

FARM AND DAIRY

&
RURAL HOME

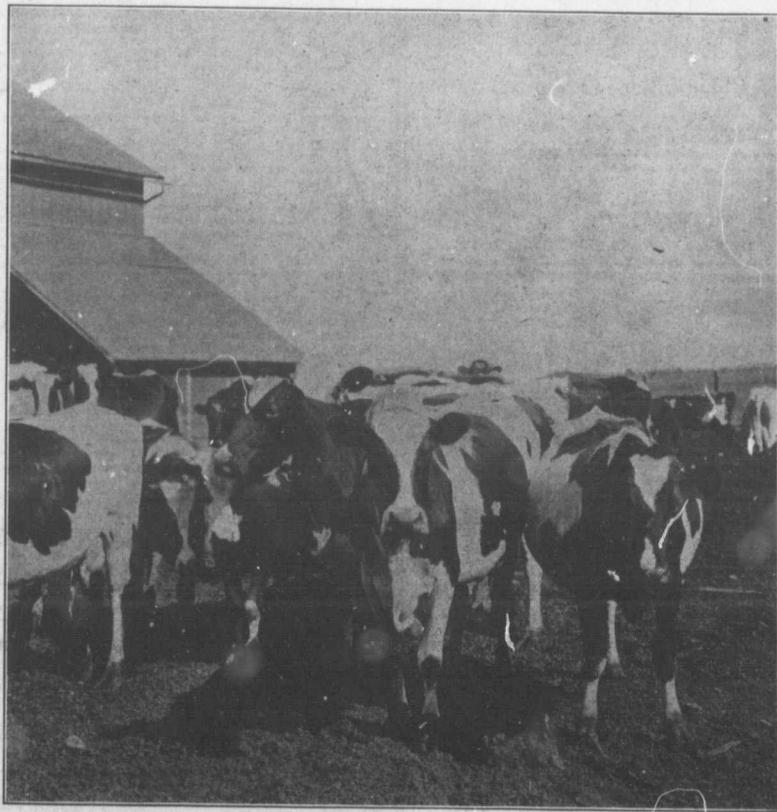
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DEVOTED TO
BETTER FARMING
AND CANADIAN
COUNTRY LIFE



Peterboro, Ont., Feb. 17, 1916



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Did it ever really occur to you that none of us have a "lease on life" and that the only way to attain the big things is to take advantage of every opportunity with the least possible delay.

It is said that "Opportunity Knocks but once at Every Man's Door." But we're not selling "opportunities." We're selling labor savers and money makers, our

B-L-K Mechanical Milker AND "Simplex" Link Blade Cream Separator

And if you are not already the owner of either or both of these machines, therein lies the opportunity for an increased output of better dairy products, higher prices and less labor.

What they are doing for others they will also do for you.

Read in previous advertisements what some of our satisfied patrons have to say. Then write us for literature.

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WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS



Our 1916 Special Issues

No. 2

Orchard and Garden Magazine Number OUT MARCH 2nd

This issue will meet the keen desire for the latest information on fruit growing.

"OUR FOLK" know that the old neglected orchard may be made the most profitable acre on the farm. This issue tells how.

ADVERTISERS will do well to have their strongest copy reach our 22,000 readers in this issue. Send along early and secure our best positions. First forms Feb. 25. Last forms close Monday, 27th, 10 a.m.

RESERVE YOUR SPACE TO-DAY

Advertising Department

Farm and Dairy - Peterboro, Ont.

The Streptococcus

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

LAST week I went up to the town of Windsor on business; to be particular and exact, to attend the West Hants Farmers' Association. Going into a friend's house, a wild streptococcus sprang upon me without any provocation, gripped me, and in spite of my efforts would not let go. For nearly a week I have been laid up in bed, every bone and muscle sore, and me not back to fighting trim yet. Had it been a bear or a wildcat, a good Winchester and a straight eye would have given me a chance; but with this streptococcus I had no more show than a jelly-fish would have with a sea-serpent.

In days of old, when the white man's burden consisted of a high-buttoned bludgeon over his shoulder and a string of blue paint round his waist, Nature put up against him warring creatures big and little. The mighty megalosaurus succumbed before his prowess. Lions and tigers disappeared before the might of puny man. But the streptococcus lingered in the land; yes, and multiplied. In the old China War, some British marines were sent ashore to attack a Chinese fortress on the land side. As they approached the unguarded rear, they were met by a deputation of smiling Celestials with a polite note, requesting the foreigners to please attack the fortress from the front; that it never was intended nor built to resist attack from the rear. When these streptococcus lay siege to us, it is not sufficient for us to tell them we are "too proud to fight." It will not do for us to say we are not so cowardly as to battle with a foe so small as they. The fact is, we have to fight; and more than that, to get every time; to be laid out on our back; and to feel as sore and ached as from a tussle with a boaster.

Sometimes I think of the first man, Adam, "with dominion over the creatures." Unconsciously he could walk about Paradise, the lion and tiger stepping from out his way; the mosquitoes and hippopotami alike afraid to touch him with their teeth. Everything in anger avoided him, like dust would dodge the nozzle of a whirlwind. Even the audacious streptococcus side-stepped when Adam passed by.

So, too, the police and public opinion have helped to place below the Cross the weightier sins. To-day a man cannot seize his stone axe and offend his neighbor's skull therewith. It is not allowed to murder to-day without a license. One cannot now grab his neighbor by the throat and roughly rob him of his cherished trumpery. It is not allowed to-day to take another's goods against his will, and without payment, and do it honestly, unless, perchance, he is a financier, or some character particularly beloved by the land. All of the great levithans of the moral world are slain (except Enoch, the great land monster, so says Henry George), but the pigmy streptococcus still survives. The bank clerk who handles millions with impunity to his con-

science is needlessly cross to the children at home. The politician who scorns the junkets and caresses of the railroad magnates forgets his pledges on the prohibition question, and even speaks unadvisedly of his fellow-members on the other side of the House. The farmer indignantly refuses to put up his price to the extortion rate of a dollar a barrel for potatoes, yet ruins his reputation for honesty by putting all the little spuds on the top where they show. We even find, by careful and kindly searching, in the minister's robe of righteousness the tell-tale holes where the little streptococcus has been getting in his licks. What a different place to live in, when this old world gets round again to the time when man will once more have "dominion over the creatures," and grip and its attendant streptococcus will be no more. Soon may it come.

The Ontario Corn Show

THE Ontario Corn Show held at Chatham last week, was a success from every standpoint—attendance, exhibits and lectures. "The standard corn exhibit this year is gratifying," remarked Mr. R. W. Kanister, of Comber, president of the Corn Growers' Association. "Taking into consideration weather conditions which the exhibitor has experienced, every credit is due to them for the excellent display they are making. There are more racks this year than in any previous year, and they are all well filled."

The exhibit of the Kent Centre Farmers' Club stared right in the centre of the curling rink, was the feature of the show. On the exhibit platform was a model farm, complete in every detail. On the arches over the exhibit the following mottoes were displayed in corn: "The Alliance for Truth and Liberty," "Corn is King in Kentucky," and "God Save Our Dixie and country." While this was the central feature, there were many other artistic exhibits made of corn, outside of the competition classes.

Prof. R. A. Moore, of Wisconsin, judged the corn exhibits and also the seed grain. One of the most valuable features of the whole show was the corn judging competitions, which were also conducted by Prof. Moore.

Prof. C. A. Zavitz spoke on "The Cultivated Crops of Ontario." These he classified as corn, roots, beans and potatoes. After speaking of rotation, fertilization and seed selection, the speaker scored the corn growers on the quality of some of the seed they were sending out. In tests of selected seed corn made at the Ontario Agricultural College, only a small proportion of the four varieties tested, came up to the exact standard. "You have standardized your seed corn," he urged, "but that is not all. You must live up to the standard." The present is regarded as an excellent opportunity for developing the production of root seed in Canada as the European supplies have been cut off. To illustrate the superiority of home-grown seed, Prof. Zavitz stated that on an average, he had secured 131 plants for 100 clusters of mangel seed sown as against 61 per 100 for imported seed.

The Maritime Corn Demand.
S. J. Moore, of Truro, N.S., told the corn growers what Nova Scotia's corn crop is like. When silos were first built in that province, they grew the old Yellow Canada corn, producing eight or nine tons of ensilage to the acre. Now from a combination of peas, oats and vetches they can secure a yield of 11 to 13 tons of ensilage to the acre, with eight per cent more dry matter than
(Concluded on page 8.)



We Want

Trade Increased

VOL. XX

The

FANNING

For a long farm machine, threshing machine, mowing by the flax chaff and broom were utilized in its primitive form. The wind cleaning of the wheat, uniform of the wheat, better work and. The earliest mills were dependent on their work, bound to be an increasing large, small impurities, weight, or heavy.

Nowadays not only do all they are clean, but they are perfectly as a spite of that, they are more than ever using mills than we use. We have several purposes to remove such.

To remove immature seed. To grade the seed to size and to remove foreign seeds. No one will admit of removing impurities; few but immature seed. Such seed that are unable to germinate.

It is worth while to remove rains? To anatomy of a seed into two parts—a mod. After germination, the young plant is the seed. A exhausted than a unfavorable, sufficient to maintain can feed favorable the greater the difference, large, plump
An address at
December, 1916.



FARM AND DAIRY

& RURAL HOME



We Welcome Practical Progressive Ideas.

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

The Recognized Equipment of Farming in Canada.

VOL. XXXV.

PETERBORO, ONT., FEBRUARY 17, 1916

No. 7

The Fanning Mill: Construction, Purpose and Use*

It Has Its Place and Will Pay Its Way on Every Farm Where Seed Grain is Produced

FANNING mills have undoubtedly been in use for a longer time than most of our modern farm machinery. They were used long before threshing machines as the final stage of threshing by the flail, to separate the grain from the chaff and broken straw. The natural breezes were utilized before for that purpose. Even in its primitive form it was a great improvement

over the winds of heaven as it made the cleaning operation, independent of the weather, afforded a more uniform blast, and therefore did better work and more rapid work.

The earliest types of fanning mills were dependent on the fan to do their work, but sieves were soon found to be an advantage on separating large, heavy impurities and small impurities of the same weight, or heavier than grain.

Nowadays threshing machines do not only do all the threshing, but they also clean the grain more or less perfectly at the same time, but in spite of that we have to-day probably more need for efficient fanning mills than ever before.

