

FARM AND DAIRY

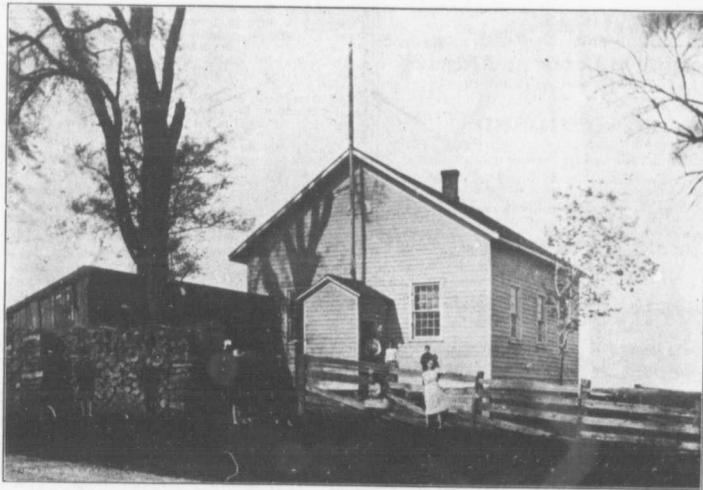
AND

RURAL HOME

PETERBORO, ONT.

NOVEMBER 20

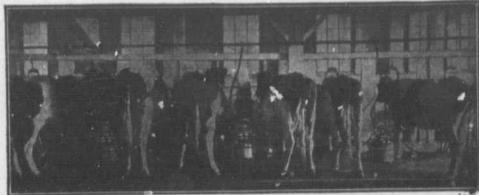
1913



IS THIS TYPE OF SCHOOL HOUSE AS DESIRABLE AS IT IS COMMON?

The rural school problem has never received the consideration that its great importance should demand. This lack of consideration is reflected even in the average school building itself; the one here illustrated, unattractive and uncared for, is a too common type. It is time that something was being done to improve educational conditions in rural districts. In this issue of Farm and Dairy Richard Lees, M.A., portrays the sad deficiencies of rural schools. In future articles Mr. Lees will give practical suggestions for improvement. Farm and Dairy commends these articles to the careful consideration of all "Our Folks."

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BETTER FARMING AND
CANADIAN COUNTRY LIFE



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FOR YOU

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He is taking great pains in the care of the milk and the way the cows are handled, but he is milking 100 cows in two hours with six machines, operated by two men, and a third to carry the milk. He effects an actual saving of \$1,500.00 per year, with an equipment that cost him \$825.00 complete.

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

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OF

FARM AND DAIRY issued DEC. 4

This big number will be replete with live spicy articles right from our big practical men out on their farms. The illustrations will reflect the continued prosperity showered upon "Our People" during the past season.

Advertisers desiring space for December 4th, should reach us without delay to insure choice placing and our best service.

Advertising Department

Farm and Dairy, Peterboro, Ont.



This Competitor is Properly Proud of His Team

Isn't this a team to make any farmer's heart glad? It's owner, Mr. Fred J. Fisher, Malvern, Ont., was awarded first place for best turnout (horses and harness) at the recent provincial plowing match.

The Provincial Plowing Match

The Ontario Provincial Plowing Match, once an annual event, has been revived after a long interval of 19 years. Good plowing is to be reinstated in its proper place as the fine art of the farm. The Ontario Plowmen's Association with all of the strength of their 1400 members and backed by all of the enthusiasm that they have aroused throughout the country have declared that such a long interval between Provincial matches will never occur again. They made a good start towards reviving this old-time institution on Tuesday, November 11, when over 1,000 people and the cream of the plowmen of the province, gathered on the farm of Mr. Joseph Kilgour at Eglington, Ont. The attendance would have been much larger had the weather been more propitious.

Each contestant plowed one-quarter of an acre. The banner plowman of the day was Cameron Walkington, of Krog, who carried off the sweepstakes trophy, a massive silver cup, donated by The Canadian Farm, which he will have to win again next year before it will become his property. Mr. Walkington had been beaten the day previously at Scarborough, but regained his laurels in the provincial event, his successful competitor of the previous day coming fourth. Mr. Walkington was first on land, crown and finish.

AN 80-YEAR PLOWMAN

The most interesting figure of the event was Wm. Milliken, an 80 year old veteran who guided his plow with a skill that many younger men might envy and finished up his quarter acre as fresh as a bird. At the banquet in the evening Mr. Milliken said that he used the same plow that day that he had used in a plowing match 80 years ago. The first silver cup that he had won was competed for just 50 years from the day previous, and it was over 60 years since he had won his first prize. There was some doubt as to when the last provincial plowing match had been held, but Mr. Milliken supplied the missing information. It had been held 19 years before on his farm.

As Mr. Milliken spoke he grew reminiscent and recalled the winnings of earlier days. He even remembered the names of the winners in the first match in which he ever competed.—Mr. Hood, Mr. Eckhart, Jas. Robertson and himself. All have passed away but himself. The speaker suggested that the name "Plowing Match" be changed to "Plowmen's Exhibition."

It was the magnificent hospitality of Mr. Kilgour that made the event the success that it was. Besides giving the use of the farm to the contestants, Mr. Kilgour provided refreshments, good substantial refreshments such as hard working men require, at noon and night. His hospitality was appreciated to the full. His name was never mentioned at the banquet

except to the accompaniment of appreciative cheers, and the crowd desisted singing "For he is a jolly good fellow."

One of the satisfactory features of the match was that of the 34 contestants, the majority were young men. This augurs well for the success of future events. The prizes were presented by Mr. J. Lockie Wilson. The winners in each of the various classes were as follows:

First class, open to all, in sod-1, Cameron Walkington, King, silver cup (presented by George Henry, M.L.A.); Class Clubino, Maple, tea service; 3, Stanley Tindale, Richmond Hill, cup (presented by John Wainman & Co.).

Second class, open to those who have never won first prizes in this class—1, William Orr, Maple, cup (presented by the Hunt Club); 2, Stewart Bond, Wabara, tea service (presented by A. J. Wabara). (Continued on page 22)

Concrete and Charity

H. Percy Blanchard, Ellershouse Farm, Hunts Co., N.S.

It is said that charity covereth a multitude of sins. In that, it is like old Rory Macdonald's two assistants in his wagon shop—paint and putty. Likewise, in the same respect, it resembleth concrete.

A few weeks ago I was visiting a friend in Scotch Village. Only lately he bought his farm; and one big barn was in bad shape. The sills, laid on the wet ground, were completely rotten, as also were the ends of the floor joists. We talked the matter over, and finally decided that the best thing would be to spike a three-inch plank on the inside of the barn to the studs and posts where the sound wood commenced, say a foot above the sills, and then, a portion at a time, dig out the rotten sill and wood, put in board forms, and run in a concrete wall all round the barn right up to the new three-inch plank. This would completely embed the old sill, that remained, the lower ends of studding, and also a few inches of the ends of the joists.

PLACED IN ACCORD WITH PRACTICE To-day I tried the same plan on an old building on my own farm. The west wall was so badly gone at the sill that I had to shore up and take the weight of the wall by props of concrete under the plate at the first ceiling. So supported, the lower portion of wall swayed like a pendulum.

To-night what is finished of it is as solid as a new building. There is a concrete foundation resting on good soil; a wall about 10 inches thick rising above the floor about a foot. The wall (good wood and irremovable rotten wood) is firmly bedded in this concrete; and I fear myself I have a good job well begun. It is much cheaper than putting in a new sill; and a much solidier and better building than any new woodwork under those rotten joists could give. However, if it looks like a cold night any time within a week, I must throw a few forkfuls of straw on top of the concrete, or the frost will damage it.

Issued
Each Week

Vol. XXXII.

A



The Plow

THAT there is a problem of importance to consideration and the citizens, has been for all who have had administration of schools been felt that pace neither with the country nor with the been made in other plain by the multiplicity letters written, reported some wise and some suggested for evils

GENE In everything else been marked progress. Contrast farm conditions that prevailed those, seeders, cultivating machines of to-day that day. Consist with its high bred scientific appliances then recall the dairy of us who have passed the journey of life telephones, rural mail in some localities, he made their contribution venience of country any fairly good agricultural comfortable, tree-shed dwellings, then try comparison those of century ago. If a house is passed on fall to observe its surroundings. A recent has made a strong case a series of country side pictures of the within two miles of striking series could most any district; everything else their signs of progress a but the school is many years ago, both as to ance and internal that the man who hel

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Each Week

FARM AND DAIRY & RURAL HOME

Only \$1.00
a Year

Vol. XXXII.

FOR WEEK ENDING NOVEMBER 20, 1913

No. 47

Are Our Rural Schools Unprogressive?

RICHARD LEES, M. A., INSPECTOR OF SCHOOLS

Our Children are not Receiving the Education they Should--Our Schools are Lacking in Important Respects--They are Not Keeping Pace with the Times--The Situation Discussed by a Man who has Spent Many Years in School Work in our Rural Districts.



The Pioneer



The Present

"The Chief Business of a Commonwealth is Education."

THAT there is in this province a rural school problem of sufficient magnitude and importance to challenge the most careful consideration and the best judgment of our wisest citizens, has been for some time the opinion of all who have had to do with the conduct and administration of schools in rural communities. It has been felt that the rural schools have kept pace neither with the general progress of the country nor with the educational advance that has been made in other lines. This has been made plain by the multitude of addresses delivered, articles written, reports presented and remedies some wise and some otherwise, that have been suggested for evils real or imaginary.

GENERAL PROGRESS

In everything else but the school there has been marked progress in our rural communities. Contrast farm conditions at the present time with those that prevailed 25 years ago. Think of the plows, seeders, cultivators, harvesters, and threshing machines of to-day in comparison with those of that day. Consider a present day dairy farm with its high bred cattle and high bred corn, its scientific appliances and sanitary precautions, then recall the dairy farm of the boyhood of those of us who have passed the thirtieth milestone in the journey of life. Improvement in roads, rural telephones, rural mail delivery, and electric cars in some localities, have all come and have each made their contribution to the comfort and convenience of country life. Take a drive through any fairly good agricultural district and note its comfortable, tree-sheltered, lawn-surrounded farm dwellings, then try to remember in comparison those of a quarter of a century ago. If a country school house is passed on the way, do not fail to observe its condition and surroundings. A recent American writer has made a strong case by publishing a series of country schools and alongside pictures of the best farm houses within two miles of them. A similar striking series could be made for almost any district in Ontario. In everything else there are abundant signs of progress and development, but the school is much as it was 25 years ago, both as to outward appearance and internal economy, except that the man who held sway then has

likely been replaced by a girl as teacher.

In this province, as well as in all progressive countries, the last 10 years have witnessed a marvellous advance in educational reform. So rapid has this been that even those directly connected with educational affairs find difficulty in keeping track of it. Manual training, domestic science, technical education have become as common and as familiar as the three "R's" used to be, and

Where is the Trouble?

"THE schools are held to be largely responsible for ineffective farming, lack of ideals, and the drift to the town. This is not because the rural schools, as a whole, are declining, but because they are in a state of arrested development and have not put themselves in consonance with all the recent changed conditions of life."
U. S. Com. on Country Life.

the town or city that has not made a beginning in some of these is out of date. Vocational schools and colleges are being established and maintained at great expense. Large sums have been spent for material equipment. Antiquated buildings have been replaced by those of modern type. Shops, laboratories, play rooms and ample grounds have been provided. Efforts have been made to adjust courses of study to modern conditions of life, and a deeper and a more active interest has been developed in all that pertains to education.

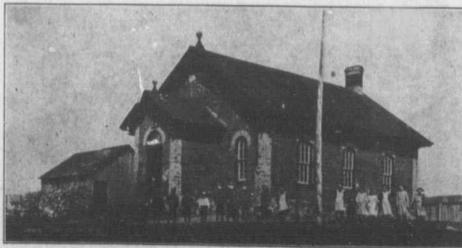
Thus we have on the one hand a wonderful de-

velopment in the things that make for comfort and efficiency in the life of the country, and on the other a striking activity and improvement in general educational conditions. How much of this latter has come to the rural school? Progress has undoubtedly been made in some respects. By the introduction of Nature Study, Agriculture and School Gardening, efforts have been made to make the course of study conform more to the life of the rural communities. Praiseworthy efforts have been made to improve the character of the teaching, yet it is to be doubted if all that has been accomplished in this direction compensates for the departure of the male teacher from the country school. Besides, it cannot be said that the training schools have as yet accomplished much in fitting teachers especially for the duty of conducting a rural school.

THE RURAL SCHOOLS

In buildings and grounds there have been improvements, but the vast majority of country schools are still of the antiquated "box-car" type with three windows in each side and a door in one end. Inside, the walls are ornamented chiefly by the accumulated dust from the dirty floors and smoke from the rusty, disjointed stovepipes which, rising with rakish unsteadiness from a still rustier stove, at one end, makes its way through unsightly hoops and wire slings, with billowy contortions to a hole in the chimney at the other end. The ceiling is dirtier than the walls, with nothing to relieve its monotony but some patches of broken plaster and a hole in the middle where the foul air of to-day may go up to come down to-morrow, cooled but musty and fouler if possible. This hole is dignified by the name of ventilator. The floor,—but the floor has suffered enough.

Why prolong the picture, have we not all been there? Have we crawled through a hole in the fence, picked our way over a yard strewn with stones, broken bats, and bits from the wood pile, have struggled up rickety and dilapidated steps to stand at last before a door from which the latch is gone and which hangs in deep dejection with one or more broken panels, from a lame hinge. What wonder children do not like school? What wonder country children do not like

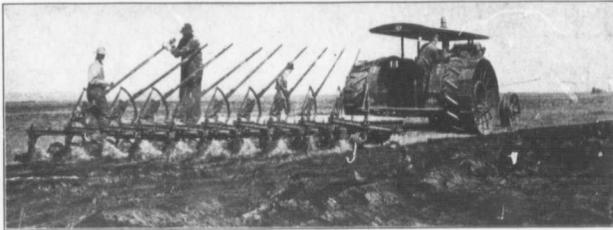


Bare and Unattractive, a Type of School Altogether too Common.

school? What wonder country trustees find it difficult to secure and retain good teachers.

While for many rural schools this picture is overdrawn, the fact remains that some of it applies to nearly all of them and few have much that is really attractive, homelike, or elevating in their appearance, either outside or inside. Compare the bare, cold, unattractive country school with the neat, tidy attractiveness of the

and tested, the results of each day were placarded in bold figures above each cow. These two furnish the extremes for one day. A 7 year old Jersey consuming 21 cents worth of feed, produced only 13 cents worth of fat. This means that she incurred a loss of eight cents for that day, that the feed cost of one pound of fat was 52 cents, that the feed cost of 100 lbs. of milk was \$2.53, and that for every dollar's worth of feed



Furrows Being Turned in Wholesale Quantities on the Prairies of Western Canada

Tractor plowing was at one time more general on the prairies than it is now. Recent reports state that many tractors have been entirely abandoned this summer and the plowing done with horses. This return to the horse is attributed in most cases to the advancing price of gasoline. The price of gasoline in its turn is advancing because of trust methods. Farmers suffer perhaps more than any other class in the community through the reaction of trusts.

best farm buildings. Compare it with the city schools. Finally, compare it with other public buildings. It is generally conceded ad rightly so that buildings owned by the public should be models of beauty and attractiveness as well as efficiency. Why not country schools? They are public buildings and the rural school should be the best and most attractive building in the section.

