RENNIE'S "XXX" SEEDS**

Our "XXX" Vegetable, Clovers and Timothy Seeds are approved by the Dominion Government for Purity and Germination. Ask your dealer, or write direct for catalogue.

WM. RENNIE CO. Limited  
Also at Montreal, Winnipeg and Vancouver. TORONTO

**Planet Jr.**

No. 16 Planet Jr. Single Wheel Hoe, Cultivator, Rake and Plow

No. 4 Planet Jr. Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow

No. 76 Planet Jr. Pivot-wheel Riding Cultivator, Plow, Furrower, and Ridger

No. 11 Planet Jr. Double Wheel Hoe, Cultivator, Plow and Rake

No. 72 Planet Jr. 2-row Pivot-wheel Cultivator, Plow, Furrower and Ridger

The highest type of Single Wheel Hoe made. It is light, handy, and adapted to use by man, woman, or child. Has leaf guard for close work, and a durable steel frame.

The greatest cultivating tool in the world for the grower of garden crops from drilled furrows to lawn, seed, etc., and can be used for covering. The cultivator is adapted for deep or shallow work and for marking out. Crops can be worked both sides at once until 20 inches high.

A wonderful implement in extensive cultivation of corn, potatoes, etc. Light in construction and comfortable to ride upon. Works rows 28 to 44 inches, and cultivates crops until 5 feet high.

This is a practical every day time-labor, and money-saver. It combines in a single single wheel hoe, furrower, wheel-cultivator, and a rapid and efficient wheel garden plow. Every owner of a vegetable garden can save the cost of this tool in a single season.

Cultivates at one time two rows of potatoes, corn, beans, etc. in rows 28 to 44 inches apart. Works like a charm in check rows. Can be equipped with roller-bearings, spring-trip standards, and other.

Write for name of our nearest Agency

# The Macdonald-Hamill Discussion

H. C. Hamill, York Co., Ont.

IN Mr. Macdonald's letter of March 19 in Farm and Dairy, he tries to draw a red herring across the trail of those \$27.50 cows. Possibly he is ashamed of them and wishes us to forget he ever wrote about them. I would return to them later on. I will admit that my profits were not what I would have wished or what they should be, but in making a comparison it would have taken 18 \$27.50 cows to give Mr. Macdonald the same cash wages I have allowed myself. It would have taken two more to have supplied my family with milk and butter for a year.

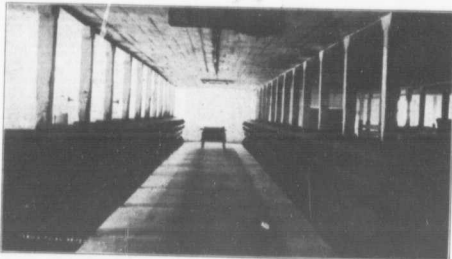
Now, Mr. Macdonald, be honest. Can my man keep such cows and allow himself as much as I have, besides other things, such as free house, proceeds of poultry, orchard, and potatoes, and garden fruit and vegetables? Mr. Macdonald says my statement is misleading, and costs much below what they actually ought to be. If any reader of Farm and Dairy will take the trouble to compare my statement with what Mr. Macdonald says it ought to be, they will find it above what he says is necessary for expenses. I placed incidental expenses or overhead which charges and depreciation on buildings and implements above what I have found necessary for myself in order to compare with conditions on the average Ontario farm, where tools and implements are not looked after as carefully as they should be. As to actual profits, the proof of the pudding is the eating of it, and I can assure Mr. Macdonald or to the profit, as I have tangible evidence to show, although not as much as I hope to be able to make as my farm increases in fertility and the output from the dairy herd shows a corresponding increase.

Now, Mr. Macdonald, I am sure the readers of Farm and Dairy are waiting patiently for you to come back to the point, and show them how

many of those \$27.50 cows it will take to make the profit I have made in one year; and don't forget to deduct the expenses you have shown us are necessary. You might also state how many acres it would take to grow feed for them under your system of feeding. I am sure it would prove most interesting reading.

### Maple Notes

R. F. Whiteside, Little Britain, Victoria Co., Ont.  
And now once more the winter's o'er,  
And snowfall's roar and sap once more;



Too Much Timber in This Style of Manger

The manger arrangement in the stable of R. R. New, Chateaugay Co., Que., was right up-to-date when installed. The lighter structure is now, however, more generally used in new barns. Too much light is obstructed by heavy timbering. In many respects, however, this stable is one of the best in Canada. Cleanliness and care enables Mr. New to ship about the best milk that reaches the Montreal market.

When robins soar, and out of doors,  
Through drift and storm, the maple store

We reap galore,  
Until the frogs, thawed out of bogs,  
Sweet music float, from out their throats.

Last year Mr. Snell, Professor of Chemistry at Macdonald College, Que., sent out requests to syrup makers to send in samples of their maple syrup. About 120 responded, and it was found upon examination that about half of these syrup makers made the syrup too thin, more than the standard of 35 per cent being water.

My sample tested 30 per cent, only one other being as thick as mine. Mr. Snell said mine would crystallize and deteriorate and that I might make about six gallons of syrup out of it by adding water, but people who here prefer thick syrup even at a little darker, rather than sap at \$1.30 a gallon.

### New Powers for Railway Commission

A Government bill has been introduced in the Senate which confers upon the Board of Railway Commissioners sweeping powers in regard to railway capitalization and the issuing of railway securities. It also brings water transportation companies within the jurisdiction of the Board.

The section respecting capitalization and the issuing of securities is based largely on the California law, and is likely to meet with considerable opposition from the railway companies. It provides that no company, unless heretofore authorized by the Governor-General in Council, shall issue stock, bonds, debentures, mortgages, or other securities or evidences of indebtedness payable more than one year after the date of issue, otherwise than solely for money considerations and without first obtaining leave of the board for such issue.