We use fanning mills now for several purposes:

To remove straw, chaff, stones, etc.

To remove shrunken, light, or immature seed.

To grade the good seed according to size and weight.

To remove weed seeds and other foreign seeds.

No one will question the necessity of removing large, coarse impurities; few but will agree that all shrunken, immature seed should be removed before sowing. Such seed produces weak plants that are unable to withstand unfavorable conditions.

Is it worth while grading seed grain? Will it pay to remove all but the best perfect grains? To answer this, let us look first at the anatomy of a seed. Roughly speaking, we find two parts—a miniature plant and a supply of food. After germination the early growth of the young plant is dependent on the food supply of the seed. A small supply of food is earlier exhausted than a large supply. If soil conditions are unfavorable, the food supply may not be sufficient to maintain healthy growth until the plant can feed itself from the soil. The more favorable the soil and seasonal conditions, the greater the difference we would expect in favor of large, plump seed.

PROF. JAMES MURRAY, MACDONALD COLLEGE

Let us now look at actual trials, which, after all, are more to the point.

Experiments With Oats

Ohio Experiment Station—average of 7 years:

Heavy seed 48 bus. per acre

Medium seed 45 bus. per acre

At Guelph, with spring wheat, five bushels more were harvested from large than from small, and with winter wheat nine bushels more.

Similar experiments at Nebraska, North Dakota, and Macdonald show that heavy seed is much better than light.

These figures bear out what we might expect from an examination of the seed itself. They demonstrate the value of well cleaned seed over poorly cleaned seed, they vindicate the use of the fanning mill.

But there is a second reason for cleaning grain, if anything more important than the one mentioned, that is the removal of weed seeds. It is well recognized that we clean grain for this purpose, but I would like to quote a few figures to show how poorly we live up to what we know. For the figures I am indebted to Bulletin No. 59, issued by the seed Branch of the Dominion Department of Agriculture.

In the spring of 1913 the Seed Inspectors collected upwards of 4,000 samples of grain that were actually being sown in different parts of Canada to ascertain just what kind of seed was being used. The first step toward improving seed is to know the quality of that in use.

Oats, 978 samples: Of these 431, or 44 per cent., were free from noxious weed seeds, 118, or 12 per cent., were free from weed seeds; 44, or 45 per cent., were free from seeds of cultivated plants or pure oats.

The sample having most noxious weed seeds had no less than 4,838 per pound—it had been cleaned with a fanning mill and still contained enough to sow 2,000 weed seeds per sq. rod. This sample came from Leeds Co., Ontario.

The sample with most weed seeds, having no less than 7,136 per pound, or enough to sow 3,000 per square rod, came from Quebec. Average of all samples would sow the square rod 44 noxious weed seeds and 138 others.

Barley, 408 samples: 174 samples, or 43 per cent., free from noxious weed seeds; 56 samples, or 14 per cent., free from weed seeds; 13 samples, or 3 per cent., free from seeds of other cultivated plants. Worst sample contained 9,539 noxious weed seeds per pound, or sufficient to put 3,000 on each square rod. Average of all samples, 33 noxious and 270 other weed seeds per square rod.

Spring Wheat, 506 samples: Worse than either oats or barley. Worst sample contained 11,528



The Great Corn Palace at the Sioux City Corn Show in 1891.

Ontario is developing a "corn belt" in her south-western counties and recently at Chatham was held the Ontario Corn Show, an institution yet in its infancy. To visitors at that show the illustration herewith will prove interesting. It shows the Corn Palace at the great Corn Show held in Sioux City, Iowa, away back in 1891. The great building depicted for the photograph to Mr. James Gow, of Hamilton, Ont.

Light seed 43 bus. per acre
Kansas Experiment Station—average of 8 years:

Heavy seed 31 bus. per acre

Medium seed 30 bus. per acre

Light seed 28 bus. per acre

Minnesota Experiment Station:

Heavy seed 64 bus. per acre

Light seed 65 bus. per acre

Guelph—average 7 years:

Heavy 62 bus. per acre

Medium 54 bus. per acre

Light 46 bus. per acre

A. Macdonald College we have not had much difference between large and medium seed, but both have given a decided difference over small weight seed.

Experiments With Wheat

The Indiana Station reports a difference of 3½ bus. greater yield from large than from small seed.

An address at the Provincial Winter Fair, Guelph, December, 1915.

weed seeds per pound, or enough to sow 8,000 per square rod at 1½ bushels per acre. From Quebec—home-grown seed sown without cleaning. Average of all samples: 50 noxious and 220 other weed seeds per square rod. These figures show how much work still remains to be done by good cleaning machines. Why is the work not done better?

1st. Many farmers have no fanning mill and do not clean their grain. Let a farm be as clean and well cultivated as it may be and the crop grown a good one, it is still a fact that cleaning the seed will soon pay for a good cleaner. A fanning mill costs, say, \$30; a man needs to make only \$1 an acre on 30 acres to pay for the machine. The figures quoted show that this can easily be done any year, and in many cases \$2 or \$3 an acre.

There are many machines that it is doubtful economy for the small farmer to buy, but there can be little doubt of the fanning mill.

The poorly equipped fanning mill is responsible for a lot of inferior and dirty grain being sown. All mills are not well equipped with screens when they are bought, extra ones have not been secured, or as is often the case, the mills have been in use for 15 to 40 years, and few screens remain. Without a proper complement of screens it is impossible to do good work. A mill equipped originally to separate chaff and wheat will probably be of little use in cleaning some of the up-to-date mixtures and with an old mill particularly it is frequently difficult to get new screens. Another difficulty in the way of securing a proper equipment is the lack of information as to what kinds to buy to do certain work. To buy a number and experiment is too expensive, so that the mill is frequently allowed to do the best work it can with a small range of screens.

Even with a good assortment of screens in good repair, many machines do poor work on account of not being adjusted and operated to the best advantage. The selecting and adjusting of screens warrants more attention than it ordinarily receives; and a little time spent in trying out various screens independent of the instructions accompanying the mill will usually well repay for the trouble. In operating, nothing is of greater importance than the air blast, as it is the scale by which is weighed the heavy and light seed. It should be strong enough to carry over the back all light grains, big or little, and not too strong to blow over much good grain. It is particularly essential that the blast be regular. If the speed is reduced even momentarily, lighter grains are sure to fall where they do not belong; if too strong, there will be a loss of good grain. Where gasoline or electric power is available, it will prove more satisfactory than the steadiest man power.

Capacity of Milling Secondary

The capacity of a mill frequently gets more attention than it deserves. All other things being equal the mill that will clean faster than another is the better mill, but in seed cleaning, speed is of secondary importance. Efficiency is of much greater importance. Take oats, for example. It takes say 90 bushels for a 10 acre field; we expect a yield of 60 bushels per acre or \$30 worth of oats, or \$300 from the field. A fast mill will clean the 90 bushels required in 15

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The Value of Variety in Crop Production

And a List of Varieties that have been Proved the Best for Ontario Conditions

PROFESSOR C. A. ZAVITZ, GUELPH, ONT.

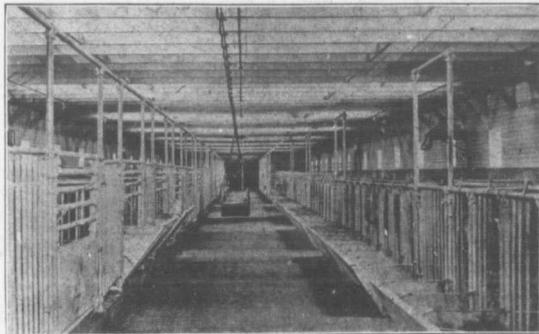
THE farmer who does not secure the very best varieties of crops for his farm is certainly living below his opportunities. There is at the present time but little excuse for the farmer who is not wide awake to the value of the varieties which will best meet the conditions of the system of farming which he is carrying out. The experimental work at the Ontario Agricultural College, the system of cooperation of the Experimental Union, the organization of the Canadian Seed Growers' Association, the plans of the Agricultural Societies and other factors are helping to make it comparatively easy and to give the best encouragement for the production of only the very best varieties.

In nearly all classes of farm crops there are

Experimental Farm at Ottawa have each made good records in the experiments at the College, and the former in the cooperative experiments throughout Ontario. The Marquis variety exhibited at this Fair received the Spring Wheat Championship. The Quebec No. 28 variety of Flint corn, and the Quebec No. 92 variety of Soy beans, both from the Macdonald College in Quebec are promising.

The season of 1915 was a very peculiar one for crop production in Ontario. The summer was cool and exceptionally wet. Even in this abnormal season, however, important lessons were obtained through experiments with farm crops. It is interesting to note that at the College the O.A.C. No. 27 variety of oats gave a yield at the rate of 103.5 bushels and the American Banner of 92.8 bushels per acre. In each of the past nine years in which these two varieties have been grown under similar conditions the O.A.C. No. 27 has surpassed the Banner in yield per acre in each year, the average for the whole period of nine years for the former being 90.9 bushels, and for the latter 72.5 bushels per acre.

Of the early varieties of oats O.A.C. No. 3 gave a yield of 76 and the Daubeny 73.5 bushels per acre in the past season. In each of the past nine years the O.A.C. No. 3 surpassed the Daubeny in yield of grain per acre, except in 1914. The average results in bushels per acre per annum for the whole period shows a yield of 82.3 for the O.A.C. No. 3 and of 74.6 for the Daubeny



The Interior of the Calf Barn at Colony Farm, Essendale, B. C.

far too many varieties grown on the farms of Ontario. The number should be cut down as much as possible, and only the very best ones used. Great care, however, should be taken to know the varieties which will give the highest returns where they are to be grown. It is only possible to refer to a comparatively few varieties at this time. Many of the leading kinds under cultivation in Ontario at present were first tested at the Ontario Agricultural College and afterwards introduced over Ontario through the medium of the Ontario Agricultural and Experimental Union. Some of these varieties originated at the College, others were secured in Ontario, and still others were imported from different countries. Particular attention is drawn to the following outstanding varieties:

O.A.C. No. 72 and O.A.C. No. 3 varieties of oats; Mandscheuri and O.A.C. No. 21 barley; Dawson's Golden Chaff and Imperial Amber winter wheat; Mammoth White winter rye; O.A.C. No. 61 spring rye; Common emmer; Rye buck-wheat; New Canadian Beauty and Early Britain peas; Pearce's Improved Tree beans; Hay Vetches; Early Yellow soy beans; White Cap Yellow Dent and Wisconsin No. 7 Dent corn; Salzer's North Dakota flint corn; Golden Bantam sweet corn; Early Amber sorghum; Ontario Variegated and Grimm alfalfas; Yellow Leviathan mangels; Empire State, Davies' Warrior and Extra Early Eureka potatoes.

