

101

THE NATIONAL DAIRY

FARM AND DAIRY

The National Dairy Magazine

Christmas and Breeders' Number

December 5th, 1918

Comm. of Conservation
Asst. Chairman Jan 19



A Study in Black and White

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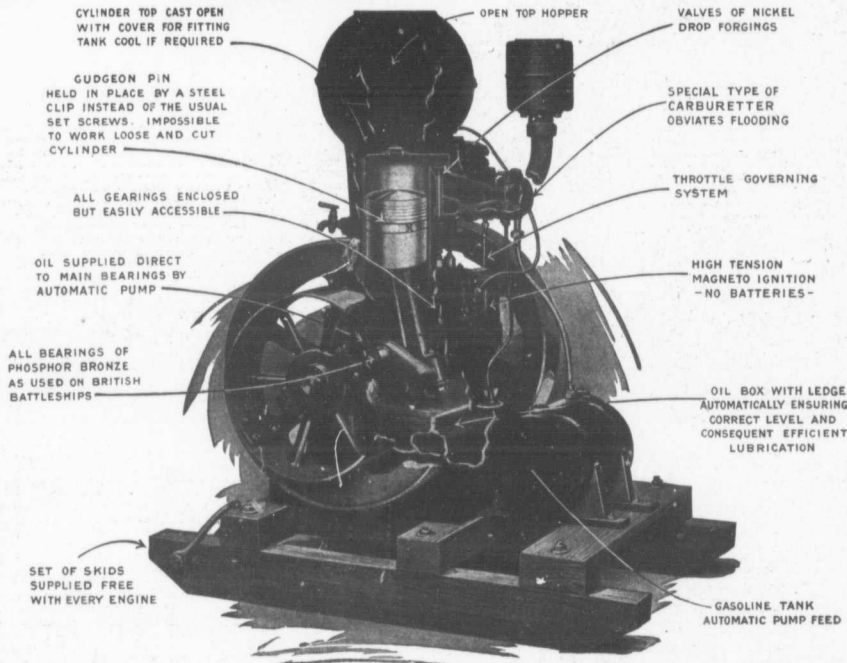
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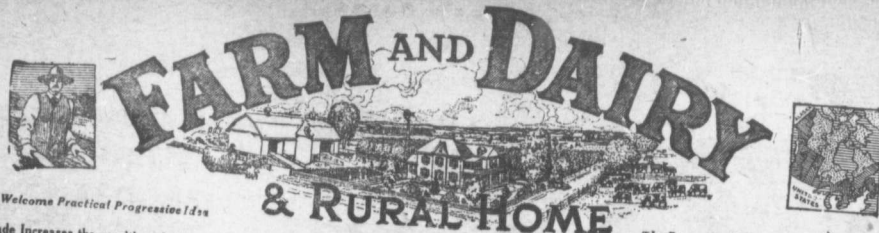
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We Welcome
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VOL. XXX

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We Welcome Practical Progressives!

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. XXXVII.

TORONTO, ONT., DECEMBER 5, 1918.

NO. 49.

A Venture in Live-Stock Prophecy

My Estimate of the Outlook for the Breeder—By Wade Toole, Prof. of Animal Husbandry, O.A.C., Guelph

PROPHESY or prediction is generally more or less dangerous policy and yet when such is applied to the future of the live stock business in a country like Canada the undertaking can scarcely be called a venture for there is little in it that is uncertain. We all believe in the future of Canadian Agriculture. We all know that Canada must continue to progress as a pre-eminently agricultural country. No one disputes these facts. Therefore, we know that the live stock business must for all time continue to flourish for live stock breeding and feeding is the foundation upon which progressive agriculture is built. "What we shall discuss, then, is "the Outlook for the Breeder."

Looking over the past and attempting to peer into the future the student of the live stock situation is compelled to conclude that bright things are in store for the breeder of good stock who understands and stays in his business. It never pays to be an in-and-out-er in any legitimate business. Go in and stay in from the beginning, lead, don't follow. There is not a doubt but the live stock business will have, in the future as it has had in the past, periods of depression but these will always be followed as they always have been by similar up and down and the live stock breeder has his feet to changing conditions just as is the case of the farmer in many another occupation. On the whole, however, prospects were never so bright for the breeder of high-class stock and no breeder should be satisfied with anything but the best.

Why are we led to believe that the Canadian breeder has such good business in store for him? Many are the reasons. When everyone is or has been talking war let us first see what effect the war is likely to have. Almost famino prices have for many months prevailed for table meats and dairy products of a high order. Breeding stock has been in great demand. Breeders, looking ahead, fully realize that some day prices are bound to drop to a certain extent, but they know that war conditions have depleted Europe of her breeding stock to such a degree that America must be looked to for large numbers of foundation breeding stock in the very near future. Up to the end of last year the decrease in live stock in France alone amounted to 2,599,900 head of cattle, 4,383,000 sheep and 14,000 hogs. In normal times France carries over fourteen million cattle, nearly seven million pigs, and about sixteen million sheep. Nearly one-third of her cattle are gone, away over one-third of her pigs, and much more than one-third of her sheep. Belgium's two million cattle and one and one-half million pigs are gone. Russia is practically starved of her million cattle and million pigs, together with nearly four million sheep have been stolen and slaughtered. Rumania is stripped bare. Even the United Kingdom has suffered and while we in America are consuming dairy products and meats less than half the normal supply. This means that when the war clouds clear away and transportation facilities are available Europe is sure to call upon America for more meat and dairy products for table use, and undoubtedly for breeding stock of all classes to rebuild her home supplies. Not only has the war affected the supplies of milk products and meat in the warring nations, but it has also had a severe effect on the live stock business in many of the neutral countries. Denmark, the great bacon producer, has only a small fraction of her usual holdings of breeding hogs. All neutrals are practising conservation to stave off starvation. And so it goes.

In Canada and the United States, under increased demands from Europe, it has been impossible to build up greater herds and flocks. High prices have prevailed and high prices, lasting over a period of years, tend to increased slaughter. For instance, 600,000 lbs. of beef a year to Europe. Last April alone, she exported over 13,000,000 lbs. Europe has been going very short of butter along with her products. I need not go further along this line. Readers will see on the face of it that demand for dairy products and meat must be great for years to come. Herds and flocks cannot be rebuilt in a breeder's world are putting forth every endeavor to increase their breeding stock the big markets will ever be hungry for more meat and milk. The ultimate end of all breeding effort is dairy products or the butcher's block. Demand for these products will always have an effect upon the demand for breeding stock. At present our numbers can do so and meet the demands from Europe in the very near future? Not likely.

Some here are, vegetarians, perhaps, who prate about the changed tastes of people, tastes which have been forced upon them by the war and war prices for the products of the dairy and for meat. They say that people have learned to eat substit-

utes and will continue, and that the demand for milk, butter, cheese and meat will be injured. Non-sense! Did you ever see a man who had spent seven years in the frozen north where he had never seen a strawberry consume this luscious fruit when first he got out to where it was procurable? And I don't believe he enjoyed the berries any more than will those who have been sipping up, under clean milk, nourishing cheese, juicy steak, tender and toothsome leg of lamb. There is likely to be a great re-act-ion, and those people feel that they can have their fill of their favorite dishes that they can than likely to miss most of the substitutes good-by and return to their old friends.

It has not occurred to most of us that we have right here in Canada a rapidly increasing urban population, as compared to rural. These city dwellers must be fed. According to our own Government statistics there was an actual decrease of 34,336 in Ontario's rural population from 1872 to 1912, while the urban population in the same time was increased 1,664,417. In ten years more before the war the rural population of all Canada increased only 17.1 per cent, while the urban increased 62.2 per cent. The trend of population, even in this so young country, is cityward and will continue to be so. No one should be fooled into thinking that the great majority of the returned soldiers will return to the farm. Not so. Large numbers of them will agree with the returned hero, who, when pressed to take up new land, replied: "What have I done to deserve such a penalty?" True, those who desire to do farm and have a taste for it should be encouraged, but the vast majority will more than likely choose intercourse and pleasure. After many months of hell the soldier will look for a few years for a place of comfort and amusement, and no one can blame him. What is said of Canada is true of the United States. City population in that country has for years been growing more rapidly than the production of the comparatively smaller numbers on the farm. The demand for choice dairy products and good meat are sure to be greater year after year.

The demand for meat and milk and the demand for breeding stock to replenish the herds and flocks purchased stock. He is the great improver. To him more rapid gains, by his efforts earlier maturity, economical production of milk and its products are made possible. He it is who has been responsible for the 20,000 lb. dairy records, the twelve-hundred-pound two-year-old steers, the two-hundred-pound six-months bacon hog, and the lamb you like so well. These could never have been without the purebred men who breed pure-bred stock.

Will the day ever come when the pure-bred stock will be so generally owned that there will be no extra profit in their ownership? No such tendency is noticeable. In a farm survey conducted in a good township in old Ontario it was found that only nine per cent of the farmers were breeding pure-bred stock. In another survey of conditions in a dairy district it was found that only slightly over fifty per cent of the dairymen keeping dairy milk records were using pure-bred stock, and the best records were using pure-bred stock, and the best prove that a good deal of mislabeled work is done necessary before all have seen the light. There is

Christmas: A Prayer

Born anew dear Lord, be born again,
Unto the hunger of the sons
men!

Whose famine is too bitter to be fed
By any lower food than sacred bread,
We thirst for hope and tasting, drink
Thee, O Christ!

We choke for joy denied a barren lot,
We crave for love and starving thro
Thee, O Christ!

That may or may not pay love's
price,
Our trembling hands, in firm have lost
the wit
To give Thy holy cup, Lord give us
it!

Fill it with strength despair'd of by
Fill it with brimming rest the weary
seek,

Out of the chalice let the lonely
drink,
Restrain the wild soul crouching on
Of shameful purposes, that he man
knows,

Watch Thou the desert where the
desperate goes!

Unto white hearts give purity anew;
And of the false the power to be
true;

Wipe away all tears from the eyes
And to all sorrowing hearts Thy comfort
speak,

Give us the friendly shrinking and
apart,
The happy throbbing of the Christ-
mas heart.

—Elizabeth Stuart Phelps.

Dairy Type and Milk Production

All Great Producers Have Certain Characteristics in Common—Would a Study of These Modify Judging Standard?

PROF. H. BARTON, Macdonald College, Quebec.

TYPE in dairy cattle and milk production are related. Form and function in the dairy cow are inseparable. To make these statements simply to state the relationship between type and effect. In other words, a fifty pound milk cow with a ten pound udder, or a ten pound rib, or a ten pound anything else of vital importance in form, does not occur.

The so-called dairy type is supposed to be the sum total of desirable indications. The desirable indications are the peculiarities of form upon which the ability to perform work in producing milk depends, and conversely they are the cumulative result of this work. Their interdependence is very complex, some of them are extremely hard to measure, and because of these two considerations there are many disappointments in making calculations of production for a given set or combination of them. Failure in calculation, however, does not necessarily condemn the standard. Moreover, type in dairy cattle includes more than milk indications. It includes indications of strength, wearing ability, and breeding. It is but natural, therefore, that in the consideration of form as a whole there will be conflicting evidence and confusion in calculation.

The cow's middle is a positive indication. Every one knows that a cow, to be a big producer of milk, must be a big consumer of food. It cannot be made out of anything else. Other things being equal, if we can denote evidence of feeding ability in a cow we have a first indication of performance. It is an established fact, that the feeding capacity of a cow can be estimated. As with many other features there are a number of indications, but above all, there is the room in the digestive cavity. In other words, the length and spread of ribs is the most vital indication. General appearance of vigor, the size of the mouth, etc. are all indicative, but the depth and size of middle count for most. Middle may be taken as positively related to milk production. It alone, however, will not suffice.

Dairy Temperament at the Turning Point. An abundance of food will supply the material, but after digestion it must still be turned to the right account. A certain amount of it will always be taken for body maintenance. This will be about the same requirement for all cows. The rest will go for one of two purposes—it will be made into flesh and fat, or it will pass on for making milk. The factor that has most to do in determining the quantity in each direction is the temperament of the cow. Obviously production. It is put down in the standards as serious temperament. In some sense a misnomer, and for this reason frequently misinterpreted. The temperament of the cow has reference to her disposition. Her disposition depends upon her nervous system.

Its control, in turn, depends upon her brain. The brain controls the nervous system and governs the functions throughout. What is meant would be one extreme. It is not sluggishness, which is a highly organized system under complete control capable of the fullest response to treatment. For years the cow has been studied and treated with a view to improving her in milk production. Gradually but surely she has been brought to the point where she is able and willing to perform extraordinary feats. Her responsiveness, her energy, and her certain peculiarities of form and appearance are regarded as manifestations of the so-called nervous temperament. The brain cavity, as observed externally, should show capacity. This is evidenced by said to be almost an index in this regard, as is also the general expression or the countenance if you like, and by the suggestion of angularity and openness in conformation as contrasted with filling, smoothness and compactness.

Efficient and Capacious Udder Indispensable. Assuming that the milk making ingredients have reached the circulation after digestion, that they are

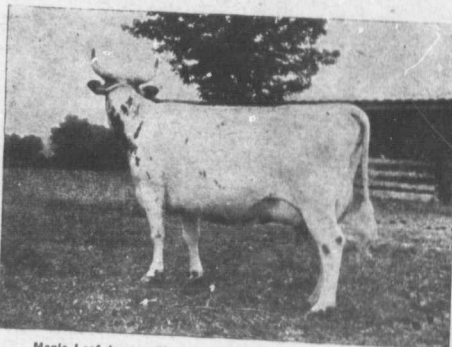
being turned over for milk, this being the active function, the process of actual milk making will be accomplished in the milk making machinery, the udder. Large work will undoubtedly require large and efficient machinery. Capacity in the udder, therefore, is imperative. Length with extension behind and on front depth and width, uniform throughout, giving what is known as balance, will ensure size. There still something necessary for capacity and for efficiency—quality. It will not suffice to have an udder of the required dimensions. It must contain a working process, and making is a cell secreting process, and the working part of the udder is a complex cell system. A highly developed system is evidenced externally in the peculiarity called quality. A quality udder is one of fine fibre in its body, and in its covering, the skin and hair, as well as one of a cellular make up which can be detected in large measure by the exterior of hand. There is one other feature in the udder which must not be overlooked, and that is its muscular strength. It must contain muscle enough to ensure a firm attachment and wearing quality.

Constitution is vital. Large milk production makes an enormous demand upon the cow. As compared with her beef sister or the steer, the demand upon her is at once apparent that if strength is

of importance in the case of the steer it must be of producing cow. The nervous energy of the cow sustained she work possible, but in order that it be vital organs, which account for a continued healthy condition under severe strain, must be strong enough for the heavy work upon them.

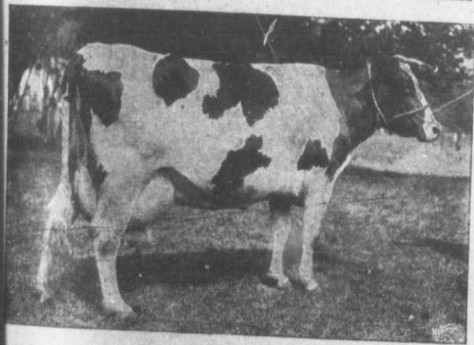
With the increased development in milk production, the increased lactation period and continuous exposure to disease, this consideration is becoming more and more important. Constitution indication is a distinct feature in type. Its character will be met noticeable in many details of the cow, but will be the chest cavity. In estimating chest development, anatomists are often misled by condition and by not matter. A large girth does not necessarily mean a well developed chest. The size of the chest, its filling size of the animal, her condition, and her other peculiarities of conformation. Finally, constitution or any consideration of isolated indications. The indications portend that others, should be the final basis.

(Continued on page 13.)



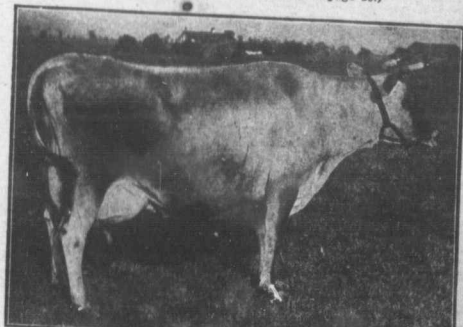
Maple Leaf Jean, a Fine Combination of Type and Production.

This splendid Ayrshire cow, owned by Gilbert Mathlan, Huntingdon Co., Que., proves by her performance the essential relationship between good dairy type and producing ability. In Record of Performance she produced 13,493 lbs. of 3.5% milk as a Junior four-year-old. In the show ring she was first as a three-year-old at the National Dairy Show and was grand champion female at Ormstown last spring.



Aurora Mechthilde, a British Columbia Cow With a Record.

This model Holstein, owned by the Experimental Farm, Agassiz, B.C., affords further proof of the close relationship between type and production. At the Vancouver Exhibition last August she was first in a class of 16 mature cows and grand champion dairy female over all breeds. She is credited with 25.8 lbs. of butter in seven days and 18,126 lbs. of milk, 292.6 lbs. of butter in R.O.P.



Sunbeam of Edgeley: Where Would She Go in the Show Ring?

Sunbeam also proves the relationship between type and production. She has every essential of good dairy type highly developed. She has produced 18,744 lbs. of milk and 958 lbs. of butter fat, making her the highest cow of any breed or age in R.O.P. In minor points, however, she would not qualify as a high class show cow. Should judging standards be modified with a view to performance and reproduction? Prof. Barton develops this subject in the article adjoining.



The Dairy Herds of America May be Called Upon to Supply Breeding Stock to Devastated Europe.

Agriculture In and Near No Man's Land

Observations in France by a Former Associate-Editor of Farm and Dairy — *By Sergeant A. B. Cutting, B.S.A.*

THE agriculture of No Man's Land and of the country immediately behind the lines in France, is interesting and unusual. While not so exciting as the war, farming over here is sufficiently distinctive to be quite exciting at times in the warring areas, to say nothing of its quaintness and peculiarities where peace reigns. A few facts and fancies regarding it from one who a few years ago was one of the assistant editors of Farm and Dairy may furnish a diversion from reports and stories of the war.

I have had no time, while "soldiering" here, to study the agriculture of the country in a commercial or scientific way. Conditions in the war zone and customs of the people in more peaceful districts, that I happened to observe at odd times and places, are all that I can tell at this time.

War's Devastating Touch.

The agriculture of No Man's Land is mostly nonexistent. By "No Man's Land," I refer not only to the area that at any moment lies between the allied and Hun lines, but to all France that this year has been the scene of battle. Every foot of such land has been a No Man's Land at one time or another. Farming was carried on there this year in a few sections that remained quiet long enough for preparing the soil and sowing the seed, but the swaying of offensives from March to September so trampled under foot or pierced with holes the promise of crops that the harvest was small, compared with what might have been. Sufficient was salvaged, however, to make the work of harvesting worth while. Everyone knows which side did the harvesting after the middle of July.

Let the readers of Farm and Dairy picture in their imaginations going to one of their own grain fields at harvest time and finding it full of shell holes, rifle pits and cover "dug in" by soldiers, of telephone wires on the ground and, perhaps, some barbed wire, to say nothing of trenches, even graves, and most of the grain trampled flat, and they may be able to realize the difficulties, even at times uselessness, of cutting grain in fields that have been the scene of battles in France. All degrees of these conditions prevailed, from crops completely ruined to fields almost free from damage. Near the old established trench systems, the land has been so cut up by shell and trench and so covered with barb wire entanglements that it is impossible to attempt farming in any way, even if other conditions permitted.

Destruction of Orchards.

To agriculture in No Man's Land, the "unkindest cut of all" is the wanton destruction of orchards everywhere that the Hun has been. Nearly every tree not ruined already by shell fire has been felled or irreparably damaged by axe or saw. Even vineyards have been levelled to the ground. Magazines and daily papers have told so often and well stories of the devastation that spreads like

a gigantic blight over the once fair fields of northern France that I shall not further attempt to describe it.

In definite and delightful contrast to the desolation of No Man's Land lie the fields of France, away and intensively. Every effort is made towards a maximum production. And the wonder of it all is, to me, how they manage to till such large areas do by the practice of almost primitive methods—they practice and implement like pioneer days in Canada—even on their poorest land, clayey, shaly, stony, to be sure; extensive farming, as known in Canada, is not practised.

Rural Community Life.

Farming sections are not laid out with a home peasants, live in community villages, and their farms lie outside and around the villages, many of them a considerable distance. With church, school and stores nearby, social conditions are ideal, but much time and labor are lost going to and from the land and clean inside, sanitation outside usually is bad.

The buildings often are grouped with courtyard houses facing inwards, the front doors of the wells for generations has been on the surface, unboxed and untiled, making that part of the yards wet and sloppy the year around. Manure is seldom hauled to accumulate to any extent, however, being permit, but the manure pile thereby is not robbed much of its hygienic menace or its aroma. The same might be said of conditions on many farms in Canada.

The Quiet Villages of France.

Near streams and almost hidden by trees, these villages nestle quaintly at short intervals all over

the country. The red tile roofs and white plaster walls of the houses; the tile roofs and mud walls hewn by hand; the thatched roofs and walls of many smaller buildings; the old mill on the hillside; the cattle, the donkeys and the goats, even the farm people themselves, lend an air of quaintness and romance to these places that captivates and lingers. And not less picturesque is the fact that those red roofs have been bent and broken by the "weight of centuries" upon their backs.

Three things strike the eye forcibly when viewing the farm landscapes outside the villages. First, is the terraced hillsides. Apparently the Frenchman does not like working up and down hills, even moderate slopes. Instead, by terracing, which must be a long, laborious job, he transforms the hillside into a series of level fields that look like broad, natural steps, ascending from earth to skyline. Wherever practicable, the rises, as well as the troughs of these steps, are cultivated.

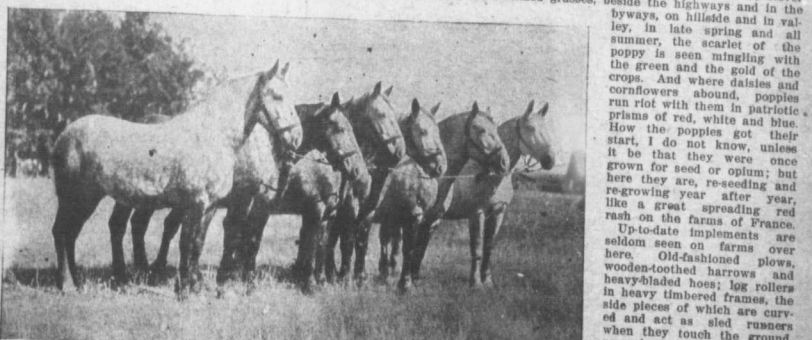
The second thing that attracts especially is the "crazy patch work" appearance of the farms. A number of various sized, shaped and colored little plots, all unfenced, appear seen (not town) together into a gigantic natural crazy quilt. Pleasing as the scenic effect is, one cannot help wondering if the practical effect on production of wheat, barley or clover on the same farm, is equally spoiled by a similar number of like areas of potatoes, barley or clover in the centre of a larger square of potatoes, probably done to camouflage from soldiers the position of the more enticing crop.

Where Poppies Grow.

The third thing that particularly strikes the eye in farming districts over here are poppies, everywhere. In the grain fields, in alfalfa, clover and mixed grasses, beside the highways and in the byways, on hillside and in valley. In late spring and all summer, the scarlet of the poppy is seen mingling with the green and the gold of the crops. And where daisies and cornflowers abound, poppies are seen in patriotic prism of red, white and blue. How the poppies got their start, I do not know, unless it be that they were once grown for seed or opium; but here they are, re-seeding and re-growing year after year, like a great spreading red rash on the farms of France.

Up-to-date implements are seldom seen on farms over here. Old-fashioned plows, wooden-toothed harrows and heavy-bladed hoes; long rollers in heavy timbered frames, the side pieces of which are curved and act as sled runners when they touch the ground, no pole being used; ground, and act as sled runners when they touch the ground, that are sharpened by beating the edge on a stone with a hammer, sickles, gradles and flails are among the things of

(Continued on page 13.)



For This Great Draft Breed We Are Indebted to France.

Percherons now, however, are owned more extensively in America than in the country of their origin. This string was photographed on the ranch of Mr. Geo. Lane, of Alberta, who is said to own more registered horses than any other three men in the world.

FARM AND DAIRY

Feeders Corner

Conducted by E. S. Archibald

Barley as Horse Feed

THIS year we were seeding down a large part of the farm and to give the seeding every chance we grew a lot of barley and very little oats. We have about 200 bushels for horses feed. How about barley? In what proportions should the oats be mixed with the barley to make it a safe feed?—S. W. Northumberland Co., Ont.

Our experience has shown that barley is an excellent grain for horses but is worth from 5 to 10 per cent less than an equal weight of oats. An excellent mixture is: Two parts whole oats, two parts whole barley, and one part wheat bran. If the horse's teeth are not sound it will certainly pay to crush the barley. The grinding of barley is not good as it induces a pastiness when mixed with saliva, which is objectionable to the horse. The writer prefers giving some wheat bran with the grain mixture as a laxative and general tonic, but if this is not available equal parts barley and oats, preferably crushed, is used.—E. S. A.

Sweet Clover Silage

WE have been growing sweet clover with great success. When it comes to curing it for hay, however, we have had no success. What ever, we have had no success. What kind of silage would it make? Should it be cut for silage at the same period as for hay? My thought is that if the weather were favorable, we could cure sweet clover for hay and if not favorable we could put it into the silo and feed it out later in the summer or even feed for winter. What is its feeding value as compared with corn ensilage?—B. W., Perth Co., Ont.

The writer has had no experience whatever with ensiling sweet clover. However, since it compares so closely with alfalfa probably the same general procedure and results would apply. In making alfalfa ensilage it is absolutely necessary that the alfalfa be cut before it is too mature, say when it is one-third in bloom. It is necessary to keep this from curing by placing it in the silo as quickly as possible after it is cut. If it is at all dry it will be necessary to add water when going into the silo. Many experienced farmers prefer using some other crop, such as green oats or corn, mixed with equal parts with the alfalfa. This undoubtedly is an assurance against bad ensilage. Generally speaking these rich protein crops are more difficult to keep in the silo and as a rule do not make as high grade ensilage as will corn.—E. S. A.

Utilizing Barley Straw

WHAT you suggest a ration for a mixed herd of Jersey and Holstein grades? We have a limited amount of hay, nothing like enough to carry to spring if fed freely. We have lots of barley straw and about 150

bushels of mangels per acre. On hand we have a fair supply of bran, shorts and barley chop. I would like a ration for from 20 to 40 lbs. of each of the dry cows that are dry or milk, and also to cows that are dry or near dry. We can't conveniently near dry. We have the straw cut.—H. F. Wellington Co., Ont.

Barley straw for milk cows is of somewhat lower value than oat straw but is very much superior to the straw from other cereals. I would advise feeding at least four pounds per cow per day of hay and the balance of the dry roughage might be fed as barley dry roughage mixed with the oat straw. This might be given after the roots and meal in the morning and the refuse thrown back from the manger into the above roughage, should be given from five to nine pounds of meal composed of bran, shorts, bar ration composed of bran, shorts, barley chop, equal parts, plus 15 per cent cottonseed meal or linseed oil meal. In addition to this these cows should have from 30 to 50 pounds of mangels per cow per day, depending on the needs of the individual animal. The feeding of meal to the dry cow would depend altogether on her condition. For some six weeks before calving should be given at least three pounds per day of the above grain mixture. If dry for several months she might be maintained by liberal feeding of mangels and half the straw she requires, with the addition of three or four pounds of hay per day.—E. S. A.

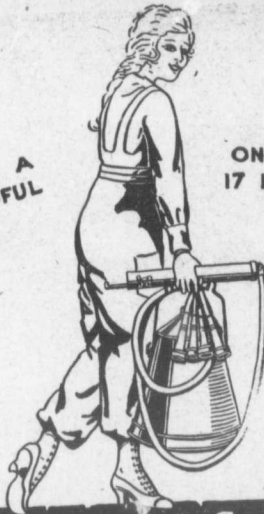
Two Meals or Three for Pigs

SOME months ago I read an article in Farm and Dairy from a man in Ontario of the county advocating just two meals a day for hogs with a feed of roots at noon. With Mr. Archibald's opinion of this method of feeding hogs as to whether or not it is an economical plan. How many pounds of roots could I feed profitably to a half a dozen sows hogs weighing about 120 lbs. We have a good supply of mangels.—P. F., Dundas Co., Ont.

Experience in feeding a large number of hogs for a number of years on the Dominion Experimental Farms has shown that with the exception of recently weaned young pigs, there is no great advantage in feeding three times per day, providing, of course, that when fed twice per day the hours are equalized. Although careful feeders may obtain somewhat greater gains from feeding three times, yet the extra gains and profit is but slight. Generally speaking, we strongly advocate the twice per day feeding. The number of pounds of roots which might be profitably fed depends largely upon the method of feeding. Pigs weighing about 120 pounds could probably consume at least eight pounds of mangels per day. These may be fed separately either after the meal ration both morning and night, as an extra feed at noon, or with the meal mixture at each feed.—E. S. A.

Envy is the vinegar in the sweet milk of human kindness.

JUST A HANDFUL



Show me the Cows

THE REST OF THIS STORY WHICH MEANS MONEY AND TIME TO YOU IS TOLD IN THE NEW HINMAN MILKER BOOK WHICH CONTAINS 50 PHOTOGRAPHS FROM LIFE.

WRITE US FOR IT
H.F. BAILEY & SON, GALT, CAN.

DAIRYMEN

We solicit shipments of Churning Cream from all points by Canadian Northern, Dominion or Canadian Express.

We supply cans, pay Express Charges and pay highest prices by Money Order every two weeks. Our books show a large increase yearly in patronage.

Write Us—It will pay you.

Cobourg City Dairy - CREAMERY DEPT. - COBOURG, Ont.

THE "QUALITY LINES" OF FARM MACHINERY

Machines Made to Stand Up and Do Their Work Well

JOHN DEERE-DAIN SYSTEM SIDE DELIVERY RAKE

"Makes Better Hay—Nature's Way"
JOHN DEERE-DAIN HAY LOADER

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JOHN DEERE ONE HORSE STEEL CULTIVATORS

"Made to Do Their Work Well and Are Quickly Adjusted"
JOHN DEERE SYRACUSE SPRING TOOTH HARROWS

"Can Be Used Profitably in All Kinds of Ground"

HOOVER POTATO DIGGERS

"Get All the Potatoes and Save Labor"

HOOVER POTATO PLANTERS

"The Visible Planter With Automatic Feed Control"

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"Cuts Large and Small Potatoes in Proper Number of Pieces"

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JOHN DEERE VAN BRUNT LIME AND FERTILIZER SOWERS

"Even Distribution Assured"

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"Give Accuracy—No Weaving"

JOHN DEERE CULTIVATORS

"Assure Clean and Thorough Cultivation"

JOHN DEERE BEET TOOLS

"They Save Labor and Make Production Profitable"



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FREE!

To Every Man who is building or remodelling his barn

THIS BT Barn Book shows you how to build your barn from start to finish, tells how to make the foundations, how to lay the cement floors and how to build the walls, how the cattle-stands can be made so they will not be cold, shows the best and most economical methods of laying out the floor space and putting in the stabling, shows right and wrong ways to remodel an old barn; shows how to ventilate barn and build cupolas for the roof. It tells how to frame the barn by a method that saves half the cost of the old way; shows how two men and a team can hoist the bents to position. You can build or remodel your barn yourself with this book to help, because every point is clearly illustrated by full-page photographs and blue print working plans.

This new 352-page book

This is the most elaborate and complete book on barn building ever published in Canada. It contains over 125 views of modern barns. Photographs of up-to-date barns were obtained in all parts of this country, and have been reproduced with full-page and double-page cuts, which show clearly every detail of construction. There are useful tables, showing the best measurements for Mangers, Gutters, Cattle-Stands, and Passages, costs of cement work, best sizes of doors and windows, amount of ventilation for different kinds of stock, capacities of silos, capacities of mows. There are also working plans for 14 different barns and exterior views of the completed barns. Best construction for Hog House is fully illustrated.

BT Galvanized Steel Stalls, Steel Horse Stable Fittings, Steel Cow Pens, Calf Pens, Steer Pens, Bull Pens, Manure and Feed and Hay Carriers, and Water Bowls are shown in actual use in many barns. Complete specifications for Stable Equipment which are useful in getting proper quotations from manufacturers.

This book is printed in colors and is bound with hard covers. It is not a mere catalogue. It is a work of reference, which you will prize and keep for years. It is considered authoritative on the subject of stable and barn construction. A copy of it should be in the hands of every man who is thinking of building or remodelling a stable, or who is going to put in the Sanitary Steel Stable Equipment.

Mail Coupon

Thousands of dollars were spent in obtaining information, plans, photographs for this book, and in printing it.

