

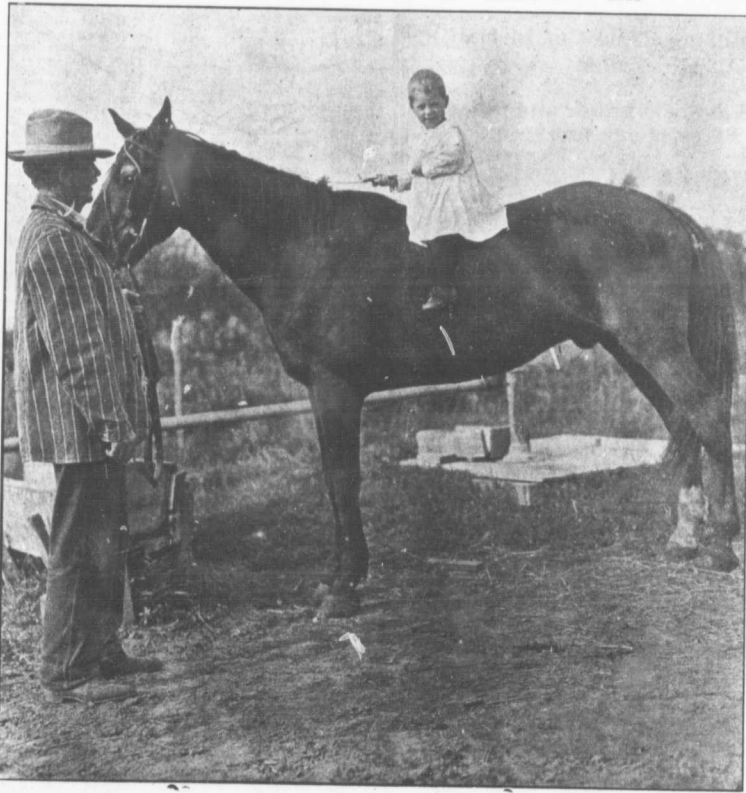
# FARM AND DAIRY

## RURAL HOME

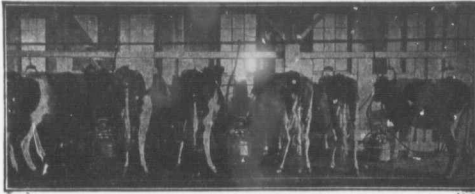
See  
Covers  
and  
Back  
Sides

PETERBORO, ONT.

DECEMBER 11 1913



The First Riding Lesson  
"SHE WILL NEVER LEARN YOUNGER"



## B-L-K Milkers Save Money

The greatest advantage of Burrell-Laurence-Kennedy Machine Milking over hand milking is the big saving every year in actual cost. When you add this to the other advantages you can not but admit that milking by the B-L-K method, no matter what way you look at it, hand milking beat by a mile.

**Sanitary Milk**  
**Cows Milked Clean**  
**Milking Time Cut In Half**  
**Large Yields**

**A Big Saving in Labor and Money**

Each of these features mean

**BIGGER DIVIDENDS**

Just an instance to show what one man is doing:

He is taking great pains in the care of the milk and the way the cows are handled, but he is milking 100 cows in two hours with six machines, operated by two men, and a third to carry the milk. He effects an actual saving of \$1,500.00 per year, with an equipment that cost him \$222.50 complete.

It is impossible for us to tell you more this week, about the B-L-K and what it can do for you in the way of saving labor, money, etc., but if you drop us a card we'll gladly send you literature giving full details. Get your card and pen now, before the matter slips your memory.

## 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



### A Dollar for a Dime

H. Percy Blanchard, Hants Co., N.S.

A great deal has been said upon the virtues of thrift and economy. There is another side to this, perhaps a dangerous side, and that is—the extravagance of undue economy.

A typical story is told of a very close old gentleman for whom some carpenters were building a house. As he stood watching the work, he noticed a tath nail fall into the chips—and each time the carpenter dropped a nail, the man was ordered to hunt for it till he found it again.

A few days ago we were racing against the clock and a north wind to get the last of the turnips in from a five-acre field about three-quarters of a mile away from the root cellar. There were as usual some baby-size turnips, and, as the sun began to drop, we skipped these wee fellows; and resolutely finished the field by nightfall. The ground that night froze and stayed so till to-day; and to-day we had to load a car with apples. As to the turnips, the last load we took in to the barn, tops and all; and then turned the sheep into the field for the leavings.

### WASTE THAT PAID

It seemed wasteful to let perhaps 10 bushels of turnipstips go, but it paid. There is no real economy in taking another piece of bread so as to finish the butter on your plate. I know of a lady who saved all the dish water and gave it to the pig. There certainly is a trace of nourishment in dish water; but its exaggerated fluidity is its objectionable feature.

All the same, the watchful care and calculation as to apparent trifles are essentials on a farm. It is only that on occasion, for a greater gain the lesser may be relinquished, and a thing of real value abandoned to waste, for the sake of saving a better.

### How About the Yard?

J. Billing, Bromo Co., Que.

Many of the barnyards in this district will soon be in the rubber boot stage. There is no need to explain this expression. That stage is characteristic of barnyards everywhere, as sirable and palatable feed for dairy most farmers know to their sorrow.

My barnyard at one time developed annually as trying a rubber boot stage as any barnyard in the vicinity. Then I woke up and one fall we took a few days off and laid tide drains 10 feet apart, of four inch tile, two and one-half to three feet below the surface. Nearby was a gravelly field that had been in need of "stoning" for some time. We got busy and picked the stones off this field and dumped them in the barnyard. We must have covered the whole barnyard to a depth of a foot and in some places two feet. These rocks were covered with good gravel, making a slope away from the buildings of about six inches in 50 feet.

Our barnyard is now a constant source of satisfaction for several months in the year. Every time that we see a barnyard in the rubber boot stage, we consider the one in our barnyard in the patent leather stage has well returned all the trouble and expense that it involved to repair it.

### Confining the Bull

Gas. McGibbon, Northumberland Co., Ont.

A man who will allow a bull six months old or over to run the roads, or even to have the run of a pasture that is not very securely fenced, should be considered guilty of criminal negligence and punished accordingly. Just a couple of days ago I was driving along a country road a few miles from here when grazing on the side of the road we passed a Holstein bull at least 12 months old. He was a big, well grown fellow and could have made a lot of trouble had he wanted to.

I suppose that had I upbraided the owner of that bull for allowing him to roam free along the public highway he would have answered somewhat like this:

"Oh, that bull wouldn't hurt anybody. He was always such a gentle calf that we could do nothing with him. It really isn't necessary to tie him up."

I'll venture to say that there is never a month passes but what some unfortunate man or other is gored to death by a bull that was always "so gentle." A bull is a dangerous animal at best and should never be trusted, particularly on the public highway after the age of six months old. I believe as much as anybody in fresh air and exercise for bulls, but let them have it in especially well fenced paddocks.

Another point that I would especially emphasize is the necessity of ringing the bull. This is a comparatively simple job, but one that is often neglected; and neglected with fatal results.

Dairymen who are handy to a sugar beet factory will find beet pulp delectable and palatable feed for dairy cows.



Trade inc  
 Vol. XXXI

## Sch

EDITOR  
 ing top  
 School

was "School interesting of given by Miss ence in teach school garde the kindness able to give trations show Miss Moffat"

My experic cent that it write a few obing, the obj The introd discouraging positio; on verbal applic tion; and ac in carrying c

When I en grounds barr an abundance ficient to Agr tario Agricultural specimens of v At the end prove the gra and all, over around the s gathered in th planted a fev



The Miss Moffat does their plots as w

I wanted to dark as to be teachers of N. and Prof. Mc College, took gardens, expl

## Your Copy is Ready

of the New Catalog of

## Bartlett's English Tested Seeds



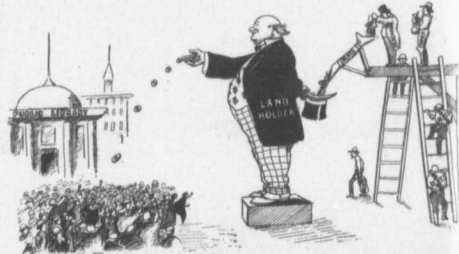
Illustrating and describing all the best varieties known and tested at the famous trial grounds of James Carter & Company of Raynes Park, London, England.

A beautiful and instructive book, giving many useful hints on cultivation. A revelation of new and improved varieties of flowers and vegetables.

A Complimentary Copy is reserved for you. Write for it.

**Carter's Tested Seeds, Inc.**  
 133 Q. King Street,  
 Toronto, Canada

"The Seeds with a Pedigree"



The City Land Holder is often Charitable and Philanthropic? Why shouldn't he be? His donations are earned by others,—the toilers of city and country



# FARM AND DAIRY

## & RURAL HOME



We Welcome Practical Progressive Ideas

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. XXXII.

FOR WEEK ENDING DECEMBER 11, 1913

No. 50

# School Garden Work Among the Indians

**EDITOR'S NOTE:** One of the most interesting topics discussed at the conference of School Inspectors at Guelph last summer, was "School Garden Work." One of the most interesting of these addresses on this subject was given by Miss M. Moffitt, who told of her experience in teaching agriculture and conducting a school garden in an Indian Reserve. Through the kindness of Miss Moffitt, Farm and Dairy is able to give Our Folks her story, and also illustrations showing her garden and pupils. Here is Miss Moffitt's story in her own words:

My experience in school garden work is so recent that it is still fresh in my memory. I shall write a few words on three points only: the beginning, the object and the effects of the garden.

The introduction of the garden was the most discouraging part of the work. I met with no opposition; on the contrary with most encouraging verbal approbation of all I suggested, but no action; and action is more successful than words in carrying out a plan.

When I entered on duty I found the school grounds barren of shade trees, but adorned with an abundance of docks, thistles and weeds; sufficient to supply all summer courses of the Ontario Agricultural College for years to come with specimens of the native and imported articles.

At the end of the first year we decided to improve the grounds. The pupils dug out, roots and all, over 2,000 docks, filled the mud holes around the school, made a walk with flat stones gathered in the yard and neighboring fields and planted a few flowers.



The Girls Enjoy the Work quite as Much as the Boys

Miss Moffitt does not confine the school garden work to the boys. The girls have their plots as well and prove themselves good farmers. A few of her pupils may be here seen with vegetables from their plots.

I wanted to do more but was somewhat in the dark as to how to proceed; at this period the teachers of N. Bruce had an excursion to Guelph, and Prof. McCready, in doing the honors of the College, took us through the Consolidated School gardens, explaining their object.

### Miss M. Moffitt, Bruce Co., Ont.

I returned to Cape Croker very enthusiastic. I talked school garden morning, noon and night, and like the ancient mariner forced the unwilling to listen, to my satisfaction, if not theirs.



Products of Their Own School Garden Plots

These happy little Indian boys are pupils of Miss M. Moffitt, Bruce Co., Ont., who has established a school garden in connection with the Indian school which she teaches. Miss Moffitt tells of her experience most interestingly in the article adjoining.

An Indian whose property adjoined the school offered me an acre for "little Guelph," as we called it. I asked the authorities to accept the gift and fence it in. They all agreed it was a good idea, very good and very necessary, but, I suppose, through force of habit, let it end there.

Meanwhile our good neighbor was the victim of a drowning accident, and his successors were unwilling to part with the land.

As the school yard was too small for both garden and playground, the latter being more necessary, I concluded, after waiting a year and a half, that the school garden idea was dead, and began to think of burying it, when we received a letter from Prof. McCready inviting us to join the School's Experimental Division.

I need not say we responded to so providential an invitation. The school garden question was revived, a neighbor offered his field as a playground for the boys and the garden was started. It proved so satisfactory that the second year the Indian Department enlarged our grounds to a little over an acre, and now the

boys play in their own back yard. My first object in having a school garden was to induce the people to have vegetable gardens near their homes. Having this object in view, I reserved a small part of the garden for the teacher's use.

In this I plant a number of vegetables, especially the new kinds, and give seeds of the same to the girls for their home gardens, that by comparing their gardens with the teacher's, they can see the benefit of proper care and cultivation.

A few results of seeds thus distributed may illustrate this feature of the work. Last fall one woman after using Golden Bantam sweet corn daily during its season, had quite a quantity to dry for winter use.

One girl of 15 years of age, raised 80 large cabbages, and two dozen of squash, besides taking first prize in the potato Club contest. Other gardens have produced equally good results, while some have yielded an abundant crop of weeds. Most of the lessons in cooking are given in the fall. I teach the preparation of the vegetables, and also of apples for the table. The boys have charge, besides their individual plots, of the corn, grains and trees. They planted, cared for and pruned, several young apple trees. The last addition to the school grounds was a neglected orchard.

### SOME OF THE RESULTS

Now for the effects: The adult population evidence an increasing interest in farming, and I believe I am not wrong in thinking the school garden comes in for a good share in this awakening. Among the pupils, the garden has given an opportunity to develop two necessary traits; respect for the property of others and a sense of honor: when left to work by themselves. Formerly, among the boys especially, the one thought or aim seemed to be play; if they were left alone to do any work, the task remained undone. Now I can send the boys or girls of one class out to the garden while I take up other lessons, and they seldom abuse the privilege of working in groups and do their work as well as if the teacher were present.

In our first school garden all the vegetables that could be eaten raw disappeared rather mysteriously and I never saw a ripe apple on the trees. Now each can enjoy the fruit of his own garden, and since they have taken charge of the apple trees, it is a sad day for the boy or girl

who attempts to imitate Mother Eve. The consequence is that all the pupils have an apple at recess every day until about Christmas time.

Our boys are beginning to realize that in the long run, farming pays better than going off every summer to work in the mills or lumber yards. At different times the boys who have passed the entrance examinations have been given scholarships paying their high school or college expenses. Six of my pupils have had this privilege but until the present year I could not induce one to come to the Ontario Agricultural College. They did not want to learn about farming.

Last winter the Indian Department offered two scholarships for the Ontario Agricultural College. Four boys over 17 years of age were willing to return to school to compete for the scholarships and at the time they could be of most help to their parents; as the Indians take out a quantity of timber during the winter months, so financially it meant no small loss for each family. This fall two of the most successful will enter the two years' course at the Ontario Agricultural College.

On the whole I think the school garden is a success and is giving an impetus to the agricultural movement. Though still chiefly a vegetable garden, I trust in time it will fulfil the expectations of the esteemed Director of Elementary Agricultural Education, and be a model farm for the people in its neighborhood.

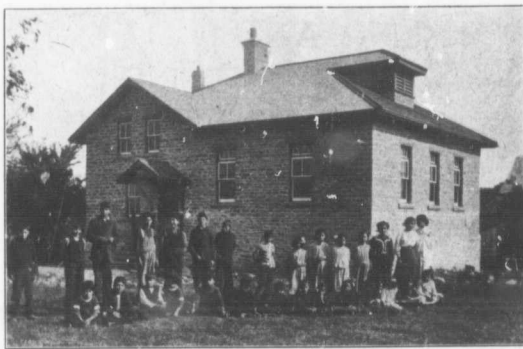
### Cow Keeping by the Clock

L. K. Shaw, Welland Co., Ont.

I was asked not long ago for my opinion as to the one point in dairy management which most dairy farmers were neglecting. I had no hesitation in naming it as irregularity. It is of the greatest importance that strict regularity be observed both in feeding and in milking in order to secure the greatest degree of contentment in the herd. My cows are fed at stated intervals. They know when to expect their feed and do not worry or become restless. I have been in herds where irregular feeding was practiced and in which the cows were restless and looking for feed more than half the time. Cows that are contented eat their food then quietly lie down, chew the cud and sleep or rest until another feeding time arrives.

I first give the grain mixture and milk the cows while they are eating it. I recommend this plan because some cows give up their milk more freely when eating that portion of their ration which has the most relish. I would not think of feeding the roughage before milking as it fills the air of the stable with dust and germs that get into the milk. Silage, roots and dry fodder are given after milking.