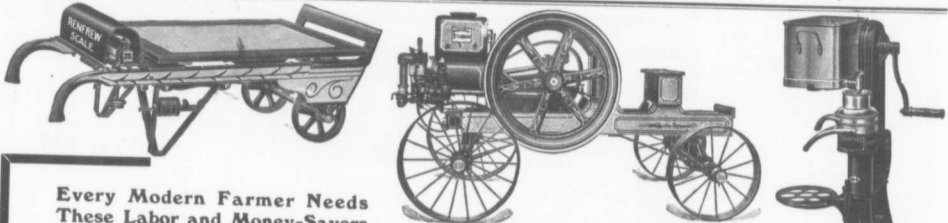
### WIDE POWERS ENDED

It is further provided that the board shall have jurisdiction to impose any terms or conditions it may deem proper in regard to any such issues, may specify a price below which such issue shall not be sold, and the purposes for which the proceeds of the issue are to be used. The board may also require an accounting to be given for any such proceeds.

Agreements for the sale, lease, and amalgamation of railways will be subject to the board's approval. At the board is empowered to deal with telephone and telegraph matters, and all tolls and tariffs of water carriers between Canadian ports.

### AVSHIRE COW HAVE RELIGION

- 1st Milkmaid 7th, 100 lbs. fat.
- 2nd E. A. Moline 7, 125 lbs. fat.
- 3rd Spicy Lucy, 60 lbs. fat, 3.77 per cent.
- 4th Charlie 10, 100 lbs. fat.
- 5th Flossie, 1942, 100 lbs. fat, 4.88 per cent.
- 6th 405 lbs. fat.
- 7th May Morn 2, 100 lbs. fat.
- 8th 426 lbs. fat.
- 9th 426 lbs. fat.
- 10th 426 lbs. fat.
- 11th 426 lbs. fat.
- 12th 426 lbs. fat.
- 13th 426 lbs. fat.
- 14th 426 lbs. fat.
- 15th 426 lbs. fat.
- 16th 426 lbs. fat.
- 17th 426 lbs. fat.
- 18th 426 lbs. fat.
- 19th 426 lbs. fat.
- 20th 426 lbs. fat.
- 21st 426 lbs. fat.
- 22nd 426 lbs. fat.
- 23rd 426 lbs. fat.
- 24th 426 lbs. fat.
- 25th 426 lbs. fat.
- 26th 426 lbs. fat.
- 27th 426 lbs. fat.
- 28th 426 lbs. fat.
- 29th 426 lbs. fat.
- 30th 426 lbs. fat.
- 31st 426 lbs. fat.
- 32nd 426 lbs. fat.
- 33rd 426 lbs. fat.
- 34th 426 lbs. fat.
- 35th 426 lbs. fat.
- 36th 426 lbs. fat.
- 37th 426 lbs. fat.
- 38th 426 lbs. fat.
- 39th 426 lbs. fat.
- 40th 426 lbs. fat.
- 41st 426 lbs. fat.
- 42nd 426 lbs. fat.
- 43rd 426 lbs. fat.
- 44th 426 lbs. fat.
- 45th 426 lbs. fat.
- 46th 426 lbs. fat.
- 47th 426 lbs. fat.
- 48th 426 lbs. fat.
- 49th 426 lbs. fat.
- 50th 426 lbs. fat.
- 51st 426 lbs. fat.
- 52nd 426 lbs. fat.
- 53rd 426 lbs. fat.
- 54th 426 lbs. fat.
- 55th 426 lbs. fat.
- 56th 426 lbs. fat.
- 57th 426 lbs. fat.
- 58th 426 lbs. fat.
- 59th 426 lbs. fat.
- 60th 426 lbs. fat.
- 61st 426 lbs. fat.
- 62nd 426 lbs. fat.
- 63rd 426 lbs. fat.
- 64th 426 lbs. fat.
- 65th 426 lbs. fat.
- 66th 426 lbs. fat.
- 67th 426 lbs. fat.
- 68th 426 lbs. fat.
- 69th 426 lbs. fat.
- 70th 426 lbs. fat.
- 71st 426 lbs. fat.
- 72nd 426 lbs. fat.
- 73rd 426 lbs. fat.
- 74th 426 lbs. fat.
- 75th 426 lbs. fat.
- 76th 426 lbs. fat.
- 77th 426 lbs. fat.
- 78th 426 lbs. fat.
- 79th 426 lbs. fat.
- 80th 426 lbs. fat.
- 81st 426 lbs. fat.
- 82nd 426 lbs. fat.
- 83rd 426 lbs. fat.
- 84th 426 lbs. fat.
- 85th 426 lbs. fat.
- 86th 426 lbs. fat.
- 87th 426 lbs. fat.
- 88th 426 lbs. fat.
- 89th 426 lbs. fat.
- 90th 426 lbs. fat.
- 91st 426 lbs. fat.
- 92nd 426 lbs. fat.
- 93rd 426 lbs. fat.
- 94th 426 lbs. fat.
- 95th 426 lbs. fat.
- 96th 426 lbs. fat.
- 97th 426 lbs. fat.
- 98th 426 lbs. fat.
- 99th 426 lbs. fat.
- 100th 426 lbs. fat.



Every Modern Farmer Needs These Labor and Money-Savers

# Renfrew Quality in All Three

For weighing cattle, horses, hogs, sheep, feed, milk, butter, grain, groceries, etc., you need the Renfrew Handy Two-Wheel Truck Scale. Weighs from 1 lb. to 2,000 lbs. Weighs accurately on even or uneven ground. Government Inspector's Certificate attached. Strong, durable yet not heavy. Built especially for use on the farm. Write for our Scale Booklet and learn how this scale has paid for itself on the farm in less than three months. Sold on a Special Easy Payment Plan.

The Renfrew Standard Gasoline Engine is known as "the engine that starts without cranking." Runs so smoothly and so perfectly balanced it needs no wooden blocks under the wheels to prevent truck from crawling. Remarkable simplicity of construction makes it easy for a boy or girl to understand and run one. Has Governor of Fly-Ball Steam Engine Type. Very economical on gasoline. All styles and sizes from 2 1/2 to 60 h.p. Write for our Engine Booklet.

Every modern farmer has heard about the Standard Cream Separator—the separator that holds those remarkable dose-skimming records at Government Dairy Schools. But every one doesn't know why its skims so close—loses but one-tenth of a pound of butter fat in every 1,000 lbs. of milk skimming. The reasons are given in our new separator booklet, which also explains the self-foiling system, the low supply can, high-crank shaft, sanitary bowl, helix gears, remarkable new-idea neck bearing, etc. Write for a copy.