The Marquis spring wheat and the Arthur variety of field peas obtained from the Central

A portion of an address by Prof. Zavitz, at Guelph Winter Fair, December, 1915.

variety.

Varieties of Barley

In the barley experiments at the College throughout Ontario the O.A.C. No. 21 still occupies highest place in yield of grain per acre. This variety has become exceedingly popular throughout the province, and is supplanting nearly all other varieties, even the Mandscheuri which the College introduced about 25 years ago and which has done so much in the improvement of barley growing in Ontario. It is now estimated that about 96 per cent. of all the barley which is grown in Ontario belongs to the Mandscheuri or the O.A.C. No. 21 varieties. Of the 40 entries of barley at the Provincial Fair not a single name occurred except the O.A.C. No. 21. According to the report of the Bureau of Industries for Ontario the yield of barley per acre for the past 16 years as compared with the 16 years previous has had an increase of about 50 per cent. This increase in yield per acre throughout Ontario for the last period as compared with the first period of 16 years would amount to about thirty-five million dollars, or sufficient to maintain the Ontario Agricultural College at its present cost of maintenance for approximately 190 years.

Desirable Potatoes

The potato crop in Ontario in 1915 was the lowest of any year since 1892, the average being only about 73 bushels per acre, according to the latest reports. The results of the experiments at the College for the past year are very interesting.

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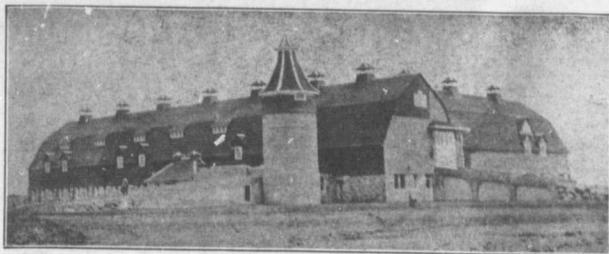
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The Main Farm Buildings in Connection with the Saskatchewan Agricultural College at Saskatoon.

Dairying at Government Farms

THERE are ten government institutions in the province of Ontario with which farms are connected and at which dairy herds are kept. For the year ending Nov. 1st last, these 10 farms carried 394 cows, which produced 3,102,671 lbs. of milk with an estimated market value of \$60,000. The most noteworthy fact about these government herds is the high average production. Evidently M. S. E. Todd, under whose supervision these herds are, has not allowed politics to play any part in the management of his department, at least politics have not been allowed to infringe on the efficiency of the cows. The following table tells its own story:

Institution at	Number of Cows		Total Production	Average Production
	Number	Total		
Brookville	68	324,101	6,544	96.2
Guelph	78	794,473	9,388	120.4
Hamilton	64	517,131	4,979	77.6
Kingston	57	17,433	4,872	85.5
London	34	390,913	4,556	134.3
Mississauga	34	281,296	5,023	147.7
Orillia	30	281,256	9,283	309.4
Woodstock	24	235,181	9,283	386.8
Penetang	22	156,258	7,111	323.3
Whitby	35	346,761	7,650	218.9

Eight of these herds are Holstein grades, with the exception of a few pure-bred cows at Hamilton. At Penetang Ayrshire grades were kept and at Whitby, milking Shorthorns. These figures reflect credit on the management of the herds, when it is considered that in the averages two-year and three-year-old heifers are included. The improvement that has been obtained through intelligent selection and breeding is strongly evidenced at Guelph, where four years ago the highest yield from an individual cow was 9,000 lbs., while last year the average for 78 cows was 9,288 lbs., and individual cows produced 12,616 lbs.; 12,368 lbs.; 11,997 lbs.; 11,472 lbs., and 10,168 lbs. A minimum production for the year has now been set at 9,000 lbs. Four cows at Woodstock averaged 14,673 lbs.; 12,838 lbs.; 10,402 lbs., and 10,149 lbs. respectively. At Hamilton, where there are more pure-bred cows, three cows produced about 13,000 lbs. each and two cows over 10,000 lbs. each.

It is now intended to change the Holstein herds that were at Brockville, Woodstock and Orillia to Shorthorn grades. The Shorthorn grades will still produce sufficient milk for these respective institutions, and the calves will be used for stocking a ranch to be opened in connection with the Industrial Farm in the Sudbury district.

Managing the Winning Herd

Jas. Burton & Son, Elgin Co., Ont.

WE are requested to give our methods with our dairy herd, which won first in the herd competition conducted by the Western Ontario Dairymen's Association.

We weed out the poorest cows every year, replacing them to the best of our knowledge with better ones, but we have never paid high prices, not more than \$90. Although we keep a good

pure-bred sire we do not raise any calves, but keep him for the sale of them.

When the cows freshen in the spring we always have sugar beets to feed them along with their ration of chop, made up of corn and oats, but generally give them bran mash for a few days when first freshened to bring them to their milk. We always keep our cows in the stable until at least May 24th, for we think if turned out before, it does not give the pasture a good enough start to last during the remainder of the season.

After being turned out about a week we take the grain away from them. By that time they are used to the grass. We do not give them any more grain until the pasture begins to dry up. About the middle of July or the first of August we start feeding them bran, giving them two quarts each twice a day until about the 1st of October, when we mix with the bran a third oat chop, giving them about three quarts the remainder of the season. During the season we did not give them any extra green fodder, but tried to give them a change from one field to another every few days.

We generally have them dry up about the first of the year and have them freshen in February and March, having them dry from six weeks to two months.

Rearing Calves McKay's Way

Geo. McKay, Perth Co., Ont.

I HAVE read several letters on calf-rearing, of which I was pleased to see as the experience of others is always helpful when the prices of milk and milfeeds are high and good results important. Many men have many experiences, but here is mine. I believe a man should consider the finish before he starts to do anything, and if you cannot see something for your trouble you had better not start.

In the spring of 1911 I bought my first pure-bred Holstein heifer calf, and wanting to grow as good a cow as possible and as cheap as possible, this is the way I proceeded and the results. I brought her home at about a week old. I started her on five lbs. of fresh warm milk from the cow as soon after milking as possible twice a day. I kept clean fresh water in a clean wooden pail before her all the time, with salt in the one end of the manger away from her feed and water.

When I went to feed her the milk I took a small handful of the meal I was feeding the cows, which was bran, oats and oilcake, equal parts by weight, and as soon as she was finished drinking I rubbed it on her nose. She soon learned to eat it out of the manger. When she was about three weeks old she was eating nicely. I then began to put some finely pulped roots in with the meal, and from that on I fed her all the meal and roots and hay she would clean up. I then began to cut down the milk until at about four weeks she was getting only 2½ lbs. twice a day as warm from the cow as possible. I never saw any sign of scours or indigestion, and there was no time lost making gruel; besides I don't believe it is good for the calf to swallow down meal either cooked or raw without chewing, as half the digestion takes place in the mouth.

She was loose in a box stall, so took plenty of exercise. She was never out the first year. As soon as the new corn came in she had all she wanted of it, and new roots and the best clover hay I had with all she would clean up of the same kind of crop until about June 1st, 1912. She was then turned out on good pasture when her milk and chop was discontinued until the fall, when she would come in at nights with the cows. I then began to feed her the same kind of meal and the same kind of feed as the cow had all winter. I like the bran, oats and oilcake as it seems to keep them in fine condition and is a good muscle and bone builder.

She grew fairly well, considering who fed her. I bred her so as to freshen at about two and one-half years, and to-day I don't know what she weighs, but her heart girth is six feet eleven inches.

I might say her best milking her first year was about 48 lbs. a day, her next year she beat 60 and I hope this year to see her do better. I believe if you stunt a calf's growth you stunt its good qualities too, and a small dried up runt of a cow is certainly a disgrace and a loss to any dairyman.

Our idea of an obstinate man: A motorist with his car stalled in a snowbank, but still declaring that there is now no place for the horse.



Live Stock at the Saskatchewan College. Shorthorns, Ayrshires, Holsteins and Jerseys Are All Represented.

130-Egg Incubator and Brooder for \$13.90

If ordered together we send both machines for only \$13.90 and we **C. FREIGHT AND DUTY PAID**

We have branch warehouses in Winnipeg, Man. and Toronto, Ont.

Ordn. shipped from nearest warehouse to your R. R. station.

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Eggs as They Are

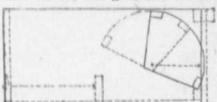
THERE is only one kind of egg in demand for the highest class of trade—Specials. The average 80-dozen case of eggs that comes in from the country, grades out about as follows:

Specials, none; Extras, 4 1/2 doz., 15%; No. 1's, 9 doz., 30%; No. 2's 10% doz., 35%; Bad and dirty, 4 1/2 doz., 15%; (No. 1 for food) 1 1/2 doz., 5%.

This analysis was announced in connection with the poultry display of the Live Stock Branch at the recent Guelph Winter Fair. It indicates big room for improvement in the quality of country eggs.

Easily Constructed Trap Nest

THE two diagrams herewith will give an idea of the construction of the simple trap nest that is being advocated by the Poultry Department of Macdonald College. The nest has two compartments. The hen lays in the rear compartment. The door is made in the type of a hollow cylinder and is covered with a wire of fine mesh. It is balanced in the first compartment. As the hen goes into the sec-



ond compartment her back touches the back of the quarter-cylinder door throwing it off its balance so that it closes. The hen of course must remain within until released.

The main structure of the nest is a rectangular box 14 inches wide, 12 inches high and 94 inches deep. Other details in the construction may be gotten from the diagrams published herewith.

The Diseases of Poultry

A CONSTANT source of loss in the poultry yard are the diseases which occasionally play havoc with both chicks and laying birds. So wide spread are the losses through poultry diseases that it is safe to say that considerably more than 80 per cent of the correspondence of those engaged in poultry work in the agricultural colleges and experimental stations relates to poultry diseases.