I give half the concentrates and half the roughage in the morning



Descendants of Our Country's First Inhabitants who are Getting a White Man's Education

Here we have the full complement of children who are being interested in school garden work by Miss M. Moffitt, of Bruce county. Notice the neat stone school building. Buildings so good as this are the exception rather than the rule in rural districts.

and the other half in the evening. I am satisfied that a cow's stomach is large enough to accommodate all the feed she will eat in two feedings a day, that is after they have become accustomed to this routine. Feeding three times a day makes it necessary for us to be in the stable, and the cows are being continually disturbed.

But above all things I emphasize the necessity of feeding at the same time each day and giving the feeds in the same order.

### Dollar's Methods With Calves

There are few of Our Folks who have not heard of E. H. Dollar, breeder of world-record cows. Farm and Dairy has told of Mr. Dollar's success as a dairyman after giving up a lucrative city business to go back to the old farm in New York State. Because of his success Mr. Dollar speaks with authority on dairy subjects. Here are a few of Mr. Dollar's ideas on calf rearing as told by himself:

"Let us start with a calf at birth. We will take it for granted that the mother has been properly nourished and properly housed, so that this infant has been brought into the world in a strong, vigorous condition. The mother and calf are placed in a box stall loose, and left there for a short time, varying from six to 12 hours, ac-

ording to the condition of the calf, but not longer than 12 hours under any condition.

"These are two reasons why the calf should be removed from the dam so early. We do not want the milk taken from the udder of the cow in too large quantities for at least two or three days after calving, because we have learned from experience that the heavy-milking cow that has had her udder entirely emptied soon after calving is apt to have milk fever or at least is more liable to this disease than she would be were her udder left well distended with milk. But the principal reason, so far as the calf is concerned, is that we do not want it to take into its stomach too much milk at one time.

"It should have a little of the mother's first milk, this seems to be necessary; but as soon as the calf becomes strong enough and begins to show a tendency to take too much of this milk, remove it at once to a separate stall, milk a small quantity from the cow four times a day for every six hours and feed it immediately, so that the calf will have the milk as near the temperature it came from the cow as possible. Of course the amount fed must be regulated according to the calf, but perhaps should not exceed one and a half pints every six hours.

"The feeding pail should be sterilized or scalded every day; in fact, I believe it more necessary that the calf pails should be given the very best of care, than it is that the milk pails be looked after to the neglect of the others. This little calf, then, should be fed three or four times a day for at least two weeks. One of the greatest mistakes made by many calf feeders is that they ask the calf to go too long between feeding times, and then allow it to take too much milk into its stomach at one time. Calves should be fed very much as a baby is fed, and no one would feed a healthy child at seven o'clock in the morning and then not until seven o'clock at night.

"After the first two or three weeks, the calf should be gradually changed from a whole-milk to a skim-milk diet by adding each time a little skim-milk direct from the separator, and it may also be fed three times a day instead of four. In

this way the calves will derive nearly as much nourishment from the skim-milk as from the whole-milk. To the skim-milk may be added a small amount of flax-seed to replace the fat removed by the separator. This is an excellent feed, and one on which calves do well. We feed milk to our calves as long as it can be spared, many times until they are a year old, but at no time do we exceed six or eight quarts at one feeding.

"As a grain ration to be used in addition to the skim-milk, we have found nothing better than 900 pounds of wheat bran, 100 pounds of hominy and 100 pounds of oil meal, fed all the calves

Concluded on page 6



Indian Children who are being Taught Industry and Respect for Property through School Garden Work

A school garden interests country boys and girls in agriculture; and it does more. Working with the soil in their own little plots develops industry, honesty and respect for each other's property. These are a few of the good results noted by Miss Moffitt in her school garden work in Bruce Co., Ont.

Soi

E. J.

The maint  
of all good  
more I see  
vined do I  
farmers owe  
we maintain  
poor men  
poor farmers  
poor man

The first  
fertile soil a  
myself, is t  
live stock to  
to the farm.

hogs, partic  
fitable ho  
fields. The  
system of r  
ing would  
sell nothing

farm but  
ducts which  
tain practic  
fertility an  
hogs that a  
to consume

products.  
county, he  
many farme  
their milk  
condensory

Truro, and  
much fertili  
leave the  
Many of us  
ever, do no  
sider this a  
proposition

good prices  
to buy r  
return mor  
the milk.

Another  
tility and  
been alive  
on very lig  
of green c  
Why buy  
when there  
over every  
nitrogen c  
through leg

There m  
ing of soil  
main point  
ance of so  
farming.

Of all th  
the best a  
Corn shou  
unaccustom  
When fed  
whether it  
with other

Once an  
condition  
sisting of  
seed, jelly  
steamed fo  
much relish  
or wet we

As an o  
chop feed  
a little bra

Hay sho  
never before  
and prefer

### Soil Fertility Comes First

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

The maintenance of soil fertility is the basis of all good farming. The more I travel and the more I see of farming methods, the more convinced do I become that the first duty that we farmers owe to ourselves and to the land is that we maintain the fertility of the soil. I have known men to be cranks on good cows and such poor farmers that they defeated their own ends by poor management of their fields. How shall we maintain and increase plant food?

The first requirement to the maintaining of a fertile soil and the one on which I lay most stress myself, is the keeping of a sufficient quantity of live stock to consume all of the raw products of the farm. I have found that dairy cattle and hogs, particularly the dairy cattle, afford a profitable home market for the products of the fields. The ideal system of marketing would be to sell nothing off the farm but products which contain practically no fertility and the hogs that are kept to consume the by-products. In this county, however, many farmers ship their milk to the condensatory at Truro, and hence much fertility must leave the farm. Many of us, however, do not consider this a losing proposition as the good prices that we receive for our milk enables us to buy more mill feeds, and through these we return more to the soil than leaves the farm in the milk.

Another factor in the maintaining of soil fertility and one to which our farmers have long been alive is the growing of clovers. Probably on very light soils the occasional plowing under of green crops to increase humus is advisable. Why buy nitrogen in expensive commercial forms when there are tons and tons of it in the air over every acre of land; and this atmospheric nitrogen can be converted into splendid plant food through legumes.

There may be many factors in the maintaining of soil fertility that I have here omitted. My main point is to call attention to the maintenance of soil fertility as the true basis of good farming.

### The Food of the Horse

F. S. Key-Smith

Of all the grains, good heavy white oats are the best and most palatable as a constant diet. Corn should not be fed young horses or those unaccustomed to it, and never in hot weather. When fed there is a difference of opinion as to whether it is best to feed it on the ear or mixed with other feed.

Once and a while, depending largely upon the condition of the bowels, a hot bran mash, consisting of about three quarts of bran, a little flax-seed, jelly and molasses, or brown sugar, all steamed for two hours, should be given. This is much relished, especially after hard work in cold or wet weather.

As an occasional change of diet a well mixed chop feed of hay, corn meal, or cracked corn, and a little bran and oats will be found beneficial.

HAY ONCE A DAY

Hay should be fed but once a day—at night—never before use, as it makes the horse sluggish, and preferably before a feed of oats than after.

ward, as it digests more quickly. It should be the best long timothy with a little clover mixed in, if desired, and should invariably be dampened before feeding to allow any dust there may be in it. Feed it from a manger and not from a rack. It is not natural for a horse to feed like a giraffe.

For a period of not less than a month each year and longer if possible, all horses should be turned upon pasture. Grass is their natural food, and grazing their natural way of feeding. Nothing takes the place of this, and no horse can thrive without it. In addition to the rest it affords, the animal can secure for himself the natural medicines needed, and the system is regulated and built up in a way not otherwise possible. Besides there is nothing better to strengthen the tendons than grazing, or to improve the feet, than running upon soft ground.



A Few of the Best Plowmen of Ontario and their Teams who Gathered at the Recent Provincial Meet in York County

When upon pasture grooming is not only unnecessary but inadvisable. The dandruff or scurf which forms at the roots of the hair as well as the thickening of the coat itself is a provision of nature which protects against thorns, shivers and the elements. The contrary is true of stabled horses, especially if little used. To such an animal, proper grooming, in addition to improving the coat, acts like a massage, opens the pores and keeps the blood in circulation, and in this way, in a measure at least, takes the place of exercise. However, a horse should receive at least two hours' exercise a day, as it is impossible to keep him in condition otherwise.

### A Progressive Club

B. C. Tucker, Hastings Co., Ont.

We have 109 members of our Farmers' Club; 76 of these are members of the Institute, and out of this club there have been two others organized lately, one at Anson, and one at Springbrook.

The volume of our transactions totals up to \$20,000. In nine months we have bought cooperatively seed corn, oats, clover seed, salt, bran, shorts, flour, sugar, binder twine, coal, besides a lot of dealing between members. We have sold horses in car lots. We sold 18 horses to one man for \$3600. We have shipped one and two car loads a week of hogs and cattle to Toronto, and we are now shipping our own poultry and expect to have an egg circle in operation soon.

Farming is no cinch. I believe that it is the healthiest and most ennobling occupation on earth, but it is not a get-rich-quick scheme. If town people could only be made to understand this they would not be so inclined to consider us "grouchy" when we complain of the exactions of a protective tariff that is making get-rich opportunities for others at our expense, or when we kick against the extortionate tolls of railroads and middlemen.

### Can We Afford to Raise Calves?

John Patterson, York Co., Ont.

Right in my immediate neighborhood I can count over a score of dairy farmers who never raise a dairy calf. Their practice is to use a cow as long as she will milk profitably and when her days of usefulness in the dairy are over she is fattened and sold for beef. Many who have followed this practice have now got together good herds of grade Holsteins. But they are finding it more and more difficult to get together good milkers. Likewise, they find that they have to pay more for even ordinarily good cows than ever before. United States buyers are taking care of that. Can we afford to raise our heifer calves, is the question that these dairymen are now seriously asking themselves. Just how much of that valuable milk that they are now sending to the city will be required to raise a good heifer calf, is the problem that troubles them.

Recently I read a review in a United States paper of some experiments that had been conducted at the University of Illinois to determine just how much milk, or rather how little milk, is required to bring a heifer calf up to the point where she can live on grain and roughage without milk. I sent for the bulletin and I find that in one test, consisting of 12 calves, the average amount of milk consumed during the first 10 weeks was 193 lbs. of whole milk, and 435 lbs. of skim milk. That milk altogether is only worth about \$4. Surely not a very big item when we place it against the \$100 or \$125 that we have to pay for a first class cow. City dairymen may be interested in knowing how these calves were fed.

The heifers received their mothers' milk for the first five days, care being taken that they were not over-fed. They were then given whole and skim milk and with two exceptions, each calf was fed 10 lbs. of whole milk and two lbs. of skim milk a day for about 10 days. By changing one pound a day the whole milk was gradually replaced by skim milk and at 25 days old the calves got skim milk entirely. They were then fed 12 lbs. of skim milk for 20 days until they were 45 days old when their ration of skim milk was reduced one pound a day until they were 55 days old, after which no milk was fed. A few calves not doing well were fed skim milk for five days longer.

Of course the calves were being taught to eat grain and roughage right along so they would not suffer unduly when cut off from their milk. The roughage consisted of good clover hay. Theoretically a grain mixture composed of ground flaxseed containing the oil would seem to be the ideal feed for calves maintained on the skim milk, but it was found in this test that because of its lack of palatability the calves would not consume enough of it, eating more freely of other grains such as whole oats four parts, corn four parts, bran one part, and linseed meal one part, which would seem to show that palatability is a more important factor than nutritive value.

From these experiments it will be seen that it is possible to raise calves on a moderate amount of milk. It seems to me to afford an avenue for city milk suppliers to renew their herds without paying out hundreds of dollars for cows of questionable quality.

Look for this Trade Mark



on every bag

## Cost of Living Reduced

that is as far as your livestock is concerned, in fact you cannot actually reduce the cost of feeding, but in addition, increase the butter fat in the milk from your cows— increase the growth and weight of your cattle, sheep and pigs—and get better work and efficiency out of your horses.

All this can be accomplished by simply feeding regularly GENUINE

# MOLASSINE MEAL

Made in England

Remember there are dozens of molasses meal preparations on the market but only one MOLASSINE MEAL which is the original and genuine.

Scientifically prepared and protected by patents.

Put up in bags containing 10 lbs. Get it at your dealers or write us direct.

## MOLASSINE CO. OF CANADA, LIMITED

Toronto Montreal St. John, N.B.

## The Jolly Winter Time

with its clean snow, its crisp fresh air, and its merry bells will soon be here.

Then our boys and girls will want to spend their spare time out in the open air, filling their lives with pure enjoyment, coasting, skating and snow-shoeing.

Those Boys and Girls who have the skates, sleds, toboggans and snowshoes are lucky. What about those who haven't them?

### We Want To Supply Them FREE

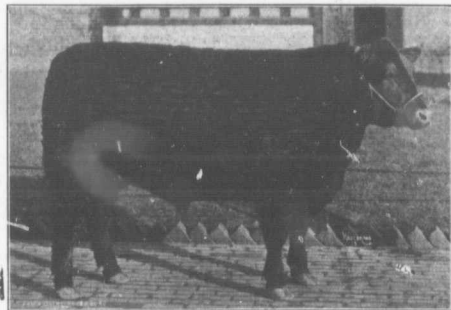
Any boy or girl who wishes to get a pair of skates, a nice sled, a toboggan or a pair of snow-shoes has only to write us and we will give you full particulars.

Pair of Skates.....	Place an X in the blank opposite the article you want, and return to us.
Bob Sleighs . . . . .	
Sled . . . . .	Name . . . . .
Toboggan . . . . .	
Snow Shoes . . . . .	
Hockey Stick . . . . .	
	Address . . . . .

### Canadians Win at International

Canadian stockmen did themselves proud and well upheld the honor of their country at the Fourteenth International Live Stock Exposition at Chicago last week. In fact, so well was Canada represented in the horse, cattle and sheep classes and so successful were their entries, that this might be called Canada's year at the International. Canadians too were represented in the judging list, Prof. Geo. E. Day, of Guelph, being the sole judge of Yorkshire swine and Robt. Graham, of Toronto, was one of the trio who placed the awards on Porcherons.

The premier of award of the whole show, that for grand championship steer, again comes to Canada. J. D. McGregor, Brandon, Man., claimed this award with Glencarrock Victor II. This grand steer, an illustration of which appears herewith, was singled out for a winner early in the judging. He was only one of three grand steers shown by Mr. McGregor.



Glencarrock Victor II, Champion at the International Exposition of Chicago. This steer, owned and bred by J. D. McGregor, of Brandon, Man., was last week declared the best steer in America. Glencarrock Victor II will be on exhibition at Guelph this week. After that he will be loaned to the Agricultural school of Alberta and used on a demonstration trip through that province. Later, Mr. McGregor declares, he will be slaughtered at Brandon and presented to his friends to eat. It will be remembered that Mr. McGregor won this greatest of all prizes at the Chicago International last year.

he getting the award for the three best cross-bred or grade steers in the show, and this in the face of the strongest opposition, all of the best breeds from the best herds of the United States being in competition. Other Canadian cattle exhibitors with cattle good enough to attract attention were: J. A. Watt, Elora, with Shorthorns; John Lowe, Elora, with Grades and cross-breds, and Jas. Bowman Guelph, with Aberdeens. It will be of interest to Canadians to know that the Hereford champion, Refiner 7th, owned by J. Price, of La Cross, was sired by The Refiner, head of the Clifford herd at Oshawa.

In the horse sections many of the best awards came to Canada, particularly on Clydesdales. An indication of the success of the Canadian exhibits is found in the record of 20 Clydesdales from our Western provinces. These Clydesdales took home with them just 20 prizes, and of these a considerable number were firsts. Graham Brown, of Clarendon, Ont., also stood up well. The Colony Farm, Mt. Coquitlam, B.C., were the principal exhibitors from the West.