## THE RENFREW MACHINERY CO., LIMITED, Head Office and Works, RENFREW, ONT.

Branches at SUSSEX, N.B.; SASKATOON, Sask.

Agencies Almost Everywhere in Canada

FARM AND DAIRY

hole in a one-annulism Snl has journals bottles to samples of free of the lway

en intro confers Commis regard of the is also compan of the

capitaliz-uriz-aria law, consider-ay com-pany. by the nil, short-ess, mor-vidences are that, other-consider-aining issue.

the board pose, may such the put-ard may lease. ills will approval sers, and carriers,

ATSRING COWS AND HEIFERS THAT HAVE REGISTERED IN THE R.O.P.

HEIFERS SINCE LAY REPORT

Mature Class

Milkmaid 7th, 2269, 1636 lbs. milk 720 lbs. fat, 4.50 per cent fat, 426 days down.
Er. A. Melroe & Sons, Charlotte, N.C.
P. E. 1.
Spicy Lucy, 6084, 1265 lbs. milk 477 lbs. fat, 3.77 per cent fat, 365 days.
Mellie, Charlotte, N.C. P. E. 1.
Flossie, 1924, 1165 lbs. milk, 446 lbs. fat, 3.63 per cent fat, 314 days.
Shannon Bros., Cleveland, R. C.
May Morn of Lywood, 2107, 1129 lbs. milk, 485 lbs. fat, 4.20 per cent fat, 350 days.
Aut. Edwards, Jr., Chatham, Ont.
Ruth, 2076, 1048 lbs. milk, 385 lbs. fat, 3.64 per cent fat, 365 days.
Woodhouse Bros., Bostwick, Ont.
Primrose of Tangleywood, 1943, 1055 lbs. milk, 464 lbs. fat, 3.81 per cent fat, 365 days.
Woodhouse Bros.
Julia, 2580, 927 lbs. milk, 446 lbs. fat, 4.92 per cent fat, 365 days.
Woodhouse Bros.
Lady Kinstry of Glenora, 1977, 933 lbs. milk, 392 lbs. fat, 4.34 per cent fat, 365 days.
Brooks, Chatterton, P. E. 1.
Dairy Maid, 2677, 825 lbs. milk, 327 lbs. fat, 4.28 per cent fat, 365 days.
S. A. Lennie, 2291, 866 lbs. milk, 385 lbs. fat, 4.21 per cent fat, 364 days.
Alex. Hume & Co., Menlo, Ont.
Blue Bell of Neidpath, 2140, 838 lbs. milk, 356 lbs. fat, 3.97 per cent fat, 338 days.
W. W. Ballantyne, Stratford, Ont.
Four-Year-Old Class
Primrose of Tangleywood 2nd, 3278, 930 lbs. milk, 422 lbs. fat, 4.50 per cent fat, 365 days.
Woodhouse Bros., Bostwick, Ont.
Mellie, 2022, 825 lbs. milk, 312 lbs. fat, 3.79 per cent fat, 294 days.
McFarlane, Leggat, Trout River, Que.
Primrose of Tangleywood, 3272, 792 lbs. milk, 356 lbs. fat, 4.32 per cent fat, 366 days.
Woodhouse Bros., Bostwick, Ont.
Bevinder Primrose, 3078, 737 lbs. milk, 279 lbs. fat, 4.56 per cent fat, 336 days.
Er. A. Melroe & Sons, Chatterton, P. E. 1.
Three-Year-Old Class
Justice of Hickory Hill, 3232, 1179 lbs. milk, 43 lbs. fat, 4.56 per cent fat, 365 days.
N. Dymott, R. No. 2, Hants, N.S.
Glebe Maid of Hickory Hill, 3230, 1084 lbs. milk, 43 lbs. fat, 3.95 per cent fat, 365 days.
Dymott.
Duchess of Hickory Hill, 3230, 954 lbs. milk, 36 lbs. fat, 4.04 per cent fat, 353 days.
Dymott.
Lousie of Hillview 2nd, 3247, 927 lbs. milk, 47 lbs. fat, 4.75 per cent fat, 365 days.
Dymott.
Miss Wylie, 3216, 876 lbs. milk, 42 lbs. fat, 4.27 per cent fat, 365 days.
Samuel C. Crockett, Chatterton, P. E. 1.
Puritan Maid of Hickory Hill, 3264, 862 lbs. milk, 33 lbs. fat, 3.81 per cent fat, 325 days.
N. Dymott.
Grace of Springbank, 3017, 766 lbs. milk, 39 lbs. fat, 4.29 per cent fat, 365 days.
Collier Bros., Beaverville, Ont.
Baroness Helen, 2575, 763 lbs. milk, 35 lbs. fat, 4.30 per cent fat, 300 days.
H. Mobary, Russell, Ont.
Fanny, 3275, 733 lbs. milk, 32 lbs. fat, 4.40 per cent fat, 365 days.
Woodhouse Bros.
Bryn Helig Lily, 3068, 743 lbs. milk, 32 lbs. fat, 4.34 per cent fat, 313 days.
A. Heister, Red Deer, Alta.
Beater, 3250, 725 lbs. milk, 32 lbs. fat, 4.30 per cent fat, 336 days.
Woodhouse Bros.
Two-Year-Old Class
Hazel of Bonnie Brook, 3076, 915 lbs. milk, 37 lbs. fat, 4.09 per cent fat, 365 days.
G. D. Moe, Vanhook Hill, Ont.
Primrose of Hickory Hill, 3232, 830 lbs. milk, 39 lbs. fat, 4.48 per cent fat, 358 days.
N. Dymott.
White Lass of Trout Run, 3078, 840 lbs. milk, 39 lbs. fat, 4.39 per cent fat, 357 days.
J. L. Stansell, Stratford, Ont.
Sherry of Maple Avenue, 3278, 834 lbs. milk, 36 lbs. fat, 4.43 per cent fat, 365 days.
S. S. Cleford, 363.
Chapelhill Bonnie 2nd, 3232, 810 lbs. milk, 34 lbs. fat, 4.27 per cent fat, 348 days.
Walter Brown, Chatterton, P. E. 1.
Daisy of Walnut Grove, 3218, 772 lbs. milk, 35 lbs. fat, 4.30 per cent fat, 360 days.
W. H. Green, Dundas, Ont.
Ercenbald Russet 2nd, 3000, 749 lbs. milk, 39 lbs. fat, 3.85 per cent fat, 365 days.
Rowland Neve, D. Winton, Alta.
305 lbs. fat, 4.36 per cent fat, 364 days.
H. O. Hill, Box Grove, Ont.
Daisyfield Peach, 3032, 719 lbs. milk, 31 lbs. fat, 4.31 per cent fat, 365 days.
W. H. Blomson, 363.
708 lbs. milk, 30 lbs. fat, 4.27 per cent fat, 365 days.
Wilson McPherson & Sons, Silverdale, Ont.
Irene of Lone Spruce, 3330, 7030 lbs. milk, 13 lbs. fat, 3.14 per cent fat, 365 days.
Bowland Neve.