Yet we offer it without charge to any man who will write and state if he is building or remodeling this year, when he expects to start the work, and the number of head of stock he keeps. If you are building or remodeling next year, or later, you will receive the Barn Construction Section of the Book, this is the part which will interest you most until you are ready to go ahead. It is a neatly bound book of 80 pages.

Simply fill in the blanks of the coupon, and you will receive the Barn Book by first mail. You do not obligate yourself in any way.

The high cost of printing the book has forced us to limit the quantity. Make sure of your copy by sending for it to-day.

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GENTLEMEN—Send me your new 352-page Barn Book, without charge or obligation. I have filled in the blanks below.

Are you thinking of building a barn?.....

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When will you start?.....

How many cows, horses, or young stock will you keep?.....

Put an X after the kind of Sanitary Stable Equipment you are interested in.

(Steel Stalls.....) (Steel Horse Stable Fittings.....)

(Manure Carriers.....) (Water Bowls.....)

(Hay Carrier.....)

Your Name.....

P.O. Province.....

Section..... Township..... Range.....

WHITE LIGHT FROM COAL OR GAS OF Electric

You can now make your home bright and cheerful and SAVE ONE-HALF ON OIL. Tests by Government and leading Universities prove this wonderful new Aladdin is nearly five times as efficient as the best round wick flame lamp. BURNS TO HOURS ON ONE GALLON common coal oil. No odor. No smoke or noise. No pumping up, easy to operate, won't explode. Won't GO AWAY. Guaranteed.

TRY IT TO NIGHTS FREE

Prove for yourself without risk that this remarkable white light is really better than any other. If not entirely satisfied, return it at our expense. \$1000 REWARD will be given to anyone who shows us an oil lamp equal in every way to this new Aladdin.

GET YOURS FREE! We want one user in each locality to whom we can refer customers.

In that way you may get your own without cost. Write quick for 10 DAY FREE TRIAL OFFER and learn how to get one FREE.

MANTLE LAMP CO., 224 Madison Bldg., MONTREAL OR WINDSOR.

Send for literature immediately. Our trial delivery plan makes it easy. **NO MONEY REQUIRED.** We start you. Sample sent for 10 days free trial and GIVEN FREE when you locate a distributor.

MAKE MONEY SPARE TIME OR FULL TIME!

PEERLESS PERFECTION

In all that represents strength, character, real worth, permanency and the elements which builder and buyer recognize as the stamp of honest accomplishment,

The Peerless Perfection Fencing

stands every test. Made by the open hatch process, all the impurities are burned out of the metal, thus removing one of the greatest causes of rust. The remaining one is so thoroughly that it will not flake, chip or peel off. Every intersection of the wire in our farm and poultry fence is locked together with our Peerless lock. While these locks



hold the wires securely together, yet this fence can be readily adjusted and perfectly stretched over uneven ground. It's easily erected and on account of heavy, stiff stays used, few posts are required.

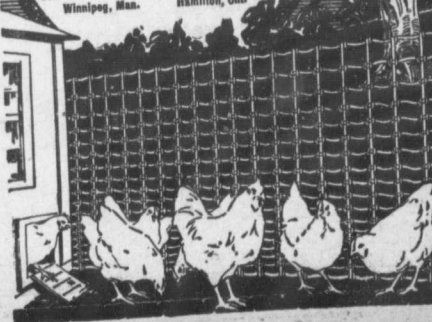
PEERLESS Perfection Poultry Fence

is true to its name, a perfect fence strong enough to keep strong animals out and close enough to keep even small poultry in. Every Peerless fence kept even small poultry in. Every Peerless fence is guaranteed against rust, and stands lock and stand lock of your dealer unconditionally.

PEERLESS Ornamental Fencing

for lawns, parks, cemeteries, etc., are handsome. Also lawn borders, flower bed guards, trellises, etc. Send for Catalog and get familiar with the best and most serviceable fencing to be had in the Dominion. Go and see it at your local dealer's store. Dealers nearly everywhere. Dealers wanted in unassigned territory.

The Banwell-Hoxie Wire Fence Co., Ltd.
Winnipeg, Man. Hamilton, Ont.



The Show Ring and Ayrshire Advancement

Does the Average Breeder Recognize His Debt to the Exhibitor?

Gilbert McMillan, Huntingdon, Que. (in The Ayrshire Quarterly).

WE question very much whether any supporter of any of our improved breeds of live stock makes as great sacrifices, or does as much good for his chosen breed as the man who consistently and persistently exhibits a string of high class animals on the Fair circuit, and we also question very much whether or any one gets less general credit from his fellow breeders, too few of them recognizing that the effort extended along this line benefits the breed as a whole, even more than it does the exhibitor.

No matter what advertising individual breeders may do, or Mr. G. McMillan, or any other, who may do, or

effort a breed association may put forth, or even what production records a breed may make, let it drop out of the show ring for a few years and see if it continues to make progress. I do not want to create the impression that the show ring alone will make the breed popular; for as a matter of fact, if the show ring standards get divorced from the functions for which the breed has been commercially developed, it will work to its ultimate injury. Neither do I under-rate for one minute the great good accomplished by the "Advanced Registry." The records of such cows as "Garland's May Mischief," "Auchebraun Brown Kate," and "Lily of Willowmoor" have done wonders in emphasizing the possibilities of production within the breed, and the splendid average made by the 2,655 cows and heifers that have qualified in the Advanced Registry have qualified the commercial worth. But as long as our Advanced Registry qualifications are based entirely on production, irrespective of cost, we cannot expect to accomplish anything that cannot be equalled by at least some of our rivals.

Where Ayrshires Triumph.

However, it comes to a line up at our Annual Shows, the Ayrshires have more than one occasion given us to see that their rivals have advanced; therefore, I say emphatically that the strongest single factor for the advancement of the Ayrshire breed to-day is the show ring, and so long as our show ring standards combine true Ayrshire type with indications of capacity and efficiency in production, it will continue to be so. That this breed does not occupy a stronger position to-day is due mainly to two causes. First, the indifference to what the show ring can accomplish for the breed, by some of our strongest and largest breeders. For a good many years the brunt of the showing has had to be borne by three or four really good herds, the good which they accomplished being largely offset by another class, exhibitor which went out with a herd whose sole object was to fill as many classes as possible and to dodge competition, and in this way pick up some easy money; happily, this class is now almost a matter of history.

Second, the great lack of uniformity in making the Ayrshire awards. It is no unusual occurrence for the same animals in a class to be placed entirely differently three or four times in as many weeks, the standards be-

ing set by the fact of whether the class is a Guernsey, Jersey, or Holstein specialist.

I have followed the bigger American shows pretty closely for the last thirteen years, and I can almost count on the fingers of one hand the times I have seen the placing made by any Ayrshire breeder. Why, you may be deploring a type that other dairy breeds are willing to try and imitate, it is a little hard to reason this out, to a logical conclusion. The remedying of the second class will, I believe, go a long way towards overcoming the first, and when for two or three Ayrshires hard on exhibit at our big National and State Exhibitions; then, and not till then, will the Ayrshire Cattle her proper place in the Dairy Cattle world, and it is up to no one but the Ayrshire breeders themselves to see that it is accomplished.

Live Stock Information Bureau

THE Department of Agriculture of New Brunswick, has established a live stock information bureau under the chief of the Live Stock Division. This information is classified and filed. This information is given to farmers who are looking for animals to purchase. The service is proving a great help to the breeders of pure-bred stock, as well as to those who desire to improve their farm animals.

A statement of the live stock available in the province is issued once a month to all the agricultural societies and breeders of the province, and to others regarding the location and price of animals. This monthly statement is revised from returns made to the Department by breeders on forms sent them for the purpose.

Silo Demonstration Work

By R. J. Ferris, Silo Demonstrator for British Columbia.

THERE is an increasing desire by the farmers of British Columbia to become acquainted with the merits of silage as an aid to the cheap production of live stock. Our operations have covered to a large extent the southern part of the province. The initial policy of the Branch of placing the silos in the outlying districts such as the Okanagan, Arrow Lakes, Kamloops, etc., instead of the more thickly populated part of the province, has proved a first-class method of advertising, with the result that they are now being built more rapidly. The offer of assistance to the first farmer in each District who erected one of the type of silos which was recommended, has been taken advantage of by 30 per cent of the Farmer's Institutes. There are still a large number of Institute districts where they have not yet begun to feed silage to their cattle. Silage is an economic necessity, and the modern dairy farm especially does without a silo; especially does this apply to British Columbia with its varying temperatures.

A circular entitled "The British Columbia Farmer and his Silo" was compiled, and the information therein given has led to a large number of farmers building silos. There has also been a large demand for the booklet entitled "Silos and Silage." Twenty-three silos have been erected by the Department representatives, and 13 have been filled.—Agricultural Gazette.

The whale gets into trouble only when he starts to blow.

Send your order to nearest branch.

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half a century! Ask for price. Packed in convenience.



Ask for price.

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Ask for price.

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Scientific Refining

En-ar-co National Motor Oil

Made by "Graduate Workmen"

Our scientific refining processes eliminate even the possibility of carrying residue or coke-like substances in the oil. In the making it first comes off in the form of a distillate or vapor. This is condensed into a liquid and then further refined and filtered. Thus we produce an oil that is ALL OIL—oil that assures a motor's greatest strength and power.

Order it by the barrel or half-barrel—the economical way. Be sure that you have an adequate supply of this dependable oil. Order now, or ask for prices f. o. b. our nearest branch. Thus you can buy at today's prices. Prices will not be lower—that we guarantee. Buy it in barrels, half barrels or steel drums or half drums—the economical way.



En-ar-co National Light Oil

Buy Your Winter Supply Now

A bright, clear light—without charring or sooty chimney—is assured when you use this oil in lamps or lanterns or oil stoves. Buy it by the barrel. Be ready to meet fuel shortages with an oil stove.



This "better oil" insures uniform heat with no smoke, no smell. It does not leave a carbon deposit to clog wick and burner.

Also best for incubators and brooders and the most economical tractor fuel.

Send your order now or ask for prices f. o. b. our nearest branch.

En-ar-co Motor Grease

For Every Grease Point



It is no longer necessary to have a special grease for compression cups, another kind for differentials, and still another grease for transmissions.

En-ar-co Motor Grease will give perfect lubrication for all purposes, all around the motor car or tractor.

Our refining experience of half a century has made this grease possible.

Ask for prices f. o. b. our nearest branch. Packed in convenient 25-lb. Screw-Top Cans.

White Rose Gasoline



The Powerful Motor Fuel You can't afford to use ordinary gasoline these days. You want "White Rose." It has made a sensational record for dependability, power and extra energy. It gives your motor "dash" and "pep" and results in a greater satisfaction than you have ever known.

Ask for prices f. o. b. our nearest branch.

Black Beauty Axle Grease



Here is the best axle grease ever made. We've been making it for nearly a half century. It now has world-wide sale. It contains no compounds to clog and gum. Packed in useful galvanized pails.

Ask for prices f. o. b. our nearest branch.



'Til the Boys Come Home

NOW to plan for the return of our fighting men—to keep their jobs open just a few months longer. They are eager to get back. They are looking forward to positions awaiting them.

Over 80 En-ar-co boys are in service. Many of them were salesmen. Soon, we hope, they will be renewing old friendships—calling on you! But until then we must all "keep the home fires burning" by doing business through the mail as much as possible. We must "carry on" for them.

Will You Do Your Part?

Buy of your local dealer if he has En-ar-co Products in stock. If he cannot supply you, then mail your order direct. Let the mail take the place of the salesmen who have brought us victory. Your check with order saves bookkeeping and helps to hold another job open. It also entitles you to a cash discount.

Now is the logical time to stock up with goods you will need during the next few months. Railroads will be congested with food and materials. Don't neglect buying now, for we guarantee that prices will not be lower inside of one year. If your present needs are supplied and you cannot secure En-ar-co goods near home, send your order for next spring's requirements, inclosing check dated ahead. We will protect you on present prices.

Use This Coupon If Your Dealer Cannot Supply You

Send This Order Coupon Now!

Canadian Oil Companies, Limited
1225 Excelsior Life Building, Toronto, Ontario

My Dealer _____
located at _____ cannot supply me. Please ship the following from your nearest branch.

- Gallons En-ar-co National Motor Oil
- Gallons White Rose Gasoline
- Gallons National Light Oil
- Pounds En-ar-co Motor Grease
- Pounds Black Beauty Axle Grease

My Name is _____
Street _____
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Canadian Oil Companies, Limited

Branches in 36 Cities

General Offices: Toronto, Ontario

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Dairy Matters of National Importance Deal With At Ottawa

A National Dairy Council Organized—Changes Suggested in Legal Standards of Dairy Products—Scales of Points Adopted for Scoring Cheese and Butter—Definitions Accepted for Different Grades of Butter, Cheese and Cream—Other Important Matters.

THE three outstanding accomplishments of the four-day national dairy conference, held in Ottawa last week, were:

First—That the delegates succeeded in forming the long discussed and desired National Dairy Council for form of organization agreed upon and preliminary expenses provided for.

Second—A number of important changes were suggested in the legal standards for dairy products, as used by the Inland Revenue Department. These apply to milk, cream, homogenized milk, homogenized cream, ice cream, condensed milk, butter and cheese.

Third—Scales of points were adopted for scoring cheese and butter which it is proposed shall be used throughout Canada. Grades for cheese were decided upon and their standards. Grade standards and grade descriptions of cream were adopted.

Recommendations Made.

A number of other important matters were dealt with and decisions reached. Among those concerns which definite resolutions were passed were the following:

It was decided to request the various Provincial Governments to enact legislation at an early date requiring milk producers to be paid for milk according to its butter fat test.

The Dominion Government will be asked to release at the earliest moment possible all soldiers in any way connected with the dairy industry.

Now that the war is practically over the Dominion Government will be asked to rescind the regulations permitting the sale of oleomargarine.

An effort will be made to impress upon milk producers all over Canada the importance of buying pure bred dairy sires only from breeders who can show reliable records of the milk and fat produced by the dams of the animals offered for sale.

As a means of helping to prevent the rapid spread of tuberculosis among swine the Dominion Government will be requested to make it compulsory to pasteurize or sterilize all dairy factory by-products.

The appointment of a dairy commission composed of butter experts was favored for the purpose of investigating the requirements of various export markets.

The pasteurization of milk or cream in the manufacture of all butter made

in Canada was recommended.

The conference was convened by the Dominion Dairy Division, the expense being met by the Government. Dairy Commissioner J. A. Baudick presided throughout. The meetings were held in the Chateau Laurier, and the delegates included representatives from all branches of the dairy industry in all the Provinces, including the producers. As the men present were recognized leaders in their respective fields and had had many years of experience, much more rapid progress was made in the discussions than otherwise would have been the case. Some resolutions were passed with little or no discussion, the attitude of the delegates concerning them being well known. In some cases the decisions reached were ahead of the views held by many dairymen, such, for instance, as the one favoring the payment for milk by butter fat test and the one recommending the pasteurization of whey. The object in passing these resolutions was that they might be used to educate public opinion and pave the way towards obtaining the reforms aimed at.

LIST OF DELEGATES.

The following is a list of those who were present:

Dairymen's Association of Western Ontario—James Donaldson, Atwood.

Frank Boyes, Dorchester; W. G. Modd, R.R. No. 1, Woodham, Ont.

Dairymen's Association of Eastern Ontario—J. A. Sanderson, Oxford Station; T. A. Thompson, Almonte; R. G. Leggett, Newboro.

New Brunswick Dairymen's Association—L. B. Vincent, Racine, Shefford Co.; J. P. Laconraire, St. Hyacinthe; J. P. Cox, Greenlay, Que.; George K. Cayar, St. Hyacinthe.

New Brunswick Dairymen's Association—W. H. Huggard, Norton; J. P. Simonds, Moncton, N.B.

Nova Scotia Dairymen's Association—D. W. Murray, Scotsburn, N.S.; Harold Falconer, Stellarton, N.S.

P.E. Island Dairymen's Association—J. Walter Jones, Bunbury Farm, Charlottetown, P.E.I.; J. F. Profit, Kensington, P.E.I.

Manitoba Dairymen's Association—Walter J. Cummings, Winnipeg; Alex. MacKay, 509 William Avenue, Winnipeg, Man.

Saskatchewan Dairymen's Association—W. A. Wilson, Sask. Co-operative Creameries, Regina; O. W. Ander-

sen, Humboldt, Sask.

Alberta Dairymen's Association—E. T. Love, Manager, Woodland Dairy, Edmonton, Alta.; P. Fallesen, Calgary Central Cheese Factory, Calgary.

Ontario Milk Producers' Association—E. H. Stonehouse, Weston, Ont.

Montreal Milk Shippers' Association—James Winter, Ormatown, Que.

Ayrshire Breeders' Association—W. F. Stephen, Huntington, Que.

Jersey Breeders' Association—B. A. Bull, Brampton, Ont.

Ice Cream Manufacturers' Association—J. Bingham, Ottawa Dairy, Ottawa, Ont.

Milk Distributors—C. B. McNaught, City Dairy, Toronto, Ont.

Canadian Creamery Association—Mack Robertson, Belleville, Ont.; W. G. Jackson, Simco, Ont.

Milk Condensers—W. D. Strach, 108 Hudson Street, New York, U.S.A.; J. D. Laing, Brockville, Ont.; S. B. Trainer.

P. E. Island Department of Agriculture—Fraser T. Morrow, Charlottetown, P.E.I.

Nova Scotia Department of Agriculture—W. A. MacKay, Dairy Superintendent, Truro, N.S.

New Brunswick Department of Agriculture—H. W. Coleman, Dairy Superintendent, Sussex, N.B.

Quebec Department of Agriculture—E. Bourbonnais, St. Hyacinthe, Que.

Ontario Department of Agriculture—G. A. Putnam, Department of Agriculture, Toronto, Ont.

Manitoba Department of Agriculture—L. A. Gibson, Winnipeg.

Saskatchewan Department of Agriculture—Percy Reed, Regina, Sask.

Alberta Department of Agriculture—C. Marker, Calgary, Alta.

British Columbia Department of Agriculture—T. A. F. Wiancko, Victoria, B.C.

Chief Dairy Instructors, Ontario and Quebec—Frank Horns, London, Ont.; G. B. Pablow, Kingston, Ont.; A. Trudel, Quebec.

Dairy Schools—A. T. Charlton, St. Hyacinthe, Que.; L. A. Zufelt, Kingston, Ont.; H. H. Dean, Guelph, Ont.; K. G. MacKay, Saskatoon, Sask.

Montreal Produce Merchants' Association—E. H. Hodgson, Montreal, Que.; P. W. McLagan, care Lovell & Christmas, Montreal, Que.

Official Butter Grader for Ontario—J. H. Scott, Municipal Abattoirs, Toronto.

Bacteriologist, O.A.C., Guelph, Ont.—Prof. T. H. Lund.

Department Trade and Commerce,

Ottawa—Dr. A. McGill, Dominion Analyst.

Officials of the Department of Agriculture, Ottawa, including George H. Barr, Chief of the Dairy Division, and F. Hingston.

THE NATIONAL DAIRY COUNCIL.

OF long years there has been a widespread desire in Canada for some form of a National Dairy Council that would unite the various branches of the dairy industry in a strong central organization, capable of speaking for the industry as a whole.

This desire has grown rapidly during the past couple of years and was intensified by the oleomargarine situation and the recent action of the Food Board in commandeering dairy butter.

At the conference last week the matter was first brought up for discussion in the form of a resolution moved by L. A. Zufelt, urging the formation of a National Dairy Council, and seconded by W. A. Wilson.

This resolution was debated at some length. It was not accepted as worded, but the idea of forming a council was approved and a committee was appointed to deal with the matter.

At a later session this committee reported that it had been moved by T. A. F. Wiancko, seconded by E. H. Stonehouse, and unanimously agreed, as a tentative provisional arrangement, to recommend that the National Dairy Council be composed of two representatives from each Province, one representative from each Province to be a producer of milk, and that they add to their numbers as follows:

Four representatives of the cheese industry, three from the east and one from the west; three representatives of the butter industry, two from the east and one from the west; three representatives of the milk distributors, two from the east and one from the west; three representatives of the cream and milk producers for city trade, two from the east and one from the west; two representatives of the ice cream manufacturers, one from the east and one from the west; one representative of the condense series, and that these thirty-four representatives elect from among themselves a president and vice-president.

Official Butter Grader for Ontario, west, and four members of the executive from Eastern Canada, and three members of the executive from Western Canada, the men from the east

(Continued on page 24.)



The Delegates who Attended the Dominion Dairy Conference, and Organized a National Dairy Council.

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Tractor Questions

As asked by the Department of Agriculture of the United States and answered by Manufacturers of Farm Tractors.

Tractors vs. Horses

What different kinds of farm work can tractors be used for at least as efficiently as horses?

TRACTORS can be used as efficiently as horses for all kinds of farm work for which tractive power is required, excepting the cultivation of corn, cotton or other crops sometimes designated as "row" crops, for which, to obtain the most efficient results, a tractor cultivator, specially designed, will be found most efficient.—Emerson-Strattingham Co.

Tractors can perform all of the following functions as well if not better than horses: Discing, performing all operations in preparing the seed bed, treading, orchard cultivating, harrowing, operating engine machine, road building and maintenance, wood sawing, pumping.—General Motors Truck Company.

THERE is no question but what tractors can be used as efficiently or more efficiently than horses for nearly all kinds of farm work. This applies especially to plowing, which is in reality the basis of all farm operations, and is perhaps the hardest farm work that has to be done. It is none the less true, however, in case of other farm work such as discing, harrowing, etc., where it is possible to load the tractor to very nearly its rated capacity, and thereby enable one man to do more work than the same man can do with horses. The tractor is also more efficient than horses for use in hot seasons of the year, or in the rushed spring, summer, and fall work. If horses are permitted to remain idle for any length of time, it is necessary to give them time to become accustomed to hard work before they can deliver their maximum amount of power. With the tractor, it is possible to do as much work the first day it is used after a period of idleness. In the case of work as light cultivation, mowing, hauling hay to the mow or barn, horses can be used to good advantage.—International Harvester Co.

Given a tractor of the right design, weight, and balance, tractors may be employed at least as efficiently as horses and in many cases much more so, for plowing, discing, harrowing, seeding, pulling binders, and, of course, all kinds of belt work.—La Crosse Tractor Co.

ALIGHT tractor of proper construction that will ordinarily pull the same size load that can be pulled by five or six horses can be used more economically on two horse work than can two horses, for the reason that this type tractor can be made to do all the work and thereby eliminate feeding additional horses for 12 months in the year so that they will be available for use for a short time. If the statement is true that as many man power hours are practically as many horse power hours are required for cultivation as are required for plowing, discing and harrowing, also when taking into consideration that mowing, binder work and other light work is being done at the same time the cultivation takes place, the tractor that works those seasons of the year can not help but be economical for all work. Tests have been made that prove a tractor such as the one above described can be used for doing two horse work more economically than two horses.—Moline Plow Co.

Truth is mighty—mighty incontestant to the horse trader.



GIVE USEFUL GIFTS

EVERYBODY prefers a gift that is really useful, to some pretty but purposeless novelty. So that it is easy to be patriotic and comply with the Government's earnest plea—Give Useful Gifts.

This applies equally whether you are buying the gift for yourself—as a "treat" after the harvesting—for your friend or relative who may be "over there" for months yet, or for the folks here at home.

The GILLETTE Safety Razor

THE USEFUL GIFT

If it were only the custom to tell your friends what you would appreciate as a gift, how many more men would own a Gillette—a really useful gift that constantly reminds the person to whom it is given of the giver's thoughtfulness—day after day, for at least the few minutes occupied by the most pleasant of shaves.

Make all your gifts USEFUL, with the Gillette heading the list where men are concerned. For men who already own a Gillette, the gift of a few packets of blades never fails to win appreciation.

Your jeweler, druggist and hardware dealer is showing Gillette Sets at five dollars. Christmas mails for Europe will soon close.



Gillette Safety Razor Co
of Canada, Limited,

MONTREAL 402

BOOKS FOR WINTER READING

The winter is your opportunity for doing some winter reading on any subject of farm interest. Here is a list of a few of the farm books in Farm and Dairy Library. All these are catalogued and are among the best published.

Dairy Farming
Feeds and Feeding
Day's Book on Swine

Modern Gas Tractor
Model T. Ford Car
Automobile Questions and Answers

These and several hundred others are listed in a good descriptive catalogue that you can secure from Farm and Dairy by dropping us a postal. Price of each book is indicated in our catalogue and will be sent postpaid on receipt of price. Write for our catalogue to-night.

Library Department

Farm & Dairy, Peterboro

Let Us Give You the Facts

About ACCO Spray Powder

Fruit growers, vegetable growers and florists have been the judges in the critical and practical tests of "ACCO SPRAY POWDER." They have been willing to accept it on merit only—"clean fruit and healthy foliage." This year more than 300 times as much "ACCO" was used in 1918 and 1917. Here are a few of the many unolicited testimonials from our customers:

Fruit

The Acco Chemical Co.,
23 River Street, Toronto.

Dear Sirs—
For more than forty years I have been battling with a large apple tree on my lawn at Greenwood St., Toronto, which year after year produced no sound fruit, but a continuous pest of worms. By accident a friend recommended me to try your Acco Spray Powder, which I did with the most gratifying results. For the first and only season the tree produced a large crop of St. Lawrence apples, all sound and free from this worst pest, and I wish that all apple growers would try your wonderful remedy for destroying fruit trees from all kinds of troublesome pests.

I have written you this unolicited letter in the hope that its great worth may be known. One season's trial will prove its value to all fruit growers.

You may make any use you like of my letter, and I will be much pleased if it results in bringing the merits of your Acco Spray Powder to the farmers and fruit growers of the Dominion.

Yours very truly,
(Signed) PETER RYAN,
City Registrar.

City of Toronto Registry Office,
September 23rd, 1918.

Vegetables

The Acco Chemical Co.,
Toronto, Ontario.

Dear Sirs—
We are glad to report that your Acco Spray Powder was thoroughly tested this spring and summer at our Northport factory, both on Tomato vines and Potato plants, and we found said spray very effective in destroying potato blight and early blight. Trace of injury either to the potato plants or tomato vines.

Yours very truly,
(Signed) J. LAING STOCKES,
Northport Canning Factory,
Northport, Ontario.

British-Canadian Canning Co.,
Toronto, Sept. 19th, 1918.

Flowers

J. Curry, Esq.,
Acco Chemical Co., Ltd.,
23 River Street, Toronto.

Dear Sirs—
After using your Acco Spray Powder on my rose bushes I thought that you might be interested in knowing just what success I have had with your product.

Up to this year, although having a great many different kinds of bug killers, I have never had the least bit of success. Invariably at least 50 per cent of my blooms have been destroyed. This year, up to the present time, I have only used two sprayings of your powder, making a level teaspoonful to a gallon of water, and have failed to find so far any blights that has been touched in the least by bugs. The two sprayings have certainly done the work with quickness and dispatch. I have quite a number of large double roses which grow thickly together and which are beautiful when in full bloom. Previous to this year I have never been able to pick more than a half dozen roses from these bushes that were free from insects. I have now been able to pick a large number of blooms in perfect condition.

Your product is so simple to use and gives such excellent results that I would not think of experimenting with anything else in this line.

Yours very truly,
(Signed) G. S. FULLINER.

Toronto, Ontario,
June 27th, 1918.

It isn't too early to plan now for your spraying material. Fruit growers anticipate heavy "setting." Available shipping will open big markets. The man with clean fruit will get the prices. In justice to your crops use

ACCO Spray Powder

It is the most effective protection against insects on the Canadian market. It is inexpensive—cheaper than Paris Green or Arsenate of Lead; simple and easy to apply, and light in shipping weight. Acco Spray Powder has proven, used according to directions, will not injure the tenderest foliage. Fruit companies used over 21 tons more in 1918 than 1917. This and such letters as the above are the proofs of entire satisfaction.

For sale by all Hardware and Drug Stores.

ACCO CHEMICAL CO., Ltd.

HAROLD F. RITCHIE, Toronto
Distributors for Canada

Toronto, Ont.

The Makers of

WISH YOU

Acco Spray A Merry Xmas
and a
POWDER Prosperous 1919

Proposed Farmers' National Platform

Council of Agriculture Meets at Winnipeg—Drafts Outline of a Progressive National Platform—Independent Farmers' Party Not Favored—Planks of Platform

FOR several days last week the Canadian Council of Agriculture met in session in Winnipeg and drafted a proposed "National Farmers' Platform" that advocates numerous progressive measures. The launching of an independent farmers' party at this time to carry this platform into effect was not favored. Inform into effect was that the policy instead it was advised that the platform that has proved so successful hitherto in the West, of working through the candidates should be followed. Freedom of choice in this matter, however, was left for the provinces to decide and to refer to local conditions. Representatives were present from the provincial farmers' organizations in the three prairie provinces and Ontario. The Ontario delegates were R. W. Burnaby, of Jefferson, president of the United Farmers' Cooperative Co., Ltd.; J. J. Morrison, secretary of the United Farmers of Ontario, and Manning Doherty, of Malton. Hon. T. Crerar, Dominion Minister of Agriculture, was in attendance.

The Platform.

The platform as adopted for submission to the provincial conventions, which will be held during the next few months, for final ratification, was, with the exception of a few explanatory paragraphs, as follows: The Canadian Council of Agriculture hereby recommends the following measures:

(1) A League of Nations as an international organization to give permanence to the world's peace by removing old causes of conflict.

(2) We believe that the further development of the British Empire should be sought along the lines of partnership between nations free and equal, under the present Governmental system of British constitutional and democratic government. We are strongly opposed to any attempt to centralize Imperial control. Any attempt to set up an independent authority with power to bind the Dominions, whether this authority be termed a Parliament, Council or Cabinet, would hamper the growth of responsible and informed democracy in the Dominions.

The Tariff.

(3) Whereas the protective tariff is the most wasteful and costly method ever designed for raising national revenue, because for every dollar obtained by levy for the public treasury at least three dollars pass into the pockets of the protected interests, thereby building up a privileged class at the expense of the masses, thus making the rich richer and the poor poorer.

And whereas the protective tariff has been and is a chief corrupting influence in our national life because the protected interests, in order to maintain their unjust privileges, have contributed lavishly to political campaign funds, thus encouraging political parties to look to them for support, thereby lowering the standard of public morality;

Specific Recommendations.

Therefore, be it resolved, that the Canadian Council of Agriculture, representing the organized farmers of Canada, urges that as a means of remedying these evils and bringing about much-needed social and economic reforms, our tariff laws should be amended as follows:

(1) By an immediate and substantial all-round reduction of the customs tariff.

(2) By reducing the customs duty on goods imported from Great Britain to one-half the rates charged under the General Tariff, and that under the General Tariff, reductions further gradual uniform reductions be made in the remaining tariff on British imports that will ensure com-

plete free trade between Great Britain and Canada in five years.

(3) That the reciprocity agreement of 1911, which will remain on the United States statute books, be accepted by the Parliament of Canada.

(4) That all foodstuffs not included in the reciprocity agreement be placed on the free list.

Free Agricultural Implements.

(5) That Agricultural implements, farm machinery, vehicles, fertilizers, coal, lumber, cement, illuminating fuel and lubricating oils be placed on the free list, and that all raw materials and machinery used in their manufacture also be placed on the free list.

(6) That all tariff concessions granted to other countries be immediately extended to Great Britain.

(7) That all corporations engaged in the manufacture of products protected by the customs tariff, be obliged to publish annually comprehensive and accurate statements of their earnings.

To Be Heard in Public.

(8) That every claim for tariff protection by any industry should be heard publicly before a special committee of Parliament.

As these tariff reductions may very considerably reduce the national revenue from that source, the Canadian Council of Agriculture would recommend that in order to provide the necessary additional revenue for carrying on the Government of the country, and for the bearing of the cost of the war, direct taxation be imposed in the following manner:

Direct Tax on Land Values.

(1) By a direct tax on unimproved land values, including all natural resources.

(2) By a graduated personal income tax.

(3) By a graduated inheritance tax on large estates.

(4) By a graduated income tax on the profits of corporations.

(5) That in levying and collecting the business profits tax the Dominion Government should insist that it be absolutely upon the basis of the actual cash invested in the business, and that no consideration be allowed for what is popularly known as "watered stock."

(6) That no more natural resources be alienated from the Crown, but brought into use only under short-term leases, in which the interests of the public shall be properly safeguarded; such leases to be granted only by public auction.

Care of Returned Soldiers.

(5) With regard to the returned soldier we urge:

(a) That it is the recognized duty of Canada to exercise all due diligence for the future welfare of the returned soldier and his dependents.

(b) That demobilization should take place only after return to Canada.

(c) That first selection for return and demobilization work be made in the order of length of service of those who have definite occupation awaiting them or have other assured means of support, preference being given relative need of industries, with care to insure so far as possible the discharge of farmers in time for the opening of spring work upon the land.