It was in sheep, however, that Canadians were most outstanding. In Shropshires, J. & D. Campbell, of Woodville, secured two firsts, two seconds and the grand championship for wethers. The grand champion wether will be on exhibition at Guelph this week. John Kelly, of Shakespere, Ont., took practically all the second prizes in fat Hampshires, as did Robt.

McEwen, of Byron, Ont., in fat Southdowns. W. Lee, of Highgate, cleaned up practically everything in Lincolns and E. Brown, of Ridgeway, Ont., was equally successful in Cotswolds. The Leicester entries were all from Canada, John Kelly, of Shakespere, Ont., and A. & W. Whitelaw, of Guelph, dividing the money.

Due to lack of space we cannot make mention of the splendid exhibits from all United States herds. The entries in all classes were of a superior character, and this year's International is a decided step in advance. Canadian laurels were won only in the stiffest competition where there was competition at all, which reflects all the more credit on our Canadian stockmen.

### Dollars' Methods for Calves

(Concluded from page 4)

will eat twice a day. With this is mixed a little salt and a liberal amount of charcoal. Charcoal is an



excellent preventive of disease and an aid to digestion and it may be fed every day. "In raising calves we endeavor to have them grow rapidly in order that they may reach their maximum production, their highest yield of milk, and this in the shortest possible time. We believe that more can be done in the first year of a calf's life towards making it a profitable dairy cow, than can be done in any two years afterwards if the calf has been neglected. Grow the calf fast, feed it liberally, and get away from the idea that a cow must be eight years old before she reaches her best."

### Items of Interest

The steamer Niagara, from New Zealand to Vancouver, is bringing a cargo of foodstuffs for Canadian consumption. The cargo includes: 17,479 boxes of butter, 255 carcasses of veal, 212 quarters of beef, 274 cases of eggs, and 25 carcasses of mutton. The shipment of butter is the largest that has ever been brought in one ship-ment to Vancouver.

Essex county will not have the monopoly on Canadian Corn Shows this winter. Lambton county is to hold a show at Petrolia, and a grant of \$100 has been promised by the Department of Agriculture, and it is expected that the county will vote a larger amount. Addresses from leading corn men from the United States and Canada will be features of the show.

## FARM MANURE

### Value of S

I rented a farm fall, when autumn summer followed not seed down an out-tilled to J. E.

I consider that to do the stunt cost about \$5 an acre, therefore, that, failure of the terms of the lease, particulars mentioned be justified in the extent of all the

### Government

The usual dist. and potatoes was Central Experiment tawa to farmers. The samples for will consist of 10 pounds, oats for pounds, and five Distribution of pound samples from several of tions. All sam- by mail.

Applicants may regard to the s grain or potato so that a suita- tions may be of seed is limi- advised to appl- All applica- tions from tario and Queb- be addressed to list, C. E. F., of vices show s- superintendent experimental fa-

### Manure

In there any m with barnyard swags of amm- of my farm it is in the field and P. L. Peterbro Many materi- mented with to stored barn, the most comm- or better still, ial being quite has the advan- manure a high Gypsum or li- sirable manur- man man is als- but must be sh- be economically could not be u- where in Ontar- Kaint contain- of potash and a manure preser- lacking in pota- son acid phosph- good preserat- deficient in ph- Where the oughly tramp moistened occa- should be used preservative. A of all is to hau-

### Silo Exp

Editor, Farm Ex- template the e- coming year. many others, would be inter- the subject of concrete and s- Farm and Dairy experience with structure. I have been men who have

## FARM MANAGEMENT

### Value of Summer Fallow

I rented a farm to a tenant to summer fallow several and seed down 10 the summer fallowed only one acre and did not seed down any. What damages am I entitled to?—E. K. LEAVER, Co. Ont.

I consider that the labor necessary to do the summer-fallowing would cost about \$5 an acre. It is probable, therefore, that, on account of the failure of the tenant to live up to the terms of the lease in the various particulars mentioned, the owner would be justified in claiming damages to the extent of about \$70.—J. H. G.

### Government Seed Distribution

The usual distribution of seed grain and potatoes will be made from the Central Experimental Farm at Ottawa to farmers throughout Canada. The samples for general distribution will consist of spring wheat, five pounds, oats four pounds, barley five pounds, and field peas five pounds. Distribution of potatoes in three-pound samples will be carried on from several experimental farms in Ontario. All samples will be sent free by mail.

Applicants must give particulars in regard to the soil and some account of their experience with such kinds of grain or potatoes as they have grown so that a suitable sort for their conditions may be selected. The supply of seed is limited, and farmers are advised to apply early.

All applicants for grain and applications from the provinces of Ontario and Quebec for potatoes should be addressed to the Dominion Cerealist, C. E. F., Ottawa. Applications for potatoes from farmers in other provinces should be addressed to the superintendent of the nearest branch experimental farm.

### Manure Preservation

Is there any material that I can mix with barnyard manure to prevent the escape of ammonia? Owing to the nature of my farm it is not advisable to haul to the field and spread during the winter.—P. L., Peterboro Co. Ont.

Many materials have been experimented with to preserve the ammonia in stored barnyard manure. One of the most commonly used is dry earth or, better still, dry muck, either material being quite effective. The muck has the advantage of giving the manure a higher nitrogen content. Gypsum or lead plaster is also a desirable manure preservative. Common salt is also a good preservative, but must be obtained very cheaply to be economically used. Probably it could not be used to advantage anywhere in Ontario.

Kainit contains a goodly percent-age of potash and is especially valuable as a manure preservative where soils are lacking in potash. For the same reason acid phosphate or bone meal make good preservatives when the soil is deficient in phosphoric acid.

Where the manure is kept thoroughly tramped in the heap and moistened occasionally if necessary, it should keep fairly well without any preservative. Of course the best plan of all is to haul directly to the field.

### Silo Experience Wanted

Editor, Farm and Dairy, — I contemplate the erection of a silo in the coming year. There are, so doubt, many others in the same boat. It would be interesting, I think, to have the subject of the relative merits of concrete and stave silos discussed in Farm and Dairy by men who have had experience with the two kinds of structures.

I have been gathering the views of men who have built silos for some

time past. They differ widely. When you talk to these men of experience there does not appear to be the same unanimity in favor of the cement silo that we find in the farm papers when the question is asked. Perhaps, seeing the large amount of space in advertising with farm journals by cement firms precludes them on business principles (the principle of "you scratch my back and I'll scratch yours") from dealing with the subject with perfect candour, for which we cannot altogether blame them.

### A REMOVAL OF DISSATISFACTION

I was told a few days ago by one of the largest and most experienced dairymen in Northumberland county that in Peterboro county, where there has been for some years a great cement silo boom, that many of the cement silos put up there about 10 years ago, are today largely played out. The action of the acids in the silage has eaten into the cement, leaving a very uneven surface, which prevents the perfect packing of the silage at filling time, and a lot of silage is consequently spoiled.

If there are any farmers among Farm and Dairy readers who have silos in this condition, would you like to hear from me? It is the life of the silo in perfect condition that interests us. It's no use putting up a structure which is claimed to "last for ever" (on the outside) if the silage will eat its inside away. What is the condition of the average silo that has been up 10 or 15 years?—W. L. Martin, Northumberland Co., Ont.

Note—Will some of our Folks who have had silo experience extending about 10 years send Farm and Dairy a story of their experience for the benefit of Mr. Martin and other prospective silo builders? The subject is an interesting one.—The Editor.

### Our Legal Adviser

**DAM BREKES WATER.**—A built a dam on his premises for the purpose of saving water for his stock. This dam is built on the natural water course. The dam makes the complaint that in the spring at high water time this dam backs the water up on the highway and across the road onto his farm, which bothers him from putting in his crop. B threatens to call on the engineer for an injunction to lower the ditch making A take out anyone else compel A to take out this dam.—Subscriber.

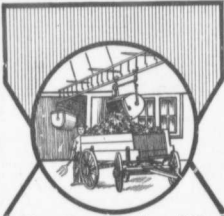
A has the right to construct a dam across a waterway flowing through his premises. But, by so doing, he damages by flooding lands belonging to B. B has the right to have the dam lowered so that his property shall not be damaged or is entitled to receive adequate compensation from A for the damage which his property has sustained.

**HUNTING RIGHTS.**—Can a hunter take a licence hunt deer on fenced or unfenced property?—C. E. B., Newark Co., Ont.

The fact that you have a hunter's license does not entitle you to enter upon growing or standing grain not your own nor to permit your dogs to enter thereon without the express permission of the owner or occupant.

You have no right to hunt upon enclosed lands belonging to another after having had notice not to hunt or verbal or in writing or by signs at least one foot square, put on near the boundary of such lands containing the following notice or words to a like effect: "Hunting or Shooting Prohibited."

There is no cure for heaves, but a heavy horse should be kept out in the open air as much as possible, while bulky feed and dusty hay should be avoided.



### Clean Your Barn in a Jiffy

It's hard getting the muck out from your barn when the drifts are deep and you use a stonebarrow, but with a muck spreader, stable cleaning becomes a drudgery. But there is a way you can make the job jiffy for a boy and have it done in a quarter of the time it usually takes!

### Muck Carrier

In your stable, it runs on an overhead track and can thus be pushed out, no matter how much snow there is. Takes out 1,000 pounds of manure at a time and soon pays for itself in labor-saving. Will do the work for 25 years. Write today for Catalogue No. 22.

**BEATTY BROS., Ltd., 1863 Hill St., Fergus, Ont.**

### SEND THIS COUPON

**BEATTY BROS., Limited,**  
1863 Hill St., Fergus, Ont.

Send me your Catalogue No. 22 about Manure Carriers.

Name .....

P.O. .... Prov. ....

## GASOLINE ENGINES

1 1/2 to 50 H. P.  
Stationary Mounted and Traction

### WINDMILLS

Grain Grinders, Water Pumps, Steel Saw Frames, Pumps, Tanks, Etc.

**GOOD, SHAPLEY & MUIR CO., LTD.**  
Brantford Winnipeg Calgary

### Johnny-on-the-Spot

I thrive on hard work—just "put it up"—and it costs but a trifle to keep my 18 H.P. "Hush" going on gasoline. I will give you perfect service because I am one of the famous

## GILSON

*Open Top Model*

Engines—the line that exactly meets every need with a high quality engine at a low price. It will pay you to write for full particulars of the "Open Top Fifty" Engines. 1 to 5 H.P.

**Gilson Mfg. Co., Ltd. 1010 York St., Toronto, Canada.**

\$47.50

## Just Make This Test

**SUPPOSE** you select a rundown horse, cow, sheep or hog and try the effect of Pratts Animal Regulator. It will not cost you a cent to make the experiment, because we have authorized your dealer to refund your money instantly if it fails. If it puts the animal on its feet, causes it to put on flesh, and places it in prime condition, you will consider the money well spent.

## Pratts Animal Regulator

is the original stock regulator of America, and for 42 years has been recognized as the most reliable and effectual regulator and tonic for all domestic animals. It is composed of pure medicinal roots, herbs and barks, so blended as to act gently but surely upon the blood, bowels, liver and digestive organs, ensuring perfect digestion and causing the animal to draw more nourishment from a reduced amount of feed.

"Your Money Back if It Fails."

At your dealer's, \$5.00 per 25-lb. pail; also in packages at \$25, \$50, and \$1.00.

Send 10c. to cover postage, wrapping, etc., and we will mail you Pratts "Pointers on Cows, Hogs and Sheep"—172 pages—or "Pointers on Horses"—181 pages—both books for \$10c. Use the Coupon.

Pratts Animal Regulator

OF THE

MAY 1910 CO.

OF THE

REGISTERED

Coupon "B" 30

(Mark X in boxes)

Send me your book on.....

Horses (10 cents) .....

Cows, Sheep, Hogs (10c.) .....

Name .....

Address .....



**Meat-Fed Fowls Command High Prices—**

Because they reach maturity earlier. This not only saves the cost of long feeding, but produces a fowl with the weight of an older bird, having firm, tender flesh and the flavor of a broiler.

In our line of the famous

**Harab Poultry Foods**

There are Chick Scrap, Beef Scrap, Beef Meal, Poultry Bone, Bone Meal and Blood Flour—six meat foods that practical poultrymen are now using largely. They are highly concentrated foods. A little goes a long way, therefore economical to use. A leading poultry journal states, "It requires seven pounds of skimmed milk to equal one pound of lean beef for flesh-forming qualities." That gives you some idea of the value of a meat food. A better idea will be given you when you feed Harab Meat Foods to your fowls.

Just try a sack or two. If your dealer will not supply Harab Poultry Foods, order direct from the writer for the latest Harab Poultry Booklet.

**The Harris Abattoir Co.**  
Limited  
Poultry Feed Dept., Stockade Ave.  
TORONTO, CANADA



Lump Rock Salt, \$10 for ten lots, f.o.b. Toronto  
Toronto Salt Works, 126 Adelaide St. E.  
G. J. Clary, Manager Toronto, Ont.

**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, charge no commission and send money same day goods are received. Millions of dollars are paid trappers each year. Deal with our reliable house. We are the largest in our line in Canada.

**FREE HALLAM'S TRAPPERS GUIDE**

French and English.  
A book of 56 pages, fully illustrated. Game Laws revised to date—tell you how, when and where to trap, bait and traps to use, and many other valuable facts concerning the Raw Fur Industry, also our "Up-to-the-minute" fur quotations, sent ABSOLUTE-  
LY FREE for the asking. Write to-day—address JOHN HALLAM, Limited, Mail Dept., 49  
111 Front St. East, TORONTO



**Blessed by Cooperation**

"Very often a dealer will go around the country, look the apple orchards over and offer the farmer a certain price for his orchard. A case comes to my mind just now in my own county, where a woman had an orchard in which she had taken a considerable amount of pride, and she had a nice crop of apples. Well, a dealer came to her and offered \$1,950 for her orchard. She thought the offer was not sufficient, but what could she do?"

"She said to herself: 'I cannot do better, there is only one dealer in this district, and if I do not sell to him my apples will go to waste.' She came down to see me about it. I told her I thought the price was a most unreasonable one for her orchard. The woman said: 'I will have to take it, I said, 'I will see if I cannot get your orchard into the association.'"

"I went to the association and told the members the story of how this woman had taken such care of her orchard and yet was only offered \$1,950. The board of pickers and packers as well as haul the apples to the station. The association decided to admit her into their ranks. The sequel is that I left a letter from her to me before I left for Ottawa, stating that she had received, through the medium of the association, \$1,035 for her orchard."—Dan Johnson, of Forest, giving the details before the Agricultural Committee of the House of Commons.

**Apples in London**

H. Watson, Trade Commissioner,  
London, E. C.

Apple quotations have to a certain degree been kept back owing to the crop in the United Kingdom having in many districts yielded much larger quantities than had been anticipated, but the prices for good fruit are considered satisfactory. Unfortunately, in addition to the standard of Nova Scotia fruit being generally low, owing to a partial crop failure, some of the cargoes which have come over have arrived in a shocking condition, and considerable losses will have to be borne by careless shippers—a quantity of a cargo of apples which arrived recently having been knocked down at and even less a barrel. One of the weekly reports describes these apples as being landed in a deplorable state, and it looked as if the bulk of the fruit had been cooked.

When looking at several barrels of American apples which were being opened last week in one of the warehouses, it was noticed that in each case a disc of corrugated cardboard of about the same dimensions as the heading was laid between the apples and the heading at each end of the barrel. It was reported that this is most advantageous in so far as it relieves the apples from the pressure of the wood and thus prevents damage by squeezing. Although the practice is said to be pretty general among the principal United States shippers, my informant stated that according to his experience it is rarely if ever adopted by Canadian shippers. As the expense is small and the protection enhances the selling value of the fruit, the greater use of this disc by Canadian shippers seems worth consideration.