The latest addition to the many books that have been written informing poultry men on the recognition, cure and future prevention of disease, is entitled "Diseases of Poultry" and is edited by three of the best known poultry men in America—Raymond Pearl, Frank M. Surface, and Maymie R. Curtis of the Maine Agricultural Experiment Station, a station that has probably conducted more constructive experimental work with poultry than all other stations combined. This book is published by the MacMillan Company of Canada and may be had through Farm and Dairy at the regular publication rate of \$2. It covers every phase of the subject exhaustively in 842 pages of printed matter.

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Peerless Poultry Fence is closed woven. It's a real protection to not only large fowls, but chicks as well. They can't get through. Neither can harm get through to them. For

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is not mere poultry netting—it's real fencing. Every intersection of wires is securely locked together. They can't slip or get loose. It is made of Open Hearth steel wire with all impurities burned out and all the strength left in. Well galvanized. Top and bottom wires are extra heavy. No top or bottom boards needed. Requires less posts than ordinary poultry fencing!

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2. They are durable.
3. They are strong.
4. They are fireproof.
5. They are durable.
6. They are strong.

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1. They are fireproof.
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3. They are strong.
4. They are fireproof.
5. They are durable.
6. They are strong.

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The Fanning Mill: Production and Use

(Continued from page 4.)

or 20 minutes, or the time of two men for 20 minutes is worth how much? Twenty-five cents? A slow machine might take an hour to clean 20 bushels. At the same rate per hour this time would be worth 75 cts. A saving of 50 cts. on the seed for a 10-acre field of oats? And what is the price paid for this saving? It may be two or even 10 bushels of oats per acre and a liberal sprinkling of weed seeds. It looks like poor economy to say the least.

Take another example — alfalfa seed. Alfalfa seed is worth anywhere from 20 cts. to \$1 a pound—call it 40 cts. a pound. Even when operating very slowly at five bushels an hour the value of the seed that is cleaned is \$120. If it put through quickly and imperfect work done, the market value may easily be reduced 20 per cent. or to instead of \$120, only \$96. It may be worth less or even nothing. Speed is important. Efficiency is the primary consideration.

Construction of the Mill

Next to efficiency few things are of more importance than the construction of the mill. We want a machine that will stand up to the work, that will give good service over a number of years and fall to pieces after a season or two's work. This is probably more important with the screens than the balance of the mill, but if one part is well built usually it is all of good construction, and if one part is shoddy it is probably all imitation.

Simplicity is another requisite. The ideal machine is one that is easy of adjustment, one that does not require a mechanic to operate or a machinist to repair. The most successful operation of any mill will involve some experimental work to get the most out of it, but it should not be necessary to spend time in experimenting to get reasonable service. For the most part hand machines are best for ordinary farm purposes. The volume of work can readily be handled by a hand machine and the additional cost of a power outfit is not warranted by the better work they do. But there is a place for the power machine in the hands of the seed centres that are springing up here and there through the country under the supervision of the C.S.G.A. These seed centres will reap the advantage of organization through being able to supply in large quantities a good grade of seed of uniform quality. Uniformity is difficult to get where the seed is grown on a large number of farms with different soils under varying conditions of management. These differences are accentuated by having the grain cleaned by a dozen different makes of fanning mills. If each seed centre had a central cleaning plant equipped with a first-class power mill and all seed cleaned under the supervision of one man, these differences could be minimized. The improvement wrought in the grain would amply justify the expenditures.

Operation Instruction Lacking

When we come to consider specific methods of cleaning grains and seeds with certain impurities or separating various mixtures, we find a startling paucity of data. Most fanning mills when bought are accompanied by more or less detailed instructions for operating, but these are often not only very incomplete, but also misleading, and do not always work out in practice. The original equipment of screens is frequently not sufficient to make many of the finely separations, and few Canadian manufacturers are in a position to

give any advice regarding the screens required for particular work. There appears to be a demand for information along these lines, and we now have under consideration and hope to be able to carry through a plan whereby we can get some data on this important subject. What we require is data that will enable us to say just how each make of fanning mill can best be adjusted for each specific job. This information can be got only by experimenting with each machine and with a great variety of material. It should be valuable both to those who manufacture and to those who use the mills.

A Productive Dairy Farm

In a recent report Mr. A. D. McIntosh, District Representative for Hastings Co., Ont., reports on a productive farm in his county. How many can equal or excel his record? Mr. McIntosh writes as follows: "Mr. Townsend, of Lot 12, con. 8, Thurlow, on whose farm is situated the largest and most successful cooperative piggery in Hastings County, gave me particulars of the output of his farm this year. From the 14 cows he received over \$1,500, raising only about a ton of feed not raised on the place. He also sold \$600 worth of hogs, \$860 worth of eggs and has about \$850 worth of hay still for sale, with enough ensilage hay and grain to winter his entire stock. On our recommendation he is going to experiment this year in a somewhat extensive way with the use of crush-ers and magnificient houses and barns and auto, we are pleased to note that Mr. Townsend is not only making money, but is enjoying himself in progressive agriculture."

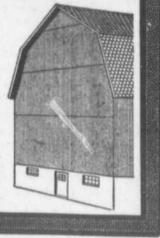
"Metallic" Corrugated Iron Barns are Lightning, Fire, and Weather-Proof

Lumber and labor are too expensive to be used in farm buildings; besides, wood buildings are easily destroyed by fire and lightning. "Metallic" Corrugated Iron makes buildings that last a life-time; that are warm and dry; and proof against fire, lightning and weather.

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You save money on labor and lumber when you use "Metallic" Corrugated Iron. Write for complete information before you buy any building material. We can save you money. Our corrugated iron is made in galvanized or painted sheets, straight or curved.

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Central Experimental Farm, Ottawa, Prof. F. C. Elford Poultry Husbandman for the Canadian Government. The Candee poultry is worth knowing about. Reports come in from different parts of Ontario and British Columbia as well as all parts of Canada showing remarkable satisfaction with the Cool-Barring Candee Colony Brooders.

Mr. George W. Sully, "Sunnyvale," Cobourg, Ont., writes June 1, 1915: "I am well pleased with my Candee Colony Brooder and with your service generally, as anything I have ordered has been promptly forwarded and has given entire satisfaction." Broods Up to 500 Chicks Burns Coal

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It has several superior features which are carefully described in a big illustrated Catalog. Send for it and study the advantages of the larger grate with coal fire, and thermostat that automatically opens and closes the draft and holds correct heat all the time. Guaranteed all-wood curtain and big all-around louver. Get your copy of this Catalog and raise more and better chicks. Write today.

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MAKING good fence is a clear, straight matter of conscience and good business. We could make more profit per rod if we didn't build it with the durability of our fence that has built up the biggest wire fence business in Canada.

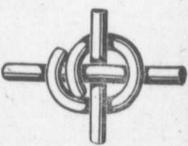
There are so many ways a fence manufacturer can "skimp"—a little lighter wire for the locks, a little lighter galvanizing; a wire slightly under full gauge—and the money-making job is done.

But the get-rich-quick Fence House has a hard time getting a hearing where Page Fence is known. For the name "Page" has come to

mean as much with most men who buy fence that its reputation far outweighs the temptation of lower prices.

As a matter of fact, Page prices are down to the fine point—down as low as you dare pay if you want a fence that will last. They've been brought down by large output and our factory-to-farm method of selling.

If you want "lifetime" fence at the price of mere ordinary fence send your next order to Page. By writing the Page Branch that is nearest to you, you will get immediate shipment with freight prepaid if your order amounts to \$10.00 or more.



We cannot make ALL the fence—so we "make the best of it."

PRICE LIST				
No. of Bars	Height	Stays (inches apart)	Spacing of horizontals	Price in Old Ontario
6	40	10	6-1-7-8-9-9	30
7	40	10	5-1-7-7-8-8	30
8	40	10	6-6-6-6-6-6-6-6	31
8	42	10	6-6-6-6-6-6-6-6	35
8	47	10	4-4-5-1-7-8-9-9	38
9	40	10	6-6-6-6-6-6-6-6	40
9	42	10	6-6-6-6-6-6-6-6	43
9	47	10	4-4-5-1-7-8-9-9	43
10	40	10	4-4-5-1-7-8-9-9	43
10	42	10	3-3-4-5-1-7-7-1-8	46
10	47	10	3-3-4-5-1-7-7-1-8	46
11	35	10	3-3-3-3-4-5-1-7-9-9-9-9	49

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UNCLE SAM'S newspaper press is ringing an alarm in the ears of millions of readers on the necessity of being prepared as a nation for aggression on the part of European powers. *Preparedness* is the word of the hour. The nations have learned their lesson and learned it thoroughly, and at great cost. No nation will be allowed in future to take any other nation by surprise.

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disk harrows and plows

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FARMERS

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OR DIRECTLY
TO THE MANUFACTURER

Dominion Grange Speaks for Farmers

THE members of the oldest farmers' organization in Canada, the Dominion Grange, held their 41st annual meeting in Toronto on February 1st. Two sessions were held, one in the afternoon and the other in the evening. The afternoon session was especially well attended, about 50 delegates being present, representing nearly as many organizations. A feature of the gathering, different from those of the United Farmers of Ontario, which met the following two days, was the presence of ladies, which added considerably to the interest in the gathering and to its pleasant character.

The Dominion Master, W. E. Wardell, of Middlemarch, gave a history of the Grange since its organization in the city of London in 1874, and showed the effect that it has had in influencing legislation of value to the agricultural interests. The good work being done by the United Farmers' Cooperative Company was commended. Local Granges were urged to appoint press committees in order to keep their work before the public. The building up of the order and the preservation of the ritual was urged.

Secretary J. J. Morrison referred to the good work that had been done by the Grange in the organization of the United Farmers of Ontario, all with which was the United Farmers' Cooperative Company, Limited. He asked the members to consider what the attitude of the Grange in the future should be to these new organizations and to decide what their special sphere of work should be if it was decided to continue the Grange as a separate organization. There were 43 Granges in good standing, of which 12 had affiliated themselves with the United Farmers of Ontario, leaving 22 affiliated with the Dominion Grange.

The statement of receipts and expenditures showed total receipts of \$292.40, expenditures of \$208.63, and a balance on hand of \$84.57. A deficit from 1914 of \$30.93 and a net of \$100 and interest had been paid, leaving a debt of \$70.73, not including the payment of delegates' railway fares, which would have to be provided for. Later a number of the delegates pledged their granges to contribute to a fund to wipe out this deficit and leave the order with a balance on the right side.