THE RIGHTS OF THE COUNTRY CHILD

What about the country boy and country girl? Their city cousins are having provided for them the best that money can secure in schools, laboratories, gymnasiums, art galleries, museums, music halls, and everything that is thought will help them develop along right lines. What father in a rural community is willing to admit that his boy is not worth as much as the city boy? Country mother, is your girl deserving of anything less than the city girl? In this land of ours, where education is supposed to be free, that is where it is provided for all at the expense of the community, it would seem to be a fundamental principle that the country boy or girl is entitled to every whit as good educational advantages as are enjoyed by the most favored city child. If the parents of the country children believe this they should act on it and demand for their children these rights. Let them awake to a realization of their duties and responsibilities in this matter, recognize fully the importance of it, and that education is costing us only a mere pittance compared with its value. Then there will be improvement of 'a substantial kind, but not till then.

Demonstration Cows at Chicago

C. F. Whitley, in Charge of Dairy Records, Ottawa

Are your dairy cows making good profits? It is necessary to find out, for at the famous National Dairy Show held in Chicago the last week in October, the authorities had gathered nine demonstration cows to prove, for one thing, how easy it is to lose good money feeding poor cows. All feed was weighed, all the milk was weighed

given to her she yielded only 62 cents worth of product.

Close to her was a 7 year old grade Guernsey that on the same day consumed only 26 cents worth of feed; but notice what she did with it. She produced two and a quarter pounds of fat, worth 79 cents, showing therefrom a profit of 53 cents. Her pound of fat cost under 11 cents to produce, while every dollar's worth of feed gave three dollars' worth of product.

It has been demonstrated to Canadian farmers over and over again that similar conditions exist in each province. Just as soon as the keeping of dairy records becomes general, the profits from feeding cows may be expected to increase rapidly. The Dairy Division, Ottawa, gladly



How Superior is the Country Home to the Average Country School

This is the attractive home of Mr. and Mrs. F. V. Woodley, Norfolk Co., Ont. Take a good look at it. Note the efforts that have been expended to make this home beautiful. Then compare with the illustrations on the front cover and on page three of Farm and Dairy this week. Which is more apt to inspire children with a love for the country and give them a real interest in life? Is it fair to our children to compel them to spend half their daylight hours in places so unattractive as the average country school? Let us make the school as attractive as the finest home in the neighborhood.—Photo by an editor of Farm and Dairy.

supplies feed record forms and a herd record book; apply for them to-day, and make sure, by systematic records, that each cow in your herd makes a good profit on her year's work.

Warm quarters are not necessary for sheep; not desirable in fact. What is wanted is a shed that is dry and light, with abundance of fresh air. Keep them well bedded.—R. Loomis, Prince Co., P.E.I.

A "Back to the Farm" Experience

C. A. Stevens, Richmond Co., Que.

I HAVE always had a dread of growing old working for a corporation, and have, while raising a large family in the city of Montreal or near it, figured at some time, before I get too old, to go "back to the farm." Last January I decided I should make the effort and go. I tried to dispose of some property I had while the real estate boom was on. I found, while I could easily sell it as good prices, I could get but little money, not sufficient to do me any good towards getting a farm.

I found a chance to swap all I had for a farm, but the farm was far too expensive for me. It looked hopeless to attempt buying it. I was offered \$4,250 for my property in a swap, and was asked \$10,200 for the farm of 250 acres; that left me \$7,200 to pay, as I had a mortgage of \$1,250 on my place. We swapped. When we were making the transfer I found that there was to be a first mortgage of \$1,000 at 7 per cent, a third mortgage of \$2,000 at 5 per cent, the second was for \$4,200 at 6 per cent, but payable \$500 and interest half-yearly until paid; and the first payment was due October 1st, 1913. I had to take it this way or not at all. I have just paid the \$500 and interest, but under the following circumstances:

PROFITED BY U. S. MARKETS

I cut 80 tons of hay. The hay market in July in Montreal was away down. I could not see more than \$7.50 a ton net to me in what was offered for what I had to sell. Boston looked better; \$18 was offered, and I shipped three cars. I bid for \$18, selling \$40 tons, and getting \$760. I had to pay out this amount:

Commission	\$33 00
Freight	169 00
Duty	97 00

Total \$279 00

Balance \$481 00

By August 15th I had not received a cent of this and I had but 15 days before I had \$626 to pay on my farm. I did not know that a farmer's assets were worthless in the eyes of Canadian banks. There was a small branch of the Bank of Commerce at Bromptonville, and I went and interviewed the manager. He referred me to Sherbrooke, a larger branch. The result of that visit was that I explained that I had a herd of 14 pure bred cattle, a flock of 14 pure bred sheep, five of them imported, 14 colonies of Carniolan bees, three horses, and \$500 worth of tools, besides the farm—there is also a cheese factory fully equipped worth \$600—in all, without the farm, \$3,000 of value; I asked the bank for about \$400. They agreed to let me have it. I went home to arrange the notes and returned in a few days. They had changed their minds and would not let me have a cent, although I had 40 tons of hay rolling to Boston and all the rest to put up; I had to go home without it. It looked like good-bye farm.

MONEY JUST IN TIME

The next day I received \$136.10; one car had been sold for \$236.10. I had sold my money from my 14 colonies of Carniolan bees, which netted me \$178.89 cash in Montreal. I went back to Sherbrooke and interviewed the bank again. There was a new manager there. After explaining again he said if I would turn the two cars of hay over to him he would risk it and let me have some \$425 I needed. He had to

(Continued on page 6)

Don't Forget

A. D. Simpson

We have heard a lot of talk about concrete highways; of hard road on the dirt roads that the in this section of In the Convention a sand road enthusiasts roads were mentioned. At the same time it would be better to come to improve ways in the way in them done. That is that our road experts attention to making

I would like to see split log drag, then make its merits land. I have used it immediately adjoining now and with the ve which is home-made next the road. She trick at all to hitch and down the road with the regular fa

NO MORE
The drag fills in perfectly smooth surface off the road readily through, making mending the foundation. So pleased are municipalities in front have been borrowing roads adjoining them. So far I have been remunerated. I should like to see their roads by free. We are doing more maintaining of good a great big nation use of the split log

Methods

Frank Teasdale

I find it advisable to rowed in August gives the young pig good start before the I always leave the I want to breed h with the sow than v

Don't Forget the Dirt Roads

A. D. Simpson, Norfolk Co., Ont.

We have heard lots of macadam, stone, and concrete highways; the world seems to be full of hard road enthusiasts. But how about the dirt roads that the great majority of farmers, in this section of Ontario at least, must use? In the Convention at Detroit, where several thousand road enthusiasts gathered together, dirt roads were mentioned, only to be condemned. At the same time those road enthusiasts admitted that it would be impossible for many years to come to improve any other than the main highways in the way in which they would like to see them done. That being the case, is it not time that our road experts were devoting a little more attention to making common highways passable?

I would like to see road experts take up the split log drag, thoroughly test its efficiency, and then make its merits known throughout the whole land. I have used the split log drag on the road immediately adjoining my farm for three years now and with the very best of results. The drag, which is home-made, stands in the lane right next the road. Shortly after each rain it is no trick at all to hitch the team to the drag, go up and down the road four times, and then go on with the regular farm work.

NO MORE MUD HOLES

The drag fills in the ruts and maintains a perfectly smooth surface. The water then runs off the road readily, instead of sinking down through, making mud holes on top and destroying the foundation beneath as it previously did. So pleased are many of our neighbors with the fine highway in front of our farm lately that they have been borrowing my drag and using it on roads adjoining their own farms.

So far I have been doing this work without remuneration. It seems to me that the County Councils should reimburse all those who drag their roads by freeing them from road taxes. We are doing more than our share towards the maintaining of good roads. I would like to see a great big national propaganda for the wider use of the split log drag.

Methods with Fall Litters

Frank Teasdale, York Co., Ont.

I find it advisable to have the fall litters farrowed in August or early in September; this gives the young pigs a better chance to get a good start before the cold weather sets in.

I always leave the pigs on the sow till the time I want to breed her, as they always do better with the sow than when weaned. When the pigs

are four or five weeks old, or probably less, I have a small trough for them, where they are fed separate from the sow. If any milk is to be had, I give them a little milk (preferably warm), with shorts and meal mixed with it.

Do not have milk standing in trough all the



Something New for the Island Province

Prince Edward Island is often mentioned as the one province in Canada where ensilage corn can not be grown successfully. Mr. Geo. Annear, of Kings county, is one of the Island farmers who are disproving this old theory and growing good ensilage. Mr. Annear's silo may be seen herewith.

—Photo courtesy Mr. Annear.

time or it will become sour, and pigs are apt to scour, which means a set-back. When they get used to feeding give them only what they will clean up in a short time. If a sow has a large litter, and they are rather thin, it will vary the time of starting to feed them.

I always keep the pigs well bedded and dry, but not necessarily in a warm pen, but one free from draughts. The young pigs will not do well in a dirty, damp pen.

The youngsters are the better of a run in a pasture lot; if that is not convenient, let them have a run in a barnyard, and if there is a straw stack, they will enjoy a sun bath until the weather is quite cold.

FEEDING AFTER GRASS

When the pigs are weaned and there is no grass, a few pulped mangels or sugar beets make a good substitute, and will be relished by the pigs. If they should be getting over fat, it is sometimes advisable to feed only roots at noon,

with a sprinkling of meal over them, instead of slop.

My experience with fall pigs is if you get them along to four months old and they are lengthy looking and thrifty, with reasonable care there is very little danger of crippling.

Fall pigs require more attention than spring pigs, and usually do not do quite so well on account of not getting the exercise. In preference to having a late fall litter, I find it more profitable to have an early spring litter and then breed for an early fall litter the coming fall.

Good Calves Comfortably Housed

Well lighted, sanitary, convenient. These are a few of the good points noted by one of the editors of Farm and Dairy in the calf barn of L. H. Lipsit of Elgin Co., Ont. Mr. Lipsit believes that the calves should be provided with a building apart from the rest of the herd, where they can be given better attention and be housed in a more comfortable manner than they would be if crowded in a few box stalls around the sides of the stable as they so often are on the average farm.

Mr. Lipsit's calf barn is 70 x 20 feet with room overhead for storage of hay and straw. The stalls are 6 x 7 feet with a feeding alley down the centre, with stalls on either side. An elevated litter carrier simplifies the cleaning of the calf barn. Large windows open to the south contributing to the cheerfulness as well as the cleanliness of the building.

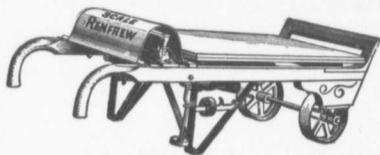
The floors are of cement and, the most unique feature of all, the partitions both between the stalls and along the feed alleys are made of steel gates attached to steel posts that in their turn are sunk into the cement floor. This steel construction is strong, obstructs little light and enables prospective buyers to see the calves to the very best advantage. The gates are also most convenient in that they can be swung back or moved completely with a minute's work, thus allowing the larger calves to have two stalls instead of one.

In building a special calf barn, Mr. Lipsit was following in the footsteps of many other breeders of dairy cattle who realized years ago that a special calf barn is a good investment for the dairy cattle breeder.

We are feeding, ensilage, 40 lbs., clover hay once a day, and one part corn meal, two parts gluten meal, and two parts bran, one pound to three and one-half pounds milk, to our dairy cows. Results good.—Jos. Smith, Prince Edward Co.



Nature in One of Her Wild Moods. A Storm Passing Over an Ontario Farm



Which Cows Would You Sell?

On the Hit-or-Miss Plan

If you wanted to sell three or four head of cattle to reduce your stock would you know just which were the **right** ones to sell. Suppose a buyer came along to look at them would you let him "take his pick" of the herd or would you **know**, to a certainty, just which were the most profitable cows to sell and which to keep?

Cattle buyers are pretty wise. They are pretty shrewd guessers. When they buy by guess they usually guess better on **their** side than on yours. But when you sell your cattle by actual **knowledge** instead of "hit-or-miss" it's a fair shake for both and you get all that is coming to you every time.

You can't sell or buy intelligently or profitably without a good reliable Scale on your farm. The man who buys your cattle or anything else by "hit-or-miss" usually "hits" and you "miss."

For a very few dollars you can have the best of all farm Scales—the Renfrew Handy Two Wheel Truck Scale—guaranteed by the Canadian Govt., and delivered to you on our "pay as it pays" plan. Thousands of farmers are finding the "Renfrew Handy" a daily money saver and money maker. They wouldn't be without it for several times its cost. Many of them have made enough profit by this scale the **first month** to pay its cost several times over. They find it as convenient and profitable as a hired man.

The Renfrew Handy Two Wheel Truck Scale is **more** than a scale. It is a convenient, profitable farm **necessity**—as much so as a horse and wagon. If you don't know about the money saving possibilities of this Handy Little Truck Scale drop us a letter or post card to-day and we will send you facts and figures that will tell you all about it and show you how it **pays for itself from the start**.

The Renfrew Scale Company

RENFREW, ONT.

The Feeders' Corner

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

Feeding Hints

J. G. Taggart, B.S.A., Frontenac Co., Ont.
Protein is a large constituent in the make up of milk, flesh and bones. Consequently dairy cows and young growing animals of all kinds require more protein in their ration than do fattening animals, horses or oxen. A cow producing 80 lbs. of milk a day will need two and three-quarters pounds of protein in her food to supply the protein for the milk alone. When we take into consideration the protein content of her body, a 50 lb. cow should get over three pounds of digestible protein each day.

A fine point in feeding is to supply enough of each constituent to meet the animal's requirements and not too much of any one. Over supply of any constituent is waste.

Here is a case in which I have often come in contact: A farmer goes to town to buy feed and he finds that one feed is a few dollars cheaper a ton than another. He buys it for that reason. The cheap feed may have been the most expensive on the market when results are considered.

Most feeds grown on the farm are deficient in protein. In buying feed therefore we should aim to buy feed that will strengthen the farm ration. That means a feed rich in protein. Many used to buy bran for this purpose but are now beginning to doubt its economy. Bran has 12.8 per cent. of protein, but oil cake meal has 30.4 per cent. of protein. Compare prices and decide which you can afford to buy.