MALES AT THE SALLEY DISPERSION SALE

One of the fine bull calves being offered on April 9 is King Salsy in his great dispersion 11904, violet of Cragside, 3071, 6394 lbs. milk, 307 lbs. fat, 4.37 per cent fat, 360 days.
H. C. Hamill, Box Grove, Ont.
Milk, 296 lbs. fat, 4.3 per cent fat, 360 days.
N. Dymott.
Laurus of Lone Spruce, 3034, 6107 lbs. milk, 282 lbs. fat, 4.50 per cent fat, 360 days.
Chas. Wm. Muttar, Dundas, R. C.
Lady Ethel of Brantford, 3030, 6040 lbs. milk, 299 lbs. fat, 4.41 per cent fat, 360 days.
H. D. Moe.
Valley Pride, 3029, 6286 lbs. milk, 318 lbs. fat, 3.78 per cent fat, 365 days.
H. D. Moe.
Pauline of Bonnie Brook, 3170, 6311 lbs. milk, 283 lbs. fat, 4.23 per cent fat, 340 days.
H. D. Moe.
Mayflower, 3271, 6158 lbs. milk, 307 lbs. fat, 4.32 per cent fat, 334 days.
Wm. Stewart, Hants, N.S.
W. F. STEPHEN, Sec. Treas.



Amatite REGISTERED ROYAL PURPLE CALF MEAL MINERAL SURFACED FEEDS NO PAINTING REASONS INSIDE OF PAIL

It needs no painting THOSE neat sparkling roofs with their crushed mineral shining in the sun—you see them all over the country—they are Amatite roofs. The fact that Amatite needs no painting means a great saving to those who use it. It is also a great convenience not to have to paint roofs. Many buyers have adopted the policy of using nothing but Amatite owing to this economy and satisfaction. A booklet about Amatite will be sent free on request. Address our nearest office: The Paterson Mfg. Co., Limited Montreal Toronto Winnipeg Vancouver St. John, N. B. Halifax, N. S. Sydney, N. S.

FOR SALE O.A.C. No. 21 BARLEY from seed of four years' selection (Germania) 1st. 90% Free from noxious weeds from selected quantity of Banner Oats samples apply J. H. Stark, R. R. No. 7, Peterboro, Ont.

Potato Profits IRON AGE 100 Per Cent Planters Offer you for themselves in one season an amount of profit that will pay for the cost of the planters. 12 inches square, 8 1/2 inches deep. With or without fertilizer. Show you this Planter and write for full literature. Iron Age Farm and Garden Co., 1000 York St., Toronto, Ont. The Heston, Whitlock and Co., 1000 York St., Toronto, Ont.

FOR SALE Pige from pure-bred Barred Rocks and White Leghorns. Choice of young strains \$1.00 for 15. Order early. Also, King and Cuthbert Raspberries. Plants for sale. Free literature. A. J. ARNOTT, R. R. 5, PETERBORO, ONT.

Raise Better Calves at Less Expense, with ROYAL PURPLE CALF MEAL

It is no longer necessary or even advisable to give your whole milk to calves. Use ROYAL PURPLE Calf Meal and get the best price for your whole milk that it will bring in your district. It is entirely different from most others, because it is hard to digest as the ingredients which are hard to assimilate by the calves. The result, however, is that it is ROYAL PURPLE Calf Meal you are using a concentrated milk containing good food, more valuable than any other. Feed to new milk of 3 cents a gallon. SPECIAL \$50 PRIZE OFFER. We offer \$50 cash prize for the best calf raised in Ontario as per Royal Purple Calf Meal, weight for age, shipped to us by Toronto Exhibitors. This calf will show in our exhibit and after the exhibition we will give the \$50 prize to the successful exhibitor. Ask your dealer for particulars. We will send 100 lbs. Calf Meal Freight Paid for \$4.25 W. A. Jenkins Mfg. Co. London, Canada

(Concluded on page 31)



We will gladly give information regarding the use of

# LIME

on your soil. The soil must be sweet to produce good crops. Where sorrel, horse-tail, moss, etc., appear, the soil is sour, and you cannot expect the maximum yield of hay, cereal or fruit without correcting this acid condition. Lime carbonate (Calcedonia Marl) will do this. In many instances it has more than doubled the yield of the furnish blue limus paper free with directions for testing your soil. Write us for further information. Agents wanted.

**INTERNATIONAL AGRICULTURAL CORPORATION**  
CALCEDONIA MARL BRANCH • 333 MARINE BANK BUILDINGS, BUFFALO, N.Y.

## Their Are Looking For Them Now

Big dairy breeders who find it necessary to change their herd sires are out to find suitable ones now.

There are scores of herds that will have new leaders next year. Perhaps you are one of them. You may be demanding one of some special breeding or type to "nick" in with your females, or you may have one of these for sale.

How do you propose to get him? Into the hands of your fellow-breeder who needs him? Or do you know your herd, or costs you only \$1.40 an inch, and will take you to 17,000 other breeders.

Lime Farm and Dairy help you to sell your surplus. We want you to get results, too, or you wouldn't stay with us. Anything help you in advertising has got to be with **FIRST**. Let us try, etc. Drop us a line to-night.