Officers Elected.

The following officers were elected: Master: J. C. Dixon, Moorefield, Ont.; Overseer: Jno. Carswell, Palmerston; Secretary-Treasurer: J. J. Morrison, Arthur; Chaplin: Wm. McCrae, Guelph, Ont.; Lecturer: Henry Glendinning, Manilla, Ont.; Steward: Percy H. Sanderson, Dresden, Ont.; Assistant Steward: W. E. Lesson, Aylmer, Ont.; Gate Keeper: Ivo Pritchard, Gortie, Ont.; Ceres: Miss M. Thompson, Palmerston, Ont.; Pomona: Miss E. Gilbert, St. Thomas, Ont.; Flora: Mrs. J. D. Pound, Aylmer, Ont.; Lady Assistant Steward: Miss Dora Futch, Middlemarch.

Executive Committee: W. E. Wardell, St. Thomas, Ont.; Jno. McArthur, Holstein, Ont.; Judson Austin, Simcoe, Ont., with the Master and Secretary. Auditors: T. H. Adams, Essex, Ont.; Jos. Goodwin, Palmerston, Ont.

Social Features.

The evening gathering was largely social in character. Addresses were given by several members, in which the opinion was expressed that the Grange should continue its work as a separate organization while cooperating with the new organization, the United Farmers' of Ontario.

The ritual of the Grange is unusually fine and impressive. It was in the installation of the new officers,

the work being conducted by the ladies present, under the direction of Miss Hattie Robinson, of St. Thomas.

The re-organization of dormant granges, especially those which hold stock in the Peoples' Salt Well, on which considerable profits have accumulated, was urged. Most of the delegates remained over for two days and attended the meetings of the United Farmers of Ontario.

The Ontario Corn Show

(Continued from page 2.)

has been secured from any corn. Maritime province growers will buy seed corn if they can get a variety that will yield 15 tons of well matured ensilage to the acre.

E. D. Eddy, of the Seed Branch, Ottawa, proposed voluntary cooperation between the farmers and the branch for the control of the seed corn grade. He proposed that the corn be graded according to quality of ear and germination tests into Extra No. 1 with a 36 per cent germination, No. 1, 90 per cent and No. 2, 85 per cent. Seed corn producers will be invited to sign agreements bringing them under the terms of the proposal. If agreeing to grade and guarantee their corn accordingly.

Prof. Moore, of Madison, Wis., emphasized the possibilities and vast importance of plant breeding. The corn breeding method that he favored was the purer to the row method of selection. What may be accomplished by plant feeding he illustrated by his own work in Wisconsin. Sixteen years ago Wisconsin was not regarded as a corn growing state and the Experimental Union was organized for the purpose of encouraging seed selection. To-day, instead of many varieties, nearly 75 per cent of the corn grown in the State is of two main varieties, and Wisconsin leads all the states, even the corn growing states of Iowa and Illinois, in yield of corn per acre. Practically whole townships now grow the same variety of corn.

Sweepstakes Winners.

Canadian Farm Trophy, for best ten ears of Dent corn in the show, A. Wimmer, Essex; Farm and Dairy Trophy, best ten ears, J. B. Hinkinson, Aylmer; Best single ear Dent corn, A. B. Wimmer, Essex; best single ear Flint corn, John Sheehy, Hiram; Imperial Bank Trophy, best ten ears from County, A. E. Wimmer, Essex; D. A. Gordon (M.P.), Trophy, best ten ears, Kent county, E. J. Wilson, Charing Cross; Merchants' Bank Trophy, best ten ears white cap, Yellow corn, J. B. Parsons, Middlemarch; Bank of Commerce Trophy, best five ears Dent corn, J. B. Parsons, Middlemarch; Essex; J. A. Fletcher Cup, for best ten ears, any variety corn grown in Tilbury East Township, J. B. Parsons, Middlemarch; for best ten ears, any variety corn, grown under 16 years of age, was won again this year by Mirnie Foster of Tilbury; A. H. Conroy, winner of the minister's class, was the judges' class, John Molloy, Port Lambton; Tilbury East Farmers' Club Trophy, open to members of show club, for the best ten ears Dent corn, won by A. Foster, Tilbury; and another for the best ten ears Dent corn was won by Neil Foster of Tilbury; John Miller special for best ten ears from Amherst (Dent or Goldsheater South, was won by S. Russell Rogers of Kingsville); G. W. Sulman (M.P.) Special for best ten ears Dent corn from West Kent, was won by W. G. Stark, Chatham; J. C. Wainwright, special for best ten ears Flint corn, a show won by E. H. Robinson, Chatham; C. Lorrain Special, for second best ten ears Dent corn in show, won by W. Anderson, Amherst; Seed-testing Machine Company Special, for best decorative display of any grain, won by James Gillies.

The Inter-County Live Stock Judging Competition held in connection with the Ottawa Winter Fair resulted as follows: First, Lanark county, 1,056 points; second, Stormont, 968 points; third, Lennox and Addington, 853; fourth, Grenville, 878; fifth, Frontenac, 883; sixth, Leeds, 843; seventh, Northumberland, 802 points; eighth, Dundas, 799; ninth, Prince Edward, 723.

The work being conducted by the ladies present, under the direction of Miss Hattie Robinson, of St. Thomas. The re-organization of dormant granges, especially those which hold stock in the Peoples' Salt Well, on which considerable profits have accumulated, was urged. Most of the delegates remained over for two days and attended the meetings of the United Farmers of Ontario.

Notes

THE first busy one of the conventions of the Farm and Dairy Association to provide for the coming of the ports of to be deferred.

Dominion

The principle of the Dominion Cattle Show had to do with of pure bred sires, under the auspices of 1915 breeders' 1915, 216 head were shipped including eight sheep and 104 shipping these amount collected shippers by of this deficit was committee consisted of John Gardhous, W. Dryden, Minister of Agriculture, grant covering the current. The show constructed to ask assistance from the Representative.

Representative

appointed as the national, President of the Western Fair, W. Ballantyne, of Tawa, the President; Winter F. P. Ballantyne, of White; East; P. J. White, K.C.P. P. F. Stephens, Minister of Genera. G. E. Day at O.A.C.

Shorthorn

Is the Shorthorn beef a is a qu naturally be a cattle fore, opened to attend of the Dominion Farmers' Association show was placed the future hope of the Society Westering was an enthusiastic. All requests for stock to enhance the popularity of the executive carry on an active including the act to conduct the show. The usual annual fair, \$4,700, the power to make they might see the minister's attention to appear to sell live stock made or controlled of Agriculture recommended that an act to secure a license for in the past act has been issued only for an outside to be imported to or dispersion sale to be paid by the summing up the organization of the house said:

"Our resignation of \$1,188 being an of 1914. Our membership, registered total \$20,200, 1, 1,149, and to the 18,299. Our ever, have been mounting to \$11 gain for the \$4.80. Our mem

the work being conducted by the ladies present, under the direction of Miss Hattie Robinson, of St. Thomas. The re-organization of dormant granges, especially those which hold stock in the Peoples' Salt Well, on which considerable profits have accumulated, was urged. Most of the delegates remained over for two days and attended the meetings of the United Farmers of Ontario.

The evening gathering was largely social in character. Addresses were given by several members, in which the opinion was expressed that the Grange should continue its work as a separate organization while cooperating with the new organization, the United Farmers' of Ontario.

Notes from the Live Stock Conventions

THE first week of February was a busy one for the live stock associations of Canada and of the province of Ontario. Practically all held their annual meetings in Toronto during that week and a few of the conventions were reported fully in Farm and Dairy last week—those having to do with the dairy industry. Owing to the lack of space, brief reports of the other conventions had to be deferred to this issue.

Dominion Cattle Breeders

The principal business of the Dominion Cattle Breeders' Association, had to do with the shipment of cars of pure bred stock to Western Canada, under the auspices of the various breeders' associations. During 1915, 216 head of pure bred animals were shipped to the west in this way, including eight hogs, 28 horses, 75 sheep and 104 cattle. The cost of shipping these animals exceeded the amount collected from the individual shippers by over \$700. How to meet this deficit was the problem. A committee consisting of the President, John Gardhouse, H. V. Smith, and W. W. Dryden, was appointed to ask the Minister of Agriculture for a grant covering part of the loss incurred. The same committee was instructed to ask the different breeders' associations for help.

Representatives to fair boards were appointed as follows: Canadian National, President John Gardhouse; Western Fair, Harry Smith and W. W. Ballantyne; Ontario, Ottawa, the President and J. J. Hodgins; Winter Fair, W. A. Dryden and the President, for beef cattle, and W. W. Ballantyne and R. S. Stevenson for dairy; Eastern Winter Fair, Peter White, K.C., Prof. Grisdale and W. F. Stephens. Mr. Gardhouse was appointed General Director, and Prof. G. E. Day as representative of the O.A.C.

Shorthorn Breeders' Meet

Is the Shorthorn a dairy animal or a beef is a question that might not unaturally be asked by one unversed in cattle lore, who might have happened to attend the annual meeting of the Dominion Shorthorn Breeders' Association. The dual purpose cow was placed on the pedestal as the future hope of the country, especially Western Canada. The meeting was an enthusiastic one and well attended. All reported a splendid demand for stock and to still further enhance the popularity of the breed, the executive was empowered to carry on an active publicity campaign including the appointing of field men to conduct the work.

The usual amount was granted to fair, \$4,700, the committee being given power to make such increases as they might see fit. The various projects of the ministry were petitioned to appoint official auctioneers to sell live stock at public sales, made or controlled by the Department of Agriculture and that the law be so amended that any auctioneer may secure a license for the whole province. In the past auctioneers licenses have been issued only for the county and where an outside auctioneer, has to be imported to conduct a commission or dispersion sale his license has had to be paid by the holder of the sale. Summing up the financial standing of the association, President J. Gardhouse said:

"Our resignations for 1915 numbered 11,185 being an increase of 948 over 1914. Our receipts from membership, registrations and books sold total \$20,290.80, being an increase of \$1,140.98, and our cash on hand amounts to the substantial sum of \$2,260.48. Our disbursements, however, have been somewhat heavier, amounting to \$18,781.64, but our net gain for the year amounts to \$8,548.90. Our membership increased in

1915 by 250; our total membership is now 2,294. To prove the dairy merit of the Shorthorn, Mr. Gardhouse summarized the records entered in record of performance from April 1910 to the present time. Twelve two-year-old hid silfers gave an average of over 6,000 pounds of milk, testing 4.20 per cent. butter fat; 19 three-year-old cows gave an average of slightly over 6,000 pounds of milk, testing 3.90 per cent; 6 four-year-old cows averaged 7,100 pounds of milk testing 3.85 per cent; 85 mature cows averaged over 8,700 pounds of milk testing 3.90 per cent. The chief officers were re-elected.