**A New Potato Disease**

We are all of us acquainted with the potato scab and blight. They have been with us from the first. Few of us, however, know that a new disease, Rhizoctonia, is becoming more and more prevalent in Canada, and in time may work untold harm.

We find it even on exhibition potatoes. At the recent Horticultural Exhibition in Toronto, H. Sirrett, B.S.A., a graduate of the Ontario Agricultural College, and one of the boys who has gone back to the farm, called our attention to the presence of this disease on a great number of the plates of potatoes exhibited. In some cases every plate a variety would be affected. In appearance the disease resembles little brown spots almost like earth, on the surface of the potato. The spots are not deep and can be almost washed off. The great trouble with this new disease is that so far no satisfactory method of combating it has been discovered.

**Better Telephone Service**

W. J. Trimble, N.D.A.C.

There is need for even better telephone service in the country than in town, for in town people can more easily get into communication with the persons they want than in the country. If any one gets sick in the country, if the telephone is out of order, a long drive and much delay and expense may result from poor service. Among the things that are caused by the telephone being out of order. When one has learned to depend upon the phone, it seems doubly hard not to be able to use it just when it is most needed.

On many country lines something seems to be wrong a good share of the time. Wires get crossed or are blown down, there is a choice assortment of rattling noises, or "Central" cannot be got.

Some responsible and efficient person should be in charge of repair work. Where the fault lies in the central office, more prompt and efficient attention should be given to troubles on rural lines. The complaint of a business man or even of a resident in town will receive prompt attention by the manager, but farmers may be put off week after week with "wired" service. Grave responsibility is upon those who are in charge of rural lines, for the issue of life or death may at times depend upon the right working of the phone, and at all times its ill-working entails much inconvenience and expense.

If rural life is to be built up and made more satisfactory and prosperous, and if the telephone is one of the main agencies in bringing about better conditions in the country, farmers are entitled to the best of service.

**Correction**—M. H. Haley, Springfield, Ont., had the junior champion Holstein male at the recent National Live Stock and Dairy Show in Toronto in his Sir Belle Fayne. The championship did not go to Leuzler & Bollert, as reported in a previous issue of the Farm and Dairy. Likewise in get of one bull, Mr. Haley was 1st and 3rd, instead of only 1st, as noted in our report. These errors were due to mistakes in the typewritten copy sent to the Farm and Dairy from the secretaries' office at the fair.



**FREE BOOK ON FERTILIZERS**

**NO ADVERTISING IN IT, although our fertilizers follow all its requirements. If you do not already use or selling our goods, it might pay you to look them up. We make a fair business proposition for live agents. Ask our office nearest you to send you the book, addressing your request to Manager "Cereals" Department in whatever office addressed.**

**The American Agricultural Chemical Co.**  
Boston, Mass.      Danvers, Vt.  
New York, N. Y.      Savannah, Ga.  
Philadelphia, Pa.      Montgomery, Ala.  
Baltimore, Md.      Charleston, S. C.  
Cleveland, Ohio.      Spartanburg, S. C.  
Cincinnati, O.      Jacksonville, Fla.      Wilmington, N. C.  
New Orleans, La.

**Farmers Sons Wanted** with honor. Best chance to work in an office. \$100 a month with advancement. steady employment, must be honest & energetic. Branch offices of the association are being established in each state. Apply at once, giving full particulars. Write to: **DAVIES COMPANY LIMITED, WEST TORONTO, ONT., Canada.**

**RAISE MORE OATS PER ACRE**

You can also grow Oats of the highest grade if you use Davies Special fertilizers. Get a month's money from your farm. Send for free Davies Company literature.

**The DAVIES Company Limited**  
WEST TORONTO, ONT.  
We have an agent near you

**Kendall's Spavin Cure**  
The Old Reliable Remedy

THOUSANDS of farmers and horsemen have saved money by using Kendall's Spavin Cure for Spavins, Curb, Ringbone, Splint, Bony Growth, and Lameness from many other causes. It keeps horses working. A \$1 bottle may save a horse for you. Get a bottle the next time you are in town. Sold by druggists everywhere, \$1 a bottle. For \$5, also ask for a copy of our book "A Treatise on the Horse," or write to **DR. B. J. KENDALL COMPANY, Enosburg Falls, Vermont**



**Seasonable**  
Working in a clear house will hasten the pullets. Don't forget clear house if necessary with the best time in August or September to late now if sand.

Much benefit is obtained on any possible are compelled to ter for their grain. Fresh sand or necessary to the this winter. Cover floors at least the earth floors from Collect a barrel dust. A bushel of frame, in a s hen house will be the fowls will the number of b A supply of groter should be lo vegetable and ro bought cheaper nabbages, and ideal greens for ter. Small potaples are also r when the fowls indoor quarters. Keep the birds morning until ground. It will prevent many.

As soon as you confine the flock the time, provide or leaves. Rye is tough and last standing close by stalks can be used.

Hens should be powder occasion of a good dust 10 occasions far few pound of powder bushel of dust fo Refill the nest ceisor, and dust thoroughly with this application days, for the ne should effectually and these pests birds for some addition to the sulphur or insect each nest.

**Rations for C**  
The following which are number have been carefu A. Benson, Dom for crate fatten view to efficien in obtaining the be borne in min fed in excess will of inferior qual peas impart a h 1. Two parts o one part ground corn meal. 2. Equal parts buckwheat, and 3. Equal parts barley, and short 4. Two parts one part corn meal. 5. Two parts 5. Two parts of grade flour or sh bran. The husks sh the oats, barley,





**Seasonable Poultry Notes**

Working in a clean, dry litter now will hasten the laying of your early pullets.

Don't forget that you must have a clean house if you are to have success with the hens this winter.

The best time to resand floors is in August or September, but it is not too late now if you can obtain dry sand.

Much benefit is likely to result, without any possible harm, if the hens are compelled to work in clean litter for their grain at all seasons.

Fresh sand or gravel is absolutely necessary to the comfort of the hens this winter. Cover wood or cement floors at least three inches deep and earth floors from six to twelve inches. Collect a barrel or two of fine road dust. A bushel of this in a large box or frame, in a sunny location in the hen house will be greatly enjoyed by the fowls and will help to keep down the number of body lice.

A supply of green feed for the winter should be looked after now, as vegetable and root crops can be bought cheaper now than later.

Chicobags, hearts and mangels make ideal greens for hens during the winter. Small potatoes unpecked apples are also relished, particularly when the fowls are confined to their indoor quarters.

Keep the birds indoors these cold mornings until the frost is off the ground. It will save any chill and prevent many cases of colds and roup.

As soon as it becomes necessary to confine the flock to the house most of the time, provide a deep litter of straw or leaves. Rye straw is the best as it is tough and lasts a long time. If nothing else is available cut corn stalks can be used.

Hens should be dusted with insect powder occasionally but the presence of a good dust bath will make these occasions far fewer.

Mix about one pound of powdered sulphur with each bushel of dust for the best results.

Refill the nests with straw or excelsior, and dust the pullets and hens thoroughly with insect powder. Repeat this application in a week or 10 days, for the nests especially. This should effectually destroy all body lice and these pests should not bother the birds for some time especially if in addition to the dust bath a handful of sulphur or insect powder is put into each nest.

**Rations for Crate Fattening**—The following five meal mixtures, which are numbered in order of merit, have been carefully selected by Mr. J. A. Benson, Dominion Poultry Representative for Prince Edward Island, for crate fattening poultry, with a view to efficiency and to convenience in obtaining the material. It should be borne in mind that ground corn fed in excess will produce yellow flesh of inferior quality, and that ground peas impart a hardness to the flesh.

1. Two parts finely ground oats, one part ground buckwheat, one part corn meal.

2. Equal parts finely ground oats, buckwheat, and barley.

3. Equal parts finely ground oats, barley, and shorts.

4. Two parts finely ground oats, one part corn meal, one part shorts.

5. Two parts barley, two parts low grade flour or shorts, one part wheat bran.

The husks should be sifted from the oats, barley, and buckwheat.

The proportions given above should be measured, preferably, by weight and mixed to a thin porridge with thick sour milk or buttermilk. On the average 10 lbs. of meal requires from 15 to 17 lbs. of milk.

If the birds appear dull and constipated at any time carefully dissolve and mix a small quantity of Epsom salts in water. If bowels are loose, add a little charcoal to one feed. Give grit and green food twice a week.

If milk cannot be obtained in sufficient quantities animal food of some kind should be supplied, but the best results can be obtained by the use of milk or buttermilk.

All food should be mixed at least 12 hours before feeding, and a very small quantity of fine table salt added, not more than one-quarter of one per cent. Before being killed the birds should be starved for 24 hours and then fed only being given to them during this time.

It is good practice to feed clean tallow to the birds at noon, during the last week. The tallow should be shaved into the trough with a knife, and is fed at the rate of about a pound to each 50 birds.

Note.—Full information on crate fattening may be had in Pamphlet No. 2 of the Live Stock Branch, Ottawa, which may be obtained by applying to the Publication Branch of the Department of Agriculture at Ottawa.

**APICULTURE**

**Hints on Winter Housing**

R. A. Whitehead, Victoria Co., Ont.

When making two by four hive clamps the outer edge can be made from half-inch wood by splitting sound inch boards. The roof can also be made from the same material if paper is used, but if batting is utilized, the roof should be of galvanized iron strips an inch wide. Tongued and grooved boards may also be used without the batting. It is well to provide the top side boards of the clamps with hinges, hooks, and eyes, so as to be easy to open to the brood chambers for spring and fall examination and for removing or placing of supers. If of light half-inch lumber the roof should be hinged and hooked down for winter.

Galb ends that have been out during the summer, and tin covers that have been used to cover the fly holes will of course be replaced for the winter. The tin should be fixed from six to 12 inches above ground.

If bees are wintered in the cellar, they are brought in when turnips are housed, or about November 15th. It is essential to have them as near the ceiling as possible, but not nailed up to the joint. If possible, have them resting on benches. They should also be in the warmest part of the cellar, and where the windows are kept darkened. A darkened room is especially important after February 15th.

When bees are buried or pitted like potatoes or roots, a hole two feet deep and two or three feet wide should be left under them. The soil covering them is then covered with thatching or by a roof which will keep out leakage. Loam or sand is better than clay for this covering.

An implement or wood shed, any loft or a vacant house cellar, are not desirable places for wintering bees. A room off the kitchen slightly heated and kept dark usually answers very well.

Be on intimate terms with your poultry. Pick them up occasionally. They will lay better if you treat them in a sociable manner.

**Where We Stand**

We believe through careful inquiry, that all the advertisements in this paper are signed by trustworthy persons. To prove our faith by works, we will make good any loss sustained by trusting advertisers who prove to be delinquent.

Mention "Farm and Dairy" when writing to our advertisers and we will guarantee you a fair and square deal.

We have gained the confidence of "Our People" by giving them good service.

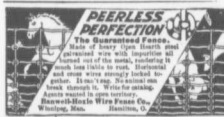
**FARM AND DAIRY**

"A Paper Farmers Swear By"



London Automatic Concrete Mixer

Write us for price of this machine. We have the largest line of concrete machinery of any firm in the world. Tell us your requirements. London Concrete Machinery Co., Dept. C, London, Ont.



BEER'S PERFECTION

Write us for price of this machine. We have the largest line of concrete machinery of any firm in the world. Tell us your requirements. London Concrete Machinery Co., Dept. C, London, Ont.

**BLANKETS**

- AT WHOLESALE PRICES  
ORDER WHILE THEY LAST  
HEAVY GREY BLANKETS, 60 x 80, \$3.00  
100 lbs. per pair. Price..... \$3.00  
BROWN ARMY BLANKETS, 56 x 76, 65 lbs. per pair. Special \$2.50  
GREY OR BROWN BLANKETS, 74 x 85, weight per pair 55 lbs. \$3.00  
TANTAN TRAVELLING RUGS, assorted patterns..... \$3.50  
EXTRA HEAVY FUR HORSE BLANKETS, thick fleecy lining, light or dark stripes, shaped necks, wide stayons, length 72 or 78. Price each..... \$3.00  
HEAVY BROWN WATERPROOF COVERS, to hams..... \$3.50  
HEAVY BROWN WATERPROOF COVERS, around breast..... \$3.75  
An extra good cover.  
All the above shipped same day as order received.

THE A. W. LYNNE COMPANY  
Agriculturists, Dept. G, 945 Queen St. W.  
TORONTO ONT

**The Call of the North**

Do you know of the many advantages that New Ontario, with its Millions of Fertile Acres, offers to the prospective settler? Do you know that obtainable free and at a nominal cost are already producing grain and vegetables second to none in the world?

For literature descriptive of this great territory, and for information as to terms, homestead regulations, settlers' rates, etc. write to  
H. A. MACDONELL,  
Director of Colonization,  
Parliament Buildings,  
Toronto, Ontario

**FOR SALE AND WANT ADVERTISING**

THREE CENTS A WORD, CASH WITH ORDER

HELPFUL LITERATURE for Bible Study, free on application—Internationals, Bible Students' Association, Avenue, Winnipeg, Man

FOR SALE—Bronze Turkeys Prices reasonable. Apply R. Bos, Lachute, Que.

FOR SALE OR EXCHANGE—A 6 H.P. Second-hand Gasoline Engine, in good running order. Will take pure bred stock or hay. Write to Walter Payne, Bushell View Farm, Lake Edward, N.B.

FOR SALE—Iron Pipe, Pulleys, Belting, Baling Chains, Wire Fencing, Iron Posts, etc. all sizes, very cheap. Send for list. Army Contractors, 1000, The Industrial Waste and Metal Co., Dept. F. D. Queen Street, Montreal

**INTERNATIONAL STOCK FOOD**

Keeps horses, cows, sheep and pigs in such prime condition, because it is composed of the same herbs, roots, seeds and berks that these animals eat freely when running wild. We grind these ten medicinal substances to a fine powder, mix them thoroughly and give them to you, at their best, International Stock Food.  
This is why a tablespoonful of International Stock Food, with the regular grain feed, helps digestion—makes sound, firm flesh—increases the milk supply—and protects animals against disease and sickness. Sold by dealers everywhere. If you will write and tell us how many head, we will send you one, free forward to you free on order. Stock Food. III

INTERNATIONAL STOCK FOOD CO. LIMITED, TORONTO.





**THE HIGHEST TAXED COUNTRY IN THE WORLD**

J. A. Macdonald, Carleton Co., Ont.

CANADA to-day is the most highly taxed country in the world. This is, or should be, a most unenviable boast. None of the European nations with their burdens of war taxes can approach Canada so far as taxes are concerned. The building of Dreadnoughts by Germany and the mad race for supremacy on both sea and land by Germany by England, France and the other nations does not call for such taxes on the people as peaceful, agricultural Canada does.

The United States used to be held up to Canadians as so much more highly taxed by its higher protection duties. Comparing the customs revenue per head of population there is a remarkable difference between the amount paid by the Canadian and United States citizen. The customs tax per head in the United States averaged less than \$3.50. Taking the Canadian customs revenue for the present year, \$115,063,77, and the population now at eight millions, the average amount paid into the Canadian customs amounts to \$14.38 per head yearly. The bread-winner for the ordinary family of five thus comes out at \$71.90. In the United States, at \$3.50 per head, the tax would be only \$17.50, making the customs tax in

Canada 320 per cent higher than in the United States per head of population.

**FOUR TIMES MORE THAN U.S.**  
In other words, Canadians pay over four times as much customs tax per head as do the United States; 410 per cent as much.

But this is by no means the amount of tax paid by Canadians per head or per family. There is the uncalculated tax which we pay for the privilege of protecting "infant industries," by which the manufacturer is permitted to increase prices to the consumer in proportion to the rate of protection. Thus, a 30 per cent tariff in woolsens allows the Canadian manufacturer to increase the price of woolen goods 30 per cent.