ADVERTISING DEPARTMENT

## Farm and Dairy - Peterboro, Ont.

### Percheron, Clydesdale and Shire

### Belgian, Hackney and French

We have a large stock of stallions and mares in our barns for sale, as ever before and are in a position to charge less than any others in the business. We raise our own feed, do our own buying and selling. We have commission agents to share profits with you. We have stallions guaranteed a foal getting, in one foal and foal, and in two foals, and 4 champion sires and 4 champions in 10 head. 10 trials. 50000. 3 trials. 50000. These horses will be in Ottawa at Fat Stock Show.

J. E. ARNOLD, Grenville, Que.

Grenville is midway between Montreal and Ottawa C.P.R. and C.N.R. Three trains daily from each city

WANTED—Four Grade Best Calves, week Old—State price—Hugh McCutcheon, Gloucest. Ont.

### AYRSHIRES

### Burnbrae Ayrshires

Now offer for sale for Bull Calves, six moos to two weeks old, A splendid lot, well marked and colored, from good milking imported and home-bred cows. See Jos. for further particulars and write to: **JOSE. HUDSON & SON, LYNN, ONT.**

### HOLSTEINS

### LYNDEN HERD

**High-Yielding**  
Bulls for sale, 21 for service with good lucking. One sired by a son of Sweetest of milk in 1 year, 26,300 lbs. in 240 days. 22,000 lbs. in 240 days. 23,000 lbs. in 240 days. 24,000 lbs. in 240 days. 25,000 lbs. in 240 days. 26,000 lbs. in 240 days. 27,000 lbs. in 240 days. 28,000 lbs. in 240 days. 29,000 lbs. in 240 days. 30,000 lbs. in 240 days.

### THE BRANT DISTRICT

is the place to buy. It comprises some of the best herds in Canada. A large number of breeders with part and station address on application. **ST. GEORGE • WEST YORK • N.Y.**

### WOODLAND FARM HOLSTEINS

Headed by Major-General De Kol, champion full brother to Bancroft's De Kol, world record 55,000 lbs. in 240 days. **NETHERLAND AAGIE DE KOL'S SON, Superior-Archie Mercedez** **LAD—SON OF AAGIE MERCEDES** **2219 lbs. Lad—son of land Aagie De Kol—champion R.O.P. 1909** Also other choice bulls and cows for service. **J. M. VANPATTER & SONS, ATLMER, ONT.**

### AYRSHIRES

### Burnside Ayrshires

Winners in the show ring and dairy tests. Animals of both sexes, Imported or Canadian bred, for sale. **R. B. NEWMAN, HOGWATER, ONT.**

### HOLSTEINS

### Grandsons of May Echo

FOR SALE  
Twenty months old, sired by a son of KEYS. Color—red and white. Individual he cannot be beaten. As an old pedigree, they are on application. **CLARENCE MALLORY, BLOOMFIELD, ONT.**

### ELGIN DISTRICT

**HOLSTEIN-FRIESIAN BREEDERS**  
Can supply your wants in cattle of the showing and breeding quality with great producing ability. A full list of breeders will be sent on application to the secretary.

**GEO. A. LAIDLAW, ATLMER, ONT.**  
BOX 254

### ONLY ONE LEFT

Bull Bull, born May, 1913; sire, "King Pontiac, Arnie Canada"; dam a 21 lb. junior siren, combined with offering a few young B. of M. Olden.

### BROWN BROS. - LYNN, ONT.

### Registered Holsteins

Our special offering is a year-old Heifers and young Cows in calf; also Bull Calves. Prices reasonable.

**W. W. GEORGE - CRAMPONT, ONT.**

462.5 lbs. milk, 14.67 lbs. fat, 18.58 lbs. butter. T. W. McQueen, Tillsonburg, Ont.

**Junior Four-Year-Old Class**

1. Princess Absher, Pauline, 2nd, 1550.4, 3y. 9m. 27d., 449.3 lbs. milk, 17.36 lbs. fat, 23.10 lbs. butter. A. E. Huie, Norwich, Ont.

2. Madam Pauline Absher, 14796, 4y. 6m. 1d., 384.8 lbs. milk, 15.40 lbs. fat, 18.77 lbs. butter. A. E. Huie, Norwich, Ont.

**Three-Year-Old Class**

1. Nettie Colwyn, Hiram, 3y. 6m. 6d., 410 lbs. milk, 16.01 lbs. fat, 20.01 lbs. butter. G. S. Phillip, Rossmore, Ont.

2. Mary Jane D. Colwyn, 3y. 10m. 4d., 464.5 lbs. milk, 15.76 lbs. fat, 19.71 lbs. butter. L. E. Lipst, Stratfordville, Ont.

3. Laura Netherland Jewel, 1st, 1489.9, 3y. 10m. 15d., 453.5 lbs. milk, 14.40 lbs. fat, 17.55 lbs. butter. Colony Farm, Coquitlam, B.C.

4. Madam Pooh Absher, 14977, 3y. 8m. 15d., 446.4 lbs. milk, 15.95 lbs. fat, 17.44 lbs. butter. A. E. Huie, Norwich, Ont.

5. Perry Colantha, 16059, 3y. 9m. 3d., 320.3 lbs. milk, 15.54 lbs. fat, 16.93 lbs. butter. T. W. McQueen, Tillsonburg, Ont.

6. Lynn River Lady, 14693, 3y. 9m. 3d., 423.2 lbs. milk, 15.25 lbs. fat, 19.55 lbs. butter. J. Alex. Wallace, Simcoe, Ont.

7. Hilviva Lad, 16443, 3y. 9m. 21d., 344.9 lbs. milk, 13.41 lbs. fat, 14.76 lbs. butter. L. E. Lipst, Stratfordville, Ont.

**Senior Two-Year-Old Class**

1. Calvary Melitana Princess, 2195, 2y. 10m. 6d., 411.4 lbs. milk, 16.60 lbs. fat, 20.95 lbs. butter.

2. Madam Pooh Absher, 14977, 2y. 11m. 21d., 384.8 lbs. milk, 15.40 lbs. fat, 18.77 lbs. butter. A. E. Huie, Norwich, Ont.

3. Beris Pooh of Terrell, 20281, 2y. 7m. 15d., 351.2 lbs. milk, 15.12 lbs. fat, 15.53 lbs. butter. A. E. Huie, Norwich, Ont.