With the Clydesdale Men

The annual report of the directors of Canada, strongly criticized the methods pursued by the Dominion government in the purchasing of horses for military purposes,—"too many middlemen acting between the farmers and the army authorities." "The difficulty in the past," stated the report, "has been the lack of a proper organization for the assembly of horses at central points for inspection by removal officers and the allied forces and the Dominion, an organization should be under the control of the Dominion Live Stock Commissioner."

The past year the directors reported as being a most trying one for horsemen in general. The demand for horses for military purposes has not yet fully materialized and purchasing of remounts has not been of sufficient volume to include the surplus lines of horses suitable for the purpose and he has had little effect upon the Canadian market for heavy horses. A conviction was expressed, however, that before peace is declared, there will be such a demand for horses as never before experienced in Canada, and, as there has been less breeding, this year's foals should grow into valuable property. Finally advice was given to farmers to hold on to their brood mares as after the war there will be a heavy demand for the breeding stock from the Old Country.

The association contributed toward a fund of \$6,000 established by the horse breeders of Canada, toward the purchase of a horse field ambulance, fully equipped for the use of the Canadian forces. The financial statement showed receipts of \$10,918 compared with \$10,709 in the preceding year, and the figures for the two years being \$11,780 and \$16,774 respectively. Last year the sum of \$5,032 was distributed in grants to the various fairs as compared with \$6,419 in the previous year.

The following officers were elected: President, John Boag, Queensville; Vice-President, William Graham, Claremont; General Directors—Messrs. William McCreedy, Napinka, Manitoba; Walter Scott, Sutton, W. F. Richardson, Columbus; James Torrance, Markham; T. H. Hassard, Markham; Jas. Henderson, Thamesford; and Dr. Elliott, Bolton; Secretary-treasurer, Mr. J. W. Wheaton, Toronto.

Fairs and Exhibitions

Many of the delegates to the various live stock conventions also took advantage of their trip to Toronto during the 16th annual convention of the Ontario Association of Fairs and Exhibitions, which was held at the same time. The question of school fairs came in for considerable discussion. It seems in fact that the school fair is now more important and better patronized than the regular fall fairs and president J. C. Stewart suggested that there should be some way of working them together.

The Farmers' Grain Exchange

Strong Vigorous Seeds to Start for a Big Yield

O. A. C. No. 72 Oats

FOR SALE. Good pure seed, true to name, selected from prize field a year. Price 80c. sacks free.

SAMUEL G. CARR, R. R. 2, PARIS, ONT.

GOOD PLUMP, CLEAR SEED O. A. C. No. 72 OATS

Carefully weeded while growing, price 90c. per bushel. Samples sent, 100 lbs. in Cotton Bags, 50c. extra. Bags hold Three Bushels.

EDGAR BRODERICK, R. R. 1, EXETER, Ont.

GROWN FROM REGISTERED SEED

from 2nd generation Elite Stock—O. A. C. No. 72 Oats. Seed carefully hand-picked before being sown to insure a clean seed—65c per bush. Seed carefully hand-picked before sowing—grown from seed purchased 2 years ago and carefully hand-loom and every precaution is taken to keep them pure and clean. They test 24 lbs. per measured bush—all seed from standing grain.

GOLDEN VINE PEAS—A limited quantity at \$2.25 per bush—a fair sample for this season.

Price 80c extra. (Samples on request.)

Price F.O.B. Peterburg, Ont. (G.T.R.) or Arr. C.P.R.

HENRY H. SCHLICHTER, Maple Avenue Farm, R. R. 1, NEW DUNDEE, ONT.

O. A. C. No. 72 OATS

The best yielding oats in the province in 1915. Have about 60 bushels good, pure, clean seed Oats of this variety for sale at 75c per bu. Bag five over per bu.

C. F. IRELAND
R. R. 1, WELLINGTON, ONT.

O. A. C. No. 72 OATS

FOR SALE—Good Clean Seed, true to name, selected from prize winning field a year ago. Price 80c per bush. F.O.B. Woodville. Sacks free.

GEORGE McCAIG
R. R. No. 4, Woodville, Ont.

FOR SALE

Everything from an apple tree to a strawberry plant, shade, nut, ornamental and evergreen trees, ornamental shrubs and vines, roses, hardy flowering plants, tulips, asparagus; guaranteed stock at reasonable prices.

Catalogue free (Silver Black Foxes)

Downham Bros., Box 3, Strathroy, Ont.

FOR SALE

Clean Seed Early O. A. C. No. 21

Price \$1.00 per bus.

H. DIAMOND, R. R. 1, NEWTON, ONT.

SEED CORN—WISCONSIN No. 7

We have some fine Wis. No. 7 Seed Corn for sale. This corn is picked from the standing stalk, carefully selected, and placed in our dryer, a building built for that purpose. This method of drying insures the buyer of a fine crop of Corn next fall. Owing to the unusual wet season throughout the corn belt, good seed corn is being very scarce. Our supply is limited. Write for prices at once.

THE POTTER FARM
R. R. 2, ESSEX, ONT.

Reliable Seed Corn

"The Best is not too good."

All my customers were satisfied last year. I want to satisfy more this year. Order early. Supply limited.

EDWARD WARWICK, BLENNHEIM, Ont.

SEED CORN

We have to offer this year choice rack-cured Seed Corn of "home grown" varieties; the only corn to plant this year. In many years' experience, we have in many trials the most reliable method of curing seed corn. Write for prices and information to—

ST. JOACHIM SEED CORN GROWERS
Box 4, St. Joachim, Ont.

To the Corn Growers of the Dominion

Not since the year 1878 has there been so little good Seed Corn grown on the American continent. The year 1915 found followed by an early frost found 85 per cent. of the Northern zone corn in the milk and Northern zone corn is the only kind which can be grown to advantage in Canada.

Much of the cheap Seed Corn sold in Canada comes from the United States, which country has not had as poor a crop in 85 years as that grown in 1915. The problem is a serious one there, and will be a serious one here, and in view of it those contemplating planting corn this spring, should secure their seed early and test it thoroughly before planting.

We are the largest growers of corn in Canada and there are several reasons why we consider our seed equal, if not superior, to any produced in this country. Our corn is raised on our own land, which is especially prepared for the crop. It is cultivated by us.

The selection of seed is made by competent and experienced men in our employ. Our seed houses are modern and up to date in every respect. Consequently the corn is true "home grown" which other things being equal, has a distinct advantage over corn that you buy by others. By that we mean that in many instances seedlings of Seed Corn know nothing whatever respecting its quality, having had it grown for them on contract.

Notwithstanding the adverse weather conditions described above, we believe that we have more "home grown" seed corn than any grower in Canada, but our supply is nevertheless limited and we suggest that orders should be sent us as early as possible. Although fully aware of the scarcity of good seed, we have not raised our prices which are the same as last year.

Price list and order blanks will be mailed to those desiring them upon application.

WALKER SONS, Proprietors, Essex Farm, WALKERVILLE, Ont.

WALKER 2

is the farm of the next issue of our "Farmers' Grain Exchange." Watch it for any seed you may require. Plan to be in it if you have seed for sale.



McGregor of Ford

RECENTLY ONE OF OUR FRIENDS FROM ACROSS the line was standing on the sidewalk in one of our larger Canadian cities viewing a march past of some of our soldier boys. The kilties were going by.

"How typically Canadian are the kilties," he remarked. "We, on our side of the big pond associate the Highland uniform as much with Canada as with Scotland. Why is it?"

The reply was to the effect that it was because the Scotch had contributed so largely to the settlement and upbuilding of the Dominion and so many Canadians of Scottish ancestry had made themselves worthy of high ranks in the history of Canada.

Among these Canadians of Scotch parentage who have won a place among Canada's great builders of industry we must reckon Gordon M. McGregor of Ford, Ont.

About the year 1850 Mr. McGregor's grandparents set out from Glasgow, Scotland, to settle in what was then a new and far away country—Canada.

A few years later we find them located at Sarnia, Ontario, where a son, William, was born.

When still a young man, William McGregor took a very active interest in the business and political life of the country and was elected a member of the Dominion Parliament, serving his country and his district well and faithfully for twenty years.

Gordon McGregor, about whom this is written, was the son of William McGregor, and was born at Windsor, Ont. As Gordon McGregor grew to manhood he capably assumed much of the business cares of his father.

William McGregor eventually became interested in the Walkerville Wagon Co., at Walkerville, Ontario, and, shortly after, his son, Gordon McGregor, was made manager of the firm. Here the son began to show that business foresight that has made him one of the prominent figures in the business world of Canada.

About this time an event took place in the carriage and wagon industry that caused the greatest concern. This was the advent and the establishment of the automobile as a practical vehicle.

Some dealers and builders were so alarmed that they thought their business would go to immediate rack and ruin and that the auto would supersede horse-drawn vehicles entirely. Others were cool-headed enough to see the advantages that this new industry afforded and governed themselves accordingly.

Among the latter was Gordon McGregor, who believed that he could successfully enter upon the business of manufacturing automobiles and looked about him for wise methods of doing this.

He got in touch with many manufacturers and looked over many makes of cars. Finally, he decided on one make and effected arrangements for its production in this country. The car he chose was the Ford.

He then tried to induce some of his friends in Canada to invest in the project and encountered all the usual cold, disheartening difficulties attendant upon the organization of a new and untried proposition. If they could have but looked ten or eleven years ahead he would have had no worries over the organization of a company even double or quadruple the size.

No stock was offered for sale outside of the Dominion until all Canadians had been given an opportunity to subscribe.

Finally, in August, 1904, they organized the company with a capital of \$125,000.

Then came the difficulties of manufacture and for three years it was a constant struggle to win success.