**WHAT THE INDIRECT TAX AMOUNTS TO**  
The total value of Canadian manufactures in 1910 was \$1,165,975,639. In 1913 the value of Canadian manufactures made here increased from \$10,490 million to \$12,000 million, an increase of the census decade as 14 per cent per year. Our manufactures, therefore, has increased 42 per cent (more likely 20 per cent), and now amounts to \$1,455 million. If the average increase in price owing to protection duties be taken as 25 per cent, the Canadian people in one year paid over 413 million as a subsidy to the protected manufacturers in Canada.

Taking the population at 8,000,000, the average subsidy paid per head would amount to over \$51 in the present year. For a family of five, the yearly bill for Canadian manufactured goods would appear to amount to \$255 more than it would under free trade. Adding the \$71.90 annual customs tax to the \$255 annual subsidy to Canadian manufacturers, the bread-winner for a family of five would appear to contribute \$327.90 yearly on account of tariff barriers. Such a generous burden might well be expected to induce many of us to support free trade, at least in part.

**TAXES ON WAGES AND OUR INCOME**  
Three hundred and twenty-seven dollars and ninety cents, the amount yearly paid by the average Canadian bread-winner, including the farmer, towards the upkeep of our government and our manufacturers is just about one-third of his income. But this contribution is taken from us by such slight-of-hand tricks that we do not see it, and yet nobody escapes these taxes that lives and labor. There is no way of escaping this annual contribution; the poorest person pays the largest percentage. The liquor-drinker even must pay in contributions to the brewer and distiller. The cheap cloth of the poor bears the highest tax. The cheap boots of the farmer and working man pay relatively higher duties, and subsidies to the manufacturer.

We complain of the high cost of living. Why shouldn't it be high? We have to give back one-third of our wages to manufacturers and the government. If we got \$3 a day, only \$2 is our own. The other dollar is the toll of the tariff barriers. If the average wage-earner was compelled to pay one-third of his wages to a direct tax to the government, would there not be a howl? But he is doing that very thing now — giving one-third of his wages back to the powers that be.

The farmer is the most heavily taxed man in Canada to-day. A farmer needs to have at least \$500 worth of tools upon which he pays a subsidy of \$150 to the protective interests. He must also possess from \$300 to \$500 worth of horse power. The ordinary farmer must possess about \$1,000 worth of tools to do with, while the work of tools and horse power, and shovel, while the clerk and book-keeper needs no tools at all.

**DE LAVAL**  
**CREAM**  
**SEPARATORS**

The best of all dairy investments  
Saves \$10. to \$15. per cow every year

De Laval Dairy Supply Co., Ltd.  
Montreal Peterboro Winnipeg

**MAIL CONTRACT**

SEALED TENDERS addressed to the Postmaster General, will be received at Ottawa until Noon, on Friday, the 2nd January, 1914, for the conveyance of His Majesty's Mails on a proposed Contract for four years, six times per week, each way, over Lakefield Rural Route No. 1 (Lakefield and Lakehurst), from the 1st April next.

Printed notices containing further information as to conditions of proposed Contract may be seen and blank forms of Tender may be obtained at the Post Office of Lakefield, Lakehurst, Mall's Bridge and Oswego, and at the Office of the Post Office Inspector at Kingston.

H. MERRICK, P.O. Inspector.  
P.O. Inspector's Office, Kingston.

**AD. TALK**

CCIX

"Wot beats me is why 'E should steal," said the Cockney. "E ain't got no need to. 'E's got a good wife to work for 'im."

This is just what our sensible dairymen think of an occasional breeder who sends out false impressions of the animals he has for sale, either as to health, individual merit or line of breeding. Such men will find that truth and general satisfaction to their customers is able to build up infinitely more profitable and permanent business for themselves than misrepresentation ever can.

Mr. J. E. K. Herrick struck the right key in his article on page 46 of Farm and Dairy last week. Breeders of dairy cattle who have missed this will profit by looking it up.

There is no more disreputable practice, nor one that is doing more to mitigate against the fraternity of breeders of dairy cattle than this very practice of misrepresentation in the sale of surplus animals. Most of the dairy world are entirely above such practice, but we must acknowledge that there are still a few who find it difficult to get the poison out of their systems, and who consider it but clever business to defraud their fellow breeders. It takes but a few instances of this to make the amateur or beginner entirely suspicious of breeders in general, and in this way both the innocent and guilty suffer, and discredit is reflected on that particular breed.

We ask "Our People" who read Farm and Dairy to consider well the remarks of Mr. Herrick and apply them generally. He is indeed voicing a sentiment that is in the best interests of the industry, and which will tend to suppress that occasional breeder who is persuaded that by misrepresentation either through advertising or personally, cheap, inferior, or diseased animals can be sold at the price of choice ones.

Those of our readers who are out to secure additional animals, or beginners in the dairy business, would do well to note carefully the big breeders who have reliable surplus stock for sale through the columns of

"A Paper Farmers Swear By"

**City Conveniences In Your Home**

Independently and easily obtained by installing the "TWEED" SANITARY CLOSET and the "ROWE" SANITARY LAVATORY.

THE "TWEED" CLOSET, for use indoors, replaces the old-time draught, unsightly and unhealthy outdoor.

Requires no plumbing or sewage—only connection with sewer-pipe for ventilation.

Ideal for use anywhere. Try one for 30 days free.

THE "ROWE" LAVATORY insures running water at all times in your home. Takes up less room than the old-style washstand, and is a positive ornament in any room.

Hotels should be equipped with the "Rowe" Sanitary Lavatory and the "Tweed" Sanitary Closet where there is no water supply. Get our prices for hotel equipment.

Satisfaction guaranteed or your money back. It is running water without plumbing.

Our descriptive booklet free for the asking. Send for it to-day.

THE STEEL TUBS & MACHINE CO., LTD.  
"TWEED" SANITARY CLOSET 115 James St., TWEED, ONT.  
"ROWE" SANITARY LAVATORY

IN THE big, roomy house or in the small cottage there is always some cold corner where extra heat is needed.

**PERFECTION**  
SMOKELESS  
**OIL HEATER**

Solid Comfort in Cold Weather

gives you heat, where and when you want it. The new model Perfection Heater, just on the market, has improvements that make it the best heater ever made. No smoke — automatic-locking flame-spreader. No smell. Flat foot insures steady heat. Indicator in sight. Burns nine hours on a gallon of oil. Finished with blue enamel or plain steel drums; nickel-plated. Stock at all chief points.

For best results use Royalite Oil

**THE IMPERIAL OIL COMPANY, Limited**

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

# SHIP US YOUR CREAM

WE Supply Cans and Pay All Express Charges within a radius of 100 miles of Berlin. Send a Statement of Each Shipment. Pay Every Two Weeks.

WRITE FOR FULL PARTICULARS

THE BERLIN CREAMERY CO.  
BERLIN, CANADA

## CREAM WANTED

Cheese Factories are Closing for the Season

How about your Cream?

We will buy your Cream all the year through

Returns are made every week

Ship your New Laid Eggs to us

We pay highest prices for both Cream and Eggs

THE BOWES COMPANY LIMITED

74-76 FRONT STREET E., TORONTO, ONT.

### FOR SALE AND WANT ADVERTISING

THREE CENTS A WORD, CASH WITH ORDER

FIRST-CLASS CHEESE AND BUTTER MAKER wants position by the month or factory by the cow. Abstainer. References. Apply Box 902, Farm and Dairy, Peterboro, Ont.

#### DISTRICT DAIRY MEETINGS, 1913

County. Place for meeting. Date.  
Northam, N.—Stirling ..... Dec. 11, 2.30 p.m.  
Northam—Campford Dec. 12, 2.30 p.m.  
Peterboro—Norwood ..... Dec. 16, 2.30 p.m.  
Victoria—Lindsay ..... Dec. 17, 2.30 p.m.

## Cream Wanted

Highest prices—unlimited markets. Toronto consumes daily the milk and cream from over 14,000 cows and the butter from over 74,000 cows. We want your cream and your neighbors'. Write

Toronto Creamery Co., Ltd.  
TORONTO



## Some Facts You Should Know About the Dillon Litter Carrier

It is the Strongest, most Convenient and Cheapest on the American Market.

On account of using the Best Material it costs us more to build it, and yet, we are offering our Guaranteed Carrier at \$18.00, Freight prepaid to your nearest station. Track and Fixtures correspondingly low and about 25% CHEAPER than other makers.

How is it?—Because we have NO MIDDLEMEN.

We sign the above statement and are prepared to back it up.

*B. Wilson & Son,*

130 Mill Street, OSHAWA, Ont.

Write us for particulars and for our Book on Clean Stables

## Creamery Department

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

### A Creamery Man of Alberta

By Max McI.

In Southern Alberta is found what is probably the last new country dairy field. Gradually, but steadily, the dairy industry has moved westward from the eastern provinces, and now the great prairies of the country west to the Rocky Mountains has become a wonderful dairy belt. With the dairy industry has come a number of the best dairymen of the eastern provinces. Old Ontario, and the provinces by the sea, have given up of her best to satisfy the call of the west. And the men from the east have made good in the dairies of western Canada.

One of these men is Harry McIntosh, of Cardston, Alberta. McIntosh began stirring milk in Almonte, Ont., and in the small cheese factories around that town. Later he became manager of Mississippi Fridge, the largest cheese plant in eastern Ontario, situated in the town of Almonte. As late as 1901, Mr. McIntosh entered the Dairy School at Kingston, Ontario, and spent two winters there. Coming west in 1911 he located at Innisfail, Alberta, and operated the creamery that this year took all the first and gold medals wherever it entered its products in Ontario. Leaving Innisfail the fall of 1911, the subject of this paragraph came to Cardston, Alberta, and here he has made a record for himself, that makes him one of the foremost men in the dairies of western Canada.

SUCCESS THAT IS UNUSUAL.

Mr. McIntosh's accomplishment is along the line of cream grading. When he took hold of the Cardston creamery, and up till this summer, no attempt at grading cream had been made. In July, however, the Cardston manager and butter maker started a vigorous campaign against anything but first grade cream and his success was the subject of much discussion and a great deal of compliment at the Dairyman's Convention, which has just closed at Olds, Alberta. The Dairy Commissioner for the Province, C. Marker, referred in the following terms to it: "The most phenomenal success ever attained in cream grading by any creamery in the province."

Regarding the country as a dairy field, Mr. McIntosh said he had studied different parts of the Canadian West, but nowhere did he find conditions so favorable to the development of this great industry as in the district in which his own creamery is located. The immense pastures of the foothill country are the ground for dairy stock. Mr. McIntosh was of opinion that on 25 per cent. of the farms in the western part of his constituency there was a running spring.

INFLUENCE OF DAIRYING

The influence of dairying on intensified agriculture was touched upon. The success of the farmers in the older provinces in bringing from their farms the returns and profits which were waiting for them, has been accomplished to a degree of thoroughness by intensified agriculture, and dairying has filled the gap between the promise of what the land will provide and a complete fulfillment of the possibilities.

Mr. McIntosh was asked about the feasibility of starting a condensing plant at Cardston. He replied that he

would be willing to close his creamery in its favor, but for one thing. The condenser takes all the milk off the farm. There is no food for hogs superior to skim milk, and with the rough grain so easily obtainable in Southern Alberta, pork production is destined to be carried on in a most economical manner. The hand separator on the farm has solved the problem of handling milk. It reduces the bulk to be sent to the creameries to about one-eighth of the whole, and leaves the warm, fresh skim milk ready for feeding on the farm.

GOVERNMENT ASSISTANCE

In Alberta, the creamery man explained, the government fosters the development of the dairying industry by taking active interest and lending necessary aid to the amount of \$1-



A Man Who Does Things

We here introduce Farm and Dairy readers to Mr. Harry McIntosh, manager and buttermaker of the Cardston creamery in Alberta. As told in the adjoining article, Mr. McIntosh, by cream grading, raised the standard of the butter from his creamery from inferior to 95 per cent special in three months at the annual speakers at a recent Convention at Olds, Alta.

600 for the starting of creameries, but these institutions are absolutely under the control of the patrons, and the management falls on a board of directors chosen by the patrons. The Cardston creamery issues two checks a month for butter fat, and Mr. McIntosh remarked that even if they were not as large as the annual grain check divided by 24, their coming 24 times in the year at regular intervals better the grocery-man considerably better.

The Cardston creamery will have a display of butter at the fair of Ontario next year. The reason that Mr. McIntosh did not send an exhibit this year for competition was the fact that he was too busy to prepare it. There is little doubt that the butter that graded 95 per cent. special would take the medal for Old Ontario.

I have been thinking over the situation re rural depopulation for some years, and am glad to see the articles published by Farm and Dairy on the subject. This is one of the most vital of our social problems.—W. C. Good, B.S.A., Master Dominion Grange.

I am a comparatively new member of the circle you call "Our Folks," having joined less than one year ago. I appreciate the value of your paper. I home, and we feel we could not be without it. In this way it has become "One of Our Folks." One week in October we missed a number, and it seemed as if "One of Our Folks" was absent that week.—Fred A. Newman, Algoma Dist., Ont.

## Cheese Depart

Makers are invited to submit contributions to this department, to ask questions on matters relating to cheese making and to suggest subjects for discussion. Address letters to The Cheese Makers' Department.

### Paper Boxes for

W. W. Moore, Chief Mar  
Ottawa

Owing to the increase suitable cheese box material, high percentage of butter content type of box design have been made to place for cheese on the market without much success. A few lots of cheese were made from pulp, but results were not satisfactory.

Some of the defects in box was not strong enough, much vertical pressure, not be trimmed down underneath cheese, and exposed to moisture it was fact that it would not stand with so much disfavor porters that some were to cut the price on any applied to them in paper and Cold Storage Report.

### Acid or Renni

The relative merits of rennet tests for determination of milk for the of cheese are compared in bulletin issued by the Department of Agriculture. The bulletin summarizes the of T. G. Hastings, J. Evans. Their conclusions briefly summed up are: In the making of the of cheese, it is desirable dition of the milk be when it can be drawn from the expiration of approximately same time each day, the cheesemaker must ripen the milk to approximately same point each day. employed to determine of the milk, and the other of its modification acid test or the titration.

From the work effectu ers, it is evident that pose of determining the milk for cheesemaking test is superior to the a

### The Foam Pr

Milk pumps, separatorizers with revolving the usual causes of f and it is the skim milk bothers most in this re We cannot always bume we can frequently of lessening the amo N. Y. Produce Review the acidity of milk th air is incorporated to secure sweeter s some.

When using pasteurizer wit revolving dashers the dashers faster When using a pump enough milk is at h to prevent the pump It has been recomme when pumping milk, is narrowed at some pump and vat so compressed somewhat air will be expelled.

FOAM KILLING AP To kill the foam at created a number of a been manufactured and op where the practicing skim milk is mor

## Cheese Department

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

### Paper Boxes for Cheese

W. W. Moore, Chief Markets Division, Ottawa

Owing to the increased scarcity of suitable cheese box material and the high percentage of breakage in the present type of box, several attempts have been made to place paper boxes for cheese on the market, but as yet without much success. Last season a few lots of cheese were exported in boxes made of pulwood, but the results were not satisfactory.

Some of the defects were that the box was not strong enough to stand much vertical pressure, that it could not be trimmed down to suit an unsized cheese, and that if it was exposed to moisture it became so soft that it would not stand handling. In fact, this kind of box was looked upon with so much disfavor by the exporters that some of them threatened to cut the price on any cheese shipped to them in paper boxes.—Dairy and Cold Storage Report.

### Acid or Rennet Test

The relative merits of the acid and rennet tests for determining the condition of milk for the cheddar type of cheese are compared in a recent bulletin issued by the United States Department of Agriculture. This bulletin summarizes the investigation of T. G. Hastings and Alice C. Evans. Their conclusions may be briefly summed up as follows:

In the making of the cheddar type of cheese, it is desirable that the condition of the milk be such that the whey can be drawn from the curd at the expiration of approximately the same time each day. To control this the cheesemaker must be able to ripen the milk to approximately the same point each day. Two tests are employed to determine the ripeness of the milk, the rennet test in one or other of its modifications, and the acid test or the titration of the milk.