4. Nellie B. North, 2093, 2y. 6m. 5d., 357.7 lbs. milk, 12.69 lbs. fat, 13.12 lbs. butter. L. E. Lipst, Stratfordville, Ont.

5. Lady Korndyke Isabella, 19767, 2y. 6m. 15d., 307.1 lbs. milk, 11.45 lbs. fat, 14.57 lbs. butter. A. E. Huie, Rossmore, Ont.

6. Lady Nell of Miller, 18646, 2y. 8m. 25d., 324.3 lbs. milk, 11.48 lbs. fat, 14.35 lbs. butter. Walter A. Dickie, Milner, B.C.

7. Colantha Payne, 17552, 2y. 10m. 3d., 362 lbs. milk, 11.98 lbs. fat, 13.60 lbs. butter. Colony Farm, Coquitlam, B.C.

**Junior Two-Year-Old Class**

1. Dido Ross, 21651, 2y. 11m. 14d., 319.6 lbs. milk, 14.10 lbs. fat, 12.56 lbs. butter. T. W. McQueen, Tillsonburg, Ont.

2. Colony Birdie Orson, 21210, 1y. 9m. 25d., 219.5 lbs. milk, 8.97 lbs. fat, 11.22 lbs. butter. Colony Farm, Coquitlam, B.C.

**Special Tests Made at Least Eight Months**

1. Griebene, 2nd, 11470, 3y. 10m. 23d., 322.60 lbs. milk, 16.53 lbs. fat, 13.16 lbs. fat, 16.85 lbs. butter. Colony Farm, Coquitlam, B.C.

**Official tests of 14 cows and heifers were received and accepted during the first half of the year. The most noteworthy are those of Saddle Creek Farm, mature class, and colony. Wadmonte, Princess with 39.85 lbs. butter in the senior two-year-old class.**

### OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS FROM FEB. 16 TO FEB. 25, 1914

1. Cabana De Kol Princess 2nd, 8066, 7y. 8m. 2d., 457.7 lbs. milk, 19.37 lbs. fat, 24.21 lbs. 60 per cent. butter. G. S. Gooderham, Bedford Park, Ont.

2. Cabana De Kol Pooh, 1664, 9y. 6m. 1d., 449.2 lbs. milk, 17.45 lbs. fat, 21.94 lbs. 60 per cent. butter. G. S. Gooderham, Bedford Park, Ont.

3. Dallah, Bedford Park, 9y. 6m. 1d., 439 lbs. milk, 16.50 lbs. fat, 20.43 lbs. 60 per cent. butter. Bales, Lanning, Ont.

4. Juanita Pictoria Pooh, 1658, 11y. 8m. 6d., 477.7 lbs. milk, 15.46 lbs. fat, 19.13 lbs. 60 per cent. butter. A. S. Maines, Lyndhurst, Ont.

5. Holbon Spink's Netherland Lass, 897, 13y. 10d., 384.9 lbs. milk, 15.48 lbs. fat, 18.73 lbs. butter. Samuel Lennan, 346 White Lillie, 542, 5y. 6m. 15d., 324.90 lbs. milk, 14.43 lbs. fat, 18.04 lbs. butter. G. S. Gooderham, Bedford Park, Ont.

**Senior Four-Year-Old Class**

1. Queen Ann Teslo Lady, 13206, 4y. 10m. 14d., 479.2 lbs. milk, 15.82 lbs. fat, 27.10 lbs. butter. Samuel Lennan, London, Ont.

2. 559.6 lbs. milk, 16.46 lbs. fat, 20.70 lbs. butter. P. J. Sallee, Lachine, Quebec, Canada.

3. Princess Zeeman Pooh, 1338, 4y. 11m. 16d., 351.7 lbs. milk, 15.36 lbs. fat, 19.00 lbs. butter. L. A. Everett, Simcoe, Ont.

**Princess Mercedes of Willowskhan, 1855, 4y. 11m. 6d., 414 lbs. milk, 16.12 lbs. fat, 19.12 lbs. butter. C. L. Robbins, Riverbend, Ont.**

5. Allannah Canary Pooh, 15331, 4y. 10m. 6d., 495 lbs. milk, 14.43 lbs. fat, 18.02 lbs. butter. O. S. Maines, Lyndhurst, Ont.

6. Hulda De Kol of Riverside, 12816, 4y. 10m. 16d., 402.9 lbs. milk, 15.92 lbs. fat, 27.40 lbs. butter. H. F. Patterson, Alford Jct., Ont.

7. Granddaughter of Kol Absher, 14043, 4y. 10m. 1d., 377 lbs. milk, 15.44 lbs. fat, 16.43 lbs. butter. L. A. Everett, Simcoe, Ont.

8. Ella Colantha, 15988, 4y. 9m. 24d., 499.9 lbs. milk, 15.97 lbs. fat, 20.60 lbs. butter. G. G. Gregg, Ingersoll, Ont.

**Senior Three-Year-Old Class**

1. Manora Hengervord De Kol, 12941, 3y. 8m. 1d., 435.2 lbs. milk, 16.92 lbs. fat, 20.15 lbs. butter. G. S. Gooderham, Bedford Park, Ont.

2. Riverview Carlotta Beebe, 18385, 3y. 10m. 10d., 444.5 lbs. milk, 14.09 lbs. fat, 19.10 lbs. butter. P. J. Sallee, Lachine, Quebec, Canada.

3. Perry Colantha, 16059, 3y. 9m. 3d., 316 lbs. milk, 15.43 lbs. fat, 17.01 lbs. butter. T. W. McQueen, Tillsonburg, Ont.

4. Belle Pooh Sylvia, 16004, 3y. 10m. 21d., 423 lbs. milk, 15.01 lbs. fat, 15.01 lbs. butter. John Mootie, Cambridge, Ont.

5. Johanna Hengervord 2nd, 18526, 3y. 1m. 31d., 398.8 lbs. milk, 14.46 lbs. fat, 17.30 lbs. butter. A. Dunn, Ingersoll, Ont.