Three pounds of linseed meal would supply sufficient protein to maintain an animal. From the amount of protein that the cow is given the additional amount required to meet all her demands can then be figured out. Of course, however, one would not supply all the protein from the linseed meal. Cotton seed, too, is rich in protein.

Either linseed or cotton seed meal must be used in moderate quantities; not more than three or four pounds to an animal.

A few years ago I was working as a hired man on a dairy farm where we were feeding bran, oats and home-grown fodders. I induced my employer to get some cotton seed meal and could see the difference in milk flow immediately.

Milk is 87 per cent. water. Hence a good supply of water and not too cold is one of the first essentials in successful feeding of dairy cattle.

The Feeding Problem

We are getting 100 lbs. of milk a day from four cows in two milkings. We are choping straw and two quarts of barley chop. The cows are out on pasture good days. They are grade Ayrshires and Jerseys. Do you think this is a fat return? Would you make butter, or ship cream or milk?—L. F. D. New Westminster, B.C.

With the little information at hand it is impossible to say whether our subscriber's four cows are doing him justice or not. If the cows freshened last spring and have been milking all summer, 25 lbs. of milk a day from each would be satisfactory milking. If, however, the cows are fresh, they should be giving 40 lbs. a day at least, to be considered profitable. Many herds would average every much higher than this.

The feed given is rather scanty for cows milking even as little as 25 lbs. a day. A good rule is to feed cows one pound of grain to every three

and one-half or four pounds of milk, and this in addition to hay containing a good percentage of clover. We would suggest that a mixture of three parts barley chop, two parts wheat bran, one part cotton meal, and one part of oil meal or cotton seed depending on the price, would be much more satisfactory for milk production than the barley chop alone. This grain mixture would need to be varied according to local prices for the various grains.

As a general rule when one is handy to shipping facilities to a good market, it is more profitable to ship milk or cream than to make butter. It all depends on the expense of carrying the milk and cream from the farm to the shipping point, and this can be determined only by local conditions. Shipping cream has an advantage in that the skim milk is retained at home, and so much fertility is not shipped away from the farm.

A "Back to the Farm" Experience

(Continued from page 4)

write Boston first to be sure about the real cars, and then to the office of the hay money came and the bank loaned me \$200 I had just one day's grace before the mortgage foreclosed.

"Back to the Farm" sounds good to hundreds of men in my position in Montreal; but few of them can afford to take the risk of leaving their situation, no matter how meagre the returns from it are, and take the risk they have to face to take advantage of the present Minister's (Hon. Martin Burrell) famous election cry, "Back to the Farm," with its little sop in way of a few thousand spent to entice the farmer, I feel I have a right to criticise the cry strongly, as I have tried it. We have the Experimental Farm at Ottawa; we have the Macdonald College of St. Anne de Bellevue, and we have such journals as *the Agriculturist*, *the Farm and Dairy*, to educate us, and I have with the knowledge gained from that source run a 230 acre farm, getting on to it the 15th of May, raised 20 tons of hay and marketed half of it, got 150 bags of green mountain potatoes in my cellar, 250 bushels oats, 250 bushels buckwheat in my barn, and paid \$900 all told in principle interest and taxes. My four milk cows gave me \$1.25 a day from the creamery, and the separated milk fed four calves and two Tamworth pigs. My son, a boy of 17, who was never on a mowing machine or rake in his life, never held a plow, no more than I have, done all the work, with some extra help in haying.

A TIP TO GOVERNMENTS
If our Government were in earnest with their "Back to the Farm" cry, let them take off the hay duty and give me back the \$100 I paid for the privilege of selling my hay in Boston when Montreal could not give me a market. Let them take some of that \$35,000,000 they are so anxious to give away, and place it where it will help the hundreds of men in Montreal, not mentioning those elsewhere, who would go back to the farm if they could see the ghost of a chance to go and stay and eat until they got on firm ground.

Back to the land is the thing, but how is the ordinary man to stay there even if he has nerve enough to go under the present conditions? We have to face a tariff that takes every cent it can from us, and a banking system that does not recognize us half as much as it does a vendor at some little dinky peanut stand, with his stock under his arm, or a broker doing business in his hat; either of these can get accommodations easier than a farmer can, and they can move out any moment they feel like it, while the farmer can move only his own hide in the same length of time.

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G. H. Mark, Vice
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Principles of Housing Sheep

G. H. Mark, Victoria Co., Ont.
In preparing winter quarters for sheep a house constructed on the following plan will constitute good accommodation for the flock:

Have a frame building on a good elevation of ground with high ceilings, single board walls well battened, a good shingled roof, and lots of windows and doors so arranged that one or more may be opened at all times without causing any draught.

Above all have a good-sized yard for the sheep so they may have lots of exercise, as this is one of the things of greatest importance, especially to the breeding ewe. My own pen has a shanty roof built at the end of my barn. The walls are single board and battened. I have also found the barn floor a good sheep pen. The main object is to keep the sheep dry, give lots of fresh air, and exercise and keep all other stock away from them.

Summer Month Yields

C. F. Whitley, in Charge of Records, Ottawa.

The average yield of 9,340 cows tested in dairy record centres maintained by the Dairy Division, Ottawa,

provement, not wanting the 458 pounds-per-month kind, but the type that yields six or seven or more thousand pounds per year.

Won't Let Down Milk

Two cows fresh in September gave a large pail of milk. Now they are holding their milk. Their udders are quite hard. We feed them before milking, thinking they will then let the milk down, but this is the reason. Sometimes I get a pail of milk and other times only half a pail.

I judge that the trouble of your subscriber, F.C.B., is due to an inflammation of the udder, which may or may not be a form of garget. The reason that the cows are irregular in the quantity of milk given and also uncertain as to temper is due largely to the condition of the udder. I would suggest a treatment somewhat as follows:

Instead of two milkings a day, I would advise three or four milkings, if the udder remains hard and the amount of milk varying in quantity. After each milking, or at least twice a day, I would advise bathing with hot water and a gentle but firm hand-rubbing lasting at least from five to 10 minutes for each cow. A good treatment for this purpose to go on with the hand-rubbing might be

Products of a Southern Ontario Farmstead

Southern Ontario counties are admirably adapted to corn growing. The splendid corn here seen in stock was grown by Mr. Geo. French, Elgin Co., Ont. The corn is of a mixed variety for silo filling. What is here seen is surplus from the silo.

in Ontario, Quebec, and the Maritime Provinces in August was 622 pounds of milk, 3.6 test, 22.6 pounds of fat, almost identical with the average yields in August of 1912 and 1911.

Concealed beneath the comforting blanket of such a general average are widely different yields in various provinces, counties, and herds. For instance, at St. Joseph, N.B., the average yield was 495 pounds of milk, at St. Prosper, Que., 611 pounds, at Woodstock, Ont., 809 pounds. Similarly the yield of fat varied from 17 to 27 pounds per cow.

When comparing districts not so widely apart: The yield of 446 cows at Farmer's Union, Ont., was 19,472 pounds of fat, but with 19 fewer cows at Frankford, Ont., the yield of fat was 889 pounds more. In the St. Hyacinthe, Que., district, a more startling comparison than this is the fact that one herd of 14 cows produced actually 4,940 pounds of milk more than another herd of 14. Similar comparisons might be made for herds at the several centres; but what is of infinitely more concern to the average patron is the comparative yield of each individual cow composing his herd. The wise, far-seeing dairyman, knows from his records, so easily kept, just what each cow gives, not only for an odd month, but for the whole year. Then he strides towards intelligent im-

proved to corn growing. The splendid corn here seen in stock was grown by Mr. Geo. French, Elgin Co., Ont. The corn is of a mixed variety for silo filling. What is here seen is surplus from the silo.

made as follows: Two tablespoonsful of gum camphor to one teaspoonful of melted lard, with the addition of one ounce fluid extract of Belladonna. If the swellings become very hard, a poultice, such as a "spont hot poultice," would be very useful. Keep the cows free from draughts, but be sure that they get ample exercise and keep their bowels in normal state. Should they become constipated, use E. S. Archibald, B.S.A., Dominion Animal Husbandman.

Great Things Predicted

Jas. McKenzie, Bruce Co., Ont.

The new tariff will be beneficial to the agriculturist, especially the cattle raiser, and eventually to sheep and swine.

Farmers here are getting ready to meet the coming demands. The increased demand for larger markets is being met by the farmers, and we are getting higher prices for all stock, dairy products and grain. There is some anxiety in the minds of some as to the home market as yet.

I have just been looking over your special number of Farm and Dairy of April 10th, and thinking what a wonderful paper it is. I would not be without it for two or three times month, but for the whole year. Then he strides towards intelligent im-

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Runs on a level overhead track in this way it keeps the manure which is not affected by any a good distance from the barn easy to run out, even when the sides or injure the paint on the yard is muddy or full of snow, the sleighs and huggies.

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ONE DISEASE THE CAUSE OF ENORMOUS LOSS TO TURKEY RAISERS

Dr. C. H. Higgins, Ottawa

ENTERO-HEPATITIS or black-head in turkeys is a disease of fowl, infectious in its nature, usually seen in its most aggravated, and fatal form among turkeys. Other fowl may be subject to the disease, but losses among them are small compared with the loss among turkeys. The first investigations as to the nature and cause of the disease were made by Dr. Theobald Smith in Rhode Island, under the joint auspices of the United States Department of Agriculture and the Rhode Island Agricultural Experiment Station during 1894 and 1895. Various investigators have since taken up the study of the disease, as it has become more widely distributed and a distinct menace to the turkey raising industry.

Detailed information relative to the manner in which the disease is transmitted from an affected to a healthy bird is lacking. It is believed that this infection is direct from the droppings or from the ground on which they have been deposited. There is still some difference of opinion as to the exact organ responsible for the lesions produced, but it is generally conceded to be a minute protozoan parasite. We anticipate conducting experiments and hope to be able to arrive at some definite conclusions regarding these and other unsettled points.

The losses from this disease have been enormous, and I believe that it is a factor responsible for the high price of turkeys. The extent of these losses is well indicated from the fact that two decades ago a single small island (Block Island), off the Rhode Island coast, provided two tons of marketable birds each year. Since that time the same locality, situated on a bay about eight years ago, it is now difficult to secure two carloads. The reason to be ascribed for this falling off in production is the difficulty of rearing stock that can withstand this affection.

In Canada the disease was first mentioned by Gilbert in the Experimental Farms Report for 1900. It has since been repeatedly reported upon evidence obtained at this laboratory and at the Bacteriological Laboratory of the Guelph Agricultural College. From the information which we have obtained through communications received at this laboratory it is evident that there is not a province in Canada where blackhead does not make its presence felt with more or less severity each season. In some portions of the country the disease has become so prevalent that the turkey industry is to almost prohibit the raising of this class of fowl.

HOW THE DISEASE GETS IN

The usual history concerning losses of turkeys is that an individual having a few birds desires to increase his poultry operations by raising a few turkeys. He is an unsuspecting buyer of parent stock or sittings of eggs. His experience has made him painfully aware of the fact that he has bought with the birds or eggs the invisible agent of this disease which later separates him from his original carrier for the younger pouls. The result is then too late for him to attempt another start, his premises are infected, and, discouraged at the result, he decides to relinquish further effort in this direction. It is this common where entero-hepatitis (blackhead) makes its appearance to 70 per cent. of the young stock where they are sufficiently mature for breeding purposes.

The early symptoms presented by

affected birds are not particularly characteristic. Affected birds, however, will separate from the remainder of the flock. This separation or lagging behind does not appear to be a desire for seclusion but the result of being unequal to the task of keeping up with the others from physical exhaustion. The droppings are more fluid than normal and may be streaked with yellow. Gas bubbles may be sufficiently numerous to give a frothy appearance. The feces may be and usually is darker in color than normal. This dark coloration may disappear and reappear at irregular intervals while the bird is at rest, but excitement usually causes a bright red coloration.

The best means of early diagnosis is the examination of the droppings for evidence of diarrhoea or a yellow coloration of the faeces. Feeding time may prove the most appropriate for this observation. Where this is not convenient owners should provide some means of determining an infection at the earliest possible moment.

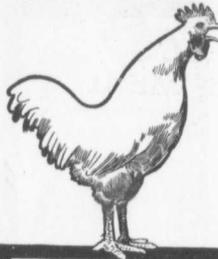
COURSE OF THE DISEASE
Affected birds if untreated may die in a few days or may linger for a week or longer after the first appearance of symptoms according to the virulence of the infecting agent. In some cases the onset is so rapid and free from outward manifestations as to be recognizable only by an autopsy. Without treatment, a complete change in diet and surroundings, the course is usually fatal.

The post mortem findings are characteristic. The lesions are confined to the liver and intestinal tract. The liver is the seat of lesions which appear on the surface as circular spots about the size of a five or 10 cent piece, yellow or whitish yellow in color, or, and very often, a normal liver, naked eye appears as a normal liver tissue. At the point between the lesion and the liver tissue, a ring almost bright red in color is observed. These lesions in the liver if cut open, may have a uniform color throughout or the more chronic cases there may be a core in the centre. The intestines may be the seat of a chronic inflammation. The caeca and two blind guts which lie along the course of the intestine and enter it about six inches from the vent are usually inflamed and in either or both a single or a number of lesions the size of a walnut are usually present. These lesions are yellow in color, have a thick wall and a degenerated centre. There may be in addition to the above in severe, or chronic cases, either a localized or general inflammation of the outside wall of the intestines) with adhesions and fluid in the cavity.

PREVENTION AND TREATMENT

The placing of the pouls on clean, sanded board floors, and well lighted and well ventilated buildings with a southern exposure, is considered a means of prevention. The continued contact with the floors, however, tends to weaken the pouls. I believe it to be an advantage so that they are quarantined on sanded board floors at night and prevented from ranging in the early morning when the grass is wet. When turkeys are older the noisier places should receive consideration. The free application of lime and sulphur wash (that used in spraying fruit trees) is suitable on the ground under the roosts and on the ground on which they are reared two or three times during the season, will destroy any infection on the ground.

We believe that persons raising turkeys should be very careful not to introduce the disease when making additions to improve their stock. A turkey tom may be a source of infec-



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Two sizes.
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DISTRICT DAIRY MEETINGS, 1913

County. Place for meeting.	Date.
Renfrew—Eganville	Nov. 25, 2:30 p.m.
Carleton—Stittville	Nov. 25, 2:30 p.m.
Russell—Hammond	Nov. 27, 2:30 p.m.
Prescott—Vankleek Hill	Nov. 28, 2:30 p.m.
Glenora—Alexandria	Nov. 28, 2:30 p.m.
Stormont—Wales	Dec. 1, 2:30 p.m.
Greenville—Kempville	Dec. 2, 2:30 p.m.
Lanark—Smith's Falls	Dec. 2, 2:30 p.m.
Leda—Bigin	Dec. 2, 2:30 p.m.
Lennox—Napton	Dec. 2, 2:30 p.m.
Frontenac—Hartington	Dec. 2, 2:30 p.m.
Hastings, E.—Belleville	Dec. 2, 2:30 p.m.
Prince Edward—Picton	Dec. 10, 2:30 p.m.
Hastings, N.—Stirling	Dec. 11, 2:30 p.m.
Northam—Campford	Dec. 12, 2:30 p.m.
Peterboro—Newwood	Dec. 15, 2:30 p.m.
Victoria—Lindsay	Dec. 17, 2:30 p.m.