From the work effected by the writers, it is evident that, for the purpose of determining the ripeness of milk for cheesemaking, the rennet test is superior to the acid test.

### The Foam Problem

Milk pumps, separators, and pasteurizers with revolving dashers are the usual causes of foam on milk, and it is the skim milk that usually bothers most in this respect.

We cannot always prevent foam, but we can frequently employ means of lessening the amount, says the N. Y. Produce Review. The higher the acidity of milk the more easily the air is incorporated, hence efforts to secure sweeter milk may help some.

When using pasteurizers or heaters with revolving dashers do not revolve the dashers faster than necessary. When using a pump be sure that enough milk is at hand in the feed to prevent the pump sucking air. It has been recommended that if, when pumping milk, the standpipe is narrowed at some point between pump and vat so that the milk is compressed somewhat considerable air will be expelled.

### FOAM KILLING APPLIANCES

To kill the foam after it has been created a number of appliances have been manufactured, chiefly in Europe where the practice of pasteurizing skim milk is more general than

among creameries in this country. Some years ago the Minnesota State Dairy Commission recommended the following plan of killing foam on pasteurized skim milk in a circular sent out to creameries in that state:

Set up an old box churn or similar tank with the manhole on the side. Let the milk supply pipe enter from the top into a tee in which the exhaust pipe enters from the side. Make the outlet the larger and thus make the milk sputter. Milk is drawn from the bottom and overflow is arranged near the top.

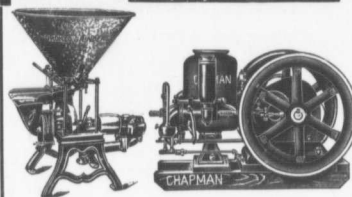
To rid the skim milk tank of foam a large sprinkling pot full of cold water is a great convenience.

### Judging Competition at Chicago

The Ontario Agricultural College achieves to only sixth place in the stock judging competition at the International Live Stock Exposition, Chicago; Manitoba College seventh, and Macdonald College eighth. Texas had the winning score of 3,664. Missouri was second with 3,496; and the three Canadian colleges scores 3,413, 3,409, and 3,402 respectively. Macdonald College made the best score on any one subject that was made in the whole competition—1,094 on horses.

The outcome of the whole competition was decided by the sheep class. In sheep judging Texas took 955, and the next nearest score was 790. The manner of the difficulty was this, in a class of Shropshire lambs, one lamb who was almost otherwise perfect, had a white spot on his black face. The Texas student disqualified him, on this account, and put him to the bottom of his class. All the other students, on account of his perfect conformation, put him to the top. In this way they lost 50 points for each student, or 250 for the class.

## Ontario Wind Engine & Pump Company's LINES ARE SUPREME



We made our goods good, our users made them famous. We manufacture what our customers say to be the best Kerosene and Gasoline Engines, Wind Mills, Feed Grinders, Saws, Pumps, Scales, Tanks, Water Basins, Standhoists, Well Drills and Pressure Tanks, and we believe they know.

### Grinders that Grind

You can grind more feed on less fuel with our Toronto grinder, than you can on any other grinder of equal size made. It is built low down, with a large hopper. The main shaft is supported with three bearings. The grinder plates are perfect; adjustment fixed.

Get particulars of this grinder, and others equally efficient of O.W.E. & P. Co.'s lines, by sending for our free catalog. It is yours for the asking. Write to-day.

## Ontario Wind Engine & Pump Co., Limited

Head Office - TORONTO

Branch Houses: MONTREAL WINNIPEG CALGARY

N. 17



This is one of the four cups donated for the Best Horse, Beef Animal, Dairy Cow, and Pen of Bacon Hogs shown at the Guelph Fat Stock Show this year.

## THE WINNER

was shown in PERFECT Condition

The difference between the blue and red is often merely a matter of condition. You've often noticed that. Most of the consistent winners at the Fall Fairs will tell you that there's nothing like

## Caldwell's Molasses Meal

for getting an animal in tip top condition in a very short time.

This meal is all food and an easily digested food—the only feed on the market manufactured entirely from Pure Cane Molasses.

We are again offering Silver Cups at Guelph Winter Fair for the best conditioned horse, steer, sheep, and hog. No restriction as to feed.

If you own an animal with breeding enough to win, if shown in first-class shape, it's easy enough to get him there with Caldwell's Molasses Meal. It tones up the digestion without scouring, eradicates worms. You will see that animal piling flesh and bone under a glossy coat in great shape. Ask the man who uses it.

If your feedman doesn't keep it, write to us.

## THE CALDWELL FEED CO. LTD., DUNDAS, ONT.

Molasses Meal, Dairy Meal, Cream Substitute, Calf Meal, Poultry Meals.





**YOUR manners will depend very much upon the quality of what you frequently think on, for the soul is tinged and colored with the complexion of thought.—Marcus Aurelius.**

## Solving the Problem

(New England Household)

By GLADYS HYATT SINCLAIR

WHEN Mrs. Burns had recovered her strength after her breakdown and was quite herself and happier every day in her modernized and beautiful home, Aunt Desire took her departure. She only "helped for accommodation" anyway. Mrs. Burns bravely resumed all the work for the house, herself, Scott, and the four hired men. But even with all the conveniences that Scott had installed, his watchful eyes soon saw the little mother begin to droop again and lose her springy step and pretty color. He insisted upon helping, though his mother protested, knowing the conditions of household help in the country better than he did. After much persuasion on Scott's part and much searching, a girl was hired from a farm eight miles away.

She was capable and strong. She was also homelike and not brave enough to bear it quietly till it wore away. She was not used to a quiet house or to working alone, and Mrs. Burns found her crying every time she left her or an hour, till the kindly woman was ready to cry herself with mingled pity and vexation. Every Saturday afternoon Mina had to be taken home, rain or shine. She was supposed to return with her beau on Sunday evenings, but the least excuse or no excuse at all was enough to delay her till Monday or Tuesday evening—though she would have been scandalized at not receiving her full week's wages. The effort necessary to keep her cheered up and to endure her depressing atmosphere weeks she sent word that she could not return and would Scott please bring her things. Mrs. Burns drew a sigh of relief.

Then Scott got a girl from an intelligence office in the city. Belle was boldy pretty, up to the minute in slang and dress; and the nice fellow who hired her, intent upon his own bit of help, did not realize that he, not the position, was the attraction that lured her so far from soda fountains and picture shows. His utter indifference to her coquettishness soon diverted them to Sam Pyle, the only American among the hired men.

Belle was almost entirely ignorant of housework and cared very little to learn. She was bent solely upon having a good time and complained persistently of the loneliness in the country. Scott raised her wages, hoping to satisfy her, but it did not help much. She only planned for more ready-made clothes, assuming Mrs. Burns' offer to show her how to make them. The evenings when she was not off with Sam to every merry-making far or near, she spent longingly to go somewhere or chattering on the telephone with her friends in the city. Mrs. Burns became more and more tormented with her, and Scott was at his wits' end. Finally

the girl and the hired man went to the city to a dance and did not return till the next day, and Scott, with blazing eyes and few words, discharged them both.

But what to do next? While helping his mother what he could, Scott turned the matter over and over in his mind and evolved a new idea. "Mother," he said, "I believe if we could get a good woman with a child to take care of my night stay and be contented. Would you try that?" Yes, she would try, though she did not feel hopeful; and an advertisement was sent to the city papers. Next day they received an answer.



The Old Fashioned Dust-Pan

and the third day Scott drove to one of the city hotels for Mrs. Harmon.

While waiting he imagined every thing, from another Belle to a frowsy slattern of fifty. As he got to his feet when the door opened, astonishment showed in his blue eyes and his nice, sensitive mouth. Could this be the widow—why, this was just a girl, a little girl, a—pulling himself sharply together—a scared girl. He had braced himself for haughtiness, familiarity, ignorance, arrogance, coarseness, anything but this scrap of a woman who, for all her quiet dignity, could not keep fear from looking out of her brown eyes. She was brushed and pressed to the limit of neatness, but even a man could see that she was pitifully shabby.

"Mr. Burns?" she asked, unsmiling. "Yes," answered Scott, equally grave. "Are you ready, Mrs. Harmon?"

"We—we must go for my baby. I'm very sorry, but I could not bring her here. It isn't far. I'm sorry."

"But why? Surely it will be easier for you to ride there than to walk?"

She looked at him a moment wonderingly, and without a word led the way out. Arrived at the poor place mentioned, a hard-featured woman brought the sweetest-faced two-year-old baby girl in the world, who threw herself upon her tiny mother with baby shrieks and chatters of delight.

"By Jove!" Scott bit back the exclamation and drew his breath hard at the change in the mother's girlish face as her arms closed round the baby, the passion of love and protection that swept the fear from her eyes. Perhaps three absorbed minutes she gave to their joy, then deftly and swiftly put on the child's wraps, paid for her board, thanked the woman sweetly for kindness the child had not received. As she turned to Scott, ready, he saw the shadow of fear again settle on her face. Because of the pitifully inadequate wraps she wore, Scott half buried the two in robes, and, feeling unaccountably ashamed of his rich fur coat and driving gloves, sped Duke for home. Two or three times he started conversation in friendly fashion. She answered pleasantly, but made no effort to continue the talk, and they rode through the bright winter afternoon in silence. The gold brown hair waved softly from under the unpretentious little hat, the wind had whipped a sunset pink into her pale cheeks, the red lips were softly, sweetly curved. What a child she looked! And to be standing alone, fighting the world for herself and her baby.

Kindly Mrs. Burns welcomed the two as she would any strange guests, help with wraps the brown eyes opened wide. While Mrs. Burns set supper on the table and Scott carried the red, amald, in the low rocker before the grate, Baby Laura hugged to her breast. She took in, with appreciative eyes the tasteful furnishings, but when Mrs. Burns asked her to come out to supper she started. "Do you mean I am to eat with you?" she asked.

"Why, of course. Lay baby here on the couch where we can watch her through the arched window when she wakes up so she can have some bread and warm milk. That will make her grow." She smiled her motherly smile, and as the little girl widow turned to lay her baby down she winked back the tears.

"Well, how is it going, mother?" asked Scott next evening, coming in from the barns to find his mother rocking baby Laura and patting her so.

"Splendid, Scott! so far. Carol knows how to work; she kept her own house two years; and she's so thankful to have the baby with her, it's pitiful to see. She doesn't understand that we expect her to be one of the family."

"Why shouldn't I be astonished?" asked a soft voice from the doorway. "I beg your pardon. I couldn't help hearing your last remark. I have done housework in the city two years," she continued gently, "and not one of my employers ever worked in the kitchen with me, or visited with me, or asked me to come into the sitting-room with them after my work was done, as you did to-day. Not one of them ever sat at the table with me or gave me any leisure except Thursday afternoon, and I don't baby in her house for an hour. Do you wonder that I can scarcely believe my luck?"

"Then—do you suppose you will be lonely here? At the hotel you had company."

Carol shivered. "The hotel was awful!" she said. "I went there for the wages because baby's board must be paid. The girls were friendly, but

the one I had to room with was dirty and—horrid. They called me Chick, and the men chafed me so in the dining-room because I couldn't answer them back as the other girls could—oh, I couldn't stand it!" A soft flush covered her face from brow to chin and Scott's own color rose, but his eyes were very bright as he watched her.

Mrs. Burns arose and tenderly laid the sleeping baby in her mother's arms. "You won't be troubled that way any more," she said. "Men in



—And the New

It is not necessary to explain the merits of dust pan number two. This little labor-saving device can be secured almost anywhere that tinware is sold for 18 or 20 cents.

—Photo by an editor of Farm and Dairy.

the country don't annoy girls, unless the girls invite it. And I hope you will stay with us and be happy." "Thank you" was Carol's gentle answer. Then she took the baby upstairs to bed and Scott remembered that she had not looked at him once. She continued not to look at him or the other men, not to speak to them except when her work demanded it. With Mrs. Burns she was friendly and helpful, then affectionate, as she relaxed in the pleasant home atmosphere. She sewed busily or read in her spare time and lost, after a while, the worried look she had brought to the farm.

One day when Mrs. Burns was visiting a neighbor, Scott came home from town and caught the girl mother in a perfect game of frolic with the baby on the floor. He watched a few minutes, his heart in his eyes; but the instant Carol saw him she caught up the baby, tried to smother her own ruffled hair, and all the gay delight died from her face. "You are late," she said. "Shall I get you some dinner?"

Scott strode in and stood before her. "No," he answered. "I don't want any dinner, but there is something I do want."

"What—is it?"

"I want to know what I have ever done to make you so afraid of me?"

"I am—not afraid of you."

"Yes you are. That shrinking, afraid look comes into your eyes if I speak to you and you avoid me all you can. What have I done, Carol?"

"Nothing." You know that. It is not you—it is all men."

(Continued next week)

There ought to be a rest room in every town where farmers' wives could go and be comfortable while waiting for their husbands to finish their business.

## The Upward

### A Christmas

How the last words breathe all the joy and Christmas time!

"Now, when Jerusalem there Bethlehem there Jerusalem . . ."

"Lo, the star which east went before the and stood over where was.

"When they were joined with exceeding

What a depth of in the last few sentences dangers and fatigues, long journey were of tainty and anxiety of est quest was at an ce this must be so, because a beautiful man had lost through so many lot now ceased movements

There did not seem prise or dismay in the distinguished scholar star stopped, not over ace, a beautiful man hotel, but over just the. There they found with the mother text over it, in that dark, place not at all like ern, cleanly, well-lighted



**The Upward Look**

**A Christmas Thought**

How the last words of the following breathe all the joy and gladness of the Christmas time!

"Now, when Jesus was born in Bethlehem there came wise men to Jerusalem . . . .

"Lo, the star which they saw in the east went before them, till it came and stood over where the young child was.

"When they saw the star they rejoiced with exceeding great joy."

What a depth of meaning there is in the last few sentence words! The dangers and fatigues of the long perilous journey were over. The uncertainty and anxiety of their great earnest quest was at an end. They knew this must be so, because that wonderful shining star, their guide and comfort through so many weary miles, had now ceased moving.

There did not seem to be any surprise or dismay in the minds of these distinguished scholarly men that the star stopped, not over a stately palace, a beautiful mansion, or a large hotel, but over just an ordinary stable. There they found the wee baby, with the mother tenderly watching over it, in that dark, dreary noisome place; not at all like one of our modern, cleanly, well-lighted buildings.

But their faith was so great that they never doubted that this little one though born in that strange, unexpected place, was one day to be King of the World. They at once presented their rare precious gifts, the first Christmas present ever given; given, not to dear ones to whom on account of their love, it was a pleasure to give, not to friends, to whom they felt they must give something; not to those from whom they would expect nothing in return; but to this poor, little baby in a foreign land, whom they would probably never see again. But as they knelt there worshipping that it was of the sweetest, happiest, most precious moments of their lives.

Next week there will be told a true Christmas story of presents given, not by wealthy men, in a far-away land, but by lively merry boys in our own home-land, given, too, for the sake of the loved Christ-child.—I.H.N.



**Some Suggestions from "Aunt Fanny"**

Just two weeks until Christmas! I wonder how many readers of Farm and Dairy have everything prepared in the line of Christmas gifts. Not many, I'm afraid. Well, for myself, I don't believe in buying gifts a couple of months or six weeks before Christmas, for it seems to me that the pleasure of buying and making gifts cannot be fully appreciated un-

til the Christmas feeling begins to stir in the air.

It is just as necessary to use considerable tact when selecting Christmas gifts as is the case when making various other purchases. Too often we feel that we must buy an expensive gift for a friend in return for something elaborate they have given us in previous years. Our Christmas gifts should express our goodwill to each other, not obligation or debt. Some one has said "Christmas presents should never express money. They should express thought, personality and temperament." And really it is surprising what pretty things can be made or purchased for a small amount, and when a personal touch is added our friends cannot help but appreciate them.