But success came and a greater success than the founders ever dreamed of—a success abounding in truly marvelous facts and figures.

And this is the story of Gordon McGregor of Ford, Ontario, and of the establishment of the Ford Motor Company of Canada, Limited.

To-day, half the population of four towns depend upon the Ford Company of Canada for their earnings. These are Ford City, Walkerville, Windsor and Sandwich.

The last census states that the average family consists of five persons. As there are over 3,000 employees in the towns mentioned above whose work is devoted to the manufacture of Ford cars, this official census figure shows that there are over 15,000 people that look to the Ford Company for their support. This does not include the nine cities in Canada in which Ford branches are established, which would add over 3,600 more.

And Ford employees are paid three times as well as the average as shown by government wage reports.

In April, 1915, a time when most Canadian manufacturers were following a policy of retrenchment, the present Ford schedule of wages was adopted by which the company virtually handed to its employees \$50,000 a month increased wages and reduced the working hours from nine to eight per day.

Surely, this is a great boon to Canadian workmen and their families. It is a boon to Canadian merchants who benefit by the increased purchasing power of all these families. It is a boon to the entire country in time of war when living expenses are higher than ever before.

And these employees have responded in like measure to the Empire's need for her people's support, Ford City alone having made what is probably a record contribution to the Patriotic Fund of \$34 per capita.

More than 300 Ford employees have enlisted for overseas service, and the Company is spending thousands of dollars in moving pictures which are offered free to assist in recruiting work all over the Dominion.

What an immense expression of confidence in the ultimate and unquestionable success of British arms and the allied cause was this great wage increase!

But it was not the only evidence of the Ford Company's faith in the Empire.

Before the outbreak of hostilities the Company decided to reduce the price of the car by \$80. When the war came upon us the Company might well have been pardoned for withholding this reduction for a time. But they never even considered it. The reduction was made the same day war was declared.

And you can realize how real this confidence in the victorious prosperity of Canada was when you consider that the prices of Ford cars are set in accordance with the estimated production for the coming fiscal year and not by any means are they based on the profits of the preceding year.

\$602,000 has been spent on new buildings in Ford City since the war began.

Over \$1,000,000 has been spent on new buildings in four Canadian cities since war began, making a total expenditure for new buildings of approximately a million and three quarters.

\$1,000,000 has been spent in new equipment since war began.

900 men have been added to the pay roll since war began.

And if there is needed further proof of this Company's absolute conviction in the progress and prosperity of the Dominion, it may be found in the fact that another \$60 reduction in the price of the car was made last August—making a total reduction of \$120.00 since war began.

This new price requires an output of 40,000 cars this year.

Then, too, the price of Ford parts has been reduced by \$147 per car—a reduction that means a big increase in economy to Ford owners.

Such immense expenditures and price reductions are the fare of the greatest benefit to the general welfare of the nation under existing conditions. They form one of the greatest possible influences towards boosting the prosperity of Canada.

Remember that all but \$16.88 worth of the material that goes into the construction of a Ford car is bought here in Canada—and it would all be bought here if it were possible to get it.

Truly, the Ford is, after all, a Canadian Car, built by Canadians. Very few Canadian manufacturers are able to show such a support to Canadian industry as this.

The Canadian Ford Company is basing this year's factory production plans on just double the business done last year.

They stake everything on the conviction that Canada is bound to prosper. They place all on the belief that Britain and her allies are bound to win.

McGregor of Ford and his Canadian associates may be pardoned for feeling proud of this record.

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The Feeders' Corner

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

Light on Cattle Feeding

J. Eldridge, Bruce Co., Ont.

TO throw some light on Mr. Squire's recent experience in feeding cattle for the agreed price of six cents for every pound gained in weight, it seems to me that under the circumstances this price was too low.

It is a common custom for farmers to take in feeders and feed five months or more to get one cent a pound live weight when taken in and an additional six cents a pound for every pound gained. This price was paid previous to three years ago when the prices of cattle were considerably lower than at present.

I have kept track of the cost of feeding cattle a couple of times and was not very well pleased with the result of one experience. To keep an account of the cost for a couple of years means some trouble. As we have experimental farms for this purpose I will refer to those reports.

The report of the Live Stock Association of Ontario for 1904 contains an article on "Raising Baby Beef". At the Experiment Farm, Ottawa, it was found that the average cost of feed to raise calves up to six months old was 2 1/2 cts a pound live weight. If you feed them from six months to 12 months the average cost is from four to five cents to continue from one year to two years old, the cost of putting on a pound of gain, if on pasture alone, in the summer is from five to six cents and to continue for another year the cost is from seven to ten cents. In addition to this the statement is made.

"We expect steers to put on two pounds a day from that start until they are ready for the block. If they do not make about 700 pounds a year, then there is something wrong; especially is this true for the first year. Cattle gaining at this rate have very often failed to gain in weight during the months of either July or August.

A similar occurrence must have happened to the four head of cattle which boarded at Mr. Squire's farm for forty seven days and gained only 68 pounds. Now if the cost is five cents a pound on pasture alone, then 2 1/2 cents a day is not enough; it should be five cents a day per head.

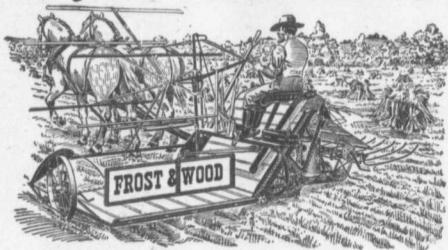
A later report for the year of 1906 shows that 40 steers in six months gained 425 pounds each at a feed cost of something like \$18 per steer. Other steers have gained as much as 70 to 100 pounds in two weeks on a palatable ration of ensilage, roots and straw as much as they would eat."

Feed Above Maintenance

It takes from one half to two thirds of a "full feed" to maintain an animal. Hence there is no increase in flesh, etc., especially what is eaten in excess of the food of support. The secret of success in cattle raising is to know how to fill them to the top notch with palatable food without overfeeding and make them grow during their growing period. Calves are the most neglected animals on the farms. Everything else such their dams, therefore calves need as much attention as a fast growing bunch of hogs and require a variety of meals, fodder, and roots. When beef cattle are finished for the market at the age of 2 to 2 1/2 years the feed cost is 50 per cent less than for cattle of the same marketable value, but a year older.

I have raised baby heaves a couple of times and think that where there

Buy Your Binder RIGHT



The most important implement investment any farmer can make certainly is his Binder, and right there, because thousands of farmers realize that fact, you have the reason for the tremendous popularity of the

Frost and Wood Binder

THIS is the Binder noted for its light draft—its sure, speedy cutting—its great strength—its ease of handling. But the greatest of all its assets is Reliability.

This comes from long Frost & Wood experience in the development of the Binder. It comes from many stringent tests we give every F. & W. Binder before it goes to the customer. The Frost & Wood Binder has a big power wheel of special design, special roller bearings, special cutter bar, special non-failing knotted, special non-clogging elevator and other exclusive features too numerous to list here. Frost & Wood make the Binder you can buy and KNOW it will give you the field service you want in any emergency.

**Roller Bearings
Swift Cutting
Cuts any Crop**

**Sure Tying
Light Draft
Special Rollers**

**Easy Levers
No Threshing
No Choking**

Write nearest Branch or Office for Frost and Wood Binder Book and see what a splendid machine it is.

The FROST & WOOD COMPANY, Ltd.
Smith's Falls Montreal St. John

Sold in Western Ontario and Western Canada by
COCKSHUTT PLOW CO., LIMITED, BRANTFORD, ONT.

is sufficient help it is the most profitable method to follow.

As I have endeavored to show the most profitable way to raise cattle I will now turn my attention to the unprofitable way. According to Mr. Squire's figures it cost him 66 cents to put on a pound of gain. We all know that straw is not a maintenance diet and as I understand it about 17 per cent of its nutritive value is taken up in the energy required to chew and digest it. This explains why cattle fed on straw come out of the stable in the spring about 25 per cent lighter in weight than when they went in, in the fall. This method of caring for cattle and finishing at four years old is the right way to lose money as it probably costs 56 cents to put on a pound of gain.

Oil Cake Meal

I HAVE been making a study of feeding analysis and in comparing them I find that cottonseed is apparently somewhat less than oil cake meal. I have not used oil cake largely. These feeders must know that oil cake is not economical, according to feeding analysis. Why do they continue to feed it? I want to be clear on this subject.—Subscriber," Peterboro, Ont.

In an average year, cottonseed meal is a somewhat cheaper food for dairy cows than is oil meal. The difference, however, unless it be in an exceptional year such as last year, is never very wide. The reason that oil cake maintains its price in position of popularity is due to properties that it has, altogether outside of its nu-

tritive value. Cottonseed meal, unless wisely fed, is apt to derange the other hand, is a regulator. Heavy feeding with oil cake places less of a strain on the animal's system than with cottonseed. Perhaps the wisest plan of all is to feed oil cake and

cottonseed together, thus combining the cheapness of one with the regulating qualities of the other. For young animals, oil cake is an exceptionally good feed and cottonseed should be fed on no consideration whatsoever. In fact, some feeders have found it positively poisonous for calves.

KINGMAN

THE FARMERS SEEDS FIFTY YEARS SERVICE

1866 1916

Save Money and Buy Your Seeds Now

We Pay Railway Freight on all orders of \$25.00 or more in Ontario and Quebec.

Our Golden Jubilee Catalogue is now ready. Write for one today, it is free.

Government Standard

No. 1 Red Clover	..... \$17.00
" 1 Alayke	..... 16.00
" 2 Golden Glow	..... 13.00
" 1 Timothy	..... 12.00
" 2 Extra No. 1 for purity	..... 5.25
Allow 30c for each Cotton Bag required.	

We have a fine quantity of Grimm or Variegated Alfalfa, if interested write for prices.

SEED CORN. On call per bush 70 lbs. Long, Pure, 1914 or 1915 growth	
Yellowcorn 70	..... \$1.75
Golden Glow	..... 1.50
Bullseye	..... 1.15
Leaning	..... 1.15
White Cap	..... 1.15
Longtongue	..... 1.50
Dakota	..... 1.50
Compton's	..... 1.50
O.A.C. No. 72 Oats	..... 85c
No. 3	..... \$2.00

GEO. KEITH & SONS SEEDS 124 KING ST. E TORONTO

FARM AND DAIRY

AND RURAL HOME
PUBLISHED EVERY THURSDAY

SUBSCRIPTION PRICE, \$1.00 a year. Great Britain, \$1.50 a year. For all countries, except Canada and Great Britain, \$2.00 a year.