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tion when he heads the flock of a neighborhood, or the disease may be introduced with sitings of eggs. The greatest care should be exercised to prevent any possible source of infection reaching a flock or locality now free from disease.

CATCH THE DISEASE EARLY

The early diagnosis of the first case is an essential feature in connection with the prevention and treatment. As has already been indicated, it is the early diagnosis that will prove the most essential factor in a successful prevention and treatment. The isolation of the first case may many times prevent further manifestations of the disease. From our experiments, however, it appears that there may be chronic carriers of the disease whose droppings are continually infected, notwithstanding the fact that they exhibit very slight if any symptoms. This suggests that isolation may not be as potent a factor in preventing losses as desired, but I believe that it should be enforced to such an extent as to prevent the old and young flocks from mingling after the first appearance of the disease.

Our experiments in the treatment of entero-hepatitis have been directed to the finding of some agent that will successfully carry off affected birds over an acute attack and enable their being conditioned for market.

MURIATIC ACID BENEFICIAL

There is to my knowledge no known specific for controlling the ravages of this affection. The use of muriatic acid in the drinking water was found some six years ago to be followed by beneficial results on affected turkeys that I was trying to raise at the time. Later it was given a single turkey at this laboratory some four years and three years ago a farm turkey at this laboratory made an apparent recovery. During the past two years we have recommended it as being the best medicinal agent which we know to assist in overcoming the affection. Last year five affected birds recovered after receiving liberal allowances of this acid. One of these which was later subjected to determine the presence or absence of lesions was found to be normal in every respect so far as we could determine.

Some apparently remarkable recoveries have followed the use of this acid by one cannot hope to bring all affected birds through an attack. I found that the contents of the digestive tract in turkeys dead of entero-hepatitis or black head to be alkaline in reaction.

The acid to be used is a teaspoonful of muriatic acid (Acid. Mur. Dil. B.P.) in a quart of drinking water. This acidulated water should be placed in a porcelain or glass vessel and is suggested in the hope that the birds may be carried over an acute attack. At the outset when the birds show evidence of being severely affected, it may be of advantage to triple the amount of acid (using three teaspoonfuls to the quart of water) for the first three days. This amount will not injure the turkeys and may assist them in more rapidly overcoming the infection.

They should be confined during the period on dry, sanded board floors in light and well ventilated quarters and allowed access to no other liquid. If allowed to roam they may obtain sufficient water for their requirements from the dew laden grass and other sources and, therefore, will not drink the acidulated water. If confined green food should be supplied in addition to the routine ration. Other medicinal agents may give equally satisfactory results in the treatment of affected birds as that above outlined, in which case my advice would be to stick to the routine medicinal agents if such other medicinal agents were effective we will appreciate learning of

them. We will also appreciate information as to the success or otherwise of the treatment herein recommended.

SENDING MATERIAL FOR EXAMINATION.
Where it is desired to determine the nature of any condition causing losses among turkeys, an examination will be undertaken provided suitable material is supplied. It is preferable to have affected turkeys forwarded alive by express in order that a thorough autopsy may be made by the Biological Laboratory. When the condition has been found at autopsy the tissues and preserved organs, if possible, may be sent by mail if properly packed and preserved in fine alcohol or a solution of one part of formaldehyde to nine parts of water. After an examination has been made, no suggestion will be forwarded for the prevention of further loss. Specimens sent should be addressed to the:

Biological Laboratory, Ottawa, Canada.

Information concerning the losses which have been experienced should be given with the material, in order that it may be properly identified. The name and address should be written plainly in order that the result of the examination may be forwarded to the sender with the least possible delay.

Our Veterinary Adviser

HEIFER SUCKS HERSELF.—A heifer two years old sucks herself at times would you kindly suggest something to break her of this habit as she is the mother of a good cow?—H. O. Peterboro, Ont.

Get two ordinary bull rings. Slip one in the nasal septum in the ordinary manner of ringing bulls. If necessary add a third ring.

URINARY TROUBLE.—A valuable stallion seems to be ailing with kidneys. Will you stand for a period of his ailing? He would keep this up continually nearly all the time, but only a few times a week, except on evenings. What is wrong, and will he quit this habit when he is a foal?—A. G. G. This is due to irritation of the kidneys. Give three drams of tincture of hyoscyamus in a little new milk twice daily, and be careful to avoid chills. It is probable a recovery will take place.

CRIPPLED PIGS.—A number of young pigs, about three months old, manifest great weakness of the spine, frequently falling upon their bellies in walking about the yard. What would you suggest to be the cause of the trouble and the best remedy?—L. B. Northumberland, Ont.

This is due to lack of exercise and high feeding. Purge each with one ounce Epsom salt. Feed on milk once. Give sufficient of equal parts Epsom salt, sulphur and powdered charcoal in food daily to keep their bowels moving freely.

SUPPURATIVE MAMMITS.—I have a two-year-old heifer that came in with a spring. She milked at night for two months, then one day her teats gave her which later developed to matter. What is the trouble?—J. S. O.

The quarter received a direct injury in some way and the formation of pus resulted. Bathe the quarters frequently with hot water, and after bathing rub well with camphor oil. Milk the quarter four or five daily. Unless abscesses form they will have to be lanced. The cavities flushed out three times daily until healed with a four-ounce solution of carbolic acid. The center solution of hyposulphite of soda three times daily. This is a case of suppurative mammitis.

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GIFTS GALORE ARE OFFERED

In Your EATON Catalogue

JUST THINK!—Christmas is almost with us. A few more weeks and then the joyous season begins. With it comes, of course, the usual tokens of goodwill—the giving and receiving of gifts. "What shall it be?" is the premier thought in most minds, and to many it becomes a great problem indeed. Those of you who have a copy of our Fall and Winter Catalogue need have no such trouble to look through your catalogue you will find it a veritable storehouse of worthy merchandise. Further than that, there are many pages which list just such articles that are of popular choice and pleasurable interest.

THE TIME TO BUY IS NOW—AND THE REASON WHY

So many conditions may later arise that it is well for us to buy gifts early. To put off your purchase too long often brings disappointment. Sit down now and give this matter your earliest consideration and make your choice while stocks are large and varied. Do not forget, also, that ours is not primarily a Christmas catalogue but a comprehensive showing of articles of daily use in the home or the personal requirement.

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Money for Good Roads

(Ottawa Citizen)

Sir James Whitney has determined to give the province a system of modern highways equal to the best on the continent. Such a piece of constructive work would be an enduring monument to the honor of an honest statesman. Trunk roads between cities and a network of highways throughout the province would be a boon to the people, both urban and rural. Under fair methods of trading and taxation, where the producer and consumer received the benefit without having to pay extra in rent, good roads would be effectively to reduce the cost of living.

While much will depend upon an efficient public service, scientifically administered, to make sure that the money spent over highways will produce roads guaranteed to last in good condition, the main problem confronting the commission would appear to

AD. TALK

CXVI

Have you ever attended a big auction sale of purebreds—one of those big sales such as the Brockville or Oxford Holstein Breeders' Club holds every year? And have you watched closely the fellows that are doing the bidding?

If so, you'll very soon realize that there are two classes of buyers or bidders. You'll find the one fellow bids almost entirely on the animals that he is quite sure will not require a very high figure to secure. He does not expect to get the very best stuff going. He thinks he cannot afford it. Possibly he is only keeping grades and cannot see the business possibility in the better and higher priced animals. And so he takes home the average priced animal—the untested and younger offerings.

Then, there is that other class of buyer. You know the minute he starts to bid. He's an expert at the business—one of our big breeders of pure bred. He knows the breeding and other virtues of every choice animal in the ring. He has come for a purpose. His eye is on the choice stuff, and it will take some bidding to prevent his securing them. He seeks the best and choicest, and nothing else will satisfy him.

You'll find these two classes of buyers in the crowd at every sale. If you analyse the difference between them you'll note that it is just about the same difference as exists between our progressive dairymen and the average mixed farmer. It's just the difference between the man who is specializing—who is expending his energies on a particular field, and the man who is still doing things, "just as father used to do."

It's the former class of farmers who comprise "Our People"—the live, up-to-date, progressive fellows who are doing things with a will. It's these fellows who appreciate the clean, spicy news in Farm and Dairy—who can well afford the very best of farm and home equipment, and which they know can be secured to best advantage from those reliable advertisers found in their own farm paper—FARM AND DAIRY.

"A Paper Farmers Swear By"

be financial; how to get the money to pay for the building of the roads.

According to the 1913 assessment of the city of Ottawa alone, taxable land values increased to \$48,000,000 from \$34,000,000 in 1912. Land in Ottawa is possibly not assessed to even sixty per cent. of its value, but the stated increase of \$14,000,000—an increase made entirely by the community—is a fair example of the enormous source of revenue at the disposal of Premier Whitney for the construction of highways in Ontario.

The assessment may have been boosted in 1913 to make up for lax assessment in former years. But, in any case, it is obvious that the sum of increment would be ample to build all the highways in the Ottawa district and leave a big margin. A tax on the unearned increment of all land values, as put into force by the British Government, would take a percentage of the community-created increase for the use of the community. And this, together with an annual tax on land values, would seem to provide the most just and scientific source of revenue for the public service, including the building of highways.

Raising Fall Calves

By G. L. Martin, Prof. of Dairying, N. D. Agri. College

The first requisites in raising fall calves are clean, dry, well-ventilated sunny pens. Young calves never do well in damp, dirty quarters. A good floor made of cement, or cork brick, well bedded with short straw, shavings or sawdust to absorb the liquid manure, will facilitate cleaning and keep the calves warm. A wood floor does fairly well if the joints are laid closely and then treated to a coat of creosote to prevent the absorption of liquid manure; otherwise, wood is very unsanitary. A floor of earth is practically useless as it cannot be kept clean and sanitary.

VENTILATION

Good fresh air in the calf stable is of great importance with the young calf to give it a strong, vigorous constitution and strong vitality. The calf will be the dairy cow within two years, so if good, productive dairy cows are expected the calf needs to be kept strong and thrifty from the start.

Sunshine is very necessary to the vigor of all young growing animals. It is an excellent germicide, and for that reason serves to purify the surroundings and to keep the young calf healthy. It is always well to place the calf pens in a part of the stable where plenty of direct sunshine may enter.

WHY HAVE FALL CALVES?

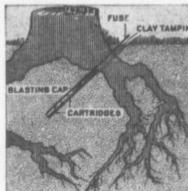
The advantage of raising fall calves are that dairy products are much higher priced in the winter and the farmer has more time to properly care for the cows; besides, the average cow will maintain her milk flow longer by coming on to grass in the springtime. With the calves coming in the fall, they are ready to be weaned in the spring, and can be put out to pasture where they will continue to grow.

On the other hand, when calves are dropped in the spring they are ready to wean in the fall, when the time winter sets in, so are liable to go through the winter without making very much growth. In the fall is by all means the best time for dairy calves to come, both from the standpoint of the calf and profits of the owner.

The persistent milker with only a comparatively small yield may give far better account of herself at the end of the whole season than the cow with the brief meteoric career. Each cow should be recorded for the full period of lactation.—G. F. Whitley, Ottawa.

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Then why delay the purchase of this great money and labor saving machine. Put it in now and let it save its own cost during the winter. Even with only part of your cows in milk it will at least half do so and by next spring you will be just so much ahead. While if you wish you can buy a DE LAVAL machine on such liberal terms it will actually pay for itself.

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HELPFUL LITERATURE for Bible Study. Free on application—International Bible Students' Association, 99 Alloway Avenue, Winnipeg, Man.

Creamery Department

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

Might Distinguish Churnings

Members of the Montreal Produce Merchants' Association have recently advanced a suggestion which they believe would simplify the work of grading butter and would enable members to distinguish accurately, instead of approximately, just what the butter is. The suggestion is that butter makers should distinguish between their different churnings by marking the boxes with the number of the churning and the date.

Butter makers have been called upon to make so many reforms and improvements that they are wondering if the demands are ever going to end. Members of the Montreal Produce Merchants' Association are aware of this, but have claimed that this little reform will not require much labor and would be of advantage all round.

Buttermilk Calves Sold

Farm and Dairy readers may remember the article by Mr. L. H. Newman, a creamery man of Victoria Co., Ont., in the last Exhibition Number. In it he told of his experiment in feeding buttermilk to heifer calves. Mr. Newman writes about the sale of these heifers as follows: "Our sale was a success and also disappointing. Though the day was fine, the crowd was one of the smallest at any sale in the vicinity. I had advertised widely, but there was not half a dozen people here from more than 20 miles away. Only one calf went beyond the 20 mile circle.

"The sale was a success in that I made money in raising the calves; enough, at least, to warrant me continuing the work another year. It was successful again because there are 150 heifer calves of good quality sold to my patrons that should give a better percentage of choice milking cows."

A DISAPPOINTING FEATURE

"It was disappointing because good, strong, healthy heifers sold no better on an average than did the poorer calves. When sale, advertising, and discounting expenses are deducted, they did not bring five cents a pound. The way the Toronto market has been this fall I would have been ahead to have sent them out for meat purposes and received cash.

"My liking for good dairy heifer calves will carry me again in the same steps as I went this year; that is, get good heifer calves from dairy cows. But my experience in selling, if followed, would lead me to buy bull calves, feed until 200 lbs. in weight, fatten quickly, and sell for cash. I can get bull calves cheap compared to heifer calves; and veal calves are much higher in price than heifer calves weighing 375 lbs., even though they show good milking qualities. Why we wish to help on the dairy industry, and also like to see beef cattle do well, my sale seems to show that money shines when you slaughter the young calves.

"Again, I regard my sale as a success because the men who benefit are well pleased. Several have come telling how well the calves are growing, and they seem sure of asking good money. By November 20, 1913, a heifer in milk for \$68. I bought her last summer as a calf for \$12.50. I am thinking of raising less calves, and holding until they are cows. I would be pleased if some one would criticize my work. So far I have been silently watched."

Dairy Inspectors for B. C.

A new policy which is expected to have a far-reaching effect in the improvement of the dairy industry in British Columbia has just been announced by Hon. Price Estlin, Minister of Agriculture. A competent dairy inspector, trained in the science of cow-testing, will be provided with a complete outfit for his work and will be allotted to each district in the province where in less than 400 cows are kept. The cost of his employment will be borne partially by the cow-testing association and partially by the provincial government. The work will be supervised by the dairy inspectors and will involve the bonusing of the associations by a sum amounting to from \$250 to \$500 per year.