(d) That general demobilization should be gradual, aiming at the discharge of men only as it is found possible to secure steady employment.

The Obligation of Employers.

(e) It is highly desirable that if physically fit discharged men should endeavor to return to their former occupations, and employers should be

(Continued on page 46.)

Those Pictures from Home

"If they only knew the pleasure they bring us
* * * * I am sure they would come."

*Translation of an extract from a letter written by
a young Belgian soldier to a friend in America.*

"And often I must take in my hand, the pictures from home. I look at them all, one after the other, and they speak to me. Then I am once more at home—I listen, and I live again. It would be too much for me to write you all that they say. But above all, they say to

me, 'Au revoir.' I find them all a little thinner, and Father and Mother a little grayer of hair. *Tiens!* if they only knew the pleasure they bring us, these pictures from home, there would not be one remaining in Belgium. All the pictures would rush towards us; even if they had to pass through the electrified wire of the frontier, or if they had to swim through Yser Canal, I am sure they would come."

GUSTAVE GEBOERS

L. 282 2me Compagnie Armée Belge en Campagne



GUSTAVE GEBOERS

IN THE FRENCH

Et chaque fois je dois prendre les portraits de chez moi en main. Je les regard tous, l'un apres l'autre et tous me parlent. Alors je suis de nouveau à la maison, je les écoute et je revivis,—ce serait trop de vous écrire, tout ce qu'ils me disent. Mais surtout ils me disent, "Au revoir!" Je les trouve tous un peu maigris, et Papa et Maman un peu plus gris de cheveux. *Tiens*, si seulement on savait le plaisir que nous procure, ces portraits de la maison, il n'en resterait pas un en Belgique. Tous les portraits s'élanceraient vers nous, quand même s'ils devaient passer les fils électrique de la frontière; ou s'ils devaient passer à la nage le canal de l'Yser, je suis certain qu'ils viendraient.

Thus writes Gustave Geboers, a Belgian boy of twenty-three. And your boy, our boys, will pictures mean less to them?

It is the very real contribution that pictures make to the morale of the men in camp and overseas that qualifies the Kodak as a gift in tune with the times. Kodaks for the folks at home mean pictures for the boys in France—good pictures.

Cheering letters mean much, cheering pictures mean more, for the soldier sees with his own eyes that all is going well back home.

Give Kodaks here that they may get pictures there.

Autographic Kodaks \$8.50 and up.

CANADIAN KODAK CO., Limited

TORONTO, CANADA



Agriculture In and Near No Man's Land

(Continued from page 7.)

implements in common use. They do the work, however, and do it well, if bountiful crops are any evidence; that is all that the French farmer wants, or cares about. It is expected, however, that demonstrations of efficiency now given by agricultural implements imported from Great Britain and Canada for purposes connected with the war will stimulate a desire for using better implements in the future.

Strict attention is paid to cultivation and manuring. Every farmer here knows that land will not produce good crops year after year without being well cared for and fertilized. Every pound of manure that his stables produce and that he can best use (in trade) goes on the land; none is wasted, except by exposure and leaching in barnyards.

Harvest Methods.

Among the interesting sights of the harvest field are clover in cocks so small that a child could lift one, hay of all kinds in cocks tied with thongs at the top, grain in stocks much larger than made in Canada and hay, straw and unthreshed grain in symmetrical, man-shaped stacks, of which the French, and also the English and Scotch, farmers are master-builders. A sprinkling of rye is sometimes grown in the clover to stiffen the latter when curing in cock and to furnish material for tying. Often the tying thongs are kept and used year after year. Sometimes the cocks are tied not only at the top before curing but also at the bottom before loading. Cured and stored like this, the clover suffers little or no loss of leaf. But intensive farming of this kind is expensive in loss of time and labor.

Live stock on the farms seems to be plentiful, but the quality is below average in and near the war zone; even in districts many miles behind the lines. The best horses have been ex-commandeered for army purposes, excepting a number of pure-breds left in selected localities for breeding. The horses left for working the farms are mostly the unids. The predominant type is heavy draft, showing Percheron blood, mostly gray in color, massive in conformation and bone and slow in quality. Most farmers have at least one or two mares of good brood type, even though they may be old and blighted. There are also lots of really good colts, too young as



A Terrace Hillside. This diagramed cross section shows the step like appearance produced on the hillside farms of France by terracing. The terraces are not so nearly perpendicular but that they, too, are crooked.

yet for work either on the farm or at the front.

A Waste of Horse Power.

Interesting and peculiar are the ways in which horses are hitched to vehicles. Two-wheeled carts are used for nearly all purposes of work and for play—for hauling manure or crops, for going to market or to the mill, for going to church or on a joyride—but they differ in size, strength and style, according to their purposes. Horses are corded to them, as on occasion demands, hitched to them, and in combinations of various numbers fan-like around singly, in tandem and in combinations of the horse in the shafts. It is common to see a dump cart of manure being hauled by four horses—one in the lead, shafts and three abreast in the lead. A few farmers have four-wheeled hay wagons, like those used in Canada, but almost twice as many horses hitched to them and drawing what Canadian farmers would call scarcely a two-horse load, but big loads in the eyes of the average farmer here.

It is on account of grades on the distant farm that some Frenchmen in use so many horses. Economy in use so many might be effected, however, by working some of these horses on the farm while the remainder were hauling the load that far.

Most interesting of all teaming customs is the fact that only one rein, or line, is used for driving, no matter how many horses are harnessed together. By means of this line, usually rope, and words of command, the horses are maneuvered in all directions like a squad of soldiers on parades. It is really a wonderful demonstration of how well horses can be trained to obey instantly such words of command as "whoa," "gee" and "haw," or their equivalent in French. Donkeys and asses are very common in France. I use the former term for the little fellows, and the latter one for all other specimens of the species. They are hitched to small carts, often in tandem, and do much useful work for the poorer classes of people. Mules are used in some parts of France quite extensively, but I have seen, in districts that I write about, only one or two outside of the army.

Red Cattle Everywhere.

Cattle in this part of the country are all red in color. In many hundreds I have seen not more than a dozen head were otherwise. This characteristic, coupled with comparison with breeds that I know or have read about, makes me think that these cattle were originated in Normandy. I have asked a dozen farmers, by means of my "pigeon" French or through interpreter, what breed his cows were and not one could tell me; to them, they were "the cows." At any rate, they are good general purpose cattle for general purpose farmers.

The cows are milked very early in the mornings and often not again until about nine o'clock at night. Some farmers milk three times a day. English and Scotch soldiers can buy this milk at eight or ten cents a quart, even less sometimes; but the Yanks and Canadians, all of whom are considered millionaires by most peasants, are honored with a special price that ranges from twelve to twenty cents according to the man, the maid and the moment.

Goats also are raised extensively for milk, meat and wool. Of sheep and

FARMERS

Plan Now For Next Season's Crops

Gather Information About:

- The Best Varieties of Grains and Roots:
- The Most Profitable Breeds of Cattle, Sheep, Swine and Poultry.
- The Manufacture of Highest Quality Butter and Cheese.
- Best Orchard Methods.
- Production of Finest Honey.
- Farm Tractors, Gasoline Engines & Motors.
- Reclaiming Land by Underdrainage.
- Business Management on the Farm.

Free Short Courses

AT THE

Ontario Agricultural College GUELPH

The College charges nothing for this instruction. It is absolutely free and the only expense you have to meet is board while in Guelph and railway fare.

The following courses are offered:

- Stock & Seed Judging (2 weeks) Jan. 14 to 25th.
- Poultry Raising (4 weeks) Jan. 14 to Feb. 8.
- Fruit Growing (2 weeks) Jan. 27 to Feb. 8.
- Vegetable Growing (2 weeks) Feb. 10 to Feb. 22.
- Floriculture and Landscape Gardening (2 weeks) Feb. 24 to Mar. 8th.
- Factory Dairy Course (3 mos.) Jan. 2 to Mar. 21.
- Farm Dairy Course (4 weeks) Jan. 27 to Feb. 21.
- Bee Keeping (2 weeks) Jan. 14 to Jan. 21.
- Drainage and Drainage Surveying (2 weeks) Jan. 14 to 25th.
- Farm Power — Including Farm Tractors, Gasoline Engines etc. (2 weeks) Jan. 28 to Feb. 8.

These short courses are for the special benefit of farmers and farmers' sons who find it impossible to attend college except for short periods in the winter.

An illustrated short course calendar, giving in detail all short courses will be mailed on request.

G. C. CREELMAN, President.



A "Crazy Quilt" Farm Plan.

This diagram is not an exaggeration. It is an accurate representation of the manner in which small farms of France are split up with perhaps several small patches of each crop, widely separated. The object of the tomato patch area, in the centre of the potato field, was, to remove, more attractively, where it would not be so easily discovered by soldiers.

December 5, swine, I can't say of the former I poor specimens, latter were worn good live stock and grade; but I ent in the distri A Tribute to The farm wonderful workers, work of the horse they do their a the fields. Most bent and many round-shouldered loads on their handled hoes in mon custom for bundles of feed or belt to the horse work is done. A almost doubled when hoeing crop are the hoes than ing and blinding.



swine. I can say very little. The few of the former that I have seen work, poor specimens, and the many of the latter were worse. There are lots of good live stock in France, pure-bred and in grade; but that kind is not prevalent in the districts near the war zone.

A Tribute to French Women.

The farm women of France are wonderful workers. Besides doing the work of the house and of the dairy, they do their share of the work in the fields. Most of the old women are bent and many of the younger ones round-shouldered from carrying heavy loads on their backs and using short-handled hoes in the fields. A common custom for women is to carry big bundles of feed or of faggots from the field to the home when the day's work is done. And one may see them almost doubled like a pocket-knife when hoeing crops, so short in handle are the hoes that they use for weeding and thinning.

Almost any work that a man can do, from seeding to stacking, is done these days by women. From dawn to dusk, they toil with the old men and children for the needs of the nation. No young, and few middle-aged men are for work on the fields. Men who are fit for military service of some kind, even though they be not fit for fighting at the front. There are no slack-man and woman is either fighting or farming, for the fame and future of France.

A Red Cross Dairy Farm

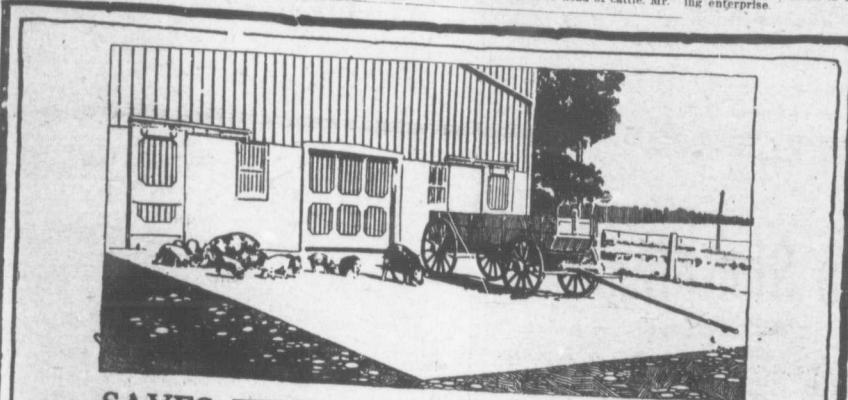
ONE of the finest farm properties in England, Salisbury Court, near Southampton, is now being worked by the American Red Cross as a means of giving recreation to wounded American soldiers and also to supply milk and fresh vegetables to the

hospital in the Manor House and neighboring hospitals. In this farm there are 186 acres, and it is expected that it will support a mixed Holstein and Guernsey herd of at least 50 head. Incidentally the establishment of the laws of Great Britain are not as unchangeable as those of the Medes and Persians are reported to have been.

The first move of the American Red Cross was to secure Mr. Frank S. Peer as manager of their dairy farm. Mr. Peer is one of the best known Guernsey men in the world. He has a fine farm in New Jersey and another farm on the island of Guernsey, the home of his breed, which is a show place and the model farm of the island. On his Guernsey farm Mr. Peer makes an acre of ground produce four tons of hay and other crops in proportion and 25 acres support 75 head of cattle. Mr.

Peer wanted to take some of his fine Guernseys from this farm across the channel to Salisbury Court. Several of the other Guernsey farmers were willing to surrender some of their prize winners to the new Red Cross herd. Great Britain has a law, however, dating back to the foot and mouth disease many years ago, absolutely forbidding the importation of live stock into the United Kingdom. All live stock must be slaughtered at port of entry and within a few hours. The American Red Cross took up the matter with the British Government and exception was made in favor of Mr. Peer's Guernseys and they are now at Salisbury Court.

In addition to the dairy herd there are now on this farm 100 pigs, 1,600 chickens and many ducks. The vegetable and fruit gardens cover 10 acres. Altogether this American Red Cross farm in the Old Land is an interesting enterprise.



SAVES FEED—and delivers the Bacon

WHY feed your hogs in the mud? Why waste high-priced feed? Feed is worth money—Concrete Feeding floors save it.

A mud lot is an extravagance—it wastes the feed.

A concrete-paved lot is an economy—it saves grain, labor, manure and money. In these days of high-priced feed you cannot afford to feed grain to

mud-holes. It's pork we need. Hogs are at top-notch prices. Now is the time to make every grain of feed bring market value. This can only be accomplished by methods of feeding that absolutely prevent waste.

Feeding in the old knee-deep feeding lot involves waste of the most terrible kind. Feed is lost, hogs become covered with filth, disease is encouraged, loss is invited.

Concrete Feeding Floors

are money-makers for farmers and money-savers for the country. It has been proved by experience that the saving of feed on a concrete floor may be as high as 30%. Such a floor will pay for itself in one normal season through saving of feed and rapid gain in weight of animals. It is not a difficult matter to build one. Write for our free "Concrete Feeding Floor" Booklets. These describe the methods of construction in detail.

Our Free Book

entitled "What the Farmer can do with Concrete," that has helped more than 100,000 farmers, will help you—by showing you how easy it is to construct improvements that are permanent, fireproof, weather-proof, vermin-proof, repair-proof. Contains 100 pages of practical suggestions with plans and full directions for building barns, foundations, floors—everything in fact, that is best made of concrete.

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Extensively for Of sheep and

ture of the horse market at least. By immediate we mean from half a decade to a decade. All seem to be agreed, however, that the emphasis in the future will be placed more than ever on the quality and character of the stock offered. The war has been instrumental in riding America, and in this the United States has been more fortunate than Canada, of a large proportion of her off type mares. With the elimination of scrub stallions and poor type mares, it is safe to conclude that horse breeding in Canada is yet an attractive proposition for the farmer who is so inclined.—F. E. E.

Dairy Type and Milk Production

(Continued from page 5.)

From a breeding standpoint the most important feature in addition to the above is character. Breediness and femininity stamp the cow as a standardised product. Here again some parts will reveal the evidence sought more than others. In this instance the head ranks first, but the color, size, horn, and many other parts contribute.

And so we have our type summed up in a few large features—feeding capacity, dairy temperament, milking machinery, strength, and character. Every particle of the cow is included in type and is essential to her, but they may be regarded as part and parcel of the above features.

The Weakness of Records.

That records furnish the last word as to a cow's performance in a given time is a simple fact. That they have been a dominating influence in dairy cow development with a general effect of value difficult to over-estimate is also a fact. That they are not in themselves a sufficient estimate of an individual or of a herd, and that they may be misleading, are also facts.

Records are becoming more and more common and more and more important. We have reached the point today when records require very close discernment if they are to serve as a reliable guide. There are a number of factors included in a record besides dairy cow merit, and there are many record cows of very little dairy cow merit. This is true even in the commercial milk sense. The ordinary average record of even today is not a difficult achievement under favorable conditions. There are thousands of cows, grades as well as pure-breds, which would require only an equal opportunity in order to register a creditable record. It is a false notion that a record makes a cow; in some cases it unmakes her, if the term may be allowed, and while in others it does something to develop them. Its real service is one of identification. May it not be asked, then, what is this identification worth in the average individual case if after all it does not identify anything of superior merit? Considered from a milk production point alone records give analysis. Considered from a milk point for milk production, consistent performance, and breeding records, while of great value, will not suffice.

The Weakness of the Show Ring.

That the show ring has been a potent factor in steering dairy cow development toward improvement is recognized by all who are in a position to know. That it has not done as much as it is capable of doing and that its influence has at times been serious must be admitted. An in-crease of the record crank who has at least a slight of everything else, so there is the show ring extremists. A case has been made for type as a criterion of performance as well as of other things, but the difficulty in making such calculations has been emphasized, which is itself will account for some of the shortcomings of the show ring. This, however, is not an explanation. In the opinion of the writer the show ring view point and modification, not only for

Has no Equal as a Milk and Butter Producer
Milk cows need food rich in nitrogen for two reasons: to rebuild the ordinary waste of tissue and to secure the protein necessary for the milk. This is why nothing equals "Maple Leaf" Oil Cake as a producer of butter and milk. It increases the flow of the milk and adds to the richness of the cream. Made by the old process and guaranteed absolutely pure. Contains over 35% Protein and 33% Carbo Hydrates. This splendid food is so rich in protein that British Farmers send four thousand miles to secure it.

Write to-day for samples and our free booklet "Facts to Feeders."

The Surest Way To sell your surplus stock is through the live stock columns of Farm and Dairy. The cost is little and the results certain. Send in your ad.

Farm and Dairy is in an excellent position to champion the cause of the farmer in Canada, because it is owned and controlled exclusively by farmers.

The Basis of Profitable Dairying

The influence of feed on the production of milk is striking. No matter how good the individual dairy cow is, the quantity of milk she yields is, within wide limits, directly dependent upon the feed she receives.

If a cow is subjected to feed of poor quality, unpalatable and indigestible, no matter how much she may be fed, she is sure to go away down in her production and will not yield any profits. Such a cow becomes a "boarder"—that is why our experts have compounded a mixed feed, properly balanced according to the needs of the dairy cow, rich in milk-producing nutrients, with a high percentage of these nutrients in digestible form.

Monarch Dairy Feed

a rich feed, but not too concentrated to feed alone and when fed liberally to dairy cows it will get the highest production possible with the least cost. There is no wastage in Monarch Dairy Feed—every pound has milk-producing value in it and more of it goes to the actual production of milk than of other feeds because such a high percentage of it is digestible.

Monarch Dairy Feed is composed of Oil Cake Meal, Cotton-seed Meal along with Bran, Barley feed and Corn feed. The mixture of Oil Cake and Cotton-seed Meals counteracts the constipation that would be caused by Cotton-seed Meal if fed alone.

Give Monarch Dairy Feed a trial and if the dealer in your district does not handle it, send us his name and we will see that you get it. By ordering early you will assure delivery when needed.



The Campbell Flour Mills Co., Ltd., Toronto, Peterboro, Pickering
Canada Food Board Licensee Nos. 4, 7 and 8.

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**Feed Them
Sugar Beet Meal**

**GET MORE BEEF FROM YOUR STEERS—
MORE MILK FROM YOUR DAIRY COWS**

For many years, our Agricultural Colleges has been urging that cattle feeds which are high in protein, are valuable as milk producers. Recently, however, they have learned that feeds rich in protein must be supplemented in the ration, by feeds which contain a high percentage of net energy.

For this reason, no matter how you feed your cattle, the ration should contain a liberal proportion of

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The great value of this meal lies in its net energy, which is 75 lbs. in each 100 lbs. as compared with standard wheat midds at 59 lbs., wheat flour midds at 75 lbs., wheat bran at 53 lbs., gluten feed at 81 lbs. etc.

The best authorities recommend Sugar Beet Meal because it is so succulent and palatable, and possesses valuable laxative and mineral qualities. Cattle relish any

balanced ration in which Sugar Beet Meal is used. Its effects are very similar to fresh June Grass, which, though low in protein, stimulates the milk production of the dairy cow.

A balanced ration feed should weigh not over 4 pounds to a 4 quart measure and, at the same time, should have approximately 20% crude protein or better. The only way this bulk can be obtained is by the use of such a feed as Sugar Beet Meal.

For Young steers, Sugar Beet Meal is especially desirable. Experiments on Government Farms show that it greatly quickens their growth and shortens the period necessary to prepare beef for the market.

Guaranteed Analysis of Sugar Beet Meal:

| | | |
|------------------|----------|------------------|
| Protein | - | not less than 8% |
| Crude Fat | - | not less than 5% |
| Crude Fibre | - | not over 23% |
| Sugar and Starch | - | |
| Carbohydrate | not over | 60% |

In former years we sold a large quantity of our Sugar Beet Meal in the United States where farmers have learned to appreciate it highly. We have been offered as high as \$45.00 f.o.b. Chatham, and we could easily dispose of our entire output at that price. But in order to introduce this valuable type of feed to the farmers of Canada we have decided to fix the price at the extremely low figure of \$35.00 per ton f.o.b. factory; the containers to be returned to us.

We are anxious to sell our meal in Canada, to conform to the wishes of the Canadian Food Board, by whom we are informed that cattle feed is badly needed by the farmers of our own country.

Write for our new booklet which is fully descriptive of the value of Sugar Beet Meal and which will explain how to obtain it and how to use it.

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Farm & Dairy - Peterboro, Ont.

The Dual Purpose Shorthorn in Canada

(Continued from page 6.)
 and should not be regarded as such. There are many farmers in Canada who through circumstances, location, inclination, or other causes, do not wish to make dairying a special feature of their business but who require cattle to make their business profitable. These men want to raise good stock which will supply the home with milk and butter, and, perhaps, produce a little extra butter which helps out with the household expenses. The main object, however, is beef production and perhaps only a few cows are milked but these only few cows are enough milk to make it worth while to milk them. For farmers such as these the dual purpose shorthorn is an ideal animal, and while not known by that name, the Shorthorn has been filling just such a place upon thousands of farms for a great many years. The dairy breeds have a very important place to fill, but, as already pointed out, every farmer cannot be a dairy man, so that in the future, as in the past, we will find the Shorthorn playing a very important part as a producer of wealth in this country by its consistent performance as a beef and milk producer. The Shorthorn has earned for itself general recognition as "The Farmer's Cow," and no other breed has as yet been able to dispute the title.

While the milk records may be satisfactory from the standpoint of a dual purpose breed, the question will naturally arise as to what the progeny of such cows is capable of doing in the way of beef production. Owing to the short time which has elapsed since the Shorthorn was admitted to the Record of Performance it is difficult to secure definite information regarding their progeny. The more so because the calves of high producing cows are so valuable for breeding purposes that few of them find their way to the butcher. A few cases, however, may be cited as throwing a little light on this question.

Recently a Pennsylvania steer, a year old, from a dairy Shorthorn cow, sold at 17c a pound, which amounted to about \$135. He dressed 59½ per cent, which is a good percentage for a calf.

At the Ontario Agricultural College, a straight Scotch Shorthorn cow, which had nursed her first two calves produced 6,000 lbs. of milk with her third calf. This third calf was a steer. He was fitted for show, and stood first in his class at the Ontario Provincial Show and was first and Reserve Grand Champion at the West Toronto Show. Had this cow been developed from the start, she would have made a better showing as a milker.

In 1917, Mr. T. A. Russell showed three steers at the Toronto Exhibition and the Chicago International. One of these steers was champion at Toronto, and second in his class at the International. He dressed 66.46 per cent, a higher percentage than the International Grand Champion steer or the Grand Champion car-load. Another of these steers won his class at Toronto and London, and stood third in Chicago, while the third steer was second at Toronto and London, second in the Shorthorn specials at Chicago, and fourth in the open class for grades at Chicago. These three high class steers have five half-sisters in the Record of Performance, one four-year-old, two three-year-olds, and two two-year-olds. Their average annual production is 7,285 lbs. milk, and 309 lbs. fat. These facts will indicate the possibilities of the Shorthorn for beef and milk.

We are asked very frequently what families or strains of Shorthorns are most noted for milk production. An analysis of the blood lines in the Record of Performance shows a great variety in breeding, and indicates that good milkers are likely to be found in any herd where attention is paid to milk production. There are 20 cows, three years old or over, in the Record of Performance with records of over 400 lbs. fat. One of these high producing cows is straight Scotch, one is straight English, eight are by straight Scotch sires, nine by Scotch topped sires, and 15 out of the 20 have one or more straight Scotch sires in their pedigree. It may be added that 15 of the 20 trace to imported English bred cows recorded in Volume 1 of the Herd Book, but the large amount of Scotch blood in the pedigrees of these high producers suggests possibilities in connection with the use of Scotch bulls. To emphasize this point we might add that 25 Shorthorn bulls have two or more daughters in the Record of Performance. Of these bulls, 20 are straight Scotch, and five are Scotch topped, which would show, therefore, that no breeder of dual purpose Shorthorns need be discouraged if he cannot obtain English dairy bred bulls, provided he will pay some attention to the milking qualities of the dams of the bulls he selects. This Scotch blood will also help to maintain the beef end of the proposition.

The dual purpose Shorthorn is not a rival of the strictly dairy breeds,

and should not be regarded as such. There are many farmers in Canada who through circumstances, location, inclination, or other causes, do not wish to make dairying a special feature of their business but who require cattle to make their business profitable. These men want to raise good stock which will supply the home with milk and butter, and, perhaps, produce a little extra butter which helps out with the household expenses. The main object, however, is beef production and perhaps only a few cows are milked but these only few cows are enough milk to make it worth while to milk them. For farmers such as these the dual purpose shorthorn is an ideal animal, and while not known by that name, the Shorthorn has been filling just such a place upon thousands of farms for a great many years. The dairy breeds have a very important place to fill, but, as already pointed out, every farmer cannot be a dairy man, so that in the future, as in the past, we will find the Shorthorn playing a very important part as a producer of wealth in this country by its consistent performance as a beef and milk producer. The Shorthorn has earned for itself general recognition as "The Farmer's Cow," and no other breed has as yet been able to dispute the title.

FARM CHATS

The Go-By

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

ON every farm there is work to do; and generally more work than is accomplished. Possibly it is because there are nine days in every week; and there are six fine days in every week; and when the rain comes, that day's work goes into the discard; or, it may be, that day's work is done on the morrow, and something else suffers.

It is interesting to watch one's self and see, first, what job one is inclined to give the go-by; and second, what, after mature consideration, does actually get the go-by. Of course other things being equal, there is a tendency to put the extra work, or give the benefit to some special field that in which one has taken a special interest. It is a case of the sick calf getting all the milk.

Our Canadian farmers, as a rule, are extensive rather than intensive farmers. Their mind goes to the big field. Ten acres in one mean far more to them than the few rods square in onions or celery. Namely they right down to the squares and they will admit in the small field in onions or celery that they have growing than in the big square of oats. But it is "come-alley" for the oats.

I remember a few years ago, I had a fine patch of strawberries. Their produce sold for well over \$100 a year; and it was cold cash. But it was the job of my life to get a horse to keep that kind of work. It is difficult that kind of work. But as a general rule, it is in the garden and the small fruit that get the go-by. It seems useless to point out to the good man that, unless the table carrots, and beets, and parsnips, and raspberries get proper cultivation he will personally suffer on his dinner table. It is generally a case of "just as soon as we get it," and the supper bell always rings first.

The beginner will have a hard road to travel if he lacks patience, perseverance, pluck, enterprise and capital.

Stable Your Cattle "The SUPERIOR Way" AND INCREASE THE PRODUCTION OF YOUR HERDS

Canada's shipments of Butter to Britain last year were only 7,121,568 pounds, against a shortage of 209,148,784 pounds.

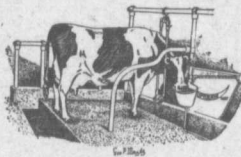
Not only is there an enormous market for Dairy Products. The millions of cows slaughtered for beef throughout European countries must of necessity be replenished.

The millions of starving people in Russia and devastated Europe must be fed.

Sanitary milk and its by-products are the nucleus of the food supply of the human race, and the present and future possibilities of the stock and dairy industry in Canada looms to gigantic proportions—from a standpoint of home consumption and the demands of the European markets—brought about by the great war.

It is up to the Stock and Dairymen of Canada to increase their herds and produce a product of high quality and make a bid for this great market.

The Stock or Dairymen who Grasps the Present Opportunity will Reap a Rich Reward and Strengthen Our National Asset.



Superior Sanitary Stable Equipment is a necessity in the Production of Pure Milk and the Successful Accommodation of Stock.

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I have prepared a new book full of valuable data to the Stock and Dairymen. This book explains fully the most Modern and Practical Methods of Building and the successful accommodation of all stock. If you wish to increase your production, your earnings, broaden your bank account and your opportunities, write for your copy. It will be sent to you free. Send now. Write me personally.

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MANAGER

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DEC. 6—GUELPH—DEC. 12

COME and SEE the BEST
 HORSES CATTLE SHEEP
 SWINE POULTRY SEEDS

Consult the programme on another page and find out what day the classes you are most interested in, are to be judged and arrange to attend that day.

Consult your local railway agent about railway fares.

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 HAMILTON.

R. W. WADE, Secretary,
 Parliament Buildings, TORONTO

Dairy Matters of National Importance Deal With at Ottawa

(Continued from page 12.)

to form the eastern executive and the western executive. The eastern executive will deal with matters which are of interest to the eastern district only, and the western executive will deal with matters which concern only the western district. When matters of mutual interest are to be considered both the eastern executive and the western executive will meet at the same time and communicate by wire.

This report was unanimously adopted. The delegates from the different provinces were asked to get together and appoint their representatives in and for the Council in order that a preliminary organization might be formed.

The Council Formed.

At the closing session Mr. Stonehouse reported that the following had been named by the delegates as their respective provinces on the council: British Columbia: E. W. Clark and S. H. Shannon, Cloverdale, Alberta: E. T. Love, Edmonton; P. Fallesen, Calgary; Saskatchewan: J. O. W. Aulic, Humbolt, and A. H. Salmon, demont; Manitoba: W. J. Cummings and E. H. McKay, Winnipeg, Ontario: S. Stonehouse, Weston; Quebec: Robertson, Belleville; P. B. Vincent, New Brunswick; J. Simmonds and W. H. Hugard, Nova Scotia; H. Falconer and D. W. Murray, Prince Edward Island; J. W. Jones and J. T. Probit, Representatives of the various branches of the dairy industry were appointed as follows: Cheese: J. P. Cox, P. Boyes, W. Olmstead, W. W. Prevey, Butter: J. Pare, Que.; W. G. Mead, Simcoe, Ont.; W. A. Wilson, Regina, Sask. Milk Distributors: J. Joubert, Quebec; J. Bincham, Ont.; J. M. Carruthers, Winnipeg; J. Man, Milk and Cream Producers: A. P. Hillhouse, Quebec; R. G. Leggett, Newboro, Ont.; J. W. Berry, Langley Prairie, B.C. Ice Cream: J. W. Carlyle, Calgary, Alberta; W. J. Foster, Hamilton, Ont.; Condensaries: Representatives to be named.

Officers.

The Council elected the following officers: President, E. H. Stonehouse, Weston; vice-president, A. McKay, Winnipeg; eastern executive, E. H. Stonehouse, P. Boyer, Dorchester; J. Stonehouse, P. Fallesen, Charlottetown, Ottawa; J. W. Jones, P. Fallesen, P.E.I. Western executive, A. McKay, Winnipeg; P. Fallesen, Calgary; J. W. Berry, Langley Prairie, B.C.; O. W. Anderson, Humbolt, Sask.

The appointment of a permanent secretary was left to a executive. In the meantime Mr. G. A. Putnam, of Toronto, will act as secretary. Mr. Putnam did good work on the committee.

How Financed.

The following resolution regarding finances was passed: "That each delegate pledge his Association for \$100 and the executive will apportion the expenses of the Council later." It was decided that each member of the Council should pay in \$10 at once and the balance of the \$100 on or before February 1, 1919.

There was a good deal of discussion over whether or not the Council should seek an annual grant from the Dominion Government. A number of the members were opposed to such action, taking the ground that the Council would be more independent if it were free from government assistance. It was finally decided to ask for an initial Government grant of \$5,000 to be used for organization purposes within sixty days. The individual members pledged themselves for a total of \$400.

Dairy Commissioner Riddick complimented the committee highly on the results of its efforts and expressed the

view that the Council will have splendid opportunities for accomplishing valuable public service. He seemed to think that the grant to be asked for would be granted.

The Grading of Dairy Products.

WHEREBY dairy products in Canada are graded at all it is by Provincial standards, and the unanimous opinion of the dairy authorities assembled at Ottawa was that we have Dominion-wide standards for such products, such as cheese and butter. "When our butter goes across to the Old Country mark it will not be known as Canadian butter, and I believe we should have a uniform system of grades on which this butter will be sold in the export market."