6. Ina Belle, 15533, 3y. 1m. 17d., 466 lbs. milk, 15.78 lbs. fat, 17.22 lbs. butter. H. F. Patterson, Alford Jct., Ont.

**Thirty-day record, 2y. 6m. 15d., 1,886.9 lbs. milk, 32.46 lbs. fat, 65.59 lbs. butter. Samuel Lennan, Lynden, Ont.**

7. Calamity Hengervord, 2y. 9m. 15d., 341.6 lbs. milk, 12.67 lbs. fat, 15.84 lbs. butter. A. Dunn, Ingersoll, Ont.

8. Lena Belle, 15988, 2y. 10m. 24d., 455.5 lbs. milk, 13.65 lbs. fat, 18.81 lbs. fat. 18.81 lbs. butter. G. S. Gooderham, Bedford Park, Ont.

**Senior Two-Year-Old Class**

1. Hulviva Wayne of Manor, 17253, 2y. 6m. 7d., 384.4 lbs. milk, 15.68 lbs. fat, 20.92 lbs. butter. T. W. McQueen, Tillsonburg, Ont.

2. Thine record, 2y. 6m. 7d., 384.4 lbs. milk, 15.68 lbs. fat, 20.92 lbs. butter. T. W. McQueen, Tillsonburg, Ont.

3. Spink Lady De Kol, 17371, 2y. 6m. 7d., 384.4 lbs. milk, 15.68 lbs. fat, 20.92 lbs. butter. T. W. McQueen, Tillsonburg, Ont.

**Thirty-day record, 2y. 6m. 7d., 1,617.8 lbs. milk, 44.40 lbs. fat, 86.26 lbs. butter. G. S. Gooderham, Bedford Park, Ont.**

2. Spink Lady De Kol, 17371, 2y. 6m. 7d., 384.4 lbs. milk, 15.68 lbs. fat, 20.92 lbs. butter. T. W. McQueen, Tillsonburg, Ont.

**Forty-day record, 2y. 6m. 7d., 644.6 lbs. milk, 28.08 lbs. fat, 36.01 lbs. butter. G. S. Gooderham, Bedford Park, Ont.**

3. Hulda De Kol Princess 2nd, 22849, 2y. 6m. 4d., 430.2 lbs. milk, 14.29 lbs. fat, 17.87 lbs. butter. H. F. Patterson, Alford Jct., Ont.

4. 398 lbs. milk, 14.29 lbs. fat, 17.87 lbs. butter. H. F. Patterson, Alford Jct., Ont.

5. Hulda De Kol Princess 2nd, 22849, 2y. 6m. 4d., 430.2 lbs. milk, 14.29 lbs. fat, 17.87 lbs. butter. H. F. Patterson, Alford Jct., Ont.

6. Spink Lady De Kol, 17371, 2y. 6m. 7d., 384.4 lbs. milk, 15.68 lbs. fat, 20.92 lbs. butter. T. W. McQueen, Tillsonburg, Ont.

7. Rhoda De Kol's Jessie Maida, 16469, 2y. 11m. 10d., 427.4 lbs. milk, 12.30 lbs. fat, 15.38 lbs. butter. P. J. Sallee, Lachine, Quebec, Canada.

8. Riverview May Belle, Walker, 16467, 2y. 11m. 30d., 365.9 lbs. milk, 13.13 lbs. fat, 15.38 lbs. butter. P. J. Sallee, Lachine, Quebec, Canada.

9. Winnie Walter, 12596, 2y. 11m. 16d., 373.5 lbs. milk, 11.22 lbs. fat, 14.03 lbs. butter. P. J. Sallee, Lachine, Quebec, Canada.

10. Fairmount Sarcastic Pooh, 15684, 2y. 10m. 8d., 318 lbs. milk, 10.57 lbs. fat, 12.31 lbs. butter. A. H. Teeple, Woodstock, Ont.

11. Riverview Carlotta Walker, 16468, 2y. 11m. 10d., 427.4 lbs. milk, 12.30 lbs. fat, 15.38 lbs. butter. P. J. Sallee, Lachine, Quebec, Canada.

12. Concordia Pooh, 19927, 2y. 8m. 25d., 274 lbs. milk, 10.12 lbs. fat, 12.65 lbs. butter. G. S. Gooderham, Bedford Park, Ont.

13. May Johanna of Lynn, Grafton, Ont., 2y. 8m. 25d., 333.60 lbs. milk, 9.95 lbs. fat, 12.31 lbs. butter. G. S. Gooderham, Bedford Park, Ont.

**Junior Two-Year-Old Class**

1. Josie Absher, 2y. 9m. 25d., 11m. 36d., 348.80 lbs. milk, 13.79 lbs. fat, 17.28 lbs. butter. G. S. Gooderham, Bedford Park, Ont.

2. Hill-Creat Pontiac B. Poole, Ingersoll, 4y. 11d., 365.5 lbs. milk, 13.06 lbs. fat, 16.25 lbs. butter. 100 per cent. Newwood, Ontario.

3. Penitencia Butter Maid, 21725, 2y. 11m. 16d., 345 lbs. milk, 12.31 lbs. fat, 15.39 lbs. butter. H. F. Patterson, Alford Jct., Ont.

4. Maplehurst Netherland Johanna, 2485, 2y. 11m. 16d., 345 lbs. milk, 12.31 lbs. fat, 15.39 lbs. butter. H. F. Patterson, Alford Jct., Ont.

5. Pentonia Alice Aagie, 1829, 2y. 11m. 6d., 347 lbs. milk, 11.75 lbs. fat, 14.69 lbs. butter. H. F. Patterson, Alford Jct., Ont.

6. Franco Duchand Hengervord, 2025, 2y. 8m. 25d., 343.9 lbs. milk, 11.81 lbs. fat, 14.69 lbs. butter. H. F. Patterson, Alford Jct., Ont.

**Imperial Duraius Pooh, 22000, 1y. 11m. 24d., 228 lbs. milk, 11.20 lbs. fat, 13.50 lbs. butter. W. B. Poole, Ingersoll, Ont.**

2. 235 lbs. milk, 10.83 lbs. fat, 12.83 lbs. butter. A. Dunn, Ingersoll, Ont.

3. 235 lbs. milk, 10.83 lbs. fat, 12.83 lbs. butter. A. Dunn, Ingersoll, Ont.