The Chilliwack dairy district has been chosen as the first experimental basis for this new work, and two inspectors have already been assigned to this field. At present there are about 63 farmers owning approximately 1200 cows in this area, and the night and morning milk of every cow in the district will be weighed and tested at least once every month, the records so obtained being used to compare the results to ascertain the annual yield of each cow.—Nor-West Farmer.

Bad for the Future

J. Seymour Taylor, Halthurton Co., Ont.

The removal of the United States duty on cattle has made live stock boom. The boom has come somewhat late, however, as the bulk had been sold. The cattle that have been sold during the last ten days have been sold very above their value as they were of a very poor quality.

While the removal of the duty is a benefit in some ways it is detrimental in others. The country will be very low in stock for some years. Those, like myself, who want to buy stockers to feed for another fall, cannot do so at the prohibitive price and poor quality. Beef being so high the temptation to close the lumber camps as they cannot afford to pay the wages and furnish meat at the high price. The shortage of cattle will make money scarce another year. Rough fees will be returned in place of being fed up and wasted to the land. A good act would be to forbid the sale of veal calves and calves outside of the local market.

The general feeling is: "Good for the present, bad for the future, and also bad for the consumer of beef."

The farmers' club is the natural forerunner of practical cooperation.

Cheese

Makers are invited to send questions on matters relating to cheese making and to suggest subjects for discussion. Address letters to The Cheese Department.

Profitable Disposal

J. P. Andrews, I. J. In disposing of the cheese factory, most must be considered. The most practical way can be that the will return the milk.

In sections where large herds and milk is secured in the idea of the whey at the farm, the patrons in the mer then secures with the aid of carry more, otherwise be able is a direct benefit in Peterboro cows to do this, as all in loads, and calves are small, it is a large territory to milk to profitably.

Under these conditions, practical to try to the farmer, so ed of in some stories have adopted the whey to the farmers living in generally the whey, but in my own auction the whey, highest bidder, a short distance from pigs to the received one dollar (\$1.01) per standard for our whey this year. We do not skin the whey, it rather than to place inferior but this year we sold, last year I

The Old C

"Let us make is what our cust said veteran D.A. E.O.D.A. meeting do our best custo Great Britain, wa extract from an don Times may get an idea, and show of the advice that have been spread "Science has g procedure in the cheeses. Bacterio made plain much formerly surround manufacture, pipe and one of the shorten the period completion. The ity of the article b use of artificial vented their ad prices; but mod cheese have cha other respects th been compelled to suit the popula gard his own id stitutes quality a

The change in the more pronounced the blue-veined white, still regarded produced in any gone little altera that there has b article appreciably which earned for

THE CHEDDAR In Cheddar can a pronounced

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There is no complicated "nests" of gears—no hard-to-clean "contraptions" in the bowl—no oil cups or glass lubricators—on the

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cream separator. There's nothing "obsolete" in the whole machine. It's right up to the last minute. Built of the best materials by the most costly machinery, and rigidly tested.

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perfectly smooth discs easily cleaned. Supply can about a foot lower than most machines. Crank four inches higher, eliminating back-braking stooping. All working parts enclosed, keeping out dust and making it impossible for children to get hands or clothes injured.

These are some of the features that go to prove the Standard's up-to-dateness. Others are told about in our new catalog, which also shows the new records for close-skimming established by the Standard at Government Dairy Schools. Write for a copy of this new catalog.

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Cheese Department

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

Profitable Disposition of Whey

J. P. Audrea, Peterboro Co., Ont.
In disposing of the by-product of the cheese factory whey, two things must be considered. First what is the most practical way; and second, how can it be disposed of so that it will return the most to the farmer.

In sections where the farmer keeps large herds and a large amount of milk is secured in a small radius, I believe the ideal way is to pasteurize the whey at the factory and return to the patrons in their cans, as the farmer then secures a sweet, clean food, with the aid of which he can raise and carry more stock than he could otherwise be able to handle, which is a direct benefit to the factory. But in Peterboro county we are not able to do this, as all the milk is drawn in loads, and as most of the herds are small, it is necessary to cover a large territory to secure sufficient milk to profitably operate a factory.

Under these conditions it is not practical to try to get the whey back to the farmers, so it must be disposed of in some other way. Some factories have adopted the plan of selling the whey to three or four of the farmers living near the factory, and generally this works out very nicely, but in my own factory we prefer to auction the whey every year to the highest bidder, who buys and places a short distance from the factory enough pigs to take the whey. We received one dollar and 40 cent (\$1.01) per standard (3,000 lbs. milk) for our whey this year.

We do not skim the whey, as we prefer to receive the high price for it rather than receive a low price and place inferior butter on the market. This year we sold 110 standards of whey, last year 141.

The Old Country Taste

"Let us make red cheese, if that is what our customers want." So said veteran Dan Derbyshire at an E.O.D.A. meeting years ago. What do our best customers, the people of Great Britain, want? The following extract from an article in the London Times may give some of the boys an idea, and show them the wisdom of the advice that many cheese buyers have been spreading broadcast:

"The cheese has recently modified procedure in the making of standard cheeses. Bacteriological research has made plain much of the mystery that formerly surrounded the processes of manufacture, ripening and flavoring, and some of the results have been to shorten the period required for their completion. The belief that the quality of the article has suffered from the use of artificial cultures has not prevented their adopters nor affected prices; but modern preferences in cheese have changed so greatly in other respects that the producer has been compelled to adapt his methods to suit the popular taste and disregard his own ideas as to what constitutes quality and nutritive value. The change in the demand has been more pronounced in the hard than in the blue-veined varieties. The Stilton, still regarded as the finest cheese produced in any country, has undergone little alteration, for the reason that there has been no call for an article appreciably different from that which earned for it its high reputation.

THE CHEDDAR PREFERRED

In Cheddar and Cheshire, however, a pronounced preference is now

shown for a softer cheese, and one more mellow in flavor. The public demand a softer article, and they will not be deterred from gratifying their preference by considerations of cost. They will study their palate rather than the amount of nutriment in the cheese they buy. Makers of the hard cheeses have endeavored to reason with the trade on this point, but to no purpose. The wholesale buyer argues that it is his province to provide the public with the class of article they demand, and, in effect, he has told the farmer that it is equally his duty, not to educate the consumer, but to produce what he desires.

The more skilled makers have adopted the policy of the astute among them has induced them to fall into line. A prominent maker of Cheshire is credited with a statement that sums up the situation. He had no doubt, he said, that the cheese now demanded was greatly inferior in quality, but he was going to make the article that would sell, and as he would receive the price of the cheese for the moisture it contained he was not going to quarrel with the consumer over the change in his taste.

THE FANCY VARIETIES

The making of fancy or soft cheeses has not made progress in this country. Attempts have been made to develop this side of the business, and all the colleges make provision for giving instruction to students in the manufacture of cream cheeses and other fancy articles of Continental origin. The poor response implies no reflection upon the enterprise of dairy farmers. The districts to which the manufacture of fancy cheeses would be most suitable are engaged in the more lucrative business of supplying the new milk canners. On financial grounds the making of cheese and butter tanks after the selling of the milk dried. Besides, the output of standard British makes has seldom exceeded the demand, so that the occasion has not arisen for turning attention from a business of assured stability to another of doubtful advantage.

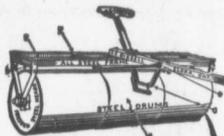
The wisdom of the British dairy farmer in adhering to the methods he understands, and which he has been successful, is confirmed by the action of American and Continental countries in emulating his example. American and Cheshire cheeses are manufactured in large quantities, not only in Canada and the United States, but also in Holland, and even in New Zealand cheesemaking on British lines is a growing and promising pursuit.

District Dairy Meetings

A schedule has been announced for the district dairy meetings to be held in Eastern Ontario. The meetings will start at 2.30 p.m. on the dates announced as follows:

- Eganville, Nov. 25; Stittsville, Nov. 26; Hammond, Nov. 27; Ankleek Hill, Nov. 28; Alexandria, Nov. 29; Wales, Dec. 1; Kemptville, Dec. 2; South Mountain, Dec. 3; Smith's Falls, Dec. 4; Elgin, Dec. 5; Napanee, Dec. 6; Belleville, Dec. 9; Picton, Dec. 10; Stirling, Dec. 11; Campbellford, Dec. 12; Norwood, Dec. 16; Lindsay, Dec. 17; Hartington, Dec. 8, at 7.30 p.m.

"Butter Making on the Farm," written by Geo. H. Barr, Chief of the Dairy Division, Ottawa, has proved such a popular bulletin that a second edition has now been published. All that is necessary to the carrying out of a well-established system in feeding the cows, the caring for the milk and cream, and churning and putting up the butter, are described in this bulletin. It can be secured by applying to the Publications Branch, Department of Agriculture, Ottawa.



BISSELL LAND ROLLERS

are all steel except the Poles. They are braced and stayed to stand all kinds of hard work and wear well. The entire frame, bottom and all, is built of steel. The (18) anti-friction Roller Bearings make light draught. The Draw Bracket and low hitch do away with neck weight.

The Axle revolves with the drums and there is no squeaking or grinding.

The Cages holding the anti-friction rollers are the best yet; they're MADE OF MALLE-ABLE ALL IN ONE PIECE—no twisting or binding of the bearings on the axle of the "Bissell" Roller. The Seat Spring is reinforced and is DOUBLED AT THE HEEL. These good features are not all of the advantages of the "Bissell" Roller. Many more good points are built into them, making a Land Roller that is "built for business," that stands up against lots of hard work. Ask Dept. R for free catalogue.

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STOP—THINK—200 Acres—in good cultivation; no waste land; free gas and \$175 rental therefor; good buildings; school and post office adjoining farm; telephone; plenty of water; at \$45 per acre. Apply to Box 602, Farm and Dairy, Peterboro, Ont.



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Make all sizes of the Cement Drain Tile here to stay. Large profits in the business. Interested send for catalogue. LONDON CONCRETE MACHINERY CO. Dept. B, London, Ont. Largest manufacturers of Concrete Machinery in Canada.

Cream Wanted

Highest price—unlimited market. Toronto consumes daily the milk and cream from over 14,000 cows and the butter from over 7,000 cows. We want your cream and your neighbor's. Write

Toronto Creamery Co., Ltd. TORONTO

FOR SALE

200 Acre Farm for sale, near cheese factory and creamery. Apply to Box 109 LISTOWEL, ONT.

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A First-Class Creamery Business in Western Ontario. Modern equipment. Splendid territory. Conveniently situated. Price reasonable. Apply BOX 489 - FARM AND DAIRY

EGGS, BUTTER and POULTRY

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

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Delivered at nearest express office. Highest prices paid Remittance Monthly. Write PETERBORO CREAMERY Peterboro, Ont.

CREAM WANTED

Ottawa is one of the best markets for butter in Ontario. That is why we are able to offer such attractive prices for cream. Cheese factory patrons who have a supply of cream at this season of the year should write us.

We supply cans, pay express charges, remit for cream twice monthly. Cream taken from any express office within 150 miles of Ottawa.

For particulars write to Ottawa Creamery Co., Ltd., Ottawa, Ont. 319 SPARKS ST.

SUPPLY YOUR CREAM

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

WRITE FOR FULL PARTICULARS THE BERLIN CREAMERY CO. BERLIN, CANADA



THE old and good remedy against a besetting sin is to leave neither time nor room for it anywhere in life, and so crowd it out steadily and surely from its old place and power.—Spurgeon.

Dick Takes Care of the Family

(New England Homestead)
MANTHEI HOWE

DICK stood beside old Dandy and carried him carefully.

"There you are," he cried, giving the horse a gentle pat. "You shine like satin."

Old Dandy turned and looked at the boy. If horses can think, and I believe they can, he must have thought that Dick was a fine upstanding boy. In all the three years that Dick had cared for the horse, old Dandy had never been neglected. Water was always there when he was thirsty. Dick never failed to feed him. So the horse followed the boy with eyes that tried hard to say "thank you."

Dick took down the harness and began hitching the horse to the buckboard.

"You just hurry back," he commanded, "because I want to go on a hike this afternoon and I can't go until you and father get back. You see when father leaves I am the only one on the place and it is up to me to take care of the family."

The old horse tossed his head up and down.

"All right," laughed Dick, as he climbed into the buckboard, and drove the horse to the house. "You just remember and travel a good gait coming home."

In a moment Mr. Woodson was ready. He waved good-bye to his wife and Betty who stood in the doorway. Then he shook the lines over Dandy. "Good-bye, Dick," he called. "Take good care of mother and Betty."

"Yes, sir, they will be here safe and sound when you get home. You needn't worry."

So the most exciting day of Dick's life had a most ordinary beginning. There was nothing in all this to make him think that he might have a big job on his hands when he promised to take care of mother and Betty. He fed the chickens and turned the team loose in the barnyard that they might roll about and kick up the coolness of the shade. For the day was going to be warm and sultry and he didn't want the horses to suffer in the hot barn when they might as well be standing in the shade of the yard. All the chores done he went back to the house to see how mother and Betty were getting along. Mrs. Woodson had just brought out the baking board to make the weekly supply of cookies and pies. Dick had an idea. More than that, he had a great liking for pies.

"Hill! I stumped you to pick enough huckleberries for a pie, Betty," said Dick. "And I'll get my quart first."

"Oh, will you?" replied Betty, grabbing her sunbonnet and a pail and darting out of the door. "If I beat you I'll have the biggest piece of pie."

Across the yard they raced and through the wood lot. Betty was about three feet ahead because she

had a few seconds' start—and then she could sprint. They fell to picking berries without any wasted conversation.

"This is my patch; that is yours," ordered Betty.

"All right," agreed Dick. "Not a sound disturbed them but the plop, plop as the berries struck the tin pails. Suddenly they heard the dinner bell loud and clear; then



A Much Admired Border at the Ontario Agricultural College

Perhaps the most admired flower border in Ontario is the one extending from the Horticultural Building at the Ontario Agricultural College, down to the street railway. It is so planned that from early spring to late fall it is a blaze with bloom and always very attractive. The situation of the border here seen is the Chabouard. On a smaller scale such a border would be a distinct addition to any farm home.

it rang sharper and more urgent.

"Why!" exclaimed Betty, "what has happened? We've only been here about half an hour. Mother said she would give us an hour."

"Drop your pail, Betty, and hurry. Something has happened to mother."

Berries, pail forgotten, they hurried home. When they struck the clearing they began to sniff. Their nostrils stung with the odor of smoke "Fire!" muttered Dick. Betty didn't say anything, but her face grew white and worried. In the barnyard the horses were sniffling and stamping restlessly. To the south and beyond the farm, the children saw a sheet of flame leap to the sky and then came creeping over the ridge of Mt. Menier.