F. W. McLaughlin, of the firm of Lovell & Christmas, Montreal, spoke from the dealer's viewpoint. He said he wanted to get away from the Provincial basis and present our whole product as Canadian butter or cheese, as the case may be. In realizing the ideal of national grades we must have a necessarily uniform grade, particularly as in Alberta, in the Province of Ontario. Said he, "One standard should be set for the whole Dominion and the same standard should be held and the same made in every month of the season."

"You will strengthen the hands of the produce merchant," said Mr. Hodgson of Montreal, "if you give him one definite system of grades to hand on to the Canadian consumer, as well as to the export market. As a result, it will with a great diversity of grades, it is impossible to educate the consumers to select certain classes of butter or cheese. With uniform grades, consumers would be asking for what they want and getting it."

Mr. C. C. Markov, who has done such splendid work in introducing the grading system into Alberta, should have opened this discussion. Mr. Markov reviewed the work that has been done in Alberta and the improvement made through grading both the butter leaving the creameries and the cream leaving the factories. At first he had only two grades for butter in Alberta, first and second. He soon found that there was too much variation within the grades and the trade was willing to pay more for the same grades from some creameries than from others. Accordingly, a higher class known as Specials was added. Mr. Bourbeau, Inspector-General of Quebec, told of their grading work with cheese in his Province which started first in 1915 with thirty factories and now have over 500 factories grading their cheese. Taking the first hundred factories to adopt grading, Mr. Bourbeau was sure that improvement is shown as great as Mr. Markov could show for Alberta butter. The following is a summary of his work:

| No. 1 Boxes, Specials. | No. 1 | No. 2 |
|------------------------|---------|--------|
| 1911 | 78,000 | 20,000 |
| 1916 | 132,000 | 48,000 |

The following figures show a marked improvement as a result of grading cheese and selling it according to grade. Mr. A. Trudel, manager of Quebec Co-operative, through which their Cheesemakers, cheese is graded and sold, professed that the sale of the cheese is up to himself a firm believer in the value of grading and selling. He, too, would prefer to see Canadian grades established in place of the varying Provincial grades now in use.

J. H. Scott, speaking for Ontario, admitted that made in the Province. It creameries v products are disappointed creameries improve the grading, ensured butter, but the same experienced This was due to the quality of the product to buy. The grading system is less of a joke, as there is to be won changing a change in A special of C. Marker, W. P. McLaughlin, and George ed to report of The recommen lished in full and Dairy. U judging butter. Commissioned that copies of the cards should be of the various other organiz interested in the assistance of the vision in getting tion. It is pro- butter chiefly ing annual con- and Western O- going systems of

GUELPH WINTER FAIR

December 6th to 12th

- Programme of Judging in Arena -

Monday, December 9th.

- 9.00 a.m.—Students Judging Dairy Cattle.
- 10.15 a.m.—Judging Shires.
- 10.45 a.m.—Students Judging Beef Cattle.
- 1.30 p.m.—Judging Aberdeen-Angus.
- 3.15 p.m.—Judging Herefords.
- 5.00 p.m.—Judging Heavy Draft.
- 8.15 p.m.—Judging Thoroughbreds.

Tuesday, December 10th.

- 8.45 a.m.—Students Judging Horses.
- 10.15 a.m.—Judging Dairy Bulls.
- 10.45 a.m.—Judging Percherons.
- 1.30 p.m.—Judging Percherons (continued).
- 3.05 p.m.—Judging Shorthorns.
- 7.45 p.m.—Judging Heavy Draft.
- 8.30 p.m.—Judging Standard Breds.

Thursday, December 12th.

- 9.00 a.m.—Judging Clydesdale Foals.
- 10.05 a.m.—Judging Clydesdale Yearlings.
- 1.30 p.m.—Judging aged Clydesdales.
- 7.45 p.m.—Judging Champion Clydesdales.
- 8.45 p.m.—Judging Watson Shield Water House and Bright Specialties.
- 9.25 p.m.—Parade Heavy Horses.
- 9.35 p.m.—Parade Dairy Cattle.
- 9.45 p.m.—Parade Beef Cattle.
- 9.55 p.m.—Parade Standard Breds and Thoroughbreds.
- 10.05 p.m.—Parade Hackneys and Ponies.

Wednesday, December 11th

- 9.00 a.m.—Judging Grade Cattle.
- 10.40 a.m.—Judging Grand Champion Beef Cattle.
- 11.00 a.m.—Judging Heavy Draft.
- 11.30 a.m.—Judging Clydesdales (imp. excluded).
- 1.30 p.m.—Judging 2-year-old Clydesdales.
- 3.35 p.m.—Judging 3-year-old Clydesdales.
- 4.40 p.m.—Judging Heavy Draft Teams.
- 7.45 p.m.—Judging Hackneys.

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J. I. Flatt, PRESIDENT

R. W. Wade, SECRETARY

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BOOKS

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Book Dept. FARM & DAIRY Peterboro

Farm and Dairy stands foursquare against everything that is detrimental to the farmers' interests, and whatever appears in its columns, either advertising or editorial, is guaranteed reliable.

mitted that little progress had been made in the grading of butter in the Province. It was optional with the creameries whether they had their products graded or not. One great disappointment has been that a lot of creameries instead of trying to improve the quality of their butter drop the grading. Thirty-five creameries shipped butter for grading in 1918, but the same disappointments were experienced as in previous years. This was due in some measure to the dealers not living up to their agreement to buy the butter on grade. "Our grading system," said he, "is more or less of a joke, except that the system is there to be used when it is needed, when changing market conditions force a change in Ontario methods."

A special committee consisting of C. Marker, W. H. Scott, Mr. E. Bourbeau, P. W. McLagan, W. A. Wilson, A. Trudel and George H. Barr was appointed to study the grades and grading. The recommendations will be published in full in a later issue of Farm and Dairy. Uniform score cards for judging butter and cheese were also suggested.

Commissioner Ruddle suggested that copies of the grades and score cards should be sent to the officers of the various exhibition boards and other organizations likely to be interested in them. He promised the assistance of the Dominion Dairy Division in getting them into circulation. It is probable that the cheese and butter exhibited at the approaching annual convention of the Eastern and Western Ontario Dairymen's Association will be judged by the foregoing system of points.

Compulsory Pasteurization.
D. B. F. TORRANCE, Veterinary Director-General, led an interesting discussion on the importance of compulsory pasteurization of dairy products to prevent the rapid spread of tuberculosis among swine. He showed that the records of the large abattoirs showed that last year, out of 2,129,682 hogs slaughtered there 19 per cent were diseased, representing a loss of \$255,561. Packers guard against such losses by paying lower prices for their hogs. One packer estimated this loss to the farmers equaled 12 cents a hog. Were the hogs incurred in connection with the hogs slaughtered privately to be added to the foregoing figures, the total loss for the year would probably exceed \$500,000.

Dr. Torrance said that tuberculosis among hogs is increasing rapidly, the percentage of infected animals having increased from 8.970 in 1910 to 19.470 in 1918, or over 100 per cent. Further reference to this address will be made later in Farm and Dairy.

Growing out of Dr. Torrance's address the following resolution was adopted unanimously:

"Whereas tuberculosis of swine is shown by statistics to be increasing from year to year and is now causing serious losses to Canadian farmers, and whereas this disease in swine is derived almost entirely from tuberculosis of cattle, chiefly by feeding the hogs on unpasteurized dairy products, be it
Resolved, that the by-products of these factories and creameries should be rendered harmless by pasteurization or sterilization before removal from such factories for feeding purposes, and that the Dominion Government be requested to make it compulsory to pasteurize or sterilize all dairy factory by-products."

The following resolutions were also adopted, most of them with but comparatively little discussion, partly because time was limited and partly because the delegates were pretty well spent in their views.

Oleomargarine.
It was moved by O. W. Andreason, seconded by B. A. Bull and carried, that whereas the Federal authorities do not see fit to temporarily admit the manufacture and sale in the Dominion

of Canada of oleomargarine; and whereas the order permitting said manufacture and sale was granted only to relieve food conditions during the present war; whereas an armistice for the consideration of peace terms is now in force; and whereas on the successful conclusion of the war the conditions in the Dominion will again become more normal;

"Be it therefore resolved, that the said order be rescinded and that the manufacture and sale of oleomargarine within the Dominion of Canada again be declared illegal within six months after the date of the declaration of peace, and further that the National Dairy Council be consulted before any legislation is enacted affecting the dairy industry in any way."

The Pasteurization of Cream and Dairy By-products.
It was moved by Prof. H. H. Dean and carried, that

"Whereas, bacteria under modern conditions of creamery butter-making play very important part in determining the flavor of the butter, which is regarded as an important one-half of its value; and whereas pasteurization has been found to be the most practicable means of controlling bacteria in milk and cream, keeping quality of butter; and whereas the expense of such pasteurization is such as to prevent its immediate and general adoption by creamery butter manufacturers;

"Resolved, that this Dominion Dairy Conference hereby recommends the system known as pasteurization of milk or cream in the manufacture of all butter made in Canada, and urges its adoption at once by all creameries which are not already using this method. That standard temperature recommended be at least 170 degrees F. holding for at least ten minutes, or 176 degrees F. for the "flash" method."

This resolution created considerable discussion. Prof. Dean suggested at first that the temperature recommended should be 159 to 165 degrees. The western men insisted these degrees too low for butter required for long shipment. Prof. Dean thought they were high enough for butter going into quick consumption, but was agreeable to their being increased in the case of export butter or butter intended for long keeping. Finally it was decided to accept the recommendations of the western men and set the temperature at 170 degrees.

Payment by Test.

It was moved by W. F. Stephen and seconded by A. B. Bull, "Where the payment is on the pooling system is an injustice to producers selling milk containing a high percentage of butter fat; Therefore, this conference places itself on record as favorable to the proposal being paid for milk for all purposes of manufacture and for human consumption; on the basis of its butter fat content; and further, That the various Provincial Governments be requested to enact such legislation at such an early date as will bring such payment of milk into effect."

Opposition to the passing of this resolution was expressed by Mr. T. A. Thompson, of Alberta, who said that while he approved of the resolution as being fair in principle, he knew the dairy farmers of Eastern Ontario had not been educated in the matter to a point where they were willing to approve of it. Mr. Pallen, of Ontario, said that if they were not educated in the matter they should be, as it had by an under discussion for years.

Speaking in support of the resolution, Mr. Stephen quoted the results of tests of 8,857 samples of milk of patrons of cheese factories made by Mr. Herna in 1917. These showed that 102 samples tested 2.5%; 84, 2.7%; 349, 2.8%; 351, 2.9%; 1,222, 3%; 857, (Concluded on page 27.)

AN INTERESTING SHORT STORY :-

We cannot prepare any better advertisement for

GOMBAULT'S CAUSTIC BALSAM

than the following voluntary testimonial from a man who stands very high in all business and social circles where he is known:

No. 2131 Wyoming Avenue, Washington, D. C., November 26, 1917.

The Lawrence-Williams Co.,
Dear Sirs—I have had GOMBAULT'S CAUSTIC BALSAM constantly in my home for thirty-three years and have used it for a large number of acute and chronic ailments. It is by far the most effective, reliable and economical medical preparation that I have ever known. Its persistent use for chronic rheumatism, lumbago, neuritis and kindred troubles bring sure relief. For sore throat, pains in chest and acute cramps it penetrates and relieves pain. For mosquito bites, bee stings and bites of all other vermin it instantly stops all irritation. For itching between the toes and on wounds and old sores, it eliminates all danger from blood poisoning and hastens a cure. A few drops of CAUSTIC BALSAM is more effective than half a bottle of any other application that I know of.

Truly yours,
M. J. LAWRENCE.



GOMBAULT'S CAUSTIC BALSAM has had a steady, reliable sale in France, where it is made, for forty-five years. In the United States and Canada, with only moderate advertisement, it has had an increasing sale for thirty-five years. The demand is produced strictly by its merit. Price \$1.75 per bottle. Sold by druggists, or sent by Parcel Post on receipt of price. Guaranteed to give satisfaction. For further particulars and unlimited testimonials, address

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The quick, handy way to cook feed

YOU get more pork to the hundred of feed when you cook the feed for your hogs. They thrive better, are healthier and put on more weight on cooked food.

The Acme Boiler is made to heat a big feeding quickly. It is also handy for other uses, rendering lard, boiling water, etc. A little fire does the work. Inside flues carry the heat round and round the pot. There is no waste of fuel and no waste of time waiting for it to heat up. You can burn any kind of waste wood, corn cobs or rubbish.

The Acme is strongly made with cast kettle—smooth inside—steel casing and large strong door. It is supplied with or without cover in 30, 45 or 60 gallon sizes. Supplied with legs as illustrated or may be set up on brick foundation.

Write at once for prices and full information

CLARE BROS. & CO., Limited
PRESTON

Makers of Hecla Furnaces and Lighter Day Ranges



"ACME" Farmer's Boiler

Dairy Matters of National Importance Dealt With at Ottawa

(Continued from page 25.)
 8.1%; 1,632, 3.2%; 1,935, 3.3%; 1,288, 3.4%; 595, 3.5%; 605, 3.6%; 155, 3.7%; 211, 3.8%; 78, 3.9%; 100, 4%; 26, 4.1%; 41, 4.2%; 12, 4.3%; 10, 4.4%; 7, 4.5%; 6, 4.6%; 4, 4.7%; 1, 4.8%; 2, 5%. He claimed that to pay for milk by weight under the conditions revealed by the foregoing figures was manifestly very unjust. The motion carried practically unanimously.

Good Sires Needed.
 It was moved by Geo. H. Barr, Ottawa, that,—"Whereas the greatest need of the dairy industry in Canada at the present time is the economic production of milk, and as the greatest factor in the economic production of milk is the cow that can produce large quantities of milk and fat, it naturally follows that the greatest problem confronting the dairymen of Canada to-day is how to eliminate the unprofitable or low producing cows from the dairy herds.

"It is generally admitted that the sire is the most important factor in building up a dairy herd and also that better results can be obtained by using a properly bred pure bred sire than by using a grade. Two registrable features about using pure bred sires are that in many cases it is impossible for purchasers to get any reliable information regarding the milk producing qualities of the dams of the animals offered for sale; and that too many dairymen apparently do not realize the importance or the value of knowing something about the milk producing qualities of the sire's ancestors.

"Be it therefore resolved that this Dominion Dairy Conference regrets the fact that many breeders of pure bred dairy stock do not keep records of the milk and fat produced by each cow and are therefore unable or unwilling to provide purchasers of pure bred dairy cattle with this most valuable information, with the result that farmers often purchase pure bred dairy sires expecting to improve the milk producing qualities of their herds, but fail to get results because the animals are bred from low milk producing stock.

"We, therefore, recommend that a special effort be made by the Dairy Schools, Dairy Instructors, Dairy-men's Conventions and other suitable avenues to place before the milk producers of Canada the importance of buying pure bred dairy sires from only the breeders who can show reliable records of the milk and fat produced by the dams of the animals offered for sale."

Carried.
 In supporting the foregoing resolution Mr. Barr stated that figures obtained by the Dominion Dairy Division showed that in a certain dairy district where a considerable number of the farmers stopped using grade bulls and bought pure bred bulls at greater cost

W. D. HOARD.

It is with deep sorrow that we announce the death of W. D. Hoard, senior editor and founder of Hoard's Dairyman. Ex-governor Hoard of Wisconsin was for many years one of the strongest influences for better dairymen on the continent. On the platform and in the press he never missed an opportunity for extolling the dairy business, or pumping more enthusiasm into dairy farming. On the Hoard's Dairyman farm he practiced as he preached and conducted a farm that is a model of its kind. He has finished his work and the record that he leaves behind him of tremendous effort in the service of others, is one that is seldom duplicated.

but without looking up the milk records of the dams, the production of milk in the district had declined. This would not have been the case had the bulls been from dams having good records.

Mr. Wisncko described the good results that had been obtained in British Columbia from the cow testing associations. Not over two to five per cent of the bulls in the province now are grades. Recently one breeder had recommended that no cows should be registered that could not reach a certain reasonable standard of production.

Market Investigations.
 It was moved by G. MacKay, seconded by E. T. Love and carried, that,—"Whereas the dairy industry in Canada has developed to such an extent that there will be a larger surplus of butter available for export in the immediate future, and in order that a product may be exported which will meet with favor in foreign markets prices; therefore, be it resolved that this conference of Dominion dairymen ask the Dominion Government to appoint a commission composed of butter experts to investigate the requirements of various export markets and report their findings and recommendations at the earliest possible date.

Speaking in support of this resolution Mr. Love said that most of our foreign markets, has come through the produce trade. Questions of moisture content, grades and salt mean dollars and cents to the producers. Certain markets demand different qualities of butter than others. An investigation by experts on these points should be beneficial. Dairy Commissioner Ruddle pointed out that he had visited the Old Country several times to investigate those matters. The Government also had agents who report from time to time on market conditions and requirements. Some of these agents, he pointed out, are not dairy experts. (Carried.)

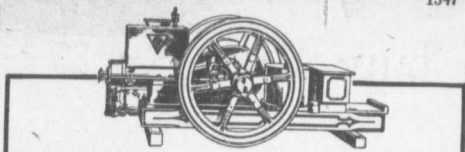
Releasing Soldiers.

On motion of W. F. Stephen, seconded by Jas. Winter, it was resolved that,—"Whereas the war (lost) of Canada can best be paid off by developing its natural resources, particularly as having reference to the dairy products, and whereas the demand of the great and increasing demand for dairy products, and whereas the Dairy Industry is badly crippled for want of suitable labor, therefore be it resolved that this Conference memorialize the Government, that peace is practically declared, to release at the earliest moment possible all soldiers in any way connected with the dairy industry, includes producers, cheese and butter makers, milk distributors, and others, that they may return to their respective occupations, not so be ready when next season opens for a big output of milk and dairy products." (Carried.)

Taking Milk Samples.

It was moved by P. Palleen, seconded by E. H. Stonehouse, and resolved, that in future the samples of milk and cream to be tested be divided into three equal portions, each properly sealed, one to be handed to the municipality, one to be tested by the members of the conference, and for testing by an independent authority should occasion require it." (Carried.)

The Conference was brought to a close by the adoption of a unanimous resolution expressing the thanks of the delegates to Dairy Commissioner Ruddle, Mr. Geo. H. Barr, and other members of the Dairy Commissioner's staff for calling the conference, and for their valuable assistance in making the gathering the success it had proved.



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THE message of Christmas is love.—God's love for us. The Spirit of Christmas is love,—our love for one another.

No Room in the Inn

By Mary Barron Washburn.

THE day before Christmas always found Mrs. Marshall, to use her own phrase, rushed to death. Each year she vowed that never again would she undertake any further preparation than could be easily completed by the close of the preceding week, but each year her eager mind betrayed her into all sorts of odd and ailing little plans, and into the last hours of December 24th. This year was proving no exception, and having packed the lunches and started the children off for school, she was hurrying through the morning work, impatient to be about the score of tasks that still awaited her.

"Christmas comes so late in the week this year that I did think I'd be ready for it," she said to her husband, as she lifted the separator discs from her scalding bath and hung them on a nail behind the stove, "but I do believe I'm more rushed than ever this time. There ought to be a few extra days for farmers' wives sandwiched into each week somehow."

"You ought to begin earlier or else not try to do so much," rejoined he, with easy masculine philosophy. Mrs. Marshall shut her lips tight and with difficulty forbore to explain. How difficult she had managed any better? She had begun her Christmas preparations weeks before and utilized every spare moment. No doubt.

Ben was under-ting taken so much but it was too late to talk about that now. Perhaps the very root of the trouble lay in the fact that she had begun early. If she had waited until the week before Christmas she would have known that she could accomplish very little every day and she would have attempted very little. But starting in she had done, early in the fall, as soon as threshing was over. It had not seemed to her that she was planning more than she could reasonably hope to find time for. But there never was any time, any spare time. Take this week for example. By prodigious efforts she had completed her gifts for her home folks, back East, the week before and sent them counted on rounding out her work for her own home Christmas. But Monday had been wash day and in the afternoon she had ironed until she had a little free time drop so as to have the ironing done on Tuesday. Tuesday she had finished the ironing, churned, and after the dinner had moided butter, and packed and dressed chickens and eggs, and dressed the customers in town. When the children came home from school in the late afternoon, they brought the pleasing information that Lulu Nellie Hunter was sick and that her place had been chosen to take the Christmas entertainment, and must wear a white dress and have her hair in curls the on Wednesday, besides going to the dress each room "a lick and a promise," she had hunted Lulu's white dress out of the trunk, let down the hem, and washed and ironed it. And

now, this was Thursday, the day before Christmas, and she had pies and cookies to bake, doughnuts to fry, a kimono to finish for Bessie, a doll to dress for Lulu, and some ornaments to make for the Christmas tree—so many of them had been broken last year and she had not bought any new ones because she had read in a magazine of a whole lot of charming ones that you could easily make at home. And she had not bought any candy for the children's stockings because she had planned to make a dozen different kinds of home-made candies. And she hadn't had time yet to do the week's mending and she knew there

he had taken down the receiver, she heard.

"Yes? Why, hello! Good morning. That's fine. Family well, I hope? No, the roads aren't so bad. They're drifted considerable up here in the hills, of course. Down on the bench hills, of course. It's blown off quite a bit. Yes, you can get through all right. Yes, that was quite a storm. Tell you, you'd better turn in at my west gate—that coulee by Wilson's always drifts pretty bad. Yes, you turn in there at my corner and come through on that ridge. Yes, the gate's just across from Jim Wilson's barn. No, you'll see my track; I took the kids up to school that way this morning. You come right past my meadow and then on through my house and your north line. All right. Good-bye."

"It's Syd Westbrook," he said to his wife as he hung up the receiver. "He's bringing his wife and baby home this morning and he phoned over North's deal of a tenderfoot, all right." His started out of the door and then paused with his hand on the knob. "You wouldn't like to ask them to stop here till tomorrow, would you, Fanny? I guess they'd appreciate it. It's a pretty long drive for a three weeks' kid and his mother, and their house will likely be cold when they get there."

Mrs. Marshall was trimming picture from the edges of the tins with a practised hand, but she paused to look upon her husband her indignant gaze.

THE GIFT.

A MOTHER was watching on Christmas night
Rocking her babe by the fire
And she lifted her eyes in the
gath'ring of the
For that Christ-child stood in
her lowly room
"What shall I give to thy
child?" He said,
Softly caressing the sleeper's
head.
"Nay!" said the mother, "O
Guest,
Give her whatever Thou deem-
est best!"

"What shall I give her, O
mother mild, for thy lit-
tle child.
Ask what thou wilt for thy lit-
tle child.
I shall kiss her brow that her
eyes may shine
With a kiss that men will
call divine!
I shall touch her lips that they
may glow
With songs the sweetest the
world may know
"Nay," said the mother, "thou
wilt not stay,
Songs may soothe and turn
thy tears gay."

"But what shall I give her?" He said again,
"Ask, and she shall not ask in vain!"
"Ask, and she shall not ask in vain!"
"Give her purity, truth and love!"
And the Christ-child turned to her soft and mild
"Thou hast chosen the best for thy little child!
Be not afraid, the life he gave
shall be with her forevermore."

—F. E. Weatherly.

were some buttons off of the clean row? Well, I guess not, with all I have to do and tomorrow Christmas, it isn't two miles from our house to their, and if he's got any gunption, he's got a fire all ready to light, and how long will it take to get the house warm?" And she turned back to her pastry board as her husband left the room.

"The idea," her thoughts ran on, "if that wasn't just like a man! And he knew the only place she could get a guest was in the parlor bedroom and that the Christmas tree was there, waiting for her to trim it. It was quite out of the question and the Westbrooks of all people.

Sydney and Grace Westbrook were young married people who had moved into the neighborhood a little more than a year ago. Both were college graduates and were vaguely rumored to have "all kinds of money." As a matter of fact, it was an uncle of Sydney's, with a large family of his own, who had all the wealth of the connection, and Sydney himself, by the time he had bought a few farms, some machinery, and a few head of some stock, and had done some necessary

tending and building, had no very large part of his patrimony left. Grace's family were cultivated, well-to-do people of the sort who live well and each year spend about as much of their income, sometimes as much more. That Grace should be a farm-er's wife seemed to them the height of absurdity and they were more than half impatient with Sydney and his enthusiasm over the agriculture and for communicating to his wife the details of Westbrooks to invest their money and settle down to ranching in the foothills country, it seemed so hard to say, perhaps it was the comparative cheapness of the land. Perhaps the writer of that particular paragraph had been a trifle more enthusiastic, had been a trifle more convincing than the shade more of all the other booster literature over which they had porred for days and weeks before their decision was made. It may have been the picture of the really beautiful scenery—taken, of course, in the summertime—with views of the splendid grain fields of "one of the entire Northwest," and glimpses of sparkling mountain streams "the homes of myriads of rainbow trout." Perhaps the fire of secret souls that had not the Country Life Commission urged upon the people of intelligence and high ideals the taking up of farm life as a form of social service.

For some reason the Westbrooks had not got very well in the neighborhood. Perhaps a too flamboyant notice in the county newspaper of their first arrival was partly to blame for this. The matter was a college acquaintance of Sydney's and when he met him at the county seat and learned the reason of his being there his pleasure at coming across a bit of the old life unexpectedly took shape in a glowing paragraph in his paper in which he dwelt, particularly upon the benefit conferred upon the community by his presence in it. Such commendation was not to the men felt for Sydney all the distrust of the Westerner for the man from the East, of the old time, for the new-comer.

When he had experienced the farmer for the book farmer, and the women seemed never to get anywhere with Grace. The Marshall's land joined the Westbrooks' and was apart for neighboring running back and forth. Mrs. Marshall had gone with her husband, as in duty bound, to call upon them soon after while the men the neighborhood and while the men stayed out of doors and inspected the stock, she had tried to visit with Grace. But Grace's living room with its Art Square and with their photographs of Mona Lisa and Michael Angelo's Moses and Rodin's Pensator, was as alien to Fanny Marshall's eyes, accustomed to a rag carpet and cheer, and she felt ill at ease in the unfamiliar surroundings, and Grace seemed to her stiff and unsocial. She did not dream that Grace would be so in sequence, and altogether the visit was far from being a success. Grace had never returned the visit, and this Mrs. Marshall secretly resented. They had met a few times after that at church or sewing circles, but there had been no growing friendliness, no neighborly gossiping over the fence, nothing to make the matter seem to be more than an utter stranger.

And until the county paper had announced early in December the birth at the hospital in a new son to Mr. and Mrs. Sydney Westbrook, Mrs. Marshall had had not known that her neighbor had left home.

So when her husband suggested on this bustle of busy days that she ask the Westbrooks to stop over tonight, she had felt that nothing could be more unreasonable.

"The Westbrooks, of all people," she

(Continued on page 31.)

The Upward Look

Glad Tidings

Behold I bring you good tidings of great joy, which shall be to all people. For unto you is born this day a Saviour which is, Christ the Lord.— Luke 2: 10, 11.

Sages leave your contemplations, Brighter visions beam afar! Seek the great Desire of nations, In his arms his natal star. —Come and worship! Worship Christ, the new-born King. —James Montgomery.

I HAVE read the story somewhere that when Daniel Webster heard or read Chalmers' great sermon on "The wonders of the telescope" his reason and his faith were shaken. "How could a Divine being, he reasoned, who created unnumbered systems of worlds, each revolving in its orbit round a central sun, stoop to one of the least of the planets and concern Himself with our petty cares? But the great preacher delivered another sermon, in which he dwelt on the wonders of the microscope, and showed that in the rolled-up, withered leaf of winter, securely wrapped and protected from the cold, was a miniature world of life ready to awaken at the first breath of spring. Then the great statesman concluded that if God could so care for the little insects that glitter in the sun and protect them during their long winter sleep, He would not forget immortal souls; and so his faith returned to him.

How much God cared for humanity, this Christmas season more than any other tells. Who can measure the love that sent the Lord of Glory, "manifest in the flesh," as the Babe of Bethlehem to stoop and assume our human form and become partaker of our nature? No wonder the heavenly host on that far away night sang "tidings of great joy." The day for which creation had waited had at last dawned. "Glory to God in the Highest, and on earth peace, goodwill toward men." This was the most wonderful song ever heard by mortal ears, and these the most joyful tidings ever proclaimed to the fallen world.

Joy is the prevailing note of the Christmas season. Good news always creates joy, and the greatest bulletin of good news ever published was on that night when the angelic host sang of the birth of the Saviour in Bethlehem of Judea, and across the weary centuries of sin, war and bloodshed still floats their song of peace and joy to the world the Lord is come. Let earth receive her King; Let every heart prepare Him room. And heaven and nature sing.

To many hearts in our dear land to-day this Christmas season may seem to hold little of joy. They will miss a familiar face and long for the sound of the still voice and the touch of the vanished hand at the Christmas table. Oh! stricken hearts look up. Christmas hath its message and its glad tidings of great joy for you. Has He led your dear ones? Then all is well with them, and He has not forgotten you, and the same Jesus who came as the Babe of Bethlehem two thousand years ago is waiting now to come into your heart, bringing with Him wondrous joy, comfort and peace, to sup with you, and be your guest at the Christmas table.

He comes sweet influence to impart, A gracious willing guest; While He can find one humble heart Wherein to rest. Hear what He says: "Behold I stand at the door and knock. If any man hear my voice and open the door I will come in to him and sup with him and he with me." Oh, wondrous condescension, who can measure it? It has been said that it is Christmas Day that holds time together, as it was to this day all the early world looked forward, and to the same day the latter world looks back. This is true as far as it goes, but the joy of which we look backward to the day of our Saviour's birth is not greater than the joy with which we look forward to His return, when we shall see Him "face to face," and the angels' song of "Peace on earth and goodwill toward men" shall at last find its complete fulfillment and war and bloodshed shall vex the nations no more, but peace and righteousness shall cover all the earth.

Their ancient splendors fling, And the whole world give back the song Which now the angels sing.

This was the day that Isaiah, standing on the mountain, peaks of prophecy saw, the day when the wolf and the lion should dwell together in the holy mountain of the Lord. It is the coming of this day that is the glorious hope of the church, the hope of the Christian, and the hope of the world.

This is part of the glad tidings of

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Book Dept. FARM and DAIRY Peterboro

PROCLAMATION OF AMNESTY

WHEREAS

"He was wounded for our transgressions, he was bruised for our iniquities; and the chastisement that laid on him for the iniquity of us all," (Isaiah 53: 5, 6)

THEREFORE:

"Let the wicked forsake his way, and the unrighteous man his thoughts; and let him return unto the Lord, and he will have mercy upon him; and to our God, for he will abundantly pardon." (Isaiah 55: 7)

THE ENDING REASON WHY God can righteously proffer mercy to sinful men.

Courtesy, Ministry Bible Institute of Chicago

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FARM AND DAIRY



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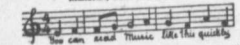
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great joy that Christmas brings to us, and let us not forget that "this same Jesus" whose coming we celebrate in this happy Christmas season is coming again in power and great glory to set up an everlasting Kingdom, and He who came once as the Babe of Bethlehem shall have the government upon His shoulder, and His name upon His forehead. Wonderful, Counselor, the mighty God, the everlasting Father, the Prince of Peace.

Beyond the war-clouds and the red- dened ways I see the promise of the Coming Days! I see His sun arise, new charged with grace.

Earth's tears to dry and all her woes efface! Who waits His time shall surely see The triumph of His constancy. The coming of His Perfect Day Shall sweep the Powers of Night away;

And Faith, replumed for nobler flight. And Hope aglow with radiance bright. And Love in loneliness be light. Shall greet the morning light.

-J. H. H.

COOK'S CORNER

Economical Christmas Dishes

If we are planning to have some- thing extra and at the same time do not want to be extravagant, it will be necessary to substitute some of the old reliable Christmas dishes with something "just as good." Below we give a few suggestions in the line of recipes:

Stuffing for Fowl.

Boil and mash some potatoes to almost stiff, the fowl, adding but a small quantity of bread. Season with salt and pepper, one small onion chopped, one tablespoon butter and some chopped celery.

Mock Pigeons.

Mince finely together half a pound of lean beef and the same amount of pork by putting through a meat chop- per twice; flatten out with a rolling pin, divide into four equal portions; spread each portion with force- meat; roll each up tightly and form into the shape of a pigeon; use pieces of potato to form the wings and add legs. Lay in a baking pan, and add a cupful of stock; bake frequently. Serve with currant jelly.

Forecraut.

Boil one onion; drain, and chop finely; mix with it one cupful of bread crumbs, half a teaspoonful of sage, pepper and salt, add the yolk of one egg, stir and use.

Mince Pie (Meatless).

Cook half a cupful of rice in water until soft; drain; add to the rice half a cupful of seeded raisins, half a cupful of currants, half a cupful of honey, two tablespoonfuls of chopped orange, a little lemon peel, one tablespoonful of mixer, and half a teaspoonful of mix- ture; add a little line a pie pan with pastry and fill with the mixture. Cover with a top paste and press the edges together. Brush over with white of eggs, then dust with sugar and bake.