One way to economize in making gifts is to make several alike to send to various friends. This year I am interested in making calendars. Simple but very artistic are the calendars that can be designed from a sheet of brown or grey cardboard and brightened with a dainty picture. One of cut cellophane on postcards, and these make an attractive finish to a calendar. Then we often come across a good colored print in a magazine that can be used effectively in this manner. Better still, if one has a kodak at their command, a good snap of themselves will be appreciated still more. Another idea which can be worked out with a kodak snap is by placing it in a sterling silver frame, quite small, which can be secured for 25 cents.

**THE COOK'S CORNER**

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

**Recipes**

**Crumb Cake.**—One cup brown sugar, one and two-thirds cups flour, three tablespoons butter. Mix together like crumbs, take out one-half cup crumbs, and add the following to the remainder: One teaspoon cinnamon and cloves, one cup buttermilk, one teaspoon soda, one cup chopped raisins. Mix all together, sprinkle with crumbs, and bake.

**Beet Salad.**—This salad is made from young beets. Cook in boiling salty water, taking care not to bruise or pierce the beets with a fork, in which case they lose color and sweetness. Plunge in cold water, skin and slice. Combine with an equal amount of cut celery; and cover with mayonnaise.

**Potato and Meat Pie.**—Take any kind of cold meat and chop it into pieces about one inch square, or cut it into bits with a knife. Moistened with cold gravy, or use a little hot water. Dot with butter and season well. Put in a baking dish about two inches deep, and spread over the top a layer of cold mashed potato. If the potato will not spread easily cut in thin slices, or mash and moisten with a little sweet milk.

"What's flour gluten, Bud?"  
 "It's what makes your dough rise, Rose."  
 "Yes"—she encouraged.  
**Added Bud very sagely:**  
 "Makes it rise in the mixer and expand in the oven. It's the elastic part of flour—absorbs all the water and milk—and things."

Rose grew interested.  
**"FIVE ROSES, said Bud, is exceedingly rich in gluten. I s'pose because it's all made from Manitoba wheat. Takes up a lot more water—makes those fat loaves—lasts longer too."**  
 "Saves money, doesn't it?" asked Rose.  
 Bud in a big voice:  
**"The fat loaf makes the fat pocketbook."**  
 Use FIVE ROSES always.  
 And Rose said YES.



**Five Roses Flour**

Not Bleached



Not Blended

WINTER MODELS TO PLEASE THE HOME DRESSMAKER

Farm and Dairy patterns shown in these columns are especially prepared for Farm and Dairy's Women Folks. They can be relied upon to be the latest models and include the most modern features of the paper pattern. When sending Farm and Dairy your order please be careful to state bust or waist measure for adults, age for children and the number of patterns desired. Price of all patterns is Our Folks, 10c each. Address all orders to Pattern Dept., Farm and Dairy, P. O. Box 100, Toronto, Ont.



The world of music—what a gift  
Suppose you should wake up Christmas morning to find that some one had put the world of music in your stocking.  
That's precisely what you can do for any member of your family, or any of your friends, if you give an

Edison Phonograph

The new types, without horns, are especially popular just now. They are made in designs from a variety of beautiful woods. The one shown here is extremely moderate priced. It is called the Amberella V. It plays the new Blue Amberol records, with all their remarkable beauty of sweetness and volume, with all their range of program. It is fitted with the diamond reproducing point that never wears out and never needs changing. An Edison is a permanent gift—one that will be a lasting pleasure for year to come. Can you imagine a more practical gift—or one that will bring more real delight to those you love?

Thomas A. Edison  
INCORPORATED  
100 Lakeside Ave., Orange, N. J.

THERE are still a couple of weeks corduroy or velvet. Cut in four sizes, in which you can finish up our 3, 4, 5 and 6 gears.

Christmas sewing and put the Mother's girl requires as much as finishing touches to the various gifts attention, if not more, than her little brothers. A practical school dress is shown in 9753. Plaid gingham in blue and brown tones with brown facings in collar and cuffs, would make a serviceable and becoming frock and would form a neat costume for a girl from 4 to 10 years.



Many a housewife experiences considerable embarrassment and annoyance when a chance visitor appears some morning when she is busy at her work and thinks she had not fit to be seen." This trouble must be avoided, however, if one wears a large apron like the one illustrated that completely protects the dress, and is necessary to go in the door this apron can be easily removed. Excellent fit is given to this apron by the front that extend from the shoulders to the lower edge and by the flared skirt. Cap and sleeve protectors are also very useful. This sizes: small, medium and large.



A simple but attractive gown suitable for general wear is illustrated herewith in cut sizes for dolls 14, 16, 18, 20, 22 and 24 inches in height. So much for dolls.



With the winter season comes the comfortable separate coat, and what we must hang away our suits for a few months. In design 9429 we have a new and popular model of separate coat in "Mackinac" style, showing either low or high closing at neck. Among the materials that could be used for developing this design are: serge, tweed, wool mixtures or diagonal cloth. Five sizes: 34 to 42 inches bust measure.



We must not forget the needs of the small boy. Here is a becoming Russian suit with knickerbockers and shirt in design 9768. In the illustrated mixed cheviot and brown was used. It is also quite suitable for



With the winter season comes the comfortable separate coat, and what we must hang away our suits for a few months. In design 9429 we have a new and popular model of separate coat in "Mackinac" style, showing either low or high closing at neck. Among the materials that could be used for developing this design are: serge, tweed, wool mixtures or diagonal cloth. Five sizes: 34 to 42 inches bust measure.



With the winter season comes the comfortable separate coat, and what we must hang away our suits for a few months. In design 9429 we have a new and popular model of separate coat in "Mackinac" style, showing either low or high closing at neck. Among the materials that could be used for developing this design are: serge, tweed, wool mixtures or diagonal cloth. Five sizes: 34 to 42 inches bust measure.



With the winter season comes the comfortable separate coat, and what we must hang away our suits for a few months. In design 9429 we have a new and popular model of separate coat in "Mackinac" style, showing either low or high closing at neck. Among the materials that could be used for developing this design are: serge, tweed, wool mixtures or diagonal cloth. Five sizes: 34 to 42 inches bust measure.



With the winter season comes the comfortable separate coat, and what we must hang away our suits for a few months. In design 9429 we have a new and popular model of separate coat in "Mackinac" style, showing either low or high closing at neck. Among the materials that could be used for developing this design are: serge, tweed, wool mixtures or diagonal cloth. Five sizes: 34 to 42 inches bust measure.

OUR FARM

Correspondence  
QUEBEC  
SHERBORNE  
LENNOXVILLE, Nov. 21, still prevail, and favor the feeding season, as desired. Price of all patterns is Our Folks, 10c each. Address all orders to Pattern Dept., Farm and Dairy, P. O. Box 100, Toronto, Ont.

TOLEDO, Nov. 21. Weather, almost like that which have not already entered into the weather exceptionally the weather being, as it is, yet been stable. Prices recently graded corn, 62c; wheat, 82c; oats, 45c; butter, 18c; milk, 10c; potatoes, 55c. Owing to the very common fruit bushel—J. A. S. T.

TOLEDO, Nov. 21. Weather, almost like that which have not already entered into the weather exceptionally the weather being, as it is, yet been stable. Prices recently graded corn, 62c; wheat, 82c; oats, 45c; butter, 18c; milk, 10c; potatoes, 55c. Owing to the very common fruit bushel—J. A. S. T.

TOLEDO, Nov. 21. Weather, almost like that which have not already entered into the weather exceptionally the weather being, as it is, yet been stable. Prices recently graded corn, 62c; wheat, 82c; oats, 45c; butter, 18c; milk, 10c; potatoes, 55c. Owing to the very common fruit bushel—J. A. S. T.

TOLEDO, Nov. 21. Weather, almost like that which have not already entered into the weather exceptionally the weather being, as it is, yet been stable. Prices recently graded corn, 62c; wheat, 82c; oats, 45c; butter, 18c; milk, 10c; potatoes, 55c. Owing to the very common fruit bushel—J. A. S. T.

TOLEDO, Nov. 21. Weather, almost like that which have not already entered into the weather exceptionally the weather being, as it is, yet been stable. Prices recently graded corn, 62c; wheat, 82c; oats, 45c; butter, 18c; milk, 10c; potatoes, 55c. Owing to the very common fruit bushel—J. A. S. T.

TOLEDO, Nov. 21. Weather, almost like that which have not already entered into the weather exceptionally the weather being, as it is, yet been stable. Prices recently graded corn, 62c; wheat, 82c; oats, 45c; butter, 18c; milk, 10c; potatoes, 55c. Owing to the very common fruit bushel—J. A. S. T.

TOLEDO, Nov. 21. Weather, almost like that which have not already entered into the weather exceptionally the weather being, as it is, yet been stable. Prices recently graded corn, 62c; wheat, 82c; oats, 45c; butter, 18c; milk, 10c; potatoes, 55c. Owing to the very common fruit bushel—J. A. S. T.

TOLEDO, Nov. 21. Weather, almost like that which have not already entered into the weather exceptionally the weather being, as it is, yet been stable. Prices recently graded corn, 62c; wheat, 82c; oats, 45c; butter, 18c; milk, 10c; potatoes, 55c. Owing to the very common fruit bushel—J. A. S. T.

TOLEDO, Nov. 21. Weather, almost like that which have not already entered into the weather exceptionally the weather being, as it is, yet been stable. Prices recently graded corn, 62c; wheat, 82c; oats, 45c; butter, 18c; milk, 10c; potatoes, 55c. Owing to the very common fruit bushel—J. A. S. T.

What Every Dairyman Needs

A clip to hold the cow's tail while milking. Handy and sure to use. Saves the milkers many a nasty blow in the face from the cow's tail while milking. Sent post paid to any address, with full instructions as to how to use them, upon receipt of \$5 (fifty cents). Address

CHALLENGE COLLARS  
Advise dealer to be the best formation of Water-proofed and made. Ask to see, and see for other. All sizes or direct for \$5.

THE ARLINGTON CO. of Canada, Ltd., 80 PRINCE AVENUE TORONTO

All "ARLINGTON COLLARS" are good, but our CHALLENGE BRAND is the best

Use this on the Farm and in the Home

NO wasting time over a lantern. Wherever you want a powerful light—indoors—outdoors—in any weather—you can get it instantly if you have a

**"NINE LIVES" ELECTRIC FLASHLIGHT**

Just press the button and get a bright, powerful gleam of light in a jiffy. Handy on hundreds of occasions. No flame. No gas. No oil. Always ready. This light is four times as strong as any other and costs but a trifle to recharge. You cannot be without it. Can be recharged in the battery or house. It is made in a powder line.

Mail your order to—  
CANADIAN CARBON CO. LTD., 52 West King St., Toronto

Only \$2.00 prepaid

NEW COAL OIL LIGHT BEATS ELECTRIC OR GASOLINE

10 Days FREE—Send No Money

We don't ask you to pay us a cent until you have used this wonderful modern light in your own home for ten days. Then you may return it at our expense if not perfectly satisfied. We want you to prove for yourself that it gives five to fifteen times as much light as the ordinary oil lamp, beats electric, gasoline or acetylene. Lights and in put out just like the old oil lamp.

**BURNS 75 HOURS ON 1 GALLON OIL**

Gives a powerful white light, burns common coal oil (kerosene), no odor, smoke or noise, simple, clean, safe, explosion, guaranteed.

**AGENTS WANTED**

To demonstrate in territory where oil lamps are in use. Experience unnecessary. Many agents get a average three times a day and make \$100.00 per month. One afternoon. You can make a money making proposition for territory.

**\$1000.00 Reward**

Will be given to the person who shows us an oil lamp equal to this Aladdin in every way (details of offer given in our circular). Would you dare make such a challenge to the world? Let the Aladdin think as to the world's best lighting. We want one person in every territory to whom we can refer customers. Write quick for our 10 Day Guarantee Form, and learn how to get ONE FREE.

MANTLE LAMP CO., 751 Aldine Bldg., Montreal & Winnipeg

Note.—If our correspondent, sign himself "D. N. A." will send a complete address, we will be pleased to forward her a copy of our issue of Farm and Dairy containing the "Nut Contest." The ideas the she requests for New Year's entertainment will appear in our December 28th issue.

Where it is at all possible for children should be given a chance to make a little money for themselves



OUR FARMERS' CLUB

Correspondence Invited

QUEBEC

SHERBROOKE CO., QUE.

LENNOXVILLE, Nov. 30.-Fall weather still prevails, and farmers are rejoicing...

ONTARIO

LEIDS CO., ONT.

TOLEDO, Nov. 25.-We are having ideal weather, almost like summer...

KINROSS, Dec. 1.-This has been an exceptional fall for plowing...

HALIBURTON CO., ONT.

TOLEDO, Nov. 25.-We are having ideal weather, almost like summer...

WINDSOR CO., ONT.

HEMLOCK, Dec. 3.-Corn is hauled and stored. Corn in the ear sells at 30c...

DUFFERIN CO., ONT.

HONTEY, Dec. 1.-The fall plowing is finished. We are having a nice open field for doing repairs and picking stock...

LAMBTON CO., ONT.

WYOMING, Dec. 1.-Almost everything is in good shape for winter. Corn was put in silo in good condition...

LEUZIER AND BOLLETT'S HERDS

A wet, dirty day found Mr. Leuzier doing his usual work with his cattle...

LEUZIER AND BOLLETT'S HERDS

A three-year-old bull named Inka Mercedes Tebbe. At Guelph last year she won first prize in the dairy test...

tically every animal in the sale. They are the big cow of the cows that most breeders are looking for...

The 3d head of their combination herd that was found in the stables of Clarence Hollett are also of the same big, growthy type.

Howitz Girl, age 11 years, their oldest cow, has a high record. She is a big, strong framed cow, with big capacity...

The senior herd sire, King Lyons Hengervold, is well known to our readers. He is an animal of good type and the richest of breeding...

Practically all the mature animals in this herd are bred to our breeders. Mr. Meyer decided that King Lyons Hengervold was the best sire...

Practically all the mature animals in this herd are bred to our breeders. Mr. Meyer decided that King Lyons Hengervold was the best sire...

Practically all the mature animals in this herd are bred to our breeders. Mr. Meyer decided that King Lyons Hengervold was the best sire...

Practically all the mature animals in this herd are bred to our breeders. Mr. Meyer decided that King Lyons Hengervold was the best sire...

Practically all the mature animals in this herd are bred to our breeders. Mr. Meyer decided that King Lyons Hengervold was the best sire...

Practically all the mature animals in this herd are bred to our breeders. Mr. Meyer decided that King Lyons Hengervold was the best sire...

Practically all the mature animals in this herd are bred to our breeders. Mr. Meyer decided that King Lyons Hengervold was the best sire...

Practically all the mature animals in this herd are bred to our breeders. Mr. Meyer decided that King Lyons Hengervold was the best sire...

Practically all the mature animals in this herd are bred to our breeders. Mr. Meyer decided that King Lyons Hengervold was the best sire...

DO YOUR RUBB SCOUR SCRUB WITH Dutch Cleanser

HAS NO EQUAL FOR CLEANING METALWOOD MANY USES & FULL DIRECTIONS ON LARGE SIFTER-CAN

GET YOUR MONEY'S WORTH If you have any money to spend on your home, let us tell you where to buy the things that count.

SMALL HOUSE DECORATING COMPANY 1 Liberty Street, New York, N.Y.

EGGS, BUTTER AND POULTRY For best results, ship your live Poultry to us and also your Dressed Poultry, Fresh Dairy Butter and New Laid Eggs.

Wm. DAVIES Co. Ltd. Established 1854 TORONTO, ONT. Well DRILLING MACHINES

Over 70 sizes and styles for drilling either deep or shallow wells in any kind of soil or rock.