4. 235 lbs. milk, 10.83 lbs. fat, 12.83 lbs. butter. A. Dunn, Ingersoll, Ont.

**Thirty-day record, 2y. 6m. 7d., 1,510.60 lbs. milk, 38.40 lbs. fat, 48.50 lbs. butter. Samuel Lennan, Lynden, Ont.**

2. Elmwood Netherland, 24903, 2y. 6m. 7d., 384.4 lbs. milk, 15.68 lbs. fat, 20.92 lbs. butter. T. W. McQueen, Tillsonburg, Ont.

**(Concluded on page 3)**



FARM AND DAIRY

HOLSTEIN-FRIESIAN NEWS

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

OXFORD BREEDERS' SALE

The sale of 80 head of registered Holstein-Friesian cows...

Consisted by the following: Edna Freeman De Kol, 8175, L. H. Lip...

Consisted by M. Armstrong: Lady May Valley, 8165, Robt. W. E. Jones...

Consisted by C. S. Hillier: Pansy Del's Victoria, 8306, F. Hamilton...

Consisted by Geo. Frouse: Florence Victoria, 8321, 2nd, 8150, Arbot...

Consisted by M. McDowell: Lady May's 8350, J. Schlegel...

Consisted by Fred Rowe: Belle of Asphodal 2nd De Kol, 8229, J. H. Ham...

Consisted by T. J. Lammiman: Viola Calamity Poole, 8160, E. Lip...

Consisted by A. T. Walker: Etho Inka, 8260, C. Boller...

Consisted by C. R. Boller: Starline Prince, 8275, J. T. Lammiman...

Consisted by N. H. Bender: Lady Belle, 8166, Geo. de Mont...

Consisted by A. T. Walker: Etho Inka, 8260, C. Boller...

Consisted by N. H. Bender: Lady Belle, 8166, Geo. de Mont...

Consisted by A. T. Walker: Etho Inka, 8260, C. Boller...

Consisted by N. H. Bender: Lady Belle, 8166, Geo. de Mont...

King Segis as one of the great sires of the breed...

BALES BROS. DISPERSION SALE: There is an element of a rush to the bidding...

small, Dunbarton; Nellie Gray Princess, 8175, Mr. Thompson...

OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS

(Continued from page 29) 23 4m, 54 366 9 lbs. milk, 9 98 the fat...

A Rural Mail Carrier in the Land to the South: The recent reduction in parcel post rates...



Saskatchewan 22 140 60 150 73 P. E. Island 10 160 50 100 Ontario 10 160 50 100

In view of the fact that the annual meetings where all business is transacted in Toronto...

as easily an excited black and white can find and settled an elderly gentleman...

At the recent sale, and this one was no strong breeding behind it brought par-

Of the 300 in attendance B. Lawless, of the heaviest Watson, of Pine Grove...

The general policy of this association has been to interest and considerate of the interests and welfare of its members...

Ontario 159 890 74 200 19 Quebec 150 135 60 50 19 B. Columbia 84 47 75 20 19 Alberta 59 42 78 35 80 Nova Scotia 19 43 70 30 80 New Brunswick 31 150 50 160 100

1. Netherland Fafort, 14766, 2y. 9m 30d 83 20 lbs. milk, 5 18 the fat, 10 22 lbs. butter...

FAIR REPRESENTATION IN THE HOLSTEIN-FRIESIAN ASSOCIATION: R. F. Hicks, Pres. H. F. Asce, Newtion...

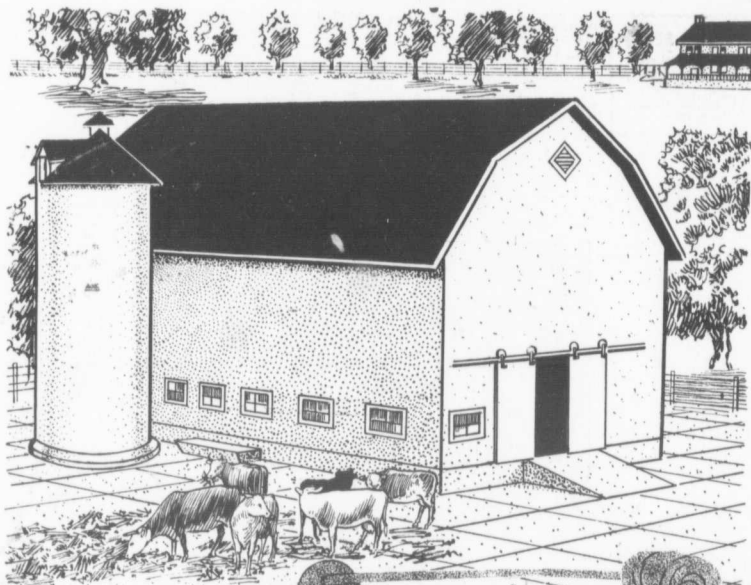
During the past year there has been western breeders' discontent among the various boards of management...

Reg. and Non-transfer. Rec'd for fair prices: Quebec 159 890 74 200 19 B. Columbia 84 47 75 20 19 Alberta 59 42 78 35 80 Nova Scotia 19 43 70 30 80 New Brunswick 31 150 50 160 100

The breed of the entire Dominion of Canada is entirely adaptable to any or every climate...

In a recent letter to Farm and Dairy, Mr. E. M. Decker, of Farm and Dairy, speaks of the cattle which he has bought...

Reg. and Non-transfer. Rec'd for fair prices: Quebec 159 890 74 200 19 B. Columbia 84 47 75 20 19 Alberta 59 42 78 35 80 Nova Scotia 19 43 70 30 80 New Brunswick 31 150 50 160 100



## Build Concrete Barns and Barnyards

**Y**OU will find that they are best at first  
and cheapest in the end.

Concrete buildings cannot burn and many dollars are saved in lower insurance rates. They need practically no repairs and never need painting.

Concrete barnyards make the best kind of a feeding-floor and save many dollars in feed bills, as your stock gets every particle that you feed to them.

Send for this free book "What the Farmer Can do With Concrete." It shows just how to build your own concrete barn, feeding-floor or any other building that you may need.



Farmers' Information Bureau

**Canada Cement Company Limited**

593 Herald Building, Montreal