"Some more of those ignorant people who ought not to be allowed to stir in the woods without a guard," stormed Dick. He was thinking of those campers who go away without taking the trouble to put out the camp fire, forgetting that in such hot weather one spark blown into the dry trees may mean the loss of many lives and thousands of dollars. The underbrush gets dry as tinder and

burns as readily; and while fifty men back-firing can stop the fire in the beginning, Dick could not hope to after such a start as this one had. When they reached the house they found their mother digging in the yard with a spade.

"Hurry," she called, but she did not stop digging. "Hasten the horse, Betty. I'll dig this hole. Mother, you put the things you want to save in the trunk and I'll bury it."

Betty was thankful that Dick had taught her to harness a team. Mrs. Woodson put some of the best clothes in the trunk; then the silverware and the most prized trinkets, and last of all the tin box containing father's papers. Dick dug rapidly. The sun seemed to scorch his back. Drops of sweat trickled into his eyes and mouth, but never for a moment did he stop his digging.

Then he and his mother lugged the heavy trunk from the house and lowered it into the hole. As they threw in the last shovelful of dirt, Betty drove up with the team. The horses were twitching and pawing. Their eyes roved wildly, and every instinct warned them to flee.

"Hurry, Dick," cried Betty. "I can't hold them much longer. They are pulling at the bits and I am not used to the team."

"Coming, Betty—just hang on a

The air began to darken with smoke and flying ashes. Rabbits and a fox frightened by the fire, fled toward the welcome shelter of the river. As they watched suddenly the wind blew hot on their cheeks.

"Why!" gasped Dick, turning to look back. "Why—what!" and then he leaned forward and brought the whip down across the backs of the straining horses.

"We're in a tight place," he gasped, choking with smoke; "only the horses can save us."

For the wind had veered about and the fire was hemming them in. He turned short to the left. Mrs. Woodson leaned forward and called to him excitedly while Betty sobbed and clung to the lurching wagon. "Dick, that isn't the way to town."

"I know, mother, but we can't make the town. The fire is gaining on us. I'll try to get to the river."

"I know that, Dick," said Mrs. Woodson. She leaned over and dampened the towel to protect Betty's eyes. And Betty knew courage when she saw it. If she needed an example her brother was showing a quiet kind of bravery that made Betty sit up and stop her crying. She thought it was time to help by stopping her childish crying.

"Are we getting near the river?" she asked.

"Almost there," shouted Dick, as he struggled to guide the plunging horses. They were pulling on the bits until it seemed that every movement would jerk his arms from his body. And now they could see the river! But—could they make it? Could they possibly make it before the fire? Already ashes, bits of charred wood, and leaves fell on their uncovered heads. A spark lit on Dick's shirt and set it ablaze so that Betty had to gasp, "out with a towel."

"Hurry, hurry," urged Dick, giving the horses their heads. Nearer and nearer the fire came.

"I'm afraid we can't make a good thing, son. But we've made a good thing. We did our best."

But it was for this that Dick had been driving carefully and saving the reins. One moment he looked over his shoulder and glared at the relentless monster of flame that came licking the green fields—a moment and then he stood up, flashed the cracking whip at the horses; like warbling Indians, he shouted and booted "Whooooopee! Whoop! Whooooopee!" The horses spurred forward in a final desperate plunge.

"We're here! We've won! To the river. Get into the river," cried Betty.

"Shall I help unhitch?" asked Betty.

"We haven't time. I'll cut the traces."

In a moment the team was free of the heavy wagon and Dick drove them into the river and Betty and mother followed at his heels. Hardly had they waded in when the fire was eating up the horses; like warbling Indians, he shouted and booted toward them. Dick still clung to the reins of the horses, but at the approach of the blistering heat they reared and then gave a wild plunge that broke the reins and set them free.

"Take a good breath," ordered Dick, and when I give the word, hold your breath and duck under the water."

"They kept wetting the towels, and held them over their heads to shut out the stifling heat. Dick's lungs seemed bursting.

"Take a breath—again! Quick!" And then the roaring, raging flames jumped the river. Again and again their heads came above water gasping for breath, only to plunge back to the safety of the river. For six hours they sat there waiting for the earth to cool off so that they might walk to town. The breaking away of the horses left the little family to make

its way on foot. The west a huge red one the stars came out.

"If you are able to, we had better try to get out of this."

"I'm all right," he cried, "I'll get my coat and hat and my gun with us until we get to the district."

"I have the pail," was so excitedly carrying the river with me."

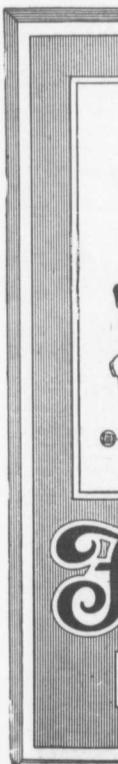
They laughed a little. Betty as she hauled the shallow bed of filling it half full of water from the six-mile wide hot ground seemed their feet, and every day had to stop and wet down in the dusky sky horizon dipped to meet twinkled the welcome auto. Betty spied the

"Look!" she cried "is father?"

It was, Mr. Woodson to them as fast as bring him. Before stopped he was out and her mother in that the danger was crying softly.

"Dick was splendid!" Mrs. Woodsoning it over and over Mrs. Woodson told her it. Mr. Woodson's wife and he hung Dick's hat that hurt.

And the man who



its way on foot. The sun sank in the west a huge red ball, and one by one the stars came out.

"If you are able to, mother, I think we had better try to get to town."

"I'm all right," came the cheery reply from mother. "If only we had that pail we could take a little water with us until we get out of that dried district."

"I have the pail," said Betty. "It was so excited I carried the pail into the river with me."

They laughed a little unsteadily at Betty as she hauled the pail out of the shallow bed of the river. Then filling it half full of water they started on the six-mile walk to town. The hot ground seemed to fairly blister their feet, and every few minutes they had to stop and wet their shoes. Far down in the dusky shadows where the horizon dipped to meet the earth there twinkled the welcome lights of an auto. Betty spied them first.

"Look!" she cried. "I know that is father."

It was. Mr. Woodson was coming to them as fast as gasoline could bring him. Before the car had stopped he was out and had Betty and her mother in his arms. Now that the danger was over they were crying softly.

"Dick was splendid. Dick was splendid." Mrs. Woodson kept saying it over and over. And between hugs Betty told her father all about it. Mr. Woodson's voice was husky, and he rung Dick's hand with a grip that hurt.

And the man who had been driving

the car and heard Betty's story, stepped forward and spoke to Dick. "I'd like to shake hands," he said. "You certainly made a fight, and I like grit."

THE COOK'S CORNER

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

Egg Salad.—Slice or chop hard-boiled eggs, mix with minced cold chicken or veal and be led salad dressing, and serve on a crisp lettuce leaf. The eggs may be used without the meat.

Peanut Wafers.—One egg, one-half cup sugar, one-half cup butter, one-half teaspoon salt, one teaspoon baking powder, two tablespoons milk, one cup chopped peanuts, three cups flour.

Baked Cheese.—Cut cheese in small pieces. Place in small baking dish, and season with a very little salt and pepper. Cover with milk and place in the oven. By the time this has browned the cheese will be cooked enough. Serve immediately.

Rusks.—One and one-half cups sugar, one-half cup shortening, two eggs, two and one-half cups rolled oats, two cups flour, one cup chopped raisins, one-half cup sour milk or four tablespoons boiling water, one teaspoon soda, one teaspoon cinnamon and nutmeg.

The Upward Look

Spreading the Word

"Go ye into all the world and preach the Gospel."

A noted artist was once asked to put on canvas his conception of a dying church. He did so. He painted a magnificent building of stone with a spire reaching high up to heaven. Thronging through its doors were well dressed men and expensively clad women. Everything about the church spoke of wealth and prosperity. Finally, when the picture was apparently complete, he painted a small box beside the door on which he inscribed "Foreign Missions," and over the opening of the door he traced a cobweb. This story is of particular import now when the Laymen's Missionary Movement is attracting world-wide attention.

We are just beginning to realize how true was that artist's conception. We are now coming to realize that the light that shines farthest is the light that shines brightest right at home. We have seen with our own eyes the regenerating, strengthening effect of an aggressive foreign mission policy on many of our churches. In obeying the Master's command to carry His word to others we ourselves get a truer love and devotion and more joy from our spiritual life.

We wonder if the man who says that

he has no use for missions, particularly foreign missions, realizes that in the same breath he says that he does not love Christ? For did not Christ say: "If ye love Me keep My commandments." And was not His last and greatest command, "Go ye into all the world and preach the Gospel."

The very essence of Christianity is service for others. Our Saviour gave His whole life in loving service for His fellow men. If we would follow in His footsteps we too must see service as a duty and privilege. The spirit of the man who would exclude foreign mission activity from the program of his church is in the class of the miser who wishes to keep all good things to himself.

And really, wasn't it the energy and love of the first foreign missionary, Paul, that brought Christianity and its blessings to us. Suppose that all the first disciples and all their converts had rigidly adhered to a narrow home mission policy. The Jews would then be the only Christian nation to-day. Or more likely Christianity would be a thing of the past. But we are talking of the impossible. The apostles had lived too near to the Master, had breathed too freely of His love that embraced all mankind, to be "home" missionaries. May all ponder well the word of the Moderator of the General Assembly of the Presbyterian Church in Canada: "I don't believe in home missions; I don't believe in foreign missions; I believe in missions." And so did Christ. And so do all of us who are really following in his footsteps. I.H.N.



**Let's make a Jelly Roll—
With FIVE ROSES flour.**

Its Strength and Fineness hold your batter together in the long well-greased pan.

Bakes evenly.

Smooth Texture—soft, golden Crumb, spongy, porous, yielding.

No holes, nor lumps to vex you.

And when you turn it out on the damp napkin hot and savorily, and you spread the under side with "jell"—

It doesn't get soggy nor crumbly.

Roll it gently, carefully.

Not a crack—not a break.

Perfect Smoothness—a Perfect Roll—Fours.

Bake anytime, make anything.

Use FIVE ROSES—bread and pastry.

Melting puff paste—flaky pie crust—crinkly fritters—

tooth some rolls.

FIVE ROSES for anything—everything.

Be flourwise.

Five Roses Flour

Not Bleached



Not Blended

This Tea Set Is Intended For You



ACTUAL PHOTO OF SET

THIS beautiful Tea Set is semi-porcelain, nicely shaped and decorated with roses in the new design. The set consists of 12 cups and saucers, 12 tea plates, 2 cake plates, and 1 cream jug and slop bowl: 40 pieces in all.

You can have one for the expenditure of only a little effort. Farm and Dairy has arranged with one of Canada's leading wholesale china firms for a large number of these sets for distribution among our women readers. This enables us to make this exceptional offer.

Every woman reader of Farm and Dairy can have one of these sets by sending us Four New Subscriptions to

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AMUSEMENTS

Conducted by MARION DALLAS

The Benefit of Home Games

In encouraging children to be alert and take an interest in family games, we are teaching them to form a very valuable habit, namely, to think, and all our educationalists to-day are lamenting the inability of our young people to think. We used to play a game in school only called "I'm thinking of something," and the teacher used to remark she could tell in a minute which child had the mind under best control. There is a mental development too—in games and home amusements.



Marion Dallas

A GAME OF DEFINITIONS

This is a game for the family circle or the social evening. To play it, select a word of more than one meaning; for instance, belle, bell. You proceed in this manner to describe it: "My word is in both meanings a common noun. In one it describes a useful manufactured article; in the other it is sometimes applied to young women." If this suggests the word to one in the game, he does not guess it, but "throws a light" thus: "It contains a privilege of a popular young woman." You admit that he is right; then the next "go"; then "lights"; fall more broadly until all have it. The one guessing last all the privilege of calling the word itself. This game can be carried on indefinitely. Aside from general information regarding the meaning, analysis and spelling of words, it teaches a correct phraseology for the delineations must be true or the real issue of the game is lost.

GOING TO JEST-BALM

It seemed to me that there could be no young person who had not enjoyed the old fashioned game of "Musical chairs," but I found a party of young people recently who had never heard of the game. The game requires music. Chairs are placed in a row, alternately facing in opposite directions. There should be one chair less than players, and the guests march or dance around, then while the music plays. When it stops they must all sit down. The one who finds no chair drops out of the game. When the music resumes, one chair is removed and the march recommences. This is kept up until only one person is left. The success of this game lies largely with the musician. He may play more slowly until everybody expects him to stop, and then suddenly begin to play rapidly and stop when nobody is expecting it.

PROGRESSIVE PUZZLES

The simplicity of this game is its great attraction, and it is interesting as it is simple. Provide as many small cards as there are guests, several pairs of scissors, a prize if you like, and the game is ready. Seat the party in a circle around the room. Each one then receives a card, and every third or fourth player scissors, which he shares with his neighbor. Each player then cuts his card twice across so as to make four pieces. They may be cut any shape. Each player now mixes his puzzle and passes it on to his right hand neighbor. At a signal every one tries to put the puzzle together, and the first player who succeeds calls out,

USE FOR Scrubbing AND DO AWAY WITH HALF THE RUBBING
Many Uses and Full Directions on Large Sifter—Can 10¢

What Every Dairyman Needs

A Clip to hold the cow's tail while milking. Handy and easy to use. Saves the milkers many a nasty blow in the face from the cow's tail while milking. Sent post paid to any address, with full instructions as to how to use them, upon receipt of 50c (10¢ extra). Address:

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Parties arriving three times a month.

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The Guild, 71 Drummond St., Montreal or 47 Pembroke St. - Toronto

St. Lawrence Sugar

Buy St. Lawrence Sugar

in original packages. Untouched from refinery to your cupboard, you are sure of sugar absolutely free from contamination or impurities of any kind.

St. Lawrence granulated white pure cane sugar is packed in three sizes of grades—fine, medium and coarse, in 100 lb., 25 lb., and 20 lb. sealed bags and 5 lb. and 2 lb. cartons.

All first class dealers can supply it so insist upon having St. Lawrence Sugar.

ST. LAWRENCE SUGAR REFINERIES LIMITED, MONTREAL.

The Sewing

Patterns 10 cents number and size give age; for adult measure for waist sure for skirts add to the Pattern Dept.

THREE-PIECE SKIRT SMALL WOMEN

like skirts in size ever. he back long the width but to the (tona) come. Fo the quiri mate \$2.50 14, 16 and 18 years.

SEMI-PRINCESSE

Two-piece skirt for small women.

TWO-PIECE SKIRT FOR SMALL WOMEN

SEMI-FITTING CUTAWAY

Use waist line of one cut out. Support the bust. The pattern is cut in 14 inches bust measure.

The Sewing Room

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

THREE-PIECE SKIRT FOR MISSES AND SMALL WOMEN. 8016

Almost every girl like the three-piece skirt. It is youthful in effect and it is in every way attractive. This one can be made with the back pieces lapped beneath a tuck or with a plain apron but the tuck is preferred. At the sides there are plaits that extend to the depth of the buttons and that provide comfortable freedom. For the 16 year size the skirt will require 3 1/2 yards of material 27, 2 1/2 yards wide with 42 inches wide. This pattern is cut in sizes for girls of 14, 16 and 18 years.