Roast Goose (imitation).

Parboil one pound of liver, then slice it and fry in butter. Put a slice of mashed potatoes in a roasting pan, cover with slices of liver, then herb stuffing, and again more liver and stuffing. Keep the layers in shape and resemble a goose. Cover all with a thick layer of mashed potatoes, and bake every ten minutes with fat.

Christmas Cake (Egless).

Sift together two cupfuls of flour and two tablespoonfuls of baking powder into a mixing bowl; add one teaspoonful of ground ginger and a little nutmeg; rub in half a cupful of butter or shortening; add half a cupful of seeded raisins, half a cupful of cur- rants, two ounces of candied peel and

half a cupful of honey; mix well to- gether, adding a little milk if neces- sary, and bake in a slow oven. This makes one cake; to make a three-tier cake use two times and a half the quantity. Ice with honey icing.

Herb Stuffing.
Chop four ounces of beef suet finely and mix it with one cupful of bread crumbs, one tablespoonful of sage, parsley, one tablespoonful of sage, some thyme, the grated rind of a lemon, pepper and salt. Beat one egg and add to the mixture with a little milk; mix well, and use.

Christmas Candy

CHRISTMAS would not be Christ- mas to the children without candy. In fact, the majority of the older folks look forward to hav- ing some sweets on that day also. If we are going to have candy at all it is much more economical to make it than to buy. Herewith are a number of recipes in which brown sugar or corn syrup is used.

Butter Scotch.

Two cups brown sugar, four table- spoons molasses, two tablespoonful vinegar, two tablespoons water. After this is boiling add one quarter cup of butter. Boil till it is brittle when dropped in cold water. Pour on to buttered pineches.

One and half cups brown sugar, half cup milk, half cup chopped nut, half teaspoon almond extract, two tea- spoonful butter. Put sugar, milk and nut in a bowl and boil together until butter is saucy and a hot ball in cold water. Add nuts and flavoring and beat till it gets thick; pour out on a greased plate.

Peanut Brittle.

One cup corn syrup, one tablespoon vinegar and a little salt. Boil un- til it forms a ball when tried in cold water. Then pour this over one cup of halved salted peanuts and stir over the fire until the mixture be- comes a light brown shade. Take off and pour on plates to harden.

Butter Taffy.

Two cups light brown sugar, quar- ter cup molasses, two tablespoonful vinegar, two tablespoonful water, seven- eighths teaspoon salt, quarter cup but- ter, five teaspoonful vanilla. Boil first five ingredients until, when tried in cold water, mixture becomes brittle. When nearly done, add butter and just before turning out to pan add vanilla. Cook until hard in squares.

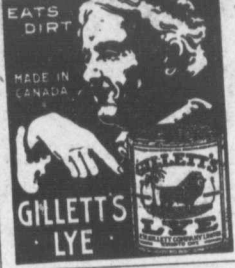
Fruit Candy.

One pound stoned dates, one pound figs, one pound seeded raisins, one pound walnuts. Mix above thorough- ly, put through meat chopper. Sprin- kle moistening honey on top. Roll mixture, cut in squares and roll each square in fruit sugar.

Favors Hot School Lunch

IN commenting on our article on "The Rural Hot Lunch," which ap- peared in the Household Number, "Just Me" had the following to say re- garding hot school lunches:

"The rural schools, especially from this time forth and on through the cold weather, need some system of feeding the children at least a warm drink. One of our teachers worked it out one winter and it was an unqual- ified success. I think the very first argument in its favor is that having a cup of hot cocoa will force the chil- dren to take the proper time to eat. Children, as a rule, are in such a hurry to get at their play, the "dry lunch" is disposed of in the quickest way possible. They are as likely as not to "eat as they run," very often throwing crumbs away because it takes too much time to chew them. But if they have a hot drink they are bound to linger long enough to at least chew their food, and although they do it's better than bolting it and leaving the stomach to do all the work."



95 to 125 Miles on a Gallon of Gasoline!

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A high-grade, easy running, speedy motorcycle of dependable work at a saving. 17 from a 300 cc. H. P. Motor, features Reverse Equipped with the H. P. Motor, Automatic Lubrication, high tension spark, Automatic Ignition, Chain drive, Simple efficient control at all times. Thousands in use.

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makes hens lay heavily, because it tones up the system and acts directly on the laying organs. Keeps fowls healthy.

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HOME CLUB

Thankfulness—Our Christmas Keynote

OUR Christmas this year will surely savor more of what it was originally intended to savor of. "Peace on earth, goodwill to men." During the past four years, when there was everything predominating on earth but peace and goodwill, we had almost forgotten what Christmas really should feel like. And though in our homes, especially the homes where there were children, we observed it to a certain extent, still we could not carry it out with the same wholeheartedness that marked our previous celebrations. Few were the homes that did not have someone in the fighting line, so Christmas meant loneliness and longing and heartache, rather than the gladness and joyousness that it hitherto signified.

This year we will feel the peace and goodwill as we could not during the awful season of war and its attending terrors. But we will show our feelings more appropriately if we let the keynote of our Christmas season be that of humble thankfulness, rather than excess of joy and hilarity. Christmas is the greatest holiday of all, and it is right that it should be so. Whoever we are, wherever we live and in whatsoever station of life we find ourselves, we will be celebrating Christmas in some way. It marks the greatest step forward in the history of humanity; the inception of a change that has been going on steadily for 2,000 years—the change from coldness and selfishness and class feeling to a conception of the solidarity of the human race, and the bond of sympathy and fellow-feeling that should unite it.

During a good part of the year we are apt to forget this. Existence is still a struggle for the great majority of people. But on one day of the year it is well to forget the struggle and to live for 24 hours at least, with a kindlier feeling for everyone and with greater self-forgetfulness.

It is no foolish habit to make Christmas gifts (unless carried on in excess of our means). Even if we don't like those we receive, and can ill afford those we make—the giving and receiving are well worth while. The gift constitutes a definite act of unselfishness. Not the least good gift we can bestow is that of good wishes—just merely good wishes!

A funny Christmas it would be Without a wish from me to thee; Without a wish from thee to me; A funny Christmas it would be.

Of course, wishes alone cannot make happiness, but they can, and do go a long way toward starting happiness. It doesn't cost anything to scatter the good wishes—and you never can tell what may come of them. Wishes, you know, are very much like birds—often they come home to roost. So, here's wishing every member of the Home Club and every reader of Farm and Dairy a very, very happy Christmas.—"JUST ME."

MUSIC—The Universal Language

SOMEONE has said, "Let me but write the songs of a nation and I care not who makes their laws." The great musician Liszt defined music as "the universal language of mankind, by which human feelings are made equally intelligible to all, white or of the other hue." It offers to the different nations a universal language. Certain it is that the influence of music on the national life is great. The aims, ambitions and culture of the race are reflected in its musical expression, from the savage with his tun-tun to the most highly civilized and cultured citizens. "The strength of the British people to-day," said a

musician recently, "is due to the fact that for the past 200 years her greatest music has been made and offered in praise of the King of kings and Lord of lords."

While it is true that the influence of music on the national life is very pronounced, it is equally true that music in the home creates a wonderful refining influence upon the momentary selection touches the heart-strings and fills us with a desire to go and live more nobly. Music in the home brings an air of cheerfulness and companionship that lends itself to congenial associations and a general uplifting tone.

If there is one place more than another where music can fill a large place it is in the farm house. There are many city homes where the piano is untouched for weeks at a time, because there are so many other things to take up the attention and the young people spend the majority of their evenings outside of the home. On the farm, however, there are not so many activities to call the young people elsewhere, and many delightful hours may be spent around the piano after supper has been washed. Of course, in order to enjoy music, at least one member of the family must be able to play. Every child all, however, stimulation for music at that opportunity if at all possible to receive a little musical training, as money invested in such training is well spent.

There is another point which is worth mentioning. It is not too often the case in our homes that the music-loving folks. Father and mother may be tired in the evening after their hard day's work, but if they would rather the children around the piano for a sing occasionally, would this not be just as restful as sitting down to read for an hour or two?

Do we sing enough? Is there not a tendency to leave all our singing for church or public gatherings instead of making use of it around home? Would life be quite as grey and heavy if we would sing more than we do? It is a pleasure to hear mother singing, she goes about her work, and if father and the young people hear her whistle or sing as they work. It is claimed that the new Navy building in Washington, D.C., was speeded up with an actual gain in transportation work of \$1,800 just because the men sung at work. Singing at work gives one a better outlook on life and keeps one's brain clear for sound thinking.

Let us endeavor to realize the large place which music should fill, in order that we may enjoy the refining influence that music has for good fellowship and cheerfulness in the home and the desire for the higher things of life which money cannot buy.

THE EARTH HAS GROWN OLD.

THE earth has grown old with its burden of care,
But at Christmas it always is young;
And the heart of the jewel burns young;
And the soul full of music breaks forth on the air,
When the song of the angels is sung.

It is coming, old earth, it is coming to-night!

On the snowflakes that cover thy sod
The feet of the Christ-Child fall gentle and white,
And the voice of the Christ-Child tells out with delight.

That mankind are the children of God.

The feet of the humblest may walk in the field
Where the feet of the holiest have trod,
This, it is the marvel to mortals revealed.

When the silver trumpets of Christmas

That mankind are the children of God.

—Phillips Brooks.

When the oven is too hot, and there is danger of the bread burning on top, put a pan of water on the top grate until the oven cools down sufficiently.

Your Christmas Gift This Year: Not Merely a Phonograph

BUT A

Brunswick
ALL PHONOGRAPHS IN ONE

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Here the Brunswick first, then judge for yourself.

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Utiona All-in-one reproducer. Plays all records correctly, exact weight, correct needle. All-wood tone chamber. Better tone. Automatic stop. Throat-way volume control. Finer cabinet work. Costs less.

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Duplex Manufacturing Co., Dept. B21, Barrie, Ont.

Please Mention Farm and Dairy when Writing

FARM AND DAIRY

and been admitted to even his mother's satisfaction, and the children had come home from school and been wild with delight at finding a baby established in the house.

"Is he ours, Mother? Did Santa Claus bring him?" asked little Lulu. "He is ours to love, but not ours to keep," said her mother. "Santa has only lent him to us."

"Mr. Westbrock tells me," said Mr. Marshall as the men came in to supper, "that he has lived on a farm all his life, except while he was at college, and that he has worked on a farm every summer for the last twelve years. I thought he was a city chap." And his wife knew from his tone that he and his guest were progressing as rapidly towards mutual understanding as were she and Grace.

It was not so very late when they reached home after the entertainment, and the parlor was warm and cozy so they sat for a little, talking over the evening and telling how Freddy almost forgot his piece but remembered it just in time, and how beautifully Lulu did her part in the tableau, and how well Besse and all the other big girls sang. Presently Grace rose and went into the bedroom and in a few moments summoned Mrs. Marshall through the crack of the door.

"I just wanted you to look at the tree and see whether you like it," she said when they were both in the room and the door was safely locked.

"Beautiful," whispered Mrs. Marshall. "It was surprising how much prettier the tree looked than if she had trimmed it herself.

"You don't know what a relief it is to me to have it all done by magic, as it were. And what are all these cute little bags?"

"Well, I had some old ribbons in my suit case, and Sydney bought a big box of chocolates in town, and I had to invent some way to put them on the tree. We got a box from home, too, just before we left town, with some Christmas records in it. Is it too late to try them to-night?"

"It's getting pretty late for my youngsters, they ought to be in bed this minute but we might have one."

"Well, just one then to-night, and the rest to-morrow," said Grace.

"It's getting pretty late for my youngsters, they ought to be in bed this minute but we might have one."

"Well, just one then to-night, and the rest to-morrow," said Grace.

So presently Elsie Baker's lovely tones filled their little parlor, and they all went to bed with "Silent Night, Holy Night," ringing in their ears. And somehow the thought of the little babe asleep in the parlor bedroom brought that first Christmas closer to their hearts and gave a tender significance to the new friendship that was taking root there.

"How lovely everything is," was Mrs. Marshall's last waking thought that Christmas Eve, "and to think how near there came to being 'no room for them in the inn.'"—Farm, Stock and Home.

stay on the farm a few more years, rebuild his barn and paint his farm buildings and perhaps he could get the stipulated price.

Just as the buyer was leaving the house, he said, "My, but that is a front porch, you have from this view well the view is framed by the two sills. How blue the lake is. The distant hills must be twenty miles away."

"Yes, that is a fine view," replied the farmer. "It shows up much better now that the barn is gone."

"I didn't realize that the barn cut off the beautiful view," said the visitor. They talked awhile longer but agreed to pay the farmer his stipulated price for the farm.

This incident shows how views add to the salability of the farm. Become distinctive features of the farm home. Preserve the views about the house site. They increase the cash value of your farm.

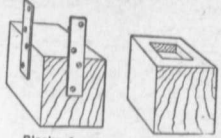
collar with food is a necessity. In cool weather, however, a cold box would be found to be quite a convenience. An ordinary light box can be used. The box is fitted to the outside of one of the kitchen or pantry windows. A north exposure is the best location. The window sill is extended by a shelf, which is supported by wooden brackets. The cold box rests on the window sill and the extended shelf and is fastened to the window casing by screws or nails near the top and bottom of each end of the box. During warm weather when the box is not in use it may be removed if desired. The box should have a sloping roof to shed the rain. Holes for ventilation are made in the end and screened. Raising the window gives access to the cold box, as is shown by the diagram. By this arrangement the light from the upper half of the window only is available, so this would need to be placed in a light room.

Removing Kinks From Kitchen Work

"**W**HATEVER lessens woman's work benefits the race." The kitchen is our workshop, and it is well worth while for every housewife to have as many conveniences as possible in that workshop. There are many home-made labor savers which might be installed in our kitchens without any great outlay. We will mention a few of them in this article.

Folding Ironing Board.

The weekly ironing is no small task, and yet how many people there are who have not a convenient ironing board. A board supported on two chairs is often used, or just the ordinary kitchen table, which in many



Blocks for Raising Tables.

Kitchen tables and sinks are usually too low for working surfaces when the housewife is standing. Low hills for tired backs and other reasons shoo, because of the undue stooping and the strain on the arms and shoulders. The kitchen table can be raised to a comfortable height by the use of blocks of wood. Two types are shown herewith, one being a block of wood with a socket into which the table leg fits securely, and the other screws or nails for fastening on to the table leg.

A Unique Dinner Wagon.

Throughout the summer and in some cases all the year round the kitchen is used for cooking in and the



meal is eaten in the dining room. This entails a great many steps for the housewife in the preparation of a meal. We recently noted a description of a step saver in one of our United States contemporaries, which was in the form of an improvised dinner wagon. It was made from a discarded baby carriage. The rear corner posts fitted in, sideboards put on and the top was finished with oak staining. The whole was finished with oak staining. The illustration on this page shows the finished product. On a contrivance of this kind, the food dishes below. Even if a person does not happen to have an old baby carriage the "handy" man around the house for working out such schemes.

A Cold Box.

Unless one has a refrigerator or ice box of some kind, endless trips to the

To My Plum-Pudding

THERE was a time, O sweet, attractive edible,
When I would welcome annual appearance,
With tireless energy and zest incredible,
I made of you a most astounding clearance!
No thoughts deterred of fruit and nuts to follow—
When I perceived you, crowned withilly spri—
I tackled you till I could scarcely swallow;
I was, in fact, a greedy little pig.

Then came a period when with cautious glances,
And inward gustatory protestations,
I took with unaccustomed care the chance
Of sundry pains, digestive perturbations;
Still did I love you, still acclaimed your magic,
Still hailed you, odorous advent with a cheer;
And if the morrow savored of the tragic,
It was, I made excuse, but once a year.

Today, as then, I offer you the biscuit
For gracing every feast of this fair season;
But as for eating you, I will not risk it
For anything, old chap—and with good reason.
That is my firm resolve . . . Yet when, all stemmings—
Straight from the kitchen's fragrant merchandise
You come triumphant, you will set me dreaming
For old times' sake, I might have—just one slice!

THE BRIDGE BUILDER.

AN old man going a lone highway,
Came at the evening, cold and gray,
To a chasm vast and deep and wide.
The old man crossed in the twilight dim—
The caution stream had no fear for him.
And built a bridge to span the tide.

"Old man," said a fellow-pilgrim near,
"You are wasting your strength with building here;
Your journey will end with the ending day.
You never again will pass this way;
Why've you crossed the chasm deep and wide,
Why build you this bridge at evening tide?"

The builder lifted his old gray head—
"Good friend, in the path I have come,"
He said,
"These followeth after me to-day
A youth whose feet may pass this way,
This chasm that has been so dear to me.
To that fair-haired youth may a pitfall be;
He, too, must cross in the twilight dim—
Good friend, I am building this bridge for him."

—Selected.

When too much bluing is put into the rinsing water try adding a little household ammonia.

Value of Good Views

A REPORT from the Wisconsin Station gives the following interesting story which demonstrates the cash value of good views on the farm.

A farmer in southern Wisconsin who found it necessary to move to a warmer climate, was very desirous of selling his farm. A buyer came to see the property and looked it over thoroughly and thought it well suited to his needs. He wished to bring his family to the farm and make it his permanent home. However, when they came to close the deal, the farmer and the buyer differed by \$2,000.

A few days later the barn, which stood across the road from the house, was struck by lightning and burned to the ground. The loss of the sale and the barn was a severe blow to the farmer, and it was with reluctance that he changed his plans and decided to stay on the farm.

Some days later the buyer returned to the farm to see whether the farmer would not consider his former offer, but upon talking the matter over, the latter told him that he had decided to

cases is too low for comfort. A board which folds up out of the way when not in use, is a convenience worth this device, which is simply constructed. It is an important point to have height for the user. When in position for ironing, the base rests on the base-board of the wall. When not in use the board is folded up against the wall and held in place with a button of some kind.

A Dish Drainer.

Perhaps no time spent in housework is more begrudged by the housewife than that devoted to the washing and wiping of dishes. As this is a task that has to be done three times a day, anything which will help to lighten the task should be welcomed by all of us. We understand dish washers may now be secured for from



\$18 up. This really does not seem a large investment when one considers what a boon it should prove to the housewife. But those of us who do such a contrivance may still lighten our labor considerably by the use of a dish drainer, such as the one here shown. It can be made by using an ordinary good-sized biscuit pan. The racks may be made with soft No. 12 pliers the wire can be bent into the proper shape for forming the racks. These fit on to the edge of a pan and the dishes out of the water. The compartment for knives, forks and spoons may be made with poultry netting, or by punching holes in the bottom of a tin can. After the dishes are washed they are stacked in the racks, scalded with hot water, and they dry clean and listless.



had driven washed the Lulu's doll appeared, a checks, and neatly rested her life in the Christmas hall. "We'll see the parlor out of me, and I will see the children are any way," said the girl to the going to the Mrs. Marshall to hear and see Lulu's doll. "I'll be better than a tree; it'll be back."

"You don't know what a relief it is to me to have it all done by magic, as it were. And what are all these cute little bags?"

"Well, I had some old ribbons in my suit case, and Sydney bought a big box of chocolates in town, and I had to invent some way to put them on the tree. We got a box from home, too, just before we left town, with some Christmas records in it. Is it too late to try them to-night?"

"It's getting pretty late for my youngsters, they ought to be in bed this minute but we might have one."

"Well, just one then to-night, and the rest to-morrow," said Grace.

So presently Elsie Baker's lovely tones filled their little parlor, and they all went to bed with "Silent Night, Holy Night," ringing in their ears. And somehow the thought of the little babe asleep in the parlor bedroom brought that first Christmas closer to their hearts and gave a tender significance to the new friendship that was taking root there.

"How lovely everything is," was Mrs. Marshall's last waking thought that Christmas Eve, "and to think how near there came to being 'no room for them in the inn.'"—Farm, Stock and Home.



THE MYSTIC
BEAUTY OF MUSIC
WAS NEVER MORE NEEDED
IN THE HOME THAN IT IS
THIS CHRISTMAS



When cloud-banks blot the sky dull grey, or whistling winds make outdoors disagreeable, how cheery and exhilarating are bright lights and sparkling fires;

And in these soul-trying days, how welcome is the cheery brightness—the soothing caress—the soul-satisfying message—of the music you love.

So this Christmas you need music more than ever—good music, that brings the spirit of Christmas to everyone, young and old. Such is the music of

The NEW EDISON

"The Phonograph with a Soul"

This wonderful instrument brings the beautiful world of music into your home—*Re-Creations* of the art of the world's greatest artists'. The New Edison does not merely imitate—it actually *re-creates* with such utter fidelity that the human ear cannot distinguish between the living artist and The New Edison.

The true spirit of Christmas lies in the soul of The New Edison. Let it sing its message of hope and faith and love in your home this year.

May we send you a complimentary copy of our musical magazine "Along Broadway" 198

THOMAS A. EDISON, Inc., - ORANGE, N. J.

TWEED Steel Cheese Vats

(Patented)

Our long delayed shipment of Tin has at last arrived. While it lasts we can supply you promptly with our steel Cheese Vats. As there is practically no chance of any more tin coming through from England for at least six months, you will be wise to buy your vats now. We are shipping them out, as fast as we make them, to the wise ones who know the tin situation. Don't blame us if you order a vat three months from now and can't get it. At the rate order a vat three months from now and offer for love or money. Send your order, don't even wait to ask prices.

DO IT NOW!

The Steel Trough & Machine Co., Ltd.
TWEED, ONTARIO

No business was ever so great or powerful that it could buy all the good advertising space and so get all the good results. There's plenty of chance for every good starter.

POULTRY



An Egg Ration Contest

THE Eighth International Egg Laying Contest held at Victoria, B. C., is now off to a good start with 40 pens entered; 21 of the light weight varieties, 20 of which are White Leghorns and one pen of Mot-White Anconas and 19 pens of the heavy weight varieties, including Wyandottes, Rocks, and Reds (six birds to a pen). Most of the entries are from British Columbia but there are also British pens entered from Oregon, New Mexico and Alberta. The contest ration fed this year is as follows:

Scratch food — Equal parts by weight of oats, barley, cracked corn and wheat. Dry and wet mash—Oats (ground) 40 lbs; bran, 22 lbs; shorts, 22 lbs; beef scrap, 15 lbs; charcoal, one pound; total, 100 lbs. Wet mash is fed Mondays, Wednesdays and Saturdays mornings. The wet mash fed at each meal weighs (dry); Class 1, light weight breeds, 12 lbs.; Class 2, heavy weight breeds, 15 lbs. fed with hot water. Birds are fed chickweed and chard, ad. lib.

Cooperative Storing of Eggs

WHY should not farmers store their eggs in summer when their prices are low and sell them again in winter when prices are high? Many are already doing so. The Poultry Department of the Nova Scotia Agricultural College has advanced the programme another step. The Department is assisting the farmers of the province in the cooperative gathering and storing of eggs during the season of plentiful supply. During the months of April, May and June, the eggs are gathered and stored in tanks with water glass and are disposed of during the season of scarcity in the months of November, December and January.

By this means the Department has been able to help farmers to obtain a better price for their eggs and to supply eggs to the market at a time when eggs are scarce. During the season of 1917 and 1918, Mr. J. P. Landry, manager of the Poultry Department of the N.S.A.C., estimates that over 15,000 dozen eggs were handled in this manner. What the farmers of Nova Scotia were able to do in cooperation with the department, independent farmers' organizations and egg circles everywhere, should be able to do on their own initiative. Such a venture would need to be carefully planned out in advance and perhaps experimented with on a small scale at first. Any new commercial venture may require experience before it may be launched on an extensive scale.—S. C. W.

Turkeys, Geese and Ducks

TURKEYS, geese and ducks should be more generally raised. They furnish the cheapest meat produced, considering labor and feed, and generally sell for a high price. Turkeys greatly aid in combating insect pests, as grasshoppers and army worms, and also in consuming the scattered grains of the fields. The best breeds of turkeys for the farm are Mammoth Bronze, Bourbon Red and White Holland. As the Bronze are the heaviest, they are the most popular with turkey raisers. A young tom with three or four early-hatched young, here makes a good breeding pen for the beginner.

Geese will help to get the maximum returns from low, marshy lands. They feed on many forms of vegetation not

used by other stock. Their fat is very valuable. The two leading breeds are Toulouse and Embden. Young Toulouse geese have been made to average 23 pounds each by December 20. In mating, one gander with three or four geese gives best results. They do not mature until about three years old, but will breed when two years old. The same breed may be kept for eight or ten years.

Ducks grow the most rapidly of all farm poultry, and furnish a desirable variety in the family food supply. The most profitable are the Rouen, or "Green W" to Pekin and Golden Plover "six Heads" as they are commonly called. They will weigh from five to six pounds in ten weeks if well fed. One pound is mated with about five mature drake for best success.

Breeding stock of turkeys, geese and ducks should be obtained during November and December for best results. At this time choice birds may be bought before being put on the market.—F. P. N.

Advice of 40 Years Ago

IT is indeed interesting to know, in these times of changes and improvements, that the advice given 40 years ago was generally very sensible, and much of it has not been changed even to the present day. Here are some samples:

"After all said and done, in regard to fattening fowls, I am doubtful whether there is any better food for this purpose than sweet corn meal. Feed it frequently during the day, not less than four or five times a day, giving the early in the morning and the rest as possible as near roosting time as possible. Give only as much as the fowls will eat with a relish. Feed it raw, not ground too fine, and moistened with a little water."

"The droppings of the hen roost are amongst the best fertilizers that accumulate on the farm. They are equal to the best Peruvian guano. Hequl too powerful to be used alone, they should be composed in the proportion of two parts of good soil or manure to one of the droppings. Thus prepared it will be found almost invaluable for any crop, but especially strawberries. We would therefore ask the farmer who permits his fowls to roost on trees, ferns, plow handles, wagons, etc., subjecting the course of waste their disease, and of course wasting their valuable droppings, whether it would not be a profitable investment to build a comfortable hen house? Think the matter over at your leisure."

"We don't believe in hens that have hatched after April; we believe in having plenty of eggs from the middle of October during the months following when eggs are high." That is surely strong advice for a period when artificial incubation was practically unknown.

"We are not particular as to breed, except that we want large, lively hens, who change cocks every year and look for good-sized smart fellows." That paragraph would be contradicted in any day, when offered at the present time, and medium-sized hens are advised, and when changing male blood annually might mean ruination.

"We love our hens, keep their houses clean, and save the droppings as the best fertilizer on the farm."

The writer has always cautioned beginners to start in a small way and go slow. It is always best to begin at the bottom round of the ladder and carefully climb to the top. Men who begin and go in that style are generally successful. It may seem easy enough to manage several hundred hens, and so it is for a man of experience, but the beginner must not lose sight of the fact that he has much to learn. He must, likewise, consult his capital, and under no circumstances should fail to lay aside a certain amount for working purposes.—Michael K. Boyer.

ONTARIO

The Land of Unlimited Opportunity

RECENT railroad construction has made accessible a vast region of natural wealth in Northern Ontario. Fortune and health await thousands in this wonderful land. Substantance will be given to millions, and Ontario faces a glorious future.

This great province presents greater possibilities to the farmer and settler, the workman and manufacturer than any other portion of Canada.

Natural Wealth

Ontario is rich in timber and waterpowers, with its limitless tracts of untouched forest and numerous waterfalls and rapids. It contains vast expanses of rich virgin farm lands, only awaiting cultivation to produce abundant crops of every description.

Of Ontario's 230 million acres of land only 13 1/2 million acres are under cultivation. More than 20 million acres of the very finest arable land lie waiting for the plough.

The following statistics will be of interest as showing the enormous possibilities of "Canada's Banner Province":

| | |
|--------------------------------|---------------------|
| Assessed Value | \$1,900,000,000 |
| Annual Production | 1,000,000,000 |
| Uncultivated Farm Land | 20,000,000 acres |
| Available Timber | 19,000,000,000 feet |
| Available Pulpwood | 300,000,000 cords |
| Undeveloped Water Powers | 4,000,000 H.P. |

Success is Sure

Tales of individual success in the Province of Ontario sound almost like romance. Not one or two, not a few dozen, but literally hundreds of men have gone on to a farm in this favored country and taken a fortune from the earth as truly as does the miner who makes a "lucky strike."

And why should this not be so? Everything is in favor of the tiller of the soil. The climate is ideal, with beautiful warm summer days and healthful winter weather, neither season being at all extreme. Spring opens fairly early and Autumn is usually protracted until late in the year. Then, the soil is rich, productive, one might term it responsive.

Information re Land Settlement and Opportunities for returned soldiers may be had by applying to Lt.-Col. Robert Innes, Parliament Buildings, Toronto.

WOULD YOU LIKE US TO TELL YOU MORE ABOUT NORTHERN ONTARIO?

Our literature descriptive of this great country may be had free on application

G. H. FERGUSON,
Minister of Lands, Forests and Mines

Write:—**H. A. MACDONNELL,**
Director of Colonization
PARLIAMENT BUILDINGS, TORONTO



AGRICULTURE

POWER

MINING

The wealth many farmers accumulate is not earned by the sacrifice of health or vigor through excessive overwork. On the contrary, with proper knowledge and care, backed by ordinary industriousness, Ontario farming land will yield a most bountiful return for the time, money and labor invested.

Free Literature

about this splendid agricultural country may be had for the asking. Your every question will receive an authoritative, carefully-considered reply. Address as below for prompt reply.

Northern Ontario

Northern Ontario's Famous Clay Belt stretches west and north from the Ottawa River, along either side of the Grand Trunk Pacific Railroad, right to the Manitoba boundary.

RAILROADS—A settler can ride from the big cities of Ontario or the West in a Pullman, if he wishes, almost to his own door. This is something new in pioneer life.

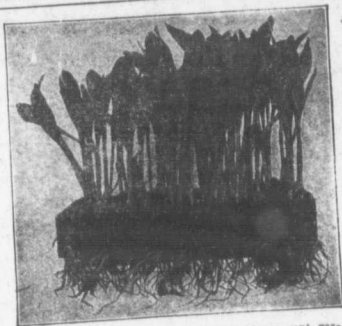
Note that this fertile land is one degree south of Winnipeg. The climate is ideal for perfect health, warm in summer, cold and invigorating in winter.

The land is well watered with lakes and rivers and covered with merchantable timber.

Agricultural Products

Millions of acres of the finest agricultural land comprise the famous clay belt, and it has been proven that certain sections are already producing wheat equal to the finest Manitoba hard.

It is encouraging to know that a great stretch of uncultivated land lies out invitingly before the prospective farmer, but the encouragement is deeper than that. It may be justly asked, "Has the soil been practically tested?" "If so, what are the results?" The answer is that settlers have gone into all the districts. To see the crops grown by them is a revelation.



This is an actual test of seed corn, 94 per cent germination. All our seed must test well and show strong vigorous growth before sending out.

SEED CORN FOR 1919 SOWING

Specialty priced for immediate delivery, carefully selected, strong vigorous seed. Tested for germination.

ROCK OR NAIL CURED ON COB.

| | | | |
|-----------------|-------|--------|---------------------|
| Long Fellow | | \$4.50 | per bushel, 70 lbs. |
| White Cap | | 3.75 | " " " |
| Gold Glow | | 3.75 | " " " |
| Wisconsin No. 7 | | 3.75 | " " " |
| Bailey | | 3.75 | " " " |

Bags Free.

Write at once for our advance price list and compare our prices with others. We sell direct to farmers. No middleman's profit.

BARGAINS IN BAGS.

Second-hand bags strongly washed by machinery. Cotton, first quality, \$5.00 per dozen; second quality, \$5.00; third quality, \$3.50. Jute Sugar Bags, \$1.50 per dozen; Jute Flour Bags, \$2.00.

Write for our Poultry Catalogue.

GEO. KEITH & SONS,

124 KING ST. EAST - - - TORONTO

Get This Blood

Two pure bred Holstein cows for sale, 4 and 7 years old. One of them in R.O.M., both in calf to King Segis Alcartra Spofford (imported by Leavens & Purtille), the \$2,000 son of the \$50,000 bull. Both guaranteed absolutely right in every respect. Price \$225 each. For particulars, write, BLOOMFIELD, Ont.

CLARFENCE MALLORY

FOR \$130.00 CASH

This is the last young sire we have to offer at the present. He is by Sir Riverdale Echo Lyons, whose four sisters average over 100 lbs. per day, including May Echo Sylvia, world's Champion Milk producer, with 41 lbs. butter and whose two sisters, dam, dam's sister and grand-dam, have records of over 700 lbs. milk in 7 days. His sire was head of the big Alliston herd at Chesterville, his dam has a 24 lb. butter record with 511 lbs. milk in 7 days and of 2,314 lbs. milk and 88.23 pounds butter in 30 days. This is the making of a splendid bull with both breeding and records behind him. He is ready for light service. COUGHLIN BROS., R.R. No. 9, PETERBOROUGH, Ontario.