A 2 Leather Sewing Machine for \$1 According to the dictionary, an Awl is a tool for making holes in leather and other heavy material.

THE 2 IN 1 AUTOMATIC AWL

Mr. E. M. Hastings, Lacona N.Y., well known as a Holstein authority, has written a letter of commendation...

The best lot of registered Holsteins ever offered in public auction in Canada were held in Toronto...

SALE TESTS CLAIMED The Southern Ontario Correspondent Sale Co. held their annual sale at Tillsonburg on the first Tuesday after the annual meeting of the Holstein Association.

Dr. W. R. Watson, West Flamboro, Ont. Dispenser and Dealer, 1914 Holsteins, Leuzier & Bollett, Woodstock, Dec. 17th, 1913.

FISHER-FORD Mfg. Co. DEPT. A42 31 QUEEN STREET WEST, TORONTO, ONTARIO. Agents Wanted.



THE CHOICEST SUGAR No choicer or purer sugar can be produced than St. Lawrence Granulated White Pure Cane Sugar.

St. Lawrence Sugar is packed in 100 lb., 25 lb. and 20 lb. nested bags, and also in 5 lb. and 2 1/2 lb. cartons...

ST. LAWRENCE SUGAR REFINERIES LIMITED, MONTREAL.

LEARN TO BE A CHAUFFEUR AND ALL ABOUT GAS ENGINES We give thorough and practical instruction on all kinds of Gas and Gasoline Engines...

EDUCATIONAL DEPARTMENT Y.M.C.A. BROADVIEW BRANCH TORONTO

Wm. DAVIES Co. Ltd. Established 1854 TORONTO, ONT. Well DRILLING MACHINES

Over 70 sizes and styles for drilling either deep or shallow wells in any kind of soil or rock.

A 2 Leather Sewing Machine for \$1 According to the dictionary, an Awl is a tool for making holes in leather and other heavy material.

THE 2 IN 1 AUTOMATIC AWL

Mr. E. M. Hastings, Lacona N.Y., well known as a Holstein authority, has written a letter of commendation...

The best lot of registered Holsteins ever offered in public auction in Canada were held in Toronto...

SALE TESTS CLAIMED The Southern Ontario Correspondent Sale Co. held their annual sale at Tillsonburg on the first Tuesday after the annual meeting of the Holstein Association.



**NOTICE TO HOLSTEIN BREEDERS**  
The business of the Holstein-Friesian Association of Canada has grown so large that it has become necessary to close the registration books for the 31st of December, instead of the 31st of January, as heretofore, in order to allow time for the audit and other preparations for the annual meeting.

At the XXXI of the Herd Book will close on the same date as the financial year, so all breeders who desire to have their records corrected should send to the Secretary before the end of December—W. A. Clemons, Secretary.

**BRANTFORD DISTRICT HOLSTEIN CLUB NOTES**

A well-attended meeting of the board of directors of the Brantford District Holstein Breeders' Club was held in Brantford on November 29th for the purpose of completing organization and laying plans for the future. With over 100 members, large and small, in the territory covered by this club, prospects are good for an organization that will prove of great usefulness to its members. Some 30 of the larger breeders are already en-

Om. 864: 3281 lbs. milk, 15.00 lbs. fat, 15.09 lbs. butter. J. C. Baxter, Brockville, Ont.  
Senior Two-Year-Old Class  
1. Helton Beehive Bonheur, 2671, 25, 6m. 16d; 3261 lbs. milk, 9.41 lbs. fat, 11.72 lbs. butter. Robert G. Lansing, Villa Nova, Ont.

Lakeview Countess Chase, 1673, 25, 6m. 2d; 2946 lbs. milk, 8.07 lbs. fat, 10.09 lbs. butter. Lakeview Farm, Brockville, Ont.  
Junior Two-Year-Old Class  
1. Bonnie Wauve Howmie, 2530, 25, 4m. 16d; 3261 lbs. milk, 9.41 lbs. fat, 11.72 lbs. butter.

Thirty-day record, 7y. 4m. 8d. 1296.5 lbs. milk, 6.19 lbs. fat, 59.34 lbs. butter. F. Hamilton, St. Catharines.

2. Calandrusus Augie, 2001, 25, 6m. 29d; 2321 lbs. milk, 8.85 lbs. fat, 11.07 lbs. butter.

Forty-two day record, 2y. 5m. 25d; 479 F. Hamilton, St. Catharines.

During the month of November 13 official records were received and accepted for entry in the Record of Merit. In the mature class Rawwood Count de Kol Lady Pauline leads with 2815 lbs. butter, while Yronka Queen is first in the senior four-year-olds with 33.79 lbs. butter. In the

**Don't Cut Out**  
ASHOE BOIL, CAPPED HOCK OR BURSTITIS

FOR  
**ABSORBINE**  
TRADE MARK REGISTERED

will remove them and leave no blemishes. Reduces any puff or swelling. Does not blister or remove the hair, and horse can be worked. \$2 a bottle delivered. Book 6, Free. ABSORBINE, the antiseptic ointment for Man, Horse, Veterinary, Allays and cures all skin eruptions, Itches, Itchings, etc. Write for literature. **W. F. YOUNG, P.O. Box 121, Montreal, Can.**

**For Sale—Cheap**

One of the best Dairy Farms in Oxford Co. The Williams Homestead on Ingersoll Gravel Road South, 300 acres, with large stone house, frame house, good barn buildings with cement stable for cows. Now silt, water by good well building soil excellent, mostly rich clay and sandy loam; 5 acres apple orchard; about 30 acres beech and maple woodlands. Living water, valuable gravel pit; fences, wire and rail, chesnut factory, near farm; milk powder factory (Brownsville), 3 miles school, 5y. milk; Culloden Village, 1 mile; inspection invited. For terms apply to **JAMES F. WILLIAMS, INGERSOLL, ONT.**

**Burnside Ayrshires**

Winners in the show ring and dairy tests. Animals of pure strain, imported or Canadian bred, for sale. Long distance 'Phone in house. **R. R. NESS - HOWICK, QUE.**

**4 Pure-bred Ayrshire BULL CALVES 4**

For Sale. Write **W. C. TULLY, ATHELSTAN, QUE.**

**HOLSTEINS**

**Cows Wanted**

Give best prices on fifty head Milking Shorthorns and fifty head Holsteins. Average age, six years. Tubercular free.

**THE DUNBROOK FARM, BEAVERTON ONTARIO**

**RIVERVIEW HERD**

3 Young Bulls from 9 to 14 months, bred by King Isabella Walker, whose sister, 3 nearest officials tested, dams of the sire, from 2 to 20 P.O. dams.

**15,345 lbs. in 1 Year**

For a Jr. 2-year-old, milked twice per day, she is a daughter of Diamond Collette, the sire of 20 P.O. dams, and 2 of her sons are 2nd and 3rd. A pair of his sons from Sir Albert, 2-year-olds, for sale. Cows show bull's old enough for service. Write for pedigree. **J. SAILEY, LACHINE RAPIDS, QUE.**

**FAIRVIEW FARMS HERD**

Is the only place on earth that you can secure a young bull that is a brother to the sire of the cow holding the championship of Canada as well as the Union. 2095 lbs. Sara Leeds Ingersoll, 3rd, first cow in Canada to make over 30 lbs. butter in 7 days per cow. Write for pedigree. **E. H. DOLLAR, HEUVELTON, NEW YORK, NEAR PRESCOTT, ONT.**

**HOLSTEINS**  
**Allison Stock Farm**  
THE HOME OF SIR LYONS SEGIS

His six first dams average 1040 lbs. butter in seven days. In the first three generations he has sows that average 30 lbs. in seven days. We have some beauties of Bull Calves, 4 to 15 mos. old, from this fellow, and out of the following dams:  
No. 1—Dan, May Echo, 23.07 lbs. milk and 1.00 lbs. butter in 365 days.  
No. 2—Dan, May Echo, 23.07 lbs. milk and 1.00 lbs. butter in 365 days.  
No. 3—Dan, May Echo, 23.07 lbs. milk and 1.00 lbs. butter in 365 days.  
No. 4—Dan, May Echo, 23.07 lbs. milk and 1.00 lbs. butter in 365 days.

We have also a few choice ones from heifers that we did not test last year, but intend to this year.  
We have four from cows with seven-day records, that we imported, and sired by De Kol, and sired by a Bull with a 34.70 lb. dam, and the other two by a bull whose dam is a 2 and G. Inks McCrimmon, seven-day record. King Segis, dam, and see them. We have a number to pick from.

**ALLISON STOCK FARM**  
CHESTERVILLE - ONT.

**Lakeview Holsteins**

Bull calves only for sale for the present, sired by Count Hengerveld Payne De Kol or by his daughters and sired by De Kol and G. Inks McCrimmon. Write for extended pedigree of these bulls, or come to Bronte and see them. **W. J. BAILEY, Hagersville, Ont.**

**LYNDENWOOD HOLSTEINS**

Among the Young Bulls we are now offering is a bull bred by Netherlands Favorit, also having the 277-odd 30-day butter record. Also a son of this bull, both fit for service, and some nice Calves nearly fit for service, from Mrs. W. J. Bailey's herd. Also some Heifers for sale, either tested or from tested dams. **W. J. BAILEY, Hagersville Station, Nobor P.O., Ont.**

**ANYTHING IN HOLSTEIN FEMALES**

From 1 week to 6 yrs. old. 73 head to choose from.  
**SPECIAL OFFER!** 10 Heifers rising 2 yrs. bred, and Bulls from 7 to 10 mos. My herd bull is Count Hengerveld, 3rd, first cow in Canada to make over 30 lbs. butter in 7 days per cow. Write for pedigree. **W. M. HIGGINSON - INKERMANN, ONT.**

**Black and Whites are Now Very Much At Home in British Columbia**

Several of the finest Holstein herds in Canada are found in British Columbia. The Holsteins seen in the illustration are representatives of the government record on the Agassiz Experimental Farm.

Other classes there is nothing of special interest. **W. A. CLEMONS, Secretary.**

**SEMI-OFFICIAL RECORDS OF HOLSTEINS FROM NOV. 1ST TO NOV. 30TH, 1913**

1. Daley St. John 8939, 5y. 6m. 10d; 15,892 lbs. milk, 476 lbs. fat, 532 lbs. butter. Owner: James Engelson, Menie, Ont.  
2. Duchess of Burebrue Farm, 4962, 8y. 11d; 15,411 lbs. milk, 428 lbs. fat, 503 lbs. butter. W. E. McKillop, St. Elmo, Ont.  
3. Elsie Mae of Grand View, 1006, 8y. 12,443 lbs. milk, 379 lbs. fat, 474 lbs. butter. Thos. F. Pattison, Thorold, Ont.  
4. Emerald De Kol, 1841, 8y. 11d; 14,179 lbs. milk, 371 lbs. fat, 464 lbs. butter. J. A. Stewart, Menie, Ont.

Four-Year-Old Class  
1. Minnie Moore, 827, 4y. 35d; 13,940 lbs. milk, 442 lbs. fat, 553 lbs. butter. J. P. Forester, White Rose, Ont.  
2. Jane Mockshie, Kewas, 11100, 4y. 10d; 12,565 lbs. milk, 440 lbs. fat, 560 lbs. butter. W. R. Shield, Mount Pleasant, Ont.  
3. Kate Raymond, 10467, 4y. 8d; 11,396 lbs. milk, 377 lbs. fat, 464 lbs. butter. Jas. Engelson, Menie, Ont.

Three-Year-Old Class  
1. Lady Kordecke Blanche, 12885, 3y. 10d; 1,955 lbs. milk, 379 lbs. fat, 429 lbs. butter. Jas. Engelson, Menie, Ont.

Two-Year-Old Class  
1. Pauline's Beauty, Nancy, 16704, 2y. 15d; 1,959 lbs. milk, 359 lbs. fat, 441 lbs. butter. J. P. Walker, Aurora, Ont.  
2. Alma Rose, 16704, 2y. 15d; 1,959 lbs. milk, 359 lbs. fat, 441 lbs. butter. J. P. Walker, Aurora, Ont.  
3. India Jo, 16704, 2y. 15d; 1,959 lbs. milk, 359 lbs. fat, 441 lbs. butter. J. P. Walker, Aurora, Ont.  
4. India Jo, 16704, 2y. 15d; 1,959 lbs. milk, 359 lbs. fat, 441 lbs. butter. J. P. Walker, Aurora, Ont.

**AYRSHIRE BREEDERS FORM CLUB**

Fanclors of the Ayrshire in the Brockville district of Ontario have been joined to follow the example set by the Holstein men and have formed an Ayrshire Breeders' Club. The Secretary is Huntingdon, Que., secretary of the Canadian Ayrshire Breeders' Club, was largely responsible for the organization. Officers were elected as follows:  
President—W. H. McNeil, Lynn, Vice-President—W. H. Newby, Secretary—Arthur Hudson, Lynn; Directors—H. E. DeWolf, Del. W. H. Brudner, Lansdowne; G. W. Percival, Glen Rock; B. N. Henderson, Morton; J. O. Stewart, Dainville; J. R. Lynch, Westport; J. Hamilton, Athens.

**OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS FROM NOV. 1ST TO NOV. 30TH, 1913**

1. Rowwood Count de Kol Lady Pauline, 13462, 6y. 7m. 24d; 4692 lbs. milk, 23.50 lbs. fat, 21.18 lbs. 80 per cent butter. Owner: W. A. Clemons, Bronte, Ont.  
2. Brookland's Kordecke Wauve, 9677, 6y. 11m. 12d; 4677 lbs. milk, 23.50 lbs. fat, 21.18 lbs. 80 per cent butter. Owner: W. A. Clemons, Bronte, Ont.  
3. Calandrus de Kol Ross, 22247, 8y. 6m. 29d; 4774 lbs. milk, 17.59 lbs. fat, 21.97 lbs. butter.  
4. Forten-day record, 6y. 6m. 4d; 815.9 lbs. milk, 35.64 lbs. fat, 42.06 lbs. butter. Lakeview Farm, Bronte, Ont.  
5. A. A. Lorne, 4348, 6y. 5m. 25d; 481.8 lbs. milk, 15.91 lbs. fat, 19.44 lbs. butter. Harry Stuart, Waterloo, Ont.  
6. Jean of Sunnyside, 2641, 6y. 9m. 11d; 422.3 lbs. milk, 14.94 lbs. fat, 18.69 lbs. butter. Robert O. Lansing, Villa Nova, Ont.  
7. Cecilia De Kol Heryl Wauve, 10677, 7y. 10m. 15d; 594.6 lbs. milk, 23.16 lbs. fat, 16.26 lbs. butter. F. Hamilton, St. Catharines, Ont.

**Senior Four-Year-Old Class**

1. Vronka 1903, 1y. fat, 23.79 lbs. butter. Department of Agriculture, Edmonton, Alta.  
2. Senior Three-Year-Old Class  
1. Kollinda Pictet, 1563, 3y. 6m. 4d; 3519 lbs. milk, 10.17 lbs. fat, 15.77 lbs. butter. Munro & Lawson, Thorold, Ont.  
2. Senior Three-Year-Old Class  
1. Pontiac Argus Clothide, 15217, 3y.



This label,  
on every bag,  
identifies  
Canada Portland  
Cement

Make certain of complete success in your concrete work by  
always using

## CANADA Portland CEMENT

We are supplying Canadian farmers with the highest quality of Portland Cement it is possible for human skill to make.

We have reduced the price of Canada Portland Cement until it is within your reach for practically every purpose. It is the only building material that is not increasing in cost.

Be sure and ask for CANADA Cement, in bags

**Canada Cement Company Limited, Montreal**

*If you have not received a free copy of "What the Farmer Can Do with Concrete," write our Information Department and get one. It's a complete practical concrete encyclopedia.*

**See that every bag of Cement you  
buy bears the "Canada" label--it  
is your guarantee of satisfaction**