SEMI-PRINCESS GOWN 8015

This gown includes the favorite two-piece skirt but is rendered unusual by the plait effect at the back and a front which can be stitched plain or finished with inverted plaits for a portion of their length. The blouse on the figure with over portions of the material and trimming of heavy banding gives a really elaborate effect. In the small view it is shown without buttons. For the medium size the gown will require 7 1/2 yards of material 27, 2 1/2 inches wide, with 3 1/2 yards of banding 7 inches wide. This pattern is cut in sizes from 34 to 42 inches bust measure.

TWO-PIECE SKIRT FOR MISSES AND SMALL WOMEN. 8022

Drapery that is arranged below the hips is to be found in many of the newest skirts. This one is charmingly attractive, adapted to small women as well as to young girls. The panel at the front is prettily shaped and lapped upon the draped portions. The lining is made beneath the left edge. For the 16 year size, the skirt will require 3 1/2 yards of material 27, 2 1/2 yards wide, with 3 1/2 yards wide at the lower edge. This pattern is cut in sizes for girls of 14 and 18 years.

SEMI-FITTING CUTAWAY COAT. 8017

Undoubtedly the waitecoat makes the important feature of autumn styles and this coat shows out it is made in sections and the upper section is a waist line giving the fashionable drooping effect. The back of the coat is novel, the upper portion being slightly full while the plain and attached to it. For the medium size 4 1/2 yards of material 27 inches wide with 1/2 yard 21 inches wide for cuffs, revers and the waist collar. This pattern is cut in sizes from 34 to 44 inches bust measure.

all must stop then and pass the puzzles to the right again. The game then goes on until the time limit is up, when the person who has the most marks by his credit receives a prize.

THE NONSENSE RHYMES GAME
Who doesn't enjoy Lear's "The Book of Nonsense"? His metro is so simple that almost any can imitate it, in a way, and an amusing game may be played with pencil and paper. Each person receives a nonsensical and is asked to produce a nonsensical rhyme according to Lear. The following is an example:
This was a young man of Bridgeport
Who sat on the stove just for sport,
And though he was burnt,
No lesson he learned
This eccentric young man of Bridgeport.

This form of amusement often leads into unsuspected channels; for instance, the writer had been indulging in the fun of writing Limericks. Imagine my surprise when I received word I had been awarded a piece of property for my Limerick.

THE GAME OF SCOUTS

In this game the players divide into two parties and go into different rooms or part of the garden. Each party sends out a "scout," and the scouts meet and decide on some different thing to guess (some local object, the left eye of Julius Caesar, etc.), and then return to the parties, each scout going to his opponent's party, where questions are fired at him in quick succession, as the side guessing first is the winning one and takes possession of both "scouts."

Only those questions, which can be answered by "yes" or "no" or "I don't know," are allowed. As in other games, it is first discovered whether the object is "animal," "vegetable" or "mineral," and after this is settled the questions come thick and fast until one of the parties has won the guessing race, when a shout or whistle proclaims the fact to their opponents.

House Plants for Winter

By P. D. Pove
Although we have had to give up our outdoor favorites we can still resort to the house window. A good south window is best, but where not obtainable an east window is next choice. In these fix up two layers of shelves upon which to place your plants.

The plants which will be found to give greatest satisfaction to the house window planter are the geraniums. Young plants from September cuttings bloom best. Fuchsias, Myrsines, Oxalis, Primrose and Abutilons are easily grown and give good results. Cyclamen, with their marbled foliage and unique bloom, makes a very beautiful plant for the table or window. Palms and rubbers are also fine for the house. A few pots of bulbs should be grown, as nothing can be more beautiful, and they require but little room.

BULBS FOR THE HOUSE

The double and single Tulips, Hyacinths, Freesias and Narcissus, make a grand display. Obtain your bulbs as early as possible, getting as much of a variety as you can. Take some four-inch pots, place drainage in bottom and fill up with good soil. Take your bulb and cover till only the very tip is showing. Water well and place in a damp cellar or under heavy shade, and cover with litter for eight weeks. Then bring them to the window, and the beautiful bloom will soon make you feel repaid for your labor. If a prolonged period of bloom is desired remove a lot to the window each week.

A paste made of gasoline and salt will take grease spots out of rugs and carpets.

City Conveniences in Home

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

Requires no plumbing or sewerage—only connection with stovepipe to chimney for ventilation. Takes up less room than the old style in any room, and is a positive ornament.

Hotels should be equipped with the "Rowe" Sanitary Lavatory and the "Tweed" Sanitary Closet where there is no water supply. Get our prices for hotel equipment. Satisfaction guaranteed or your money back. It is running water without plumbing.

Our descriptive booklet free for the asking. Send for it to-day. THE STEEL TROUGH & MACHINE CO., LTD. 133 James St., TWEED, ONT.



BLACK KNIGHT STOVE POLISH



A HOUSEWIFE IS JUDGED BY HER KITCHEN. FOR A BRIGHT STOVE AND A BRIGHT REPUTATION, USE BLACK KNIGHT.

A PASTE THE F. F. DALLEY & CO. LTD. NO DUST NO WASTE HAMILTON, ONT. NO RUST



WE PAY THE FREIGHT.

At the Factory Price

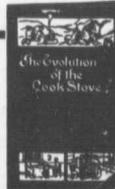
Buying at the factory will land this range at your station freight prepaid for \$20.00 less than

the next best stove on the market. You pocket the dealer's profit—about 30 per cent.—get a beautiful steel and malleable iron range built to last a lifetime. And what's more you save money every month on your fuel bill.

Every Range is unconditionally guaranteed.

Dominion Pride Range

Sold on easy terms if desired



It's as good as seeing the range to read the complete and clear description in our book. The book also contains a history of cooking worth reading. Let us send you a copy.

Canada Malleable & Steel Range Mfg. Co., Limited, Oshawa, Ont. Please Send Book.

Canada Malleable & Steel Range Mfg. Co., Limited, Oshawa, Ont.

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

HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the official organ of the Canadian Holstein Friesian Association, all of whose members are invited to send notices for publication in this column.

CANADIAN HOLSTEINS IN NEW ZEALAND

"The New Zealand Farmer" mentions the Holsteins exported to that country last May by Mr. N. Sangster as follows: "After a lengthy voyage extending to three days, there was landed at Auckland on August 2nd from the largest importation of Canadian-bred Holsteins which had yet reached this country. The shipment which came to the order of Messrs. Gunn and Sinclair, of Raetihi, Main Trunk line, through Dalgey and Co. Ltd., comprised 19 young bulls, seven heifers, and a cow.

"The female portion of the shipment has since been sold to Messrs. H. North and Sons, Otago, for £1,675, one of which the cow, Colantha of Ornatown, was valued at £200. This cow was placed first in the public test at Ottawa, as at three-year-old and took first prize at Quebec in 1912. She was champion of Lady Colantha De Kol, who was champion in the milk test at Ottawa, Winter Fair for three years.

"The 19 young bulls, which range in age from 18 months to two years old, are a very promising lot, and in many respects they are level in type and well grown for their age. They are by various sires including King De Kol, Pietorius Colony, King Farnie Sevia Clothide, Black Sir Iuka, Imperia, Pauline De Kol, Brighter Canada, Oakland, Sir Matilda, Princess Hengerveld Friesland, Pietje Kornydyk Lad, others.

"The shipment which left Montreal on May 31st in charge of Mr. A. Williams, and were landed here in splendid order, was selected by Mr. N. Sangster, a leader in Canadian breeding."

HOLSTEINS SELLING HIGH IN ENGLAND

In spite of the fact that they are few in number and that the quarantine to prevent further importations from abroad is still in force, the demand for Holsteins in England is increasing. Their recent increase in selling high in England. The farmers of the land of the milk-belt are getting a better price for their milk. The demand for Holsteins is great for Holsteins. It was hardly thought that all previous records would be equalled at the sale on Wednesday, November 30th, by Messrs. John Thornton & Co. of a portion of the celebrated herd of Mrs. Brown, 28, Abingdon, where a 7-head sold averaged 27 1/2, which is easily a record for this increasingly popular dairy breed.

Frank P. Matthews, the auctioneer, started the bidding, which was brisk throughout, and the excitement was maintained to the last. Bidders from all countries, and from Scotland, Ireland and Wales, attended, a feature of the event being the number of animals purchased for Ireland. The three best prices paid were 100 guineas, for the beautiful heifer, Hodes Colantha, which D. A. Mellemann took to his Athlone herd at Milnes. Mr. Mellemann's record was broken, however, after a great struggle between Francis B. May and the bidding, when E. F. Farnie of Otago, the former secured Hodes Bonnie Ladette for 115 guineas. The second bull, Hodes Bonnie Ladette, was sold for 100 guineas, which could claim him. The average for the 74 cows sold was 24 1/2 lb. for the 27 head, and for the 27 head comprising the whole 24 1/2 lb., the total receipts being \$3,972 1/2.

OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS FROM OCT 1 TO

- 1. Tiranra Netherland 3rd 1797, 67 11m 58 1/2 lbs. milk, 21.90 lbs. fat, 27.38 1/2 butter.
2. Three Year Class
3. Mature Cows
4. Bell Tensen 67, 67 1064, 15,720 lbs. milk, 486 lbs. fat, 493 lbs. 30 cent butter.
5. De Dikkery's Keyra De Kol 962, 87, 1577 lbs. milk, 42 lbs. fat, 550 lbs. butter.
6. Pontiao View 834, 67 394, 10,660 lbs. milk, 43 1/2 lbs. fat, 433 lbs. butter.
7. Kate Sparrow 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.
8. Roseman 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.
9. Roseman 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.
10. Roseman 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.

- 5. Pauline Brook 9703, 5y. 3m. 54, 462.2 lbs. milk, 16.47 lbs. fat, 19.68 lbs. butter.
6. Delia 1723, 5y. 3m. 54, 462.2 lbs. milk, 16.47 lbs. fat, 19.68 lbs. butter.
7. E. W. Hyde, Tyrrell, Ont.
8. E. W. Hyde, Tyrrell, Ont.
9. E. W. Hyde, Tyrrell, Ont.
10. E. W. Hyde, Tyrrell, Ont.

- Senior Four-Year-Old Class
1. Bessie Netherland 1st Kol 15000, 4y. 3m. 21d. 583.2 lbs. milk, 20.02 lbs. fat, 25.02 1/2 butter.
2. Cairngorm Aggie 14233 4y. 6m. 16d., 322 lbs. milk, 17.23 lbs. fat, 21.28 lbs. butter.
3. Labeida Melba Alband De Kol 14883, 4y. 7m. 24d., 424.8 lbs. milk, 17.47 lbs. fat, 21.83 lbs. butter.
4. Junior Four-Year-Old Class
1. Ema Netherland 1st Kol 15656 4y. 5m. 29d., 462.8 lbs. milk, 21.83 lbs. fat, 27.29 1/2 butter.

- 3. Wadmanite Canary, 1775 (30 days), 4y. 3m. 13d., 2102.2 lbs. milk, 67.22 lbs. fat, 82 lbs. butter.
4. Six month record, 4y. 3m. 13d., 14,154 lbs. milk, 479.49 lbs. fat, 586.84 lbs. butter.
5. Junior Three-Year-Old Class
1. Nita 1st Kol 1568 (30 days), 3y. 2m. 29d., 2,064.12 lbs. milk, 66.40 lbs. fat, 83 lbs. butter.
2. Edith Ormby Merced 1st Kol 1568, 3y. 2m. 29d., 2,064.12 lbs. milk, 66.40 lbs. fat, 83 lbs. butter.

- 3. Fourteen-day record, 3y. 4m. 13d., 555.9 lbs. milk, 19.74 lbs. fat, 23.90 lbs. butter.
4. Colony, Model Emma 3007, 3y. 4m. 13d., 555.9 lbs. milk, 19.74 lbs. fat, 23.90 lbs. butter.
5. Records Made at Least Eight Months
1. Bessie Botsford 1241, 3y. 4m. 29d., 362 lbs. milk, 12.74 lbs. fat, 15.90 lbs. butter.
2. Lydia 1974, 3y. 4m. 29d., 362 lbs. milk, 12.74 lbs. fat, 15.90 lbs. butter.

- 3. Flora May 1st Kol 1519 3y. 7m. 23d., 370 lbs. milk, 12.74 lbs. fat, 15.90 lbs. butter.
4. Reports of the official tests of 19 cows and before a public and accepted during the month of October, in the makes 27.38 lbs. Tiranra Netherland 3rd 1797, 67 11m 58 1/2 lbs. milk, 21.90 lbs. fat, 27.38 1/2 butter.
5. De Kol goes over the 25-lb. mark in the senior four-year-old class, and in the same milk test, the Tiranra Netherland Junior makes the good record of 27.38 lbs. butter.

- 6. W. A. GLEMON, Secretary.
SEMI-OFFICIAL RECORDS OF HOLSTEINS FROM OCT. 1 TO OCT. 31, 1913
Mature Cows
1. Bell Tensen 67, 67 1064, 15,720 lbs. milk, 486 lbs. fat, 493 lbs. 30 cent butter.
2. De Dikkery's Keyra De Kol 962, 87, 1577 lbs. milk, 42 lbs. fat, 550 lbs. butter.
3. Pontiao View 834, 67 394, 10,660 lbs. milk, 43 1/2 lbs. fat, 433 lbs. butter.
4. Kate Sparrow 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.
5. Roseman 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.

- 6. W. A. GLEMON, Secretary.
Three Year Class
1. Roseman 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.
2. Roseman 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.
3. Roseman 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.
4. Roseman 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.

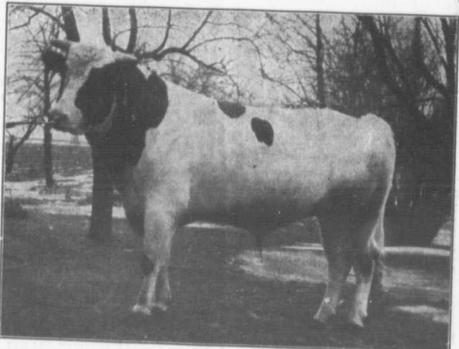
- 5. Roseman 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.
6. Roseman 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.
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- 9. Roseman 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.
10. Roseman 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.
11. Roseman 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.
12. Roseman 67 67 61, 9,500 lbs. milk, 312 lbs. fat, 390 lbs. butter.

A teacher in a high school had given lessons to an infant class had given Commendments. In order to test their memories she asked the little child to give me a commendment with only four words in it?
A hand was raised immediately.
"Well," said the teacher.
"Keep off the grass," was the reply.

"Look here," said an old gentleman to his Irish servant, "to-morrow evening you are to go to the fair and buy me a drop in the saucer I will give you a shilling if you come and see a little child give me a commendment with only four words in it?"
"Right sir," said Pat, and the following evening he won the shilling by bringing the drop in one hand and the saucer in the other.