The First Creamery in the Temiskaming District of New Ontario. The creamery at Paton Lake started operations in August, 1917. In its first year the number of patrons increased from 62 to 159 and the make totalled 96,500 lbs. of butter.

A New Ontario Creamery

FACTORY dairying is off to a good start in New Ontario. The government creamery at New Lakeard, which is illustrated on this page, commenced operations last August. The start was made with 52 patrons. This year, after a good deal of work and organizing, there are 183 of the district are wide awake to the opportunities that a dairy market affords.

The creamery is due to fill an increasingly important place in the agriculture of the New Ontario district, which is one of the finest grazing districts in Ontario and well adapted to dairying. Mr. A. MacLachlan, the manager of the creamery, is enthusiastic over the country and its possibilities and to help on dairy development expects to organize several cow testing associations next spring.

A Factory Herd Bull

J. A. Williams, Ontario Co., Ont.

THERE are many instances in these factory sections where a good bull would be used if one were available. In many sections where I have visited I have found that perhaps there were only one or two real good sires to serve a very large district. As a result many patrons of these factories or creameries were using sires of very inferior quality. I believe that this disadvantage could be remedied if the cheese factories and creameries supported a pure bred dairy sire for the use of their patrons. I know of one case where

this has been tried out and so far as I can learn it is giving splendid satisfaction. The patrons are charged a nominal fee for the service of the bull, just sufficient to maintain and keep the animal in good shape. The method employed by the Canadian Government when loaning bulls to breeders' clubs. Some man in the centre of the district the bull is to serve, is appointed as caretaker. He receives a stated fee for his trouble and any expense incurred. All feed is furnished him by the factory authorities. The cheesemaker has full control of the bull.

It seems to me that such a plan as this might be adopted to good advantage in many sections where the influence of such a sire will be pronounced and noted in the increase of the milk flow of the herds he sire, and in the quality of the animals produced. In this way the receipts of the milk at the factories should be materially increased in the following year or five years. No doubt, too, such a plan would serve to attract the patrons of other factories to sire, maintaining a pure bred dairy sire, maintained above, there

In the case mentioned above, the patrons are charged a very nominal fee, which goes towards maintaining and paying off the original purchase price of the bull.

WM. SCOBEL'S SALE

In the ad. of Mr. Wm. Scobel's sale on page 53 of this week's issue, the time the sale will commence at is given at 11 p.m. Just on going to press Mr. Scobel advises us that the time has been changed to 10 a.m. Look up his ad. and note particulars of the sale.

Excelsior Farms

"Buy the best and breed them better" is my motto. That is why I bought Lakeview bulls that were direct descendants of Canadian champion cows to head my herd. The senior sire is a descendant of Lakeview Rattler (page 49), 37.54 lbs. butter, 724 lbs. milk. My junior sire is a son of Lakeview Lestrangle (page 44), 38.06 lbs. butter, 741 lbs. milk. When in need of a high class bull, write Excelsior Farms.

JOHN WARNER, Proprietor, CAYUGA, ONT.



LAKEVIEW MONA RATTLER BOY

FOODS

- Ground oats.....
- Wheat bran.....
- Corn meal.....
- Shrimp.....
- Oil meal.....
- Alax Sakers.....
- Carrots.....
- Chickens feed.....
- Ground barley.....
- Kale.....
- Flour.....
- Honey.....
- Shady's cream.....
- Alfalfa meal.....
- Best pulp.....
- Molasses.....
- Mixed hay.....
- Green clover.....
- Slip.....
- Green vicia leucom.....
- Alfalfa hay.....
- Patent.....

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Where Fitting is Half the Battle

(Continued from page 4.)

manger out good and clean, that she is ready to have her ration shovled up a notch or two. We find it invaluable in our testing work to make a careful study of each animal so as to ascertain just what her likes and dislikes are in regard to her feed and what she likes to give her what she likes. Often a cow will clean up her feed better if one of the concentrates which she likes best is put on top of her feed and she can eat that first without musing her other food. Or if you find she likes the roots or silage better, that is put on top. Cows, like human beings, vary in regard to their tastes, and each animal must have her taste so satisfied so as to have her make the best record. One cow which we tested would eat more and better if we gave her each concentrate separate instead of mixing them together. Another cow we tested would respond better to her ration if we gave her the grain ration first and then in half an hour or so gave her her roots and silage. If the cow does not clean up her entire ration it should immediately be removed from her manger and not left for her to mussy over. In our own practice of feeding we feed the grain, roots and silage four times per day and the hay three times, the latter being omitted at the midnight milking.

The grain rations which we like best and seem to derive the best results from are the same as are used on many other farms including the Pine Grove Stock Farm of Elma, N.Y. We try to stay as close to these rations as possible although, as stated before, we must first consider the taste of the cow.

Ration No. 1.

Two hundred lbs. bran, 200 lbs. distillers' dried grains, 125 lbs. ground oats, 125 lbs. gluten, 100 lbs. cottonseed meal, 80 lbs. oil meal, 10 lbs. salt, 15 lbs. charcoal.

Ration No. 2.

One hundred lbs. bran, 100 lbs. ground oats, 100 lbs. hominy, 100 lbs. oil meal, 50 lbs. cottonseed meal, 10 lbs. salt, 15 lbs. charcoal.

Personally I have derived the best results from No. 1 ration although in many cases you will find that the cow will refuse either the distillers' grains or the gluten.

In my opinion mangels or sugar beets are invaluable to the man who is testing, and in many instances will eat 100 lbs. of these a day. From 20 to 30 lbs. of silage may be fed, depending upon the likes of the cow and the character of the silage.

Feeds Popular With Others.

While attending Cornell University and studying under Prof. Savage I made a study of the various kinds of rations which had been fed to the ten

highest cows in all the breeds during the time they had made their record. Some 50 letters were sent out and I received some 20 replies as you will find that testing, as well as other phases of work, some men are not inclined to give to the public their pot- secrets of success. The table published here goes to show the results in all cases and that ground oats was used in nearly all the rations. Oil meal, gluten feed and cottonseed meal were also favorites with the breeders.

In caring for a cow on test the feeder should at all times be in close touch with his animals, but not so much as to bother her or cause undue excitement. In testing, one has to be very patient and look after the small details as well as the big ones. It is only fair and square to the cow to give her the best chance possible for a good record, so we must see to it that every condition about her is favorable to her milkings during the test. One must be regular with his milkings during the test to change milkers during a test three times during the day and another man the other milkings. If the cow is on test she will become attached to his milk and more readily let down her milk whereas, if she is forced to put up with two milkers, we her under these changing conditions. The condition of the bowels, especially all times be closely watched, and if any undue disturbances occur, the cause should immediately be sought out.

The Test Barn.

It is always well to hold as near as possible to the proper temperature in the test barn, which is between 45 and 60 degrees. The test barn should at all times contain plenty of dry pure air and plenty of sunlight. It is well to lightly blanket the cows during cold weather and any drafts or direct currents of air should be avoided so as not to chill the cow. The test barn should be kept as quiet as possible and no undue noises or disturbances should be allowed.

I like the man best who immediately cleaning the stable after the morning milking, giving the cow a good clean bedding, a thorough grooming and then let her alone until the next milk- ing. We feed our test cows just as we milk them and let them eat what we are doing the milking. This, I believe, tends to draw the attention of the cow away from what you are doing and she will allow her milk to flow more freely. The manager should always be sure to strip out the udder

of the cow very carefully after each milking and give it a good rubbing. This little extra trouble will surely pay in the end.

Current Notes

Announcement is made from Ottawa that W. J. Black has resigned his position as Commissioner of Agriculture to become Chairman of the Soldiers' Settlement Board. On the Board he takes the place vacated by Mr. C. F. Howard of Winnipeg, and the change means that an agriculturist is now associated with the work of the Board. Mr. Black is a graduate of the Ontario Agricultural College and has served as editor of The Farmer's Advocate of Winnipeg, Deputy Minister of Agriculture for Manitoba and was for 10 years president of the Manitoba Agricultural College.

Sidney C. Johnston, at one time vegetable expert for the Ontario Department of Agriculture and later director of the Ontario Government Motion Picture Bureau, passed away in Toronto on Friday Nov. 22nd. Appendicitis followed by complications, was the cause of his death. Heart felt sorrow will be felt at this sad news by the hundreds who knew 'Sid' at college and by the many friends that he has made since. He was just 23 years old.

With the idea of capturing the proposed International Live Stock Show for Toronto, a deputation headed by Messrs. George E. Day and George Pepper, representing the live stock interests of Canada, Messrs. John G. Kent and C. A. B. Brown of the Exhibition, proposed to the Toronto Controllers that the city erect at a cost of \$500,000 a live stock arena for winter stock shows at the Exhibition grounds, on the live stock interests agreeing to pay \$200,000 of the costs, the Provincial Government \$30,000 and the Federal Government \$10,000 annually as prize money. It was asked that the city submit the matter to the people at the next election, in the form of a by-law to raise the money. Finance Commissioner Bradshaw objected and the matter was referred to him for further investigation.

Many a good Scotch story is told by Sir Henry Grier. One is in regard to a certain headie who had to show visitors over the remains of an old abbey "somewhere beyond the Tweed." He had on one occasion performed this service for a lady at a cost of his own life at the church- yard gates, merely rewarded him with thanks.

"We my leddy," he remarked, "when ye gang hame, if ye fin' out that ye have lost your purse, ye maun recollect that ye haven't had it out here."

The Fire-proof permanent roof is the cheapest

A FIRE can wipe out the savings of a lifetime, and human life as well. But lightning or fire cannot burn the building that is roofed with "Eastlake" Galvanized Shingles - and sided with "Metallic" Siding.

Why risk your family's safety, or your buildings and belongings when the cost of a permanent, fireproof, "Metallic" roof and wall is little or no more than for inflammable kinds.

Before you build or repair write for free booklet and information. We can show you real economies in many ways, including lower insurance rates.

We also make "Metallic" Ceilings, Corrugated Iron, Rooflights, Ventilators, Sile-roofs, etc.



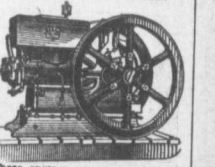
"EASTLAKE" GALVANIZED SHINGLE

Peck, Kerr & McElderry Barristers, Solicitors, etc. 415 Water St., Peterborough E. A. Peck F. D. Kerr V. J. McElderry

BONE SPAVIN... No matter how old or how long standing, no matter how difficult it falls to cure either Bone Spavin, Ringbone or Sidelbone, Fleming's Vest Pocket Veterinary Ad- viser will cure you.

TYPEWRITTEN PEDIGREES 4 GENERATIONS 1 copy \$1.00 (Printer's copy for sale catalogues) 2 copies \$1.10 5 copies \$1.20 The Canadian Holstein Sales Co. Simco, Ontario, Bell Phone 130.

Brantford Kerosene Engines 1 1/2 to 20 H.P. Stationary, Mounted, Traction



These engines are the perfected product of years of study and experimentation with internal Compression Engines, and are a demonstration throughout Canada. Get one this season and let it replace your hired man. It's a gluton for work but runs on coal oil or naphtha. We also manufacture full line of WINDMILLS, Grain Grinders, Saw Frames, Pump, Tanks, Water Boxes, Concrete Mixers, etc. Catalogue of any list mailed on request.

GOLD, SHAPLEY & MUIR CO., LTD. Brantford, Winnipeg, Regina, Calgary.

Mention Farm and Dairy When Writing

Table with columns for various feed types (e.g., Ground oats, Wheat bran, Corn meal) and rows for different farms or regions (e.g., Eastern Base, Hop, Cloverhatch, Sportin, Woodrow, etc.). The table contains numerical data representing feed usage or preferences.

35 HEAD **Dispersion Sale** **35 HEAD**

OF

Pure Bred HOLSTEINS

AT

Courtland, Ont., on December 18th, 1918

The offering will consist of thirty-five head—9 males, 26 females. Quite a number of these cows are fresh or will be time of sale. The young stock to be sold are Canada's Pontiac Kornydyk, The Pontiac stock to be sold are Canada's Pontiac Kornydyk, the son of Pontiac Kornydyk, sire of 102 A.R.O. daughters, 46 proven sons of Pontiac Kornydyk, cow first 35-lb. cow, first cow to produce 1,000 lbs. fat in one year, and sire of King of the Pontiacs, who sold for \$15,000. Some of the cows are bred by Dutchland Sir Hengerveld Maplecroft, 20 R.O.M. daughters.

TERMS—Cash, or 6 months' credit at 6 per cent.
Write for Catalogue.

HIRAM REAGH **Courtland, Ont.**

Sunnyside Stock Farm Holsteins

ECHO SEGIS FAYNE—Our best sire is by a brother of the world's only 50 lb. butter cow, Segis Fayne Johns. He is a grand bull in every way and is not yet four years old. To avoid inbreeding should sell him at a price. Also have bulls from one month to 17 months old, all sired by well backed bull, write or come out of grand producing cows. If you need a well backed bull, write or come out of grand producing cows.

JOHN M. MONTLE, Prop. Sunnyside Stock Farm STANSTEAD, QUE.

FORBESCRETS FARM

Offers registered Holstein-Friesian bulls from one to fifteen months old, at bargain prices. Must sell quick in order to make room. Write and state what you want, etc., or come and see them.

R. R. No. 5. SIMCOE, Ontario.
R. B. BROCK.

CLOVER BAR STOCK FARM OFFERS

A few choice young bulls for sale, from heavy producing dams, sired by a son of Frank and Write now for description, photo and price.

R. R. No. 3. STRATFORD, ONT.
FRANK SMITH

His 2 Nearest Dams Average 38.82

His dam, sire's dam, grand sire's dam and great grand sire's dam, average 38.82 lbs. butter in seven days, and over 115 lbs. milk in one day, which is not equaled by any other bull in Canada.

His name is **ORMSBY JANB BURKE**. His services may be hired by YOU. Cows and heifers in calf to him for sale. If you need a **HOLSTEIN BULL**, write us.

R. M. HOLTV, PORT PERRY, ONT.

A 32.74 lb. Bull for Sale or Exchange

On account of relationship to my heifers I would like to exchange this nine months' old bull for one about same age, he is beautifully marked and right in every way, will pay cash difference if you have something better to offer.

T. JENKINS, 15 1/2 TORONTO ST. TORONTO

GREENFIELD HOLSTEINS

We are at present offering **PONTIAC SCOTT**, born February 13th, 1918. His dam, Meta Pauline, gave 24.78 lbs. of butter in 7 days and 109.40 lbs. in 30 days as a 3-year-old. R.O.M. This year, as a mature cow, she will exceed 15,000 lbs. of milk on two milkings per day. His sire is a 36 lb. grand son of King of the Pontiacs. Price \$150.

Write or come and see him and his dam.
WM. STEINACKER R. R. No. 5, STRATFORD, ONT.
(Sebringville Sta.)

CHOICE OFFERINGS

Of the BIG SALE—DUNNVILLE, DECEMBER 11

JUST FOUR HEAD, not officially tested, but good individuals and carrying the best blood in Canada.

Look them up in the Catalogue. In their pedigrees are such noted animals as Sir Admiral Ormsby, Dutchland Colantha Sir Moon, King Segis and others of the sires and dams that have made the breed famous. See them at the sale.

FRANK RICKER Canfield, Ontario

AT THE DUNNVILLE SALE

On WEDNESDAY, DECEMBER 11th

ONE MATURE COW—good enough for any show ring and grand-daughter of **ADMIRAL WALKER PIETTER**. Also her daughter sired by a son of **SIR ADMIRAL ORMSBY**.

TWO DAUGHTERS—of Lakeview Dutchland Hengerveld, a son of Dutchland Sir Moon.

FOUR DAUGHTERS of a son of **SIR ADMIRAL ORMSBY**, who is out of a grand-daughter of **KING SEGIS**.

THIS IS GOOD STUFF. There are no official records, but this is a world's record in every pedigree.

WARREN STRINGER CANBORO, ONT.

Watering Cows?

W. C. Shearer, Oxford Co., Ont.

HERE is almost as much in watering cows as in feeding them when it comes to getting a profitable flow of milk. We had always been in the habit of turning our cows out to water in the barnyard. Two years ago in the winter season we began taking the chill out of the water and giving the cows a drink morning and night in the stable. At noon the cows were turned out and could drink as much as they liked. The amount they drank in the morning, however, increased until they were taking two buckets each morning and night, or as high as 100 lbs. of water per cow per day. They drank correspondingly less of the cold water when turned out.

The results were immediately seen in the milk production. On the same to feed as formerly the cows began to give more milk, and the increase was sufficient to make the extra labor involved time profitably spent. Where the cows are not watered continuously with water bowls or a trough in front of them we have concluded that it pays to take the chill off their drinking water and water in the stable morning and night.

A noted agriculturist was traveling through one of the southern states on a lecture tour. One evening, after delivering his lecture, he approached a grizzled farmer with the intention of starting a conversation on the betterment of crop conditions.

"Good evening, sir," said the agriculturist.

The farmer regarded him doubtfully for a moment and then said abruptly, "You can't learn no nothing in' here. I've done 'wore out' two farms already."—Exchange.



REGISTERED HOLSTEINS

FOR SALE, Our Herd Sire

King of the Tensens

No. 2279

His Dam and Sire's Dam average 1 day 104.40 Butter 7 days 28.34 Milk, 400.30 Butter, 30 days 114.75; Milk, 600.30 Butter, 365 days 938.75; Milk, 278.00 Butter, 265 days 938.75; Milk, 25,500.00, and plenty more official backing. Weight over a ton. Age 4 years. A close individual and satisfactory in every way. Price \$1500. Write for extended outline.

LYNN RIVER STOCK FARM

Alex Wallace SIMCOE ONT.

CHEAPER THAN A WHIP

AND BETTER FOR YOUR HORSES

A horse with bruised, galled and chafed neck or shoulders can't earn his feed. Whipping only increases his suffering. You can prevent such injuries for less than the price of a good whip. Equip your father or yourself with our **NEW PATENTED HOOK ATTACHMENT** (Patented Only on Pads Made by Us.) Consists of wire staple with felt washer. It gives hook a firmer hold and prevents pulling off, even though fabric is weakly stretched. This is the greatest improvement since we invented the hook.

STUFFED COLLAR PADS

Filled with our Special Composite Stuffing are better than other kinds. They are soft, spring, absorbent and serve as a guarantee against bruised, galled and chafed shoulders.

THIRD SEVEN YEARS MAKING PADS

Look for the Fish Washer

SOLD BY DEALERS EVERYWHERE

The American Pad & Textile Company, Canfield, Ontario

Sunnybrook Farms

HOLSTEIN BULLS at the right price and with excellent official record, as calves or ready for heavy service.

JOSEPH KILGOUR
Eglington, P.O., North Toronto

SEED CORN

Wisconsin and White Cap. Very choice, \$3.00 per bushel of 70 lbs. on cob; bags free. Cash with order.

WALLACE ANSON
Kingville Ontario

Seed Corn

No. 1 Quality. Wisconsin No. 7, W.C. Y.D. ready for shipment \$3.50 for 75 lbs.

W. A. BARNETT
Harrow, Ont.

ONLY ONE

That's what I am consigning in the sale at Dunville, on December 11th.

She is a mature cow recently freshened and she is a real good cow at the sale.

Look her up in the catalogue
Wm. H. Harvey - Canfield, Ont.

AYKSHIKES

Purchase a good stock bull before prices advance. I am offering two young bulls six months old from two of my best cows averaging between 900 and 1,000 lbs. per present and are offering at very reasonable prices.

For further information apply
J. H. STARK, R.R. 7, Peterboro, Ont.

FOR SALE AND WANT ADVERTISING

THREE CENTS A WORD, CASH WITH ORDER

CHEESE FACTORY FOR SALE—Make about 40 tons—very butter plant in construction. A good paying factory. Located in Hamilton County. For particulars, write Box 40, Farm and Dairy, Peterboro.

FARM WANTED—Wanted to rent a farm near Toronto, for two or three years with a view to purchasing. Send particulars as to rent and price full particulars as to rent and price and location, character of soil and buildings to box 316, Farm and Dairy, Peterboro, Ont.

HISTORY WANTED—History of the County of Peterborough. Apply, stating condition and cost, to A. White, 41 Confederation St., Building, Toronto.

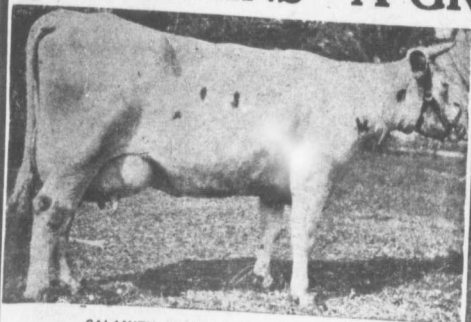
"How We Sold Father's Apples in Toronto"—When other trees in orchard had rotted under trees in orchard. Read this valuable "selling" experience, by Chas. Nixson in **RURAL CANADA**, December issue; ten cents, postage paid—see better, send \$1.00 for year's subscription. Money refunded if not satisfied. Rural Canada, Toronto.

CREAMERY WANTED—Would like to purchase a creamery business in Ontario. State volume of business, and post your State volume of business. Apply Box 27, Farm and Dairy, Peterboro.



Under official largest butter milk, 24,149.3

HOLSTEINS—A GREAT DAIRY BREED



CALAMITY SNOW MECHTHILDE 2nd, 26707
Three-year-old champion in the Record of Performance test with 1,053.75 lbs. butter from 23,274 lbs. milk. Official record for seven days, 32.70 lbs. butter from 672.4 lbs. milk.



COLONY AAGGIE PIETERTJE, No. 38774.

The new Jr-2-year-old world's champion milk and butter for 1 year in strictly official test. Record 21,161.81 lbs. milk and 531.84 lbs. butter.

A Great Breed

Owners and breeders of Holstein-Friesian cattle base their claims for the superiority of the breed over all other dairy breeds mainly on the following points: First, that the Holstein-Friesian is a large, strong, vigorous cow, full of energy and abounding in vitality. Second, that her physical organization and digestive capacity is such that she is able to turn to the best of advantage the roughage of the farm, converting the same into merchantable products. Third, that she yields large quantities of most excellent milk, fit for any and all uses and especially well fitted for shipping purposes. Fourth, that heredity is so firmly established through her to lone lineage that she is able to perpetuate herself through the production of strong healthy calves. Fifth, that, when for any reason her usefulness in the dairy is at an end, she fattens readily and makes excellent beef.



BONERGES HARTOG,

Senior and Grand Champion at the Canadian National and London Exhibitions, 1918.

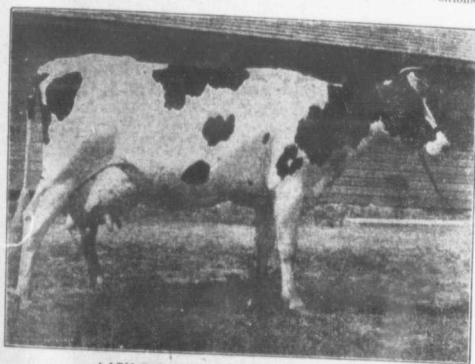
Holsteins

Hold All Championships

- World's Record Price for Cattle—
Carnation King Sylvia... \$106,000.00
- World's Record for Butter, One Year—
Duchess Skylark Ormsby 1896.35 lbs.
- World's Record for Milk, One Year—
Lutscke Vale Cornucopia 21348.9 lbs.
- World's Record for Butter, Seven Days—
Siegis Puyne Johanna... 50.68 lbs.
- World's Record for Milk, Seven Days—
May Echo Sylvia... 1490.8 lbs.
- Canadian Record for Butter, One Year—
Lady Pietje Canary's Jewel... 1173.66 lbs.
- Canadian Record for Milk, One Year—
Zarilda Clothilde 3rd DeKol... 39467.0 lbs.

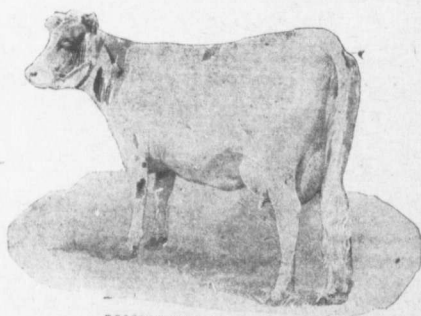
IF YOU CAN'T BUY A HERD, BUY A HEIFER

Information from the Holstein-Friesian Association.
President, DR. S. F. TOLMIE, M.P.,
Secretary, W. A. CLEMONS,
Victoria, B.C. St. George, Ont.



LADY PIETJE CANARY'S JEWEL, 17314.

Under official test for the whole year as a Junior three-year-old she made the largest butter record of any cow of any breed in Canada. Year's record, milk, 24,149.3 lbs., butter, 1,173.66 lbs.; 7 day record, milk, 671.9 lbs., butter, 32.81 lbs.; 1 day record, milk, 109.6 lbs.



POSCH QUEEN WAYNE, 12190.

Champion mature cow in the yearly Record of Performance test with 1,121.25 lbs. butter from 25,085 lbs. milk. Record for two successive years 2,062.50 lbs. butter and 45,948 lbs. milk.

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CO
31
P.O. B.S. Box 1180
P.O. Box No. 1180

Proposed Farmers' National Platform

(Continued from page 14.)

urged to reinstate such men in their former positions wherever possible.

(f) That vocational training should be confined to those who while in the service have become unfitted for their former occupations.

(g) That provision should be made for insurance at the public expense of unpensioned men who have become undentifiable insurance risks while in the service.

(h) That facilities should be provided at the public expense that will enable returned soldiers to settle upon farming lands when by training or experience they are qualified to do so.

Relation of Labor and Capital

(i) We recognize the very serious problem confronting labor in urban industry resulting from the cessation of war, and we urge that every means, economically feasible and practicable, should be used by Federal, Provincial and municipal authorities in relieving unemployment in the cities and towns, and further recommend the adoption of the principle of cooperation as the guiding spirit in the future relations between employer and employees—between Capital and Labor.

(7) Land settlement scheme based on a regulating influence in the selling price of land. Owners of idle areas should be obliged to file a selling price on their lands, that price also to be regarded as an assessable value for purposes of taxation.

(8) Extension of cooperative agencies in agriculture to cover the whole field of marketing, including arrangements with consumers' societies for the supplying of foodstuffs at the lowest rates and with the minimum of middleman handling.

Public Ownership of Utilities.

(9) Public ownership and control of railway, water and aerial transportation, telephone, telegraph and express systems, all projects in the development of natural power, and of the coal mining industry.

(10) To bring about a greater measure of democracy in government, we recommend the immediate repeal of the War Time Election Act; the discontinuance of the practice of Canada; the return upon citizens of Canada; the reform of the Federal Senate, and the increased responsibility of individual members of Parliament in the abolition of the patronage system; the publication of all contributions and expenditures, both before and after election campaigns; the removal of press censorship upon the restoration of peace, and the immediate restoration of the rights of free speech; the setting forth by daily newspapers and periodical publications of the facts of their ownership and control; proportional representation; the establishment of measurement of direct legislation through the use of initiative referendum and recall, and the opening of seals in Parliament to women on the same terms as men.

Political Action.

That this council recommends to the provincial associations that they take action in whatever manner they deem advisable to secure the nomination and election of candidates at the next general election who will endorse and support the platform adopted by this Council.

War Veterans' Deputation.

A deputation from the Winnipeg branch of the Great War Veterans, consisting of its president, R. B. Maxwell, and Major W. G. Andrews, M.P. was received, and each of the two gentlemen was invited to address the Council. They made addresses setting forth the ideals and aims of the Great War Veterans, namely, the securing of the best and most just treatment of all returned men, in the interests of both Canada and of themselves, including all necessary care of the wounded and those suffering

disability as the result of their services; but speakers made it plain that the organized veterans are devoting earnest thought to all the problems of demobilization and of the rehabilitation of the life of the country of the men who have returned, and those who are still to return from the war. They gave emphatic expression to the strong desire of the Great War Veterans to cooperate towards solving Canadian national problems with a sole view to justice for all and the furtherance of the public welfare.

The members of the Council followed both speakers with close attention and marked interest. Later the Council devoted much time to the consideration of the problems touched on by Mr. Maxwell and Major Andrews.

The Council also listened to a brief address by Prof. W. F. Osborne, of the University of Manitoba, in advocacy of the project of a National Congress of Education.

The merits of the Boy Scout movement were set forth to the Council in an earnest address by Hugh D. Macintosh, of the Manitoba Boy Scouts executive.

Potato Flour and Hemp Fibre.

A deputation representing the Western Canada Development Bureau of the Winnipeg Board of Trade was received, and its spokesmen, Messrs. Vere Brown and Lieut.-Col. Grassie, explained to the Council the cooperation of the Canadian Council of Agriculture in undertaking an investigation of the practicability of introducing into Western Canada two new industries, namely, the manufacture of fibre from hemp, with a view to the making of binder twine and of other commodities. The deputation was accompanied by Messrs. Doust and Gammon, from the United States, who gave explanation in regard to the proposed industries, which will be dealt with later in 'The Guide. The members of the Council were invited to join the Winnipeg Board of Trade, and at the luncheon these proposed new industries were further discussed, and bread made with potato flour was served.

The delegates present at the Council meeting were as follows: From Ontario, R. W. E. Burnaby, Jefferson, M. Doherty, Malton; J. J. Morrison, Toronto, From Alberta, H. W. Wood, Carstairs, (Vice President); P. Baker, Ponoka; R. E. Sheppard, Edmonton; C. Rice-Jones, Calgary; J. W. Leidy, Whitecourt; J. J. McLeellan, Purple Springs, From Saskatchewan, H. B. Moseley, George Langley, Regina; J. B. Moseley, A. G. Hawkes, Perivall, J. E. Paynter, Tantalus; J. L. Rookie, Togo; R. M. Johnston, Eastview; J. F. Reid, M.P., Oreada, From Manitoba, Hon. J. A. Crozier, Winnipeg; J. I. Brown, R. H. Wood, Winnipeg; J. A. Kennedy, Winnipeg; J. R. Murray, Winnipeg; Norman P. Lambert, Winnipeg, (Secretary); W. J. Chipman, Winnipeg; W. J. Healy, Winnipeg.

Company Notes

"We are glad to be able to inform our secretaries," writes L. M. Powell, manager of the United Farmers' Cooperative Company, Limited, "that we are able to make quotations on buck grain in carlots and in many cases a much higher price than is offered locally. We would be pleased any time to offer quotations by wire on application."

"Owing to government ruling we can only offer government set prices for wheat, but are in the market for any that may be offered. We see no reason why we should not do a large volume of business to the advantage of the clubs."

Mr. Powell estimates that the

WANTED

SEVERAL MORE BREEDERS OF

Brown Swiss Cattle

—IN CANADA—

Any energetic Dairyman who has not already chosen his favorite Breed would do well to purchase a small herd, trio or pair of

BROWN SWISS

and commence breeding them at once, in order to reap his reward with the rest of us.

The demand for BROWN SWISS STOCK is greater than the production, making quick sales at good prices.

Any one wishing to know more about these cattle, and to get in touch with reliable breeders should write to

RALPH H. LIBBY,
STANSTEAD, QUE.

Sec. of Canadian Brown Swiss Association.

Sunnyside Jerseys



Imported Heifers at Sunnyside Jersey Farm

I AM OFFERING

for the first time, choice pure-bred cows, due to freshen in March and April, young stock of both sexes, from imported and Canadian bred stock.

For further particulars write:

M. Grant Thompson - Bloomfield, Ontario

THE EDGELEY CHAMPION HERD OF JERSEYS.

Write us about your next herd sire. We now have sons of our present herd sire, Edgeley's Bright Prince, who is a son of Canada's champion butter cow, Sunbeam of Edgeley. Pay us a visit. Sunbeam of Edgeley is not the only high record cow we have. We are pleased to supply our herd at all times.

JAMES HAGO & SONS (Woodbridge, C.P.R., Concord, G.T.R.), EDGELEY, ONT.

CANADA'S MOST BEAUTIFUL JERSEY HERD

Herd headed by imported Champion Rover, Winner of first prize with five of his daughters on the Island of Jersey, in 1914, second in 1916, and again first in 1917. We are now offering for sale some very choice bull calves, ready for service. Sired by imported bulls and from record of performance. Sired by imported bulls and from record of performance. Sired by imported bulls and from record of performance. Sired by imported bulls and from record of performance. Sired by imported bulls and from record of performance.

YORKSHIRE HOGS OF BEST WINNING STRAINS.
Choice stock for sale, all ages. Some bred and ready to breed; younger stock, both sexes from suckers up. Good growthy fellows of good type and breeding. Nearly all varieties Turkey, Geese, Ducks, Chickens. 100 yearling S. C. White Leghorns here. Write for prices.
T. A. KING
MILTON, ONTARIO.

spread in elevator prices and U.F.O. prices will be from three to seven cents a bushel, depending on competition at local points. The company is offering for immediate delivery a quantity of sugar beet meal. This feed was going to the United States at \$45 per ton f.o.b. shipping point, but the Canadian Government placed an embargo on this article and the U.F.O. Co. is able to offer it at \$36, f.o.b. Chatham, Ont. At this price it is considerable cheaper food than bran, but must not be used as an exclusive grain ration, as it is extremely laxative.