EXTENSIVE AUCTION SALE OF HOLSTEINS PURE-BREDS AND GRADES



13 Choice Pure-Breds at Berlin, Ont.

37 High-Class Grades, Thursday, Nov. 27

SIR KORNDYKE BOON—one of the best sons of Pontiac Korndyke, half brother to King of the Fontaines, sire of the world's record cow, 41.18 lbs. butter in 7 days. Seven half sisters with record of from 31 to 38 butter, and his own dam, Fairview Korndyke Moon with a rec. in 30 days 32.17 lbs. butter in a week, 130 lbs. in 30 days, milk testing 1.867, fat, my present herd bull, is in the sale.
SIR KORNDYKE GERBON DE KOL—a choice son of above bull, 18 months old, my present herd bull, is in the sale.
My Pure Breds are descendants of such noted bulls as Netherland Statesman, Corralius, Mamet Pietorius, Paul, Count Posch, Mechthild and Canary Clive with 15,000 lbs. milk in one year under common farm conditions.
The Holsteins Grade are an exceptional fine lot of cows and heifers—large producers, with two or three crosses of best Holstein blood.
This is a chance to get high class stock at your own price, out of a herd kept for profitable production of milk for city trade.
My farm is sold. Everything goes.—Well equipped set of farm machinery, working horses, etc. sold the same day.
The farm is easily reached,—only miles south of Berlin. Electric car service between Berlin and Galt, with car stop right in front of farm house. C.P.R. and G.T.P.R. connections.
Lunch on noon Send for Catalogue 70, D.A.Y.

M. M. SCHANTZ, BERLIN, ONT. Bell Phone Connection

HOLSTEINS 15 Heifers, rising 2 years. 20 Heifer Calves, from 1 month to 9 months. Bull Calves, from 1 to 10 months. Also Cows up to 5 years. W. HIGGINSON, INKERMANN, ONT.

15,345 lbs. in 1 Year For a Jr. 2-year-old, milked twice per day. She is a daughter of Dutchland Colantha Sir Abbecker. A pair of his sons from 22 and 23 lb. 4-year-olds for sale. Both extra show calves, odd enough for service. Write for pedigree. LAIDLAW BROS. ATLMER, ONT.

RIVERVIEW HERD is the place to buy Holsteins of quality. The Third Annual Sale will be held at the city of Woodstock on March 25th, 1914. Full list of breeders, the Oxford District with post office and station addresses sent on application to P. J. SALLEY, LACHINE RAPIDS, QUE.

Oxford District The Holland of North America is the place to buy Holsteins of quality. The Third Annual Sale will be held at the city of Woodstock on March 25th, 1914. Full list of breeders, the Oxford District with post office and station addresses sent on application to P. J. SALLEY, LACHINE RAPIDS, QUE.

Lakeview Holsteins Bull calves only for sale for the present, sired by Count Hengerveld Payne De Kol or by his daughters and sired by Dutchland Colantha Sir Abbecker. Write for extended pedigree of these bulls, or come to Bronie and see the herd. Visitors always welcome. E. F. OSLER, BRONTE, ONT.

Lyndenwood Holsteins Among the Young Bulls we are now offering is a full brother to Netherland Favorit, also having the 2yr-old 30-day butter record. Also a son of this heifer, both fit for service, and come from the best of both fit for service, and come from the best of both fit for service, and come from the best of both fit for service. W. J. BAILEY Hagersville Station, Nober P.O., Ont.

FAIRVIEW FARMS HERD is the only place on earth that you can secure a young bull that is a brother to the sire of the cow holding the championship of Canada as well as the United States. Both of these records are held by cows that were sired by sons of PONTIAC KORNDYKE. We can offer you a few of his sons at reasonable prices; also some of the greatest Korndyke bulls living today, with APPLIED KORNDYKE ETH, 79416, out of daughters of Pontiac Korndyke with large official records. Write, or come and see the herd. E. H. DOLLAR, HEUVELTON, NEW YORK, NEAR PRESCOTT, ONT.

HOLSTEINS

HOLSTEINS

Lyndale Offering

One Yearling Bull-tuberculin tested-3 of his nearest dam average 27 lbs. butter each in 7 days. Two grandams of "RING each in 7 days. One 12 mo. old, out from a 20-lb. Jr. 3-year-old; another 5 mos. from a 20-lb. 2-year-old grand-daughter of Mrs. Jewel Hengerveld.

BROWN BROS. - LYN, ONT.

Ridgedale Holsteins

Young stock for sale, both sexes. Also two or three Young Cows, bred to imperial Pasture De Kol. Write or call to R. W. WALKER, U.T.C. ONT. MYRTLE, C.P.R. and Manchester, G.T.R. Bell Phone.

Phone

2 or 3 of your friends and neighbors right now while you are thinking about it and ask them to become subscribers to Farm and Dairy. You can easily get a club in this way, and a new subscriber you know will entitle you to one of Farm and Dairy's Pure-Bred Pigs

Forest Ridge Holsteins

HERD "KING SEDI'S PIETERTJE'S SIRE" "FINDERINE KING MAY FAYNE" One of the two sire average over 32 lbs. butter in 7 days. Best by test. Get your next young bull from my herd. Present offering a few young bulls nearly fit for service, sire by R. S. P. and a few choice young cows bred to him. Farm 40 rods from station.

L. H. LIPSIT, Prop. - Elgin Co., Ont. Stratfordville

RIVERSIDE HOLSTEINS

Herd headed by King Johanna Paulus Koradyn, whose near dam and sisters, 13 in all, average 32 1/2 lbs. butter in 7 days. His sister, Paulus Lady Koradyn, has a record of 30 1/2 lbs. butter in 7 days. We are offering several famous bred to this bull, also a few bull calves.

J. W. RICHARDSON - R. R. No. 2, CALEDONIA, ONT.

Allison Stock Farm

THE HOME OF SIR LYONS SIEGIS

His six first dam average 30.50 lbs. butter in seven days. In the first three generations he has 33 cows that average 30 lbs. in seven days. We have some beauties of Bull Calves, 4 to 12 mos. old, from this follow, and out of the following dams:

No. 1-Dam, May Echo, 23 1/2 lbs. milk and 1.08 lbs. butter in 365 days Canadian record, 72.6 lbs. milk and 31.54 the butter in seven days. No. 2-Dam, Neithyren Queen Jane, Canadian record, 111 1/2 lbs. milk in one day, 742 1/2 lbs. milk and 28 1/2 lbs. butter in seven days.

No. 3-Dam, Queen Pietertje of the Pontiacs. This heifer is sired by King Helton De Kol, half-sister to Pontiac Lass, 4 1/2 lbs. butter in seven days, was also a few choice ones from heifers that we did not test last year, but intend to this year.

We have four from cows with seven-day records, that we imported, and two of them are sired by a bull with a 4 1/2 lb. dam, and the other two by a Kingly, seven day record 29.82. King Segis, dam.

Come and see them. We have a number to nick from.

ALLISON STOCK FARM

CHESTERTVILLE - ONT.

Registered Holsteins

FOR SALE

Two fine Young Cows and five or six Heifer Calves. All good stock and in fine shape.

R. A. Gillespie - Abbotsford, Que.

AYRSHIRES FOR RED DEER

A. H. Trimble, of Lone Spruce stock Guide, farm, Red Deer, the pioneer breeder of Ayshire cattle in Alberta, has just arrived from Eastern Canada with five carloads of dairy cattle, comprising one lot of purebred Ayrshires and the balance grade.

Mr. Trimble, who had such a successful sale of his purebred herd in spring, and who has had erected on his place one of the finest dairy barns in the province, is coming to his favorite breed, and this last commitment is said to be the finest lot he has ever offered. Mr. Decker and will be a splendid addition to the already good herds of dairy

cattle in that district. - Grain Growers'

Young Man (over the counter) - If I should want to exchange this engagement ring for something else it will be all right, won't it? - Oh, certainly, with pleasure. We are always glad to accommodate patrons.

Young Man (over the counter, one year later) - I believe you told me when I bought this ring I could exchange it for anything else. What will you have? Jeweller - Yes, Man - Well, I'd like to exchange yours for a barrel of flour, a bushel of potatoes, a ham and a load of coal.

HIGHEST-FRIESIAN RECORD OF MERIT

The Highest Seven-Day Butter Records Made by Canadian Cows

Table with columns: Name, H B No., Milk, Fat, Butter. Lists various cow names and their records.

SENIOR FOUR-YEAR-OLD

Table with columns: Name, H B No., Milk, Fat, Butter. Lists senior four-year-old cow records.

JUNIOR FOUR-YEAR-OLD

Table with columns: Name, H B No., Milk, Fat, Butter. Lists junior four-year-old cow records.

SENIOR THREE-YEAR-OLD

Table with columns: Name, H B No., Milk, Fat, Butter. Lists senior three-year-old cow records.

JUNIOR THREE-YEAR-OLD

Table with columns: Name, H B No., Milk, Fat, Butter. Lists junior three-year-old cow records.

SENIOR TWO-YEAR-OLD

Table with columns: Name, H B No., Milk, Fat, Butter. Lists senior two-year-old cow records.

JUNIOR TWO-YEAR-OLD

Table with columns: Name, H B No., Milk, Fat, Butter. Lists junior two-year-old cow records.

THE HIGHEST THIRTY-DAY BUTTER RECORDS

Table with columns: Name, Milk, Fat, Butter. Lists highest 30-day butter records.

SENIOR FOUR-YEAR-OLD

Table with columns: Name, Milk, Fat, Butter. Lists senior 4-year-old 30-day records.

JUNIOR FOUR-YEAR-OLD

Table with columns: Name, Milk, Fat, Butter. Lists junior 4-year-old 30-day records.

SENIOR THREE-YEAR-OLD

Table with columns: Name, Milk, Fat, Butter. Lists senior 3-year-old 30-day records.

JUNIOR THREE-YEAR-OLD

Table with columns: Name, Milk, Fat, Butter. Lists junior 3-year-old 30-day records.

SENIOR TWO-YEAR-OLD

Table with columns: Name, Milk, Fat, Butter. Lists senior 2-year-old 30-day records.

JUNIOR TWO-YEAR-OLD

Table with columns: Name, Milk, Fat, Butter. Lists junior 2-year-old 30-day records.

OUR FARMER

Correspondence. ATTIENS, LEEDS CO. Flower's Association the farm of Mr. Wall...

Waterloo. F. L. M. L. R. Nov. 11 - finished. Pflorig is in the roots are all housed for best outfit.

On account of dryness, been good until the 11 have some of their stable. People as many as they can.

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WAIT for the Big

Dispensary Sale

OF REGISTERED HIGH-CLASS

9 Holsteins

Size and Vigor

These are without doubt three of the highest class herds of Holsteins ever assembled at Public Auction in Ontario. Those well-known breeders, Jacob Leuzler and Clarence Bolter, have dissolved partnership. Every animal will go under the hammer. In addition the sale will be supplemented by the Graefland Farm herd of Miss Ruby.

Type and Production

Wednesday Three Select Herds Wednesday

Dec. 17 WOODSTOCK Dec. 17

AUCTIONEERS

COL. R. E. HAEGAR, Algehequa, Ill. COL. B. V. KELLEY, Syracuse, N. Y.

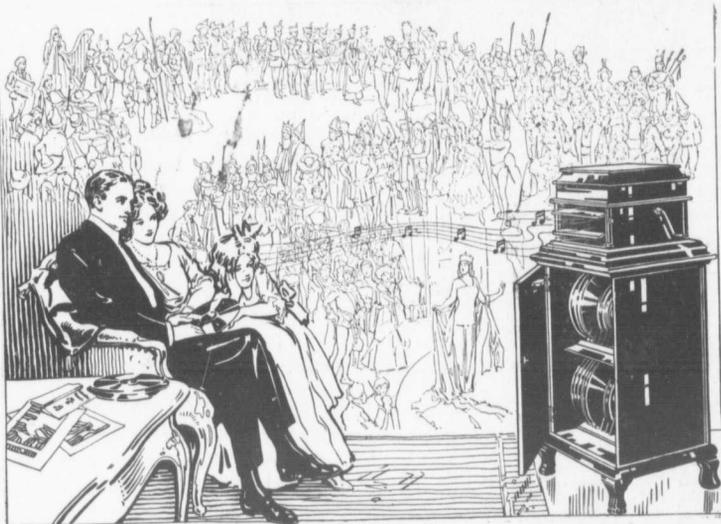
At Toronto National Dairy Show we will have a dozen or more of the animals for this sale. Be sure to call on us here.

See full particulars of Sale in Farm and Dairy of Dec. 4

Write today for Catalogue. It gives all details of the animals you can buy on Dec. 17.

ELIAS RUBY HERD OF LEUSZLER & BOLLERT Graefland Farm TAVISTOCK, ONT.

CATALOGUES from JOSEPH LEUSZLER, Sec'y of Sale, R. R. No. 1, Bright, Ont.



“All the
Music
of all the
World”

Right in
Your
Own Home

Bring Cheer to YOUR Home By Mailing the Coupon To-day

PERHAPS you have been looking forward to the day when you could afford to own a really high-class Grafonola—the up-to-date kind that plays all the records made by the world's greatest singers, violinists, pianists, orchestras, bands, etc. Then you need wait no longer. The instrument you have been wanting is here—you can have it NOW. The Columbia Grafonola has finally been developed to a point where even the humblest home can afford an instrument that will play with all the tone quality and naturalness of \$250 instruments. Sign and send the coupon now and learn how you can get one of the newest Columbia Grafonolas at a cost of only \$5 per month.

Hear the Columbia Before Buying Any “Gramophone”

Don't think of buying an old-fashioned out-of-date “phonograph” when you can get the very latest model Columbia Grafonola, made by the Columbia Graphophone Company, creators of the Talking Machine industry and owners of the fundamental patents, at the same cost. The instrument we recommend to you is the new hornless type exactly as illustrated. It plays all flat disc-records—the only kind capable of that life-like naturalness and musical quality which all music lovers demand.

MUSIC SUPPLY COMPANY

Wholesale Distributors of Columbia Graphophones,
Grafonolas and Records

88 West Wellington St., TORONTO

DEALERS Be sure to write for full particulars of this liberal offer.

Learn How You Can Own One of The Superb Entertainers Now

We want you to see and hear this splendid new model of the Columbia Grafonola. We want you, your family, your friends, to enjoy the matchless entertainment which it provides—the music you most enjoy; right where it will give you the most pleasure—**IN YOUR OWN HOME.**

So send us your name immediately on the coupon and let us send you a complete description of this latest Columbia model and tell you how easily you can arrange to own one right away and enjoy it night after night, week after week all this winter, and for years to come.

But don't delay. So great is the demand, we can supply only a limited number and we want you to have yours immediately. Write to-day.

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