The U.F.O. Financial Statement

THE financial statement of the United Farmers of Ontario for revenue and expenditure for the year ending October 31st, 1918 is as follows:

In considering this statement it must be remembered that all dues are this year paid in advance and that all expenses of the Annual Convention have to be met out of this seemingly large surplus.

| | |
|--------------------------------|------------------|
| Assets. | |
| Cash on hand and in Bank | \$7832.58 |
| Accounts Receivable .. | 340.22 |
| Farmers' Publishing Co. | 359.79 |
| Stock Buttons | 70.00 |
| Stock Books | 133.53 |
| Office Furniture | 211.65 |
| Liabilities. | \$3947.77 |
| Accounts payable | \$189.03 |
| Surplus | \$7588.74 |

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|-----------------------------------|------------|
| Receipts. | |
| Membership Dues | \$9890.97 |
| Life Membership | 12.00 |
| Collections, Donations, etc. | 2177.18 |
| Surplus Buttons, account | 579.83 |
| Surplus Books | 304.42 |
| | \$12963.30 |

Disbursements and Expenses.

| | |
|---|-----------|
| Annual Meeting, 1917 .. | \$1258.22 |
| Club Organization | 1154.38 |
| Circulars, Printing, Postage | 956.14 |
| Advertising | 144.17 |
| Travelling Expenses—Delegates to Ottawa Special Convention, Toronto | 402.38 |
| Newspaper Committee .. | 218.15 |
| Can. Council of Agriculture, 1917 | 109.00 |
| Can. Council of Agriculture, 1918 | 200.00 |
| Dominion Grange, '18 .. | 100.00 |
| Root, Salaries, Telephone and Telegrams, General Office Expense | 1381.06 |
| Directors' Travelling Expense | 147.05 |
| | \$6227.59 |

| | |
|--|-----------|
| Surplus | \$6735.75 |
| Balance brought forward 1st Nov. 1917 .. | \$2922.99 |
| Surplus as per Statement | \$7588.74 |
| Certified Correct, | |

A. Q. C. O'Brien, Auditor,
14 November, 1918.

The Thoroughbred in Warfare

CAPT JAMES M. BROWN, attached to the Royal Field Artillery in France, writes as follows to the London Sportsman about the thoroughbred and his conduct in the great war:

"After being veterinary officer for over three years in France and attached to the field artillery the whole period, I can affirm that there is not one per cent of trotting-bred half breeds in any unit of the Royal Field Artillery, and I think I may safely affirm the same as regards the French and Italian artillerymen. Certainly a large proportion of the British Field Artillery

horses are American or Argentine bred, but I should say the large majority are Percheron crosses. The French artillery are largely Percheron, Boulais or Breton or crosses of these breeds. I understand the Belgian artillery are now similarly hatched to the British. The cavalry, French or British, are hatched with thoroughbred crosses or half-breeds, and often three-quarter-bred. I can vouch for the fact that the better bred the animal the better he is under shell fire. A thoroughbred animal

can be trained to stand any amount of shell fire, and surpasses in courage and stamina any other breed. I think one would be hard put to it to find a single American trotter that is used as a recognized officer's charger by any General, brigade of artillery or battery commander. On the other hand I will, without difficulty, find plenty of thoroughbreds or so near thoroughbred that one would have great difficulty to tell the difference, used by officers of the above ranks as chargers."



**ONTARIO FARMERS' OWN ORGANIZATION
THE UNITED FARMERS OF ONTARIO**

Farmers, have you studied the power of organization? Do you realize what organization has done for other industries? The United Farmers of Ontario and The United Farmers' Co-operative Company were organized for YOU. Will you give it your influence and your business? Have you a club in your locality? Are YOU a member? Are you going to attend the Farmers' Parliament, December 17th, 18th, 19th, and perhaps the 20th. Buy a return ticket as no reduced rates are being given this year.

All farmers welcome. Ladies especially invited.
The United Farmers' Co-Operative Co., Ltd.
2 FRANCIS ST., TORONTO

IF INTERESTED IN AYRSHIRES

THE HEMMINGFORD AYRSHIRE BREEDERS' CLUB

IS PREPARED TO FURNISH

THE BEST IN THE BREED.
FOUNDATION STOCK
FOR CHOICE DAIRY HERDS.



THE COW WE NEED

ANYTHING YOU NEED
FROM A SINGLE INDIVIDUAL
TO CARLOAD LOTS

We have winners at the Ottawa Dairy Show and their offspring. If you want anything in Ayrshires, give us a call, or write our Secretary or President. Visitors gladly received and a square deal guaranteed

THESE MEN ARE YOUR GUARANTEE:

PRESIDENT:
S. A. CLELAND,
Hemmingford, Que.

R. T. BROWNLEE,
THOS. A. STEWART,
N. O. STEWART.

DIRECTORS:

Hemmingford. W. T. HAYES, Hemmingford.
DONALD WATT, Lacolle, Que.

SECRETARY:
FRED A. SWEET,
Hemmingford, Que.

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Springburn Stock Farm

HIGH CLASS AYRSHIRES
IMPORTED AND CANADIAN BRED

Herd Sire **Lessnessock Golden Love Imp.**, Grand Champion Ottawa and First Aged Bull National Dairy Show, 1918. Formerly herd sire at Auchenbrain.

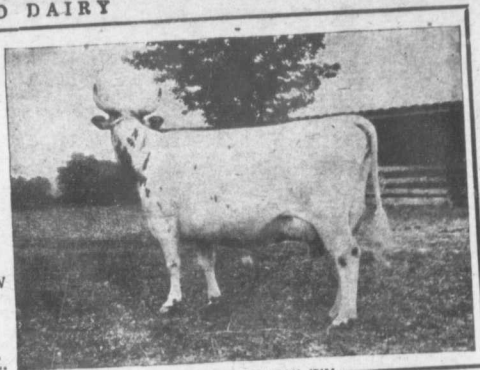
Maple Leaf Jean was the highest scoring cow for both conformation and production at the National Dairy Show, 1918 in Junior A. R. Class.

THIS is the **KIND** we are **BREEDING** from at **SPRINGBURN**
Entire Herd Tuberculin Tested

GILBERT McMILLAN

R. R. Stathe, Carra Crossing C. T. Ry.
Huntingdon, N.Y.C. Telegraph, Bell Telephone

HUNTINGDON, QUE.



MAPLE LEAF JEAN 47434.

HIGHFIELD AYRSHIRES

Two bull calves, rising 8 months, from R.O.P. dams. Also heifers and heifer calves for sale. Herd sired by Springbank Scottish Thistle, son of Canadian champion three-year-old, R.O.P., 14,907 lbs. milk.

W. LEEMING R. R. NO. 3 GLANFORD STATION, ONT.

AYRSHIRES

If you want Ayrshires of the right kind, write us. Possibly we have what you want.
PALMER BROTHERS NORWICH, ONTARIO

PLEASANT VIEW AYRSHIRES

Young calves, either sex; several from R. O. P. cows. It will pay to come and see or write for prices if wanting anything in choice Ayrshires.
A. HENDERSON R. R. No. 4 ATHENS, ONTARIO

ELMCREST AYRSHIRES

Herd Sire—Glenhurst Torra Master, sired by Lessnessock Comet.
Stock for sale, all ages, at reasonable prices, 75 head to pick from. Some good young bulls. Call or write for prices.
WILLIAMSTOWN, ONTARIO.
SANDILAND BROTHERS

SPRUCEHURST AYRSHIRES

Yorkshires and Oxford Downs.

We have 20 heifers from six months to two years. Their dams all test four per cent and better. Their sire is Forest King, 2nd, 4808. His dam's record is 13,210 lbs. milk, 566 lbs. fat as three-year-old. His grand sire has 19 qualified progeny, R.O.P. Also five grand bulls from above sire.
No. 1 Dam, Natherton Queen Nancy (imp.)
No. 2, A grand-son of Queen Nancy.
\$75 each.
The other three are out of our heaviest producing young cows, \$50 each.

D. LEITCH AND SON R. R. No. 2 CORNWALL, ONT.

INGLEWOOD AYRSHIRES

CHESTER WHITE SWINE

For the past ten years we have endeavored to establish a herd of good producing cows. Whether or not we have succeeded we leave entirely to your good judgment.

Our mature records run up to 16,038 lbs. milk, 650 lbs. fat
4-year-old " " 12,288 lbs. milk, 533 lbs. fat
2-year-old " " 12,098 lbs. milk, 450 lbs. fat

Special Offering

Bull calf, 7 months of age. A good individual, nicely colored, whose four nearest dams average 12,730 lbs. milk, 461 lbs. fat, including only one mature record.

Also pigs from 4 to 12 weeks of age, pairs or trios, not akin, from the best foundation stock procurable.

Visit our Farm or Write for Prices.
WILSON McPHERSON & SONS ST. ANNS, ONTARIO



Jean Armour (15591) Ex-world's Champion. Record 20,147 lbs. milk, 903 lbs. butter. A district bred cow. Stock in sale closely related.

50
HEAD

Seventh Consignment Sale

50
HEAD

Registered Ayrshire Cattle

FROM THE HERDS OF

Southern Counties Ayrshire Breeders' Club

TO BE HELD AT
THE DR. RUDD SALE STABLES, WOODSTOCK, ONT.

DECEMBER 19, 1918, AT 1 P.M.

The heaviest producing strains of Ayrshires in Canada are represented in this sale. Twelve richly-bred young bulls and 38 females, many of them due to freshen about sale time.

This is the district from which the great producing Ayrshires are coming. JEAN ARMOUR, LADY JANE, and SCOTCH THISTLE were all bred in this district. Attend the Sale and secure some of the good ones. No by-bidding or bidding-in at our sales.

WRITE THE SECRETARY FOR A CATALOGUE

F. H. HARRIS, President,
MOUNT ELGIN, ONT.

JOHN McKEE, Sec. and Sales Mgr.,
NORWICH, ONT.

MOORE & DEAN,
Auctioneers



Whitney's Lassie—41683—Three-year-old record 16,001 lbs. milk, 4,167 lbs. fat. Mature record just finishing of about 16,000 lbs. A district bred cow. Closely bred stock in the sale, including a half-sister to 3-year-old R.O.P. Champion, Scotch-Thistle.

NESS

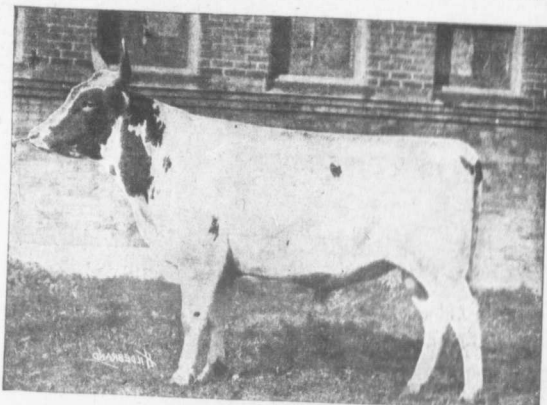
LEADERS FOR OVER A QUARTER CENTURY

Ayrshires

— and —

Clydesdales

Imported and
Canadian Bred

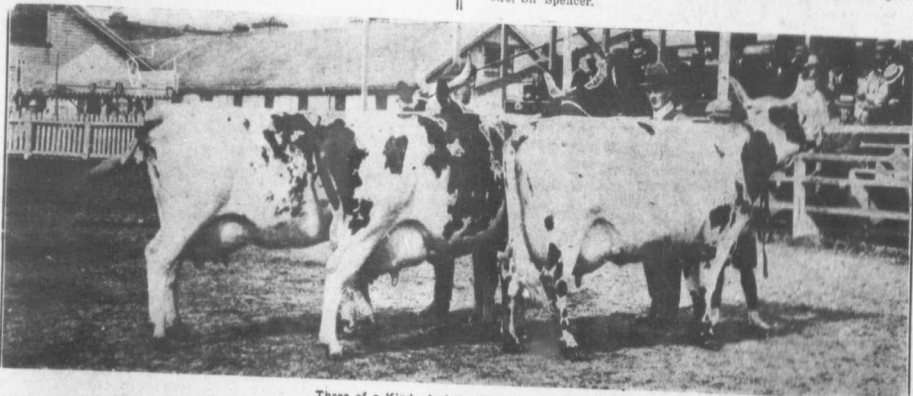


Molehouse Hopeful, one of our junior herd sires. A winner at Toronto, Ottawa, and Columbus in 1915. By the use of such sires as this fellow, the future excellence of Burnside Ayrshires is assured.

Burnside Stock Farm

IN AYSRSHIRES, we can supply your wants in either sex, imported or Canadian bred. This stock will be from cows with records running up to 17,000 lbs. milk in R. O. P., and by that great sire, Hobland Masterpiece, who is an R. O. P. sire in Scotland, Canada and the United States. We intend importing next spring, and would carefully fill any orders entrusted to us.

IN CLYDESDALES, we have been taking a leading position at the big fairs, having been heavy winners in all ages and both sexes. We have now some excellent fillies and young colts by our great sire, Sir Spencer.



Three of a Kind—And the Right Kind, Too.

Harley Holm White Rose 3rd, 1st prize and gr. champion at Toronto, Ottawa and National Dairy Show, Champlanton Henney, 1st and gr. champion Ormstown, Toronto, and Ottawa, 1917; 2nd prize Toronto, Ottawa and National Dairy Show, 1918. Carleton Baroness, 3rd prize, aged cow, Toronto.

Winners—1st, 2nd and 3rd at Toronto; 1st, 2nd and 5th at Ottawa; and 1st, 2nd and 6th at Columbus in 1918, in competition with the best that America can produce. Reading from right to left—Harleyholm White Rose 3rd, Champlanton Henny, and Carleton Baroness.

R. R. NESS & SONS - HOWICK, QUE.

FARM AND DAIRY

Dairy Farming in the Kelowna District
There Has Been a Rapid Development in This Industry During Recent Years—By T. A. F. Wiancko, Provincial Dairy Instructor



Our herd sire, Blumcroft Dounie Sylvius. We chose him because his dam and his sire's dam average 23.00 lbs. butter and 520 lbs. milk in 7 days. His two grand-dams average 35.34 lbs. butter and 608 lbs. milk in 7 days. His seven nearest dams average 31.65 lbs. butter and 710 lbs. milk in 7 days. His grand-dam is Miss Echo Sylvia. He is a half brother to the sire of the 1106.000 calf, and his dam is Maude Snowball with 23.12 lbs. butter and 525 lbs. milk in 7 days.

OUR HERD WILL BE REPRESENTED IN THE
NIAGARA PENINSULA CLUB SALE
At DUNNVILLE, December 11th, by

- 6 Females 7 HEAD 1 Young Bull
1. An 8-year-old daughter of Sir Sylvia Poosh with 100-lb. backing. Her Big type cow; will be fresh in a few weeks.
 2. A five-year-old grand-daughter of Brookbank Butter Baron. Her dam is a half sister to Queen Butter Baron, the 23-lb. former Canadian champion. She will also be fresh.
 3. A grand-daughter of Dutchland Colatana Sir Abbelech, whose dam is a daughter of Prince DeKok, Poosh, and has six nearest dams with over 22 lbs. in 7 days. Sire's five nearest dams average 25 lbs. with over 22 lbs. in 7 days. Her dam is a good sire.
 4. A fine three-year-old. Perfect in type and will be bred to herd sire.
 5. A yearling, half sister to the above cow, will be bred to herd sire. Her dam is a grand-daughter of Count Hengewerd DeKok.
 6. A junior three-year-old from same dam as number 4, and fresh by a son of Pontiac Koradyke. Nice smooth heifer. Will be bred to the time of sale.
 7. Seven-months bull calf. Dam a 21-lb. junior 4-year-old. Sired by King Johanna Netherland, whose dam made 629.70 lbs. milk and 23.21 lbs. butter in seven days.

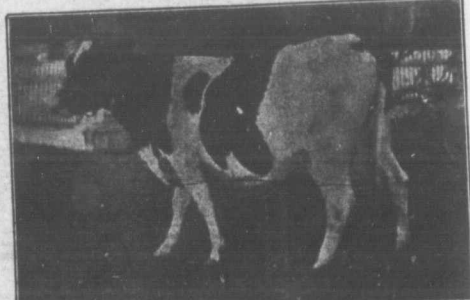
Come early to the sale and look these animals over. It will be well worth your while to do so.
J. W. MOOTE CANBORO, ONTARIO

THERE are few places in Canada where the dairy industry has received such a quickening as it has in the Kelowna Valley during the past few years. Up to about the year 1915 it was generally accepted that the country was all suited to fruit growing, and many thousands of fruit trees were planted on land that was not suited to horticulture. Live stock came into bearing the problem of a market for the fruit became a serious one indeed. Prices for fruit were very low and overhead charges excessive. The special one crop system had its limitations. There was only one pay day in the year—at the end of the day in the year—and many there were fruit season—and many there were who were confronted with a loss as a result of the season's work.

Practically all food products for the family, more especially such as butter, eggs, bacon, and milk, had to be procured from outside sources, and this expenditure made serious inroads on the farmer's income. It was a common sight in those days to see the farmer come to town with a few orchard boxes full of choice fruit, for

possible that she would do for the Kelowna district what she had so unmistakably done in other communities. Accordingly a movement was set afoot towards the establishment of a creamery which should take care of the milk and cream that would presently be produced by the prospective patrons. In this assistance of the business men of the city was easily enlisted, since these same business men were alive to the fact that what men would benefit the farmers would in turn help to fill their cash register, and improve conditions in the city. They were, to use a common expression "fed up" with giving long credit to the farmer, and in the new movement saw visions of the days when bad debts would vanish from their books and a strictly cash basis would govern all their transactions with the farmers.

Consequent upon a thorough canvass of the district during the spring of 1915 it was found that several hundred cows were available within easy driving or shipping distance, and a promise was obtained from many farmers that in the event of a creamery being established they would immediately purchase cows and become



One of the good cows in the consignment of Mr. T. Wilcox to the Niagara Breeders' sale at Dunnville. Look up his advertisement of page 45 of this issue.

which he got but a very small price, and return home with such necessities as butter, eggs, bacon, and a few cans of condensed milk under the seat of his rig, and perhaps a bale of hay to feed to his work horse. Conditions such as these could not go on much longer, and the farmer began to scratch his head and wonder if he hadn't made a serious mistake in becoming married to a one-crop system. Should he not also engage in some other line of agriculture which would give him a more steady income the year around? This could best be accomplished by keeping live stock. This at least would assure him a good share of his home supplies, such as milk, eggs and bacon, and possibly a surplus to be marketed. It would at the same time assist in keeping up the fertility of his land, and also give him employment all the year round. The City of Kelowna, with its several thousand inhabitants, would afford a market for a large quantity of live stock products, and in British Columbia, we are exporting very heavily in such products a ready market should be insured for many years to come.

Business Men Interested in Creamery. In all progressive farming communities the dairy cow had played a very important role in bringing about improved conditions, and it was surely

patrons. This was encouraging. But how was the capital for the necessary building and equipment to be raised? Money was indeed scarce and hard to obtain. An estimate of the cost of a suitable plant and building was made by an energetic committee, assisted by members of the Provincial Dairy Division. A building council was set up at a low rental, and at a small outlay could be converted into a suitable creamery. The plant would cost in the neighborhood of \$1,500, and in order to raise this amount it was decided to put on the market a block of 25 shares of capital stock at \$50 per share, to be paid in instalments, arrangements being made with the bank to take care of the unpaid balances.

Upon Mike Heron, than whom there was no more enthusiastic dairyman in the Okanagan, fell the responsibility of selling the stock, which he finally accomplished by reason of his unbounded enthusiasm and faith in the project. It must be mentioned, also, that the provisional board of directors were men of the right type and willing and eager to spend their time for the good of the community. Mr. W. C. Benson, as secretary, very generously undertook the task of organization without remuneration for the first year.

A Slow Start—Then Success. With sufficient money in hand,

WILLENROCK STOCK FARM

— COME —
To the Niagara Peninsula Sale
AT
Dunnville
Dec. 11th

See Our Consignment
of Tested Cows
and a Very Fine Bull
W. C. HOUCK Proprietor

ON THE BOULEVARD OF THE BEAUTIFUL NIAGARA RIVER

25 HOLSTEINS FOR SALE

Two of these will freshen early in December. Fifteen of these females who range from six months to four years of age, are grand-daughters of Black Apple Koradyke 5th, the \$28,000 bull. Some of them are bred to a 31-lb. bull. We also have three daughters of Queen Calamity Paul's own. His dam had a record of 19 lbs. butter in 7 days as one year and all of these cows have a record of 17.74 lbs. butter in 7 days as two year olds, to 27.50 lbs. butter. Prices reasonable. Write for Full Particulars.

C. J. COON ATHENS, ONTARIO

CHOICE HOLSTEIN BULL CALVES

We have for sale some fine Holstein bull calves from one to eight months old, breeding of E. H. Doolittle, Haverhill, N.Y.; Stevens Bros., New York; Mark H. Piper, Michigan and J. W. Richardson, Caledonia, Ont. Also some females, all ages. Everything at a very low price.
R.R. No. 3, PROTON STATION, ONT.

December
Therefore, creamery work in June and S. J. Thom experience cream can small quantities as cash returns more stock. Cream they along nicely the business the output is sure a small investment in needed improve larger volume plant is provided in the province of butter will sides this, a few cream needs of the rounding town. With modern ment and scientific facturing and keeping and high awards provincial award. At the Calp 1918, Kelowna money in a odd entries. The future trict is assured are engaged in desire to go on. In fact, they plans for greater. They believe, order to keep necessary to the maximum are best suited. Northern in and corn, the feeds, do better district. Province the proper station also are spring numbers each. ing their business, and m

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therefore, to make a modest start the creamery was ready for business early in June under the management of Mr. B. J. Thomas, a man of many years' experience in creamery work. At first cream came in very slowly and in small quantities. However, as soon as cash returns began to come in many more took heart and added what little cream they produced. Things went along nicely in this way and gradually the business grew to a point where the output was sufficiently large to insure a small profit. This in turn was invested in additional equipment and needed improvements to meet the larger volume of business. Today the plant is probably the most up-to-date in the province, and the yearly output of butter will exceed 100,000 lbs. Besides this, quite a large quantity of ice cream is manufactured for the needs of the City of Kelowna and surrounding towns.

With modern pasteurizing equipment and scientific methods of manufacturing only butter of the finest kind and keeping quality is produced. Very high awards have been secured in both provincial and Alberta competitions. At the Calgary Exhibition in June, 1918, Kelowna got into the prize money in a class comprising some 150 odd entries.

The future of dairying in this district is assured. Most farmers who are engaged in the business have no desire to go back to the old conditions. In fact, they are laying comprehensive plans for greater things in the future. They believe, and rightly so, that in order to keep up with the game it is necessary to make every acre produce the maximum of those crops which are best suited for milk production. Nowhere in the country does alfalfa and corn, the two greatest of all dairy feeds, do better than in the Kelowna district. Provision is being made for the proper storage of these feeds, and silos are springing up in increasing numbers each year. They are enlarging their barns, putting up milk houses, and making many other im-

provements which make for more economy and efficiency in handling their business.

The improvement of the dairy herds of the community is receiving attention in a manner that will assuredly bring the right kind of results. In 1915 several car lots of heavy producing cows were brought into the district and quickly disposed of to patrons of the creamery. Many good sires, the progeny of exceptionally high producing cows, have been brought into the community, cooperatively as well as privately, and the progeny from these are now beginning to show the wisdom of such a policy. During the summer of the present year the Kelowna Holstein Breeders' Association was formed with the aim to establish a Holstein breeding centre. Quite a number of very fine pure-bred females were purchased from leading breeders at the coast and distributed to the various members of the association. Thus, in the space of three or four years this community has built up one of the best and creameries in British Columbia, and through the spirit of cooperation among its members this district has more prosperous homes and contented farmers.

Silage as a Feed

CORN silage of itself is not a complete nor a well balanced ration for farm stock. In the case of young cattle, when mixed with chaff or cut hay, it will do very well as a winter ration. I have seen young cattle eat wheat straw with avidity when mixed with silage and come through the winter in very good condition.

In feeding dairy cows, alfalfa or clover hay is the logical roughage supplement. When supplementing with grain feeds, use such concentrates as bran, shorts, oil cake meal or cottonseed meal, all of which are rich in protein. Oats, barley or corn are not the best supplements to corn ensilage.—J. H. G.

PINE RIDGE STOCK FARM

Will consign A 24 LB. COW in the

Niagara Peninsula Sale at Dunnville

ON

Wednesday, December 11th.

A total of

3 Females

and

1 Male

LIZZIE PIETERTJE DEKOL—

A real choice one, who has milked 76 lbs. per day in two milkings on grass, and who has given 24 lbs. butter in 7 days under most adverse conditions. She is easily good for 30 lbs.

EVERGREEN REX—

A well developed individual, showing large milk veins and capacious udder. She has a 12-two-year-old record of 11 lbs. but this is no indication of her ability.

ROUSAY DUCHESS—

A fine two-year-old that has the best of breeding, and when fully developed should make a good one.

FRED SEGIS WALKER—

11 months old son of Centre-view Calamity Segis, whose dam was first prize winner in Dairy test at Guelph. She milked over 60 lbs. per day testing 4% as a two-year-old and was a daughter of King Isabella Walker, whose dam has a record of 22,000 lbs. milk in 1 year and 1,000 lbs. butter. The dam of this bull will be tested at next freshening and should make a creditable record.

All these cows are bred to our herd sire Prince of the Jennets, whose sire is a son of Lulu Keyes, 26 lbs. in 7 days. His dam is Jennie Bonerges Ormsby 4th, over 20 lbs. in 7 days as a two-year-old, with first calf. She being a daughter of Jennie Bonerges Ormsby, who, until recently, was the only cow in the world to make a 30 lb. record in five consecutive years, and having also over 500 lbs. butter as a jr. two-year-old.

T. WILCOX

Smithville, Ont.

Second Annual Consignment Sale

OF

43
Head

The Niagara Peninsula Holstein
Breeders' Club

43
Head

AT

DUNNVILLE

IN HALL'S FEED BARN, DEC. 11th, AT 12.30 SHARP

There will be offered 43 head of registered Holsteins taken from the best herds of the Niagara Peninsula. The sale will be held in a comfortable building with good seating capacity and electric lighting. All animals will be guaranteed. Railway station only one minute's walk from sale stable.

John Meete, Canboro.
Warren Stringer, Dunnville.
J. Dyer, St. Catharines.

William Harvey, Canboro.

AUCTIONEERS.

B. V. Kelley, Syracuse, N.Y.
Frank Montague, Dunnville.
Wm. McQuillen, Dunnville, Ont.

CONSIGNORS.

Cecil Hagar, Welland.
W. C. Houck, Black Creek.
Frank Ricker, Canboro.

Sales Secretary.—W. L. Houck.

S. A. Best, Canfield.
T. Wilcox, Smithville.
J. Aitemang, Canfield.

CLERKS.

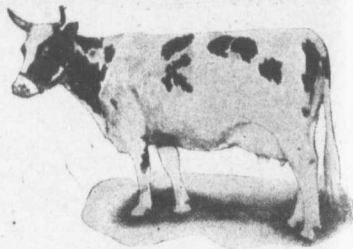
E. K. Hampson.
David Elliott, St. Catharines.

Train Connections.—G. T. R. arrives from east 8.40 a.m.; leaves 6.40 p.m. Arrives from west 11.25; leaves 6.40 p.m. T. H., B. arr. at 11 a.m.; leaves 7 p.m., connecting with all T. H. & B. trains at Smithville.

For Catalogues send to W. L. HOUCK, STEVENSVILLE, R.R. 2 Ont.

Depots only 1 minute walk from Sales Stable.

Sales Manager—JOHN MOOTE



Puts Every Animal in the Pink of Condition



LIVINGSTON BRAND OIL CAKE MEAL

If you, as a stockman, or as a dairy breeder are not using Oil Cake to-day, you are losing money not only on the output of your animals, but also on the present feeds you use. Oil Cake Meal enables your animals to make better use of all other feeds used with it. It is the acknowledged, universal great food tonic and laxative for every farm animal from horses to hens. The best farmers in the old country and in many sections of Ontario have learned this fact. In England, a farmer wouldn't think of trying to handle stock well without oil cake.

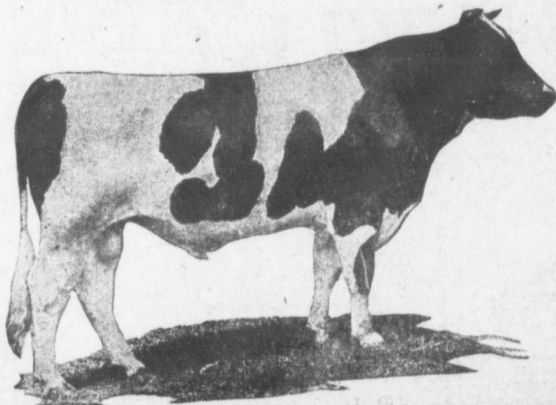
A liberal use of Oil Cake Meal will keep the team glossy and in good

health; it will insure stronger foals; it will increase the milk flow when prices are high; it will grow stronger, sturdier calves and insure quick gains with the steers. For sheep, it means healthier lambs, and more mutton for the feed consumed. For pigs, it insures better mothers, bigger litters and thrifty hogs. And we make these statements, unqualifiedly. They are not true because we say so—but because they have been proved true, and acknowledged by every noted Agricultural College and Experimental Farm in America. They all use it.



Always ask for LIVINGSTONE BRAND—the original and still to-day. The most widely used Oil Cake in Canada. Put up in 100-lb. bags. Write us direct if your dealer cannot supply you.

THE DOMINION LINSEED OIL COMPANY, Limited
 Baden, Ont. Montreal, Que. Winnipeg, Man.



The Only Men who need not worry about the health, vigor and "fettle" of the Herd Sire are those who feed Livingston old process, OIL CAKE MEAL

With little exercise, a Sire specially needs Oil Cake.

Farm A

Stanchion

If the calves are in a large pen, they should be fed them by hand. When they are often spoiled, get part of the Very simple stanchion constructed to insure the equal



feed. To prevent sucking one another in the stanchion after feeding. A calf stanchion at cheap or scrap price 36 to 40 inch four-inch space for design for a grass shown in the diagram.

A Four-H

Will you kind and Dairy a good four-horse walking abreast that will give good horses and one which is handy just two or three.

The diagram here shows a four-horse hitch.



However four-horse hitch used. The four-horse team can be a better horse, if they are with the addition of a hub from the bit of the harness of the horse measurement cannot be given. The size of the horse of each individual. This is only one

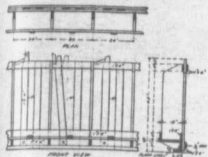


One Method

Farm Appliances

Stanchions for Calves.

If the calves are kept together in a large pen, it is very difficult to feed them by hand unless they are tied. When they are loose the milk often is spilled, and the larger calves get part of the smaller ones' share. Very simple stanchions may be constructed to prevent losses of milk and insure the equal distribution of the



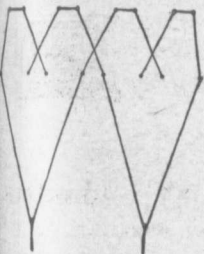
fed. To prevent the calves from seeking one another, they should be kept in the stanchions for some time after feeding.

A calf stanchion may be constructed of cheap or scrap lumber. It is usually 26 to 40 inches high, and has a four-inch space for the calf's head. A design for a practical stanchion is shown in the diagram herewith.

A Four-Horse Hitch

WHILE you kindly publish in Farm and Dairy a diagram showing a good fourhorse hitch, all four horses walking abreast. I want a hitch that will give good control over the horse and one which requires the driver to handle just two lines.—C. J. B., Peck Co, Ont.

The diagram herewith illustrates a fourhorse hitch which is popular



hever four-horse teams are comonly used. The lines used for a two-horse team can be adjusted to handle four horses, if they are good and long, with the addition of four straps to hook from the bit of one horse to the harness of the horse next to it. Careful measurements for each strap must be given. This will vary with the size of the horses and with the harness of each individual teamster. This is only one of many hitches.

There are others which find greater preference with some teamsters but its popularity would seem to indicate that this one is at least as good as others.—F. E. E.

A Bucket Rack

IN bucket feeding calves, we are generally limited to two alternatives. We can stand and hold the bucket while the calf gobbles up its contents, which involves a waste of time, or we can set the bucket down and let the calf go to it, with about a 50 per cent chance that the bucket will be upset and the contents wasted before the meal is well started. Recently, in visiting one of the many good dairy farmers in Eastern Ontario, an editor of Farm and Dairy noticed a very convenient rack which comes into use at feeding time. The diagram herewith illustrates the principle. The calves are tied up in stanchions at feeding time as calves always should be. In the manger in front of the stanchions, a rack as long as the calf pen is dropped in, fitting against cleats put there for the purpose. The cross pieces of the rack, just allow a feed bucket to fit in nicely. The bucket cannot be overturned, no time is lost and when the feeding time is over, the rack is lifted out, buckets and all, and hung

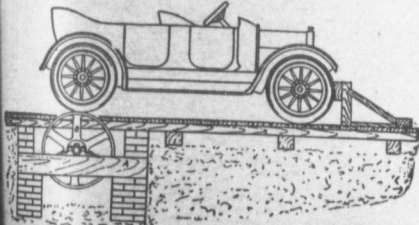


above the stanchions until needed again.

Power From Farm Car

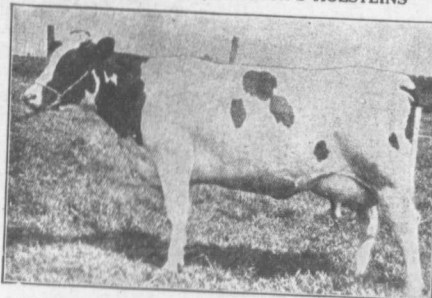
SOMETIME I read an article in Farm and Dairy dealing with the power uses of the farm car. Your article discussed only the commercial power attachments, which may be purchased for power development. Two or three years ago I read an article on the same subject in a farm paper published in the State of Iowa, where I was then living. This attachment differs from anything I have ever seen elsewhere and it has the advantage of being homemade. The drawing which I send you herewith illustrates the principle very completely.

In this case the power is located outdoors and the pulleys, on which the wheels run, are mounted on brick walls in a pit dug for the purpose. In most cases, however, the power is required inside the building and in most farm barns equipped with power I find that there is one general shaft with pulleys and belt attachments for grinding feed, pulping roots, pumping water and running the milking machine or cream separator. I would suggest that it would be very easy to have the pulleys on which the wheels run extending slightly above the barn floor with the main shafting attached to the pulleys running along just under the joists. Any ingenious farmer could construct and install such a power plant without expert assistance.



One Method of Harnessing a Car to Develop power.

RIVERSIDE
THE HOME OF RICHARDSON'S HOLSTEINS



Falladin Heets of Riverside, one of the good ones in the Riverside herd, the fine milk at a Junior 4-year-old, daughter of King Johanna Pontiac Kormdyke and sister to our present herd sire.

Riverside Holsteins

have been doing good work at home, but what is of still greater importance they have been doing still better work in other herds all over Canada, where they have been placed.

JEMINA JOHANNIA OP RIVERSIDE, who has over 30 lbs. butter in a week, 60 days from freshening, averaging other great cows in both R.O.M. and R.O.P.

MOHAWK Riverside is a safe place to buy Holsteins. We are prepared to go ahead and offer the breeders of Canada the same high quality of stock, both male and female, as we have offered in the past.

At present we have a few choice bulls for sale. They are from our former herd sire, recently sold, Francy Bonerogus Hartzer, a sire with Sir Pietertje Posh Dubou, Johanna Rue 4th's Lad and King Johanna Pontiac Kormdyke.

We have bred the best and are still breeding the best.

J. W. RICHARDSON - Caledonia, Ont.

Riverside Stock Farm

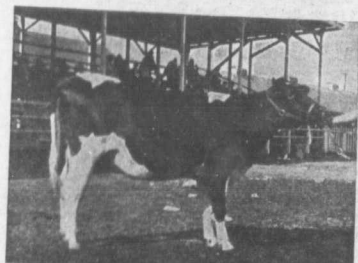
has produced the following famous ones—

NETHERLAND AAGGIE DEKOL, former Canadian champion, (21650) lbs. milk and 831 lbs. butter in one year, R.O.P.

POTILLA OP RIVERSIDE, 21,084 lbs. milk and 1,227 lbs. butter. Canadian champion, R.O.P.

A Rising Herd

We are just beginning to have nothing for sale at present. However, we will have a little later on.



BELLE ABBEKERK and, 1st prize Sr. Yearling at Canadian National and Western Fair, 1918. Her calf will be by May Sylvia Cornucopia.

A Sample of Our Foundation. Her dam and sire's Dam Average 29.63 lbs. in 7 days

JUST A WORD ABOUT OUR FEMALES

that will freshen in the next couple of months. A Junior 4-year-old with 23.10 lbs. butter from 491 lbs. milk, has just finished 12 months in the daughter and a sister of this heifer. A two-year-old with 16.47 lbs. butter in 7 days, 46.47 lbs. butter in 21 days, R.O.M., 11,700 lbs. milk and 600 lbs. butter in 11 months. She is a daughter of a 23-lb. 4-year-old that gave 91 lbs. in one day. A 24-lb. 2-year-old that is just fresh on a four-year-old and looks pretty good and her 2-year-old daughter. A daughter of a 23-lb. cow.

Surely we have not a sell to tell you about, but we are down here in South Oxford with plenty of good ones close by. We haven't used anything less than 91 lbs. butter and 100 lbs. milk in 7 days.

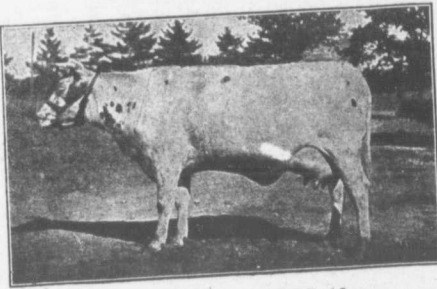
Watch for our future ads. Possibly we can supply you with a good calf later.

Correspondence Solicited.

J. B. Hanmer - Norwich, Ont.

A Frank Talk to Live Stock Breeders

Extracts From an Address by C. A. Stannard

RIDGEDALE
HOLSTEINS

World's-Record Heifer

Lakeview Dutchland Colantha Rose, highest producing 2-year old with 1st calf, 31.71 lbs. butter in 7 days. We have the good ones, both male and female.

Let Your Wants Be Made Known

RIDGEDALE STOCK FARM
F. A. HESLOP, Prop.
FREEMAN (RR. 2) ONTARIO

There is no man that needs to be more careful of his reputation for truth and honesty than the breeder of pure-bred live stock. His whole business success and future depends on his straight-forward, honorable business methods. No man can last in the pure-bred live stock business that cheats, wrongs or defrauds his customer. In selling your breeding stock, if there is a blotish on that animal, call the prospective buyer's attention to it. In other words, treat your customer as you would like to be treated if your positions were reversed.

Be prompt in answering your correspondence, be prompt in sending the papers for your live stock to the purchaser. In my time I have bought a good many pure-bred cattle and I believe seventy-five per cent if not ninety per cent of the men I have bought from have been dilatory about sending the registration papers. I have had to write some of them three or four times before I would get a reply, others I have had to write and telegraph, and some few I have had to go and see, and you would hardly believe me if I should tell you how many men are careless about their breeding men are careless about them, but I believe some of them are dishonest with themselves and their associations.

Pure Carelessness.
This develops when you have sold a cow to someone and a calf comes and conflicts with the previous calf, and the secretary calls you down and says that it is impossible for the cow to have two calves in six months. This comes from pure carelessness. You have neglected to set down the date at the time the calf came. Two or three months later you have attempted to guess at the date that the calf was born, maybe six months later and you

have missed it, and the result is a conflict of calves and you are called down by the secretary, humiliated and maybe asked for your books. Maybe you have neglected to record this calf until the time went by in which you could record at a nominal fee, and then avoid the penalty you dated it ahead, and when you came to record the next calf you forgot about the whole thing being occasioned by neglect and carelessness. If you will just heed this motto you will avoid all of these mistakes. "Do it now."

For fifteen years I served on the board of directors of the American Hereford Cattle Breeders' Association, and I got a very good idea of how and I got a very good idea of how many men were careless in their records. There were not so many men that were dishonest, and when their attention was called to it and they saw how important it was that the records should be kept absolutely correct, they readily acquiesced, and the feeling that the officers of the association were imposing on them vanished. I wish there was something I could say or do to impress on every man that is engaged in the breeding of pure-bred live stock, the importance of promptness and accuracy in your records. If your operations are large enough that you keep a hired man that looks after your record, I would suggest a daily report. I use this in my business. Every three or four days my herdman or man keeping track of the records on my place, hands me a report for each day, showing the breeding record of that day, all the calves dropped, and the disease from which they died if he knows, and any other thing that may have happened pertaining to the live stock, and what he (Concluded on page 52.)

CANADA'S COMING SIRE

A Grand Pedigree

His Dam: Lakeview Lestrange, 741 lbs. milk and 38 lbs. butter in 7 days.

His Sire: Dutchland Colantha Sir Mona, who has produced more Champion daughters than any other bull in the world, and is a brother to Dutchland Colantha Vale, 22,750 lbs. milk and 858 lbs. butter at 2 years.

CHAMPION SISTERS.

Lakeview Dutchland Artis, Canadian Champion mature cow, 43 lbs. butter and 654 lbs. milk in 7 days.

Lakeview Dutchland Queen, 34.65 lbs. butter and 708.5 lbs. milk.

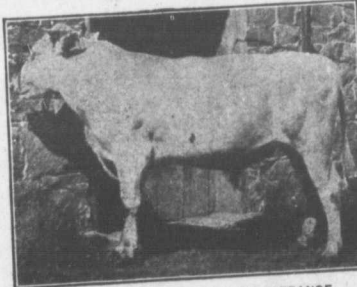
Lakeview Dutchland Calamity Rose, world's champion two-year-old with first calf, 31.71 lbs. butter and 510.4 lbs. milk.

His 38 lb. Dam



Lakeview Lestrange, 35.06 lbs. butter and 741 lbs. milk, second highest milk and butter ever in Canada.

A. J. TAMBLYN,



LAKEVIEW JOHANNA LESTRANGE. In 7 days, she and sister average 40.56 lbs. in 7 days, is with the 31st of his old brother, the only

BULL IN THE WORLD
whose first seven sisters hold nine Canadian and two world's records. Every generation in his pedigree contains Canadian all world's records. As my herd is not large I offer him for

SERVICE.
Already I have stated some of the best cows in Canada. During the past week, the following have been added to the list: Mona's Calamity Rose, with 26,418 lbs. milk and 1,941 lbs. butter in a year, and Victoria and Burke, 31.90 lbs. butter in seven days, and Alice Jensen Canary, with 30.25 lbs. butter and 622 lbs. milk in seven days. We can still take on a few more.

LAKEVIEW JOHANNA LESTRANGE
is a splendid individual. The above photo was taken on a dark, cold day, and does not show a positive injustice. His first calf is now a few weeks old, and is as promising an individual as we have ever bred.

From Every Angle

HIS BROTHER.—Lakeview Dutchland Hengerveld Bos, the unbeaten show bull of America.

The dam's sisters, Lakeview Queen 3rd, Canadian Champion 2-year-old in eight months' division, and 33.3 lbs. a 2-year-old, without going dry between the two tests.

Lakeview Calamity Countess, 32.45 lbs. butter and Lakeview Queen 3rd with 30.15 lbs.

HIS GRAND SIRE. Colantha Johanna Lad, who has produced more cows with over 600 lbs. milk in seven days, than any other two sires, and is even with Pontiac Keornlyke in number of 30-lb. daughters.

He is closely related to Segie Fayne Johanns, world's champion, seven days 58.6 lbs. butter. Also Sarcastic Lad, grand champion at the St. Louis Exhibition, and whose progeny holds more world's records than any other sire. Also Colantha 4th, the only cow who has ever held all world's records from one day to one year at the same time.

His 43 lb. Sister



Lakeview Dutchland Artis, 43.06 lbs. butter in seven days, Canadian champion.

Cedardale Stock Farm

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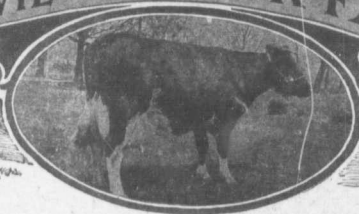
6 lbs. butter in

CO, ONT.

LAKEVIEW STOCK FARM

Major F.E. OSLER PROP.

T. ADAMSON Mgr.



The ORIGINAL HOME of LAKEVIEW HOLSTEINS

THE above cow, Lakeview Rattler, was the first Holstein calf ever born on Lakeview Farm. Her dam, Rose Rattler, and her grand-dam, Calamity Jane, made Mr. George Rice famous the world over as a breeder of the Black and Whites, as has Lakeview Rattler made Lakeview Holsteins famous the world over, and good luck follows her, or her blood lines wherever it is found. Rattler was once the highest producing butter cow in Canada in the 7-day division by producing 724 lbs. milk and 37.54 lbs. butter. In nine months she gave over 20,000 lbs. milk, and 8 months after calving 1412.4 lbs. milk and 61 lbs. butter in 30 days, which is to this day the Canadian record.

COUNT HENGERVELD FAYNE DEKOL

was the first herd sire. He is well known to-day by the records of his daughters. The first was Lakeview Lestrangle, who made 38.06 lbs. butter from 724 lbs. milk, average test 4.14 per cent, only equalled at that time by one other cow in Canada and to-day only by her own stable-mate, Lakeview Dutchland Artis, the only 43.06-lb. cow in Canada, who is a

grand-daughter of this same bull. Lakeview Queen 2nd is another daughter of his, 30.16 lbs. butter, and Lakeview Queen 3rd, another daughter, is the Canadian champion senior 2-year-old 8 months after calving. There are a great many more good ones and a lot of young heifers still to be heard from. But—

Oh—Boy—Look—

DUTCHLAND COLANTHA SIR MONA----

HE was the next sire, and look what his daughters are doing. And they are only beginning. Lakeview Dutchland Artis, Can. champion mature cow, milk 654.0 lbs., butter 43.06 lbs. She is also Can. champion senior 3-year-old, milk 567.9 lbs., and butter 34.66. Another, Lakeview Dutchland Queen, Canadian champion three-quarter cow—milk 705.6 lbs., butter 34.65 lbs. Still another one, Lakeview Dutchland Colantha Rose, is Canadian and world's highest producing 3-year-old, with first calf—milk 496 lbs., butter 31.71 lbs., and he is the only bull in the world who has 27 sisters giving over 600 lbs. milk, and 20 sisters with over 20 lbs. butter in 7 days, and three sisters and two daughters have held world's records. His grand-dam is the only cow in the world who has held all world's records from one day to a year. He is being kept for service to a limited number of approved cows. Full particulars on application. Good young herd-headers always on hand.



DUTCHLAND COLANTHA SIR MONA
SENIOR HERD SIRE

We have appreciated the visits of the many Holstein breeders to Lakeview in the last year. Whether you are a prospective buyer or not, we extend you a kindly invitation to spend a few hours with us looking over our splendid herd. The farm is on the cement highway—Toronto-Hamilton—and is easily reached by road or rail. The latch-string is always out at Lakeview.

LAKEVIEW STOCK FARM - BRONTE, ONT.

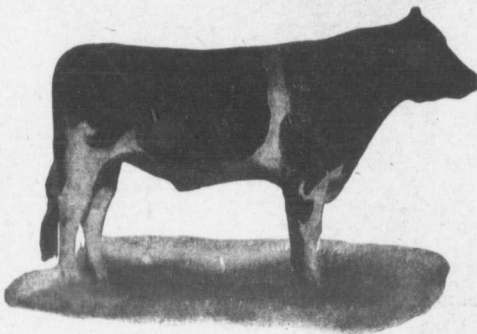
PREMIER HOLSTEINS

40-lb. Sires

King Sylvia Keyes—62½ per cent blood of May Echo Sylvia, 152 lbs. milk one day, 41.01 lbs. butter with 1005 lbs. milk seven days.

L. D. Hengerveid 2nd—75 per cent blood of L. D. Artis, 43.05 lbs. (Canadian champion), also two world's record sisters. His sire has 20 sisters over 30 lbs., (daughters and sons of Albina Josie King, with a 40-lb. dam, and her dam having three 40-lb. sisters, two near dams average 35.80 lbs. His sire with three 40-lb. sisters, and is a full brother to the first 44-lb. cow.

The Mighty Monarch, with a 47.35-lb. dam, 50-lb. grand-dam, 39-lb. great-granddam; three near dams average 45.49 lbs. His sire with three 40-lb. daughters.



KING SYLVIA KEYES—No. 28566
5 Sisters Average 115 lbs. of Milk Per Day

100-lb. Dams

The dams of the sires that have been and are used in our herd are mostly 100-lb. cows. The dam of King Sylvia Keyes made the even 100 lbs., of Albina Josie King, she averaged 103.6 lbs. for seven days, of the Mighty Monarch, she nearly averaged the 100 lbs. for seven days. Combined with this very high milk flow is the pronounced 40 and 50-lb. blood. Absolutely ideal breeding is behind every animal that finds a place in the Oak Park herd. If it is blood and breeding, type and conformation you are looking for, we have them in our herd.

**WE OFFER THE COMBINED BLOOD OF CANADA'S 2-40lb. COWS
EVENTUALLY YOU WILL BUY HERE—WHY NOT NOW?**

IN THE RING

WE had unparalleled success at the leading Canadian Exhibitions for a herd founded in 1914. Our males have been prominent winners of first places, champions and grand champions. Our females have met with the same success. This stock is a selection from other competitor's herds combined with other typey stock of our own breeding. It is well to remember this when you contemplate the purchase of a good foundation cow or a good sire to lead your herd.



EDGEMONT PRIDE—No. 17403
50% blood of May Echo Sylvia
152 lbs. Milk in 1 Day

AT THE PAIL

WE have in our herd over 20 mature cows for a foundation, and each member produced from 80 to 104 lbs. of milk per day with large 7-day butter records, from a normal per cent of butter fat, not abnormal. It is our aim to breed and produce cows that will milk the 100 lbs. at freshening and hold a high flow of milk for the year. We will achieve our aim as the official records backing our males and females strongly indicate great yearly work. Don't forget us when you are in need of males or females.

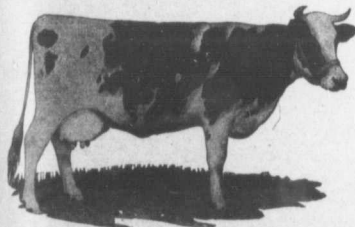
Oak Park Stock Farm

Compliments
of the
Season

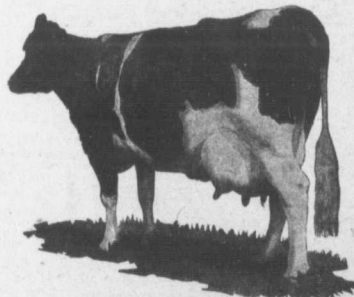
H. H. BAILEY
MANAGER
PARIS, ONT., CANADA

VISITORS ALWAYS
WELCOME

Farm can be Reached from
Either Brantford or
Paris by Electric
Radial



HELBON BEAUTY BONHEUR—No. 30294
Grand Champion Cow, and only One of Our Heavy
Producers



L. HENGERVELD WAYNE—No. 12430
Her Son for Sale. His 3 Near Dams Average 35 lbs.

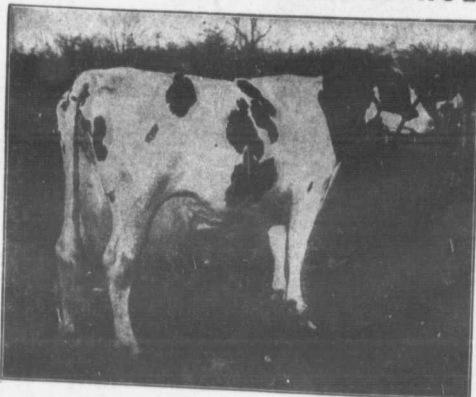
WATCH OUR ADS. IN THE FOLLOWING ISSUES OF THIS PAPER

ROYCROFT

THE HOME OF WORLD RECORD HOLSTEINS

Our Herd

holds more world's records than any other herd in Canada and more than any herd of similar size in America. It has more 30-lb. cows than any other herd in Canada and it has produced the highest-priced female ever sold in Canada, Het Loo Pieterje, \$12,750, world's record heifer. Our herd was started right. We had the proper females to begin with and by the use of still better sires we have brought about a steady improvement. Our crop of young stuff now growing into maturity would gladden the heart of any Holstein breeder. They are sired by either one or the other of our three herd sires, Pontiac Korndyke Het Loo, a son of Pontiac Korndyke; King Sogis Alcatraz Spofford, a son of the \$50,000 bull, and Pontiac Echo Het Loo, a grandson of May Echo Sylvia. The heifers will go on ahead and make still more world's records at Roycroft.



MAY ECHO SYLVIA 11385.

The greatest milk producer the world has ever known. Official milk record for one day, 152.1 lbs.; 7 days, 1065.8 lbs.; 30 days, 4183.3 lbs.; 60 days, \$2301. lbs.; 90 days, 11,861 lbs.; 100 days, 12,893 lbs. Official butter record for 7 days, 41.0 lbs.; 30 days, 169.72 lbs.; 60 days, 323.22 lbs.; 90 days, 463.67 lbs.; 100 days, 505.31 lbs.

Our Junior herd sire is Pontiac Echo Het Loo, by Avondale Pontiac Echo, a son of May Echo Sylvia. His dam is one of our best females, Anyville Elsie, 31.75 lbs. in 7 days. His offspring are now coming on and are a fine straight lot. They combine the blood of the two great families, Pontiac Korndyke and May Echo Sylvia.

Young Sires We Offer

Study the photos on this page. They represent the Roycroft combination that has made the name "Roycroft" synonymous with world's records, the world over. Would you like to get "near" this combination? You can do so by securing a Roycroft sire. We can give you a Het Loo sire, a brother to Het Loo Pieterje, the world's record heifer, from one of our grand old foundation cows. We can give you a son of our May Echo Sylvia bull and from one of our Het Loo females, sisters of Het Loo Pieterje. We can give you a son of the Spofford bull, whose dam can give you a son of Het Loo Pieterje the \$12,750 heifer heretofore. These young bulls will go sires of future world's record females; but as their sires are producing world's record females today.

Come to Roycroft for Your Next Sire



HET LOO PIETERJE, THE \$12,750 HEIFER.

World's champion Junior two-year-old for butter for seven, thirty and sixty days. Record for seven days, 30.32 lb. butter from 278 lbs. milk; thirty days, \$23.01 the butter from 2352.6 lbs. milk; sixty days, 22.25 lb. butter from 4561.1 lbs. milk. This heifer represents the kind we are producing at Roycroft. We sold two of her sisters recently for \$4,000 and \$6,000, respectively, and a brother for \$2,000. What her sire has done in our herd, her brothers can do for you. We also have a son of this heifer in our herd which we can sell.



PONTIAC KORNDYKE HET LOO.

Pontiac Korndyke Het Loo, senior sire at Roycroft, and sire of Het Loo Pieterje, the \$12,750 heifer. He also has 30 other tested daughters, who are making good. Pontiac Korndyke Het Loo is one of the leading bulls in Canada to-day. He is individually about the best son of Pontiac Korndyke and his offspring show the same grand dairy type as he carries. We have a few of his sons for sale, also a few sons of his daughters, sired by our young May Echo sire and the Spofford bull.

And Her Sire

"Like Begets Like"

Canadian breeders have the privilege of proffing by our success.

Make yourself a Christmas present of a Roycroft sire. Write to-day for fuller particulars.

W. L. Shaw Roycroft Stock Farm Newmarket, Ont.

Two tested Sylvia, Ontario, and 955 milk week could heavy sale in average and for us has one, he which winter.

the odd Smith a total \$12.95.

\$155, T. Korndyke Smith, is, \$26, Secretary, T. W. 1918, lowered Alcatraz; J. B. Hamilton; H. Spay; W. May; Mary Hal; 105, W. 1918, W. Cal; 150, C. 1918, 110, H. 1918, 110, H. 1918.

ING.

of Hol- ty of buy- ing such ill be dis- cuss Farm, by H. 48 animals, one due to sale. Four be fresh, 7. It is calves young bulls.

offering of alantinus, a whose off- of his dis- is a son of six nearest or a week, in his sire's for his use the dam King Sogis, Anna Naisey, out of the 18,877 lbs. to Johanna wife's Chama- grand dam, 17,990 lbs. 60 days, an unusual Canada, Pif- big sire's first show animal, is a son of six nearest litter. He is a Netherlands daughters over 30 lbs.

best grand (88.73) the has produced 30 ter of Holie (26.0) grand 3-year-old in

ing) and one service of the in the sale of the best calves. The animals are the best breeding and auction and for foundation an attend this

class of cattle Drumbo, R. E. logue.



QUEEN BUTTER BARONESS.

7-day record, 512 lb. milk, 33.18 lbs. butter.



MIDNIGHT COMET DEKOL.

7-day record, 579.9 lbs. milk, 34.98 lb. butter.

30 lb. Cows

in

OXFORD COUNTY

If wanting Holsteins in car-load lots come to Oxford County, the Holland of America. We can supply you from the herds that produced the cows, whose photos appear on this page. For particulars regarding Oxford County Holsteins write to W. E. Thompson, Secretary of the Oxford County Holstein Breeders' Club, Woodstock.

DAISY KORNDYKE BEETS.

7-day record, 715.5 lbs. milk, and 31 lbs. butter.

Oxford County has more 30-lb. cows than any other county in Canada. Oxford County Holsteins have won more sweepstakes at the Genesee Winter Fair than any other three counties. Oxford County won three out of a possible four championships at the Canadian National this year and for years have furnished 30 per cent of the whole exhibit. If you wish to secure Holsteins of 30-lb. breeding come to Woodstock on December 17th.

65 Head

including mature cows, heifers, bulls and a few calves of both sexes.

COME TO THE BIG FALL SALE

65 Head

choice selections from the best herds in Oxford County.

OF THE

Oxford County Holstein Breeders Club AT WOODSTOCK

ON

Tuesday, December 17, at 12.30 p.m.

This sale is a rare opportunity for breeders to secure some of the best producing blood of the breed. The Woodstock sale has established a reputation for the quality of the offerings. This sale will be no exception. Plan to attend this sale and secure foundation cows from the herds which produced the high producing cows which appear on this page.

Our motto is Quality and Satisfaction

For Catalogues Write W. E. THOMPSON, Woodstock, Ont.
Auctioneers—MOORE & DEAN
Sales Managers—A. E. HULET, M. H. HALEY, M. L. HALEY



COUNTESS MERCENA BEULAH.

7-day record, 706.8 lbs. milk, 34.04 lbs. butter.



HELENA MERCENA POSCH.

7-day record, 632.6 lbs. milk, 30.52 lbs. butter.



PONTIAC JESSIE.

7-day record, 664 lbs. milk, 37.67 lbs. butter.



CALAMITY SNOW MECHTHILDE 2ND.

7-day record, 612 lbs. milk, 32.70 lbs. butter.



MADAME PAULINE CANARY.

7-day record, 375 lbs. milk, 39 lbs. butter.



BARONESS MADOLINE.

7-day record, 686 lbs. milk, 34 lbs. butter.



COLANTHA BUTTER GIRL.

7-day record, 589 lbs. milk, 35.87 lbs. butter.



PAULINE COLANTHA POSCH.

7-day record, 691 lbs. milk, 34.23 lbs. butter.

Another Record Smashed

"MAY ECHO SYLVIA," the holder of six world's champion milk and butter records, also smashed all previous "price records" for a cow's progeny. Her six months old bull calf sold at auction in Milwaukee June 7th for \$106,000—twice the previous high record price.

The owner of this wonderful cow, Arthur C. Hardy, of Avondale Farm, feeds and endorses SCHUMACHER FEED. If you want to get the best results possible from your herd—if you want to increase your milk profits, you can do it by feeding

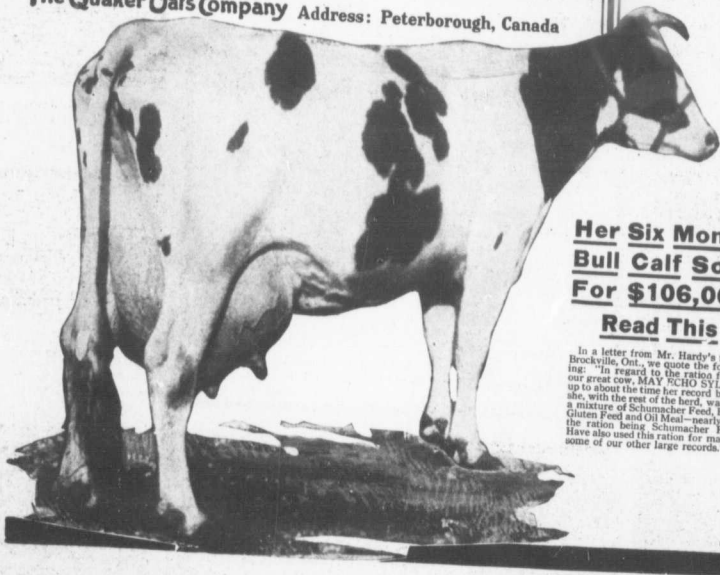
SCHUMACHER FEED

as the carbohydrate or maintenance part of your ration and our BIG "Q" Dairy Ration as the protein or milk-producing part of the ration.

SCHUMACHER FEED is composed principally of blended corn, oats, wheat and barley by-products correctly balanced, finely ground and kiln dried. It is palatable and cows relish it—one reason why it produces such good results in the milk pail.

Not only is SCHUMACHER FEED the world's most widely used feed for fresh cows, but it is used equally as successfully for fitting dry cows for another year's work, for young stock, hogs and horses. Farmers find that when fed to hogs as a corn supplement, they get bigger, faster gains at much less cost. Ask your dealer for SCHUMACHER FEED. If he can't supply you, write us.

The Quaker Oats Company Address: Peterborough, Canada



**Her Six Month
Bull Calf Sold
For \$106,000**

Read This

In a letter from Mr. Hardy's farm, Brockville, Ont., we quote the following: "In regard to the ration fed to our great cow, MAY ECHO SYLVIA, up to about the time her record began, with the rest of the herd, was fed a mixture of Schumacher Feed, Bran, Gluten Feed and Oil Meal—nearly half the ration being Schumacher Feed. Have also used this ration for making some of our other large records."



More choice cattle of recognized beef breeds are needed to replace scrubs.

Ontario Live Stock Breeders "CARRY ON!"

LIVE STOCK FARMS ARE PRODUCTIVE FARMS
AND
PRODUCTIVE FARMS ARE PROFITABLE FARMS



The products of first-class dairy cattle will always be in demand.

Through the period of reconstruction at the conclusion of the Great War good live stock will be, as it always has been, the basis of profitable farming in Ontario. Farmers of this Province should continue to place their confidence in high-class beef cattle, heavy-producing dairy cows, and sheep which are valuable for both mutton and wool, and

the long, lean bacon hog. To work the land to produce the feed for greater numbers of live stock more weighty, heavy draft horses will be required. Ontario Breeders will "carry on." The threshing machine stays longest on the farms which carry the heaviest stock, the granaries are better filled and the bank account of the farmer swells in proportion.

Prices for all classes of good live stock are likely to remain high in comparison with prices of grain and feed. Any shortage in grain may be made up much more quickly than the world depletion of live stock can be repaired.



Prices of weighty draughters are ready for an upward trend. Good horses are scarce.

The Stock Breeder who stays with the business, breeds well, feeds well and culls carefully always reaps greatest ultimate profit. Through ups and downs the man who "sticks" prospers. The in-and-outer is usually out of pocket.

The live stock of Europe has been depleted by millions of head. Breeding stocks of the beef and dairy herds across the water have been slaughtered promiscuously. Sheep flocks and swine herds are at a low ebb. Already Europe is calling to America for breeding stock. Not only must European herds be built up but the population must be fed in the meanwhile and, particularly, thousands of our troops must continue to be

fed during the extensive period of demobilization. Particularly must we produce meat and wool for the people of Great Britain and her Allies. It will take years to make up the world's deficiency in live stock. Herds and flocks should be strengthened rather than dispersed. Ontario Breeders never had such an opportunity. Breed for quality in all live stock that Ontario may do her part in establishing Canadian Brands on the British and European Markets.

If you are in the Live Stock Business stay with it. If you are not in, get in at once.
You can use the money and the world needs the meat, milk and wool.

ONTARIO DEPARTMENT OF AGRICULTURE
PARLIAMENT BUILDINGS, TORONTO

People have learned to eat more lamb and mutton. Wool is needed for clothing.



DR. G. C. CREELMAN,
Commissioner of Agriculture.



HON. GEORGE S. HENRY,
Minister of Agriculture.

Keep the Good Breeders
Buy more if you can feed them well
Cull out the Scrubs

This is Ontario's chance to capture the British market for the bacon hog.