ADVERTISING RATES, 15 cents a line flat, \$1.00 an inch insertion. One page 48 inches, one column 12 inches. Copy received up to Saturday preceding the following week's issue.

UNITED STATES REPRESENTATIVES

STOCKWELL'S SPECIAL AGENCY
Chicago Office—People's Gas Building.
New York Office—Tribune Building.

CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy number 21,000. The actual circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 25,000 to 30,000 copies. No subscriptions are accepted at less than the full subscription rates.

Sworn detailed statements of circulation of the paper, showing its distribution by counties and provinces, will be mailed free on request.

OUR GUARANTEE.

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

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

The Rural Publishing Company, Limited PETERBORO, ONT.

"Read not to contradict and to confute, nor to believe, and take for granted, but to weigh and consider."—Bacon.

Should Eggs be Inspected

IN the egg trade of Canada we have the nucleus of a tremendous business. Speaking at Petrolia recently, W. A. Brown of the Poultry Division, Ottawa, estimated that the egg production in Canada alone for 1915 would be worth \$30,000,000. This is two and one-half times the value of the whole fruit crop of Canada, six times the value of all the sheep, and half the value of all the cattle produced. The output, moreover, can be increased almost indefinitely. The only difficulty in the way of increased poultry production will be the marketing of the egg crop, and here we come upon our first stumbling-block.

For several years past all of the eggs produced in Canada have been consumed on the home market. Last year, however, the supply over-reached the home demand, and the egg market would have dropped to an unprofitable level, had not war closed off European supplies to the Old Land and we were able to develop an export trade of considerable proportions. The opening of the British market offers to our poultrymen a great opportunity for selling their surplus, but it is an opportunity that has already been seriously abused. Eggs of every description have been shipped and already Canadian eggs have a bad reputation on the British markets, and after the war they will come into competition with the cheap eggs from Russia and other European countries, instead of the quality eggs of Denmark and Ireland, which command a higher and a more profitable price.

This is a regrettable state of affairs, as the continued development of the poultry industry in Canada seems to depend upon our foreign markets. If the future of the industry lies in

the shipping of properly branded eggs, it is too big a problem to leave with the individual shipper. We believe the Government should act in the matter and provide legislation similar to the Fruit Marks Act, with proper provision for inspection of all eggs exported. The time to act is now, before the egg trade of the Old Land returns to its old channels and while we still have an opportunity of re-establishing ourselves in favor on the British market.

Patriotism and Production

AT the recent annual convention of the Ontario Plowmen's Association, the following motion was submitted and carried unanimously:

Moved by H. L. Winslow, seconded by T. A. Peterson: "That the Executive of the Ontario Plowmen's Association wait on the Honorable Minister of Agriculture for Ontario, and request him to get in touch with recruiting officers in the rural districts in an endeavor to arrange, if possible, that at least one capable farm hand be left on each one hundred acre farm in the province so that the campaign for increased production may not fall in 1916."

There are many reasons why the Minister of Agriculture should heed the suggestion made in this resolution. We realize that in some quarters the adoption of such a suggestion may be regarded as class legislation, but there is no reason why it should be. Munition workers are not now accepted for overseas service, and thousands of mechanics have actually been taken out of the trenches to man the factories. Food is as much a part of munitions as clothing, shells, or armament. Numerous industries now employing many men could be allowed to lapse altogether without detriment to the military power of the Allies, but should Canada's crops fall off seriously it would not only mean financial difficulties at home, but actual want abroad. Two men is not too much for 100 acres. In fact, it is an absolute minimum if production is to be maintained. The resolution approved by the Plowmen's Association may be an important factor in bringing the Government to consider this aspect of the recruiting problem. The opinions of Our Folks in the same connection are invited.

Fruit Growing in British Columbia

A DEPUTATION representing the Fruit Growers' Association of British Columbia recently waited on the Economic and Development Commission at Ottawa to urge upon the Commission the desirability of having such measures adopted as would ensure to the apple growers of that province a fair profit for their labors. We do not know whether this deputation asked for a tariff increase, lower freight rates, direct government assistance, or a combination of all three, but we suspect that the tariff came in for most consideration. We feel justified in asking, are the British Columbia growers fair in their demand that, conditions considered, they should be assured a profit on their labors.

When the first orchard plantings made in British Columbia came into bearing, a profitable market was found in the prairie provinces for the small supplies of fruit then produced. So profitable were these first plantings that the fruit growing industry was boomed tremendously. Orchard planting was rushed ahead apparently without any consideration of where a market would be found for the immense crops of fruit that the future would bring forth. This orchard boom was not confined to British Columbia. Plantings were made on an even greater scale in all of the Pacific Coast states. These orchards are now coming into bearing, and the supply is altogether in excess of the demand. In the meantime the growers who have high interest

rates to meet in addition to their other expenses, are finding it hard to make both ends meet.

Such is the situation. The growers believe that a tariff high enough to exclude United States fruit from the prairie markets would do much to solve their problem. We doubt, however, if even such a radical measure as this would assure a market for all the fruit grown in British Columbia in the next score of years as only a small proportion of the orchards planted are yet in bearing. Even if it did, would it be quite fair to ask the farmers and city consumers of the prairies to pay for the mistakes of the fruit growers themselves who are alone responsible for the rash over-planting and the excessive capitalization of their land? We do not believe the Government would be justified in granting such assistance. The subject, however, is open for discussion.

Tuberculin Tests

A BRITISH Columbia reader has asked our opinion as to the merit of the tuberculin test, and requests a discussion of compulsory tuberculin testing as conducted in his province. We will discuss the points brought out in this letter more fully at a later date, but let us state here that the more we learn of the effects of tuberculosis, the more are we convinced that compensation or no compensation, no dairy farmer can afford to have the disease in his herd. This is as true of grade as of pure-bred herds. Aside from being a continual menace to the health of our own families, the tuberculous cow and herd cannot long be tolerated for economic reasons. The cities will see to that.

Milk for city consumption is the most rapidly increasing market for dairy products. The quality of milk supplied to this trade, once left to the initiative of the individual dairymen, is now coming more and more under the supervision of health officials. No authority in the land can prevent a city or town council taking such measures as it deems essential for the protection of the health of its citizens, and some cities have already refused to allow milk from untested herds to be sold within their limits. More cities are falling in line, and the time is not far distant when all milk for city and town consumption will come from herds that the tuberculin test has shown to be free from the disease.

Then, again, dairy cattle buyers are more and more buying milk cows subject to the tuberculin test, and just in proportion as city health authorities demand the test, will city milk men, who are the largest buyers of milk cows, refuse to buy from untested herds. As a result, the district or province which applies the test universally as British Columbia is now attempting to do, will get the cream of the cattle buying trade. We would also call attention to the fact that swine fed on skim milk from an infected herd, very frequently contract the disease, and their carcasses are rejected on that account.

It may be costly to exterminate the disease. We know that it is. But may it not be even more costly to let the disease take its course?

A flock of sheep, under average conditions, will make more money on the investment than any other class of live stock. Why, then, are they so scarce on Canadian farms?

"Dairy cows are valuable to convert unmarketable roughage into a saleable product," remarks a contemporary. Yes and good dairy cows will convert all of the staple crops of the farm into milk, and at something more than the market price. Well, perhaps we will expect timothy from this ruling. Better sell it and buy clover.

At the Ayrshire Breeders' Banquet

Admirers of the Scotch Dairy Cow Discuss Ayrshire and Other Matters Around the Festive Board.

THE opening session of the Canadian Ayrshire Breeders' Association, held in Toronto on Feb. 9 and 10, took the form of a banquet in the Carls-Rite Hotel. Dr. C. C. James, Commissioner of Agriculture; H. A. Craig, Deputy Minister for Alberta; Dr. H. S. Tolmie, Live Stock Commissioner for British Columbia, as well as many prominent Ayrshire breeders, gave addresses.

Referring to the current report that country districts are not doing their share toward helping with the war, Dr. James said that during the past few months county councils of Ontario had voted grants of from \$3,000 to \$6,000 or more per month until the war is over for patriotic purposes. In some cases the patriotic funds provided equalled the entire taxes hitherto paid. As far as the supply of men was concerned, one valley in British Columbia, out of a population of 15,000, had sent 1,400 men to the colors up to July, 1915. In one county in Nova Scotia, out of 161 men recently enlisted, 115 were from the farms. With the organization of county battalions in Ontario, at least 30,000 farmers' sons and farm work-mens of this year. When this happens, what about production? The authorities realized the fact that the production of foodstuffs was just as important as the production of munitions, and the Military Department was being advised that there was a danger of unbalancing the country if recruiting was carried to too great a length in rural districts.

Ayrshires in the West

H. A. Craig told something of what was being done by the Ayrshire breed in the Sunny Province. The Department of Agriculture had established seven demonstration farms, on each of which a good herd of cattle of one breed was kept. On their farm at Claresholm they had a nice herd of Ayrshires of high quality. Throughout the province the breed was making headway, but was meeting with keen competition from some of the other breeds. The Ayrshire was at a disadvantage in that, when the demand for dairy cows, consequent upon the rapid growth of their cities during the boom, was keen, a lot of very inferior specimens of the breed had been sent from Ontario to that province. Mr. Craig strongly advised the Ayrshire men to send to Alberta nothing but their largest and typiest animals of good producing capacity. There was a strong sentiment in favor of cattle of larger size and this would have to be taken note of if the breed was to hold its own in the future.

Dr. Tolmie stated that Ayrshires were making good in the B.C. foothills. An active cow of good grazing qualities was the one required in these districts, and the Ayrshire filled the bill better than any other. They had found difficulty to secure Ayrshires as needed in the work of distributing sties in British Columbia.

The Past and Future of Ayrshires

The history of the Ayrshire breed in Canada was briefly sketched by Alex. Hume, the well-known breeder of Campbellford, Ont. The Chicago fair, held 23 years ago, first brought to the notice of the world the splendid doing. The triumphs that Canadian Ayrshire men had won at Chicago were repeated at the Panama and St. Louis Expositions, and he considered these as great milestones in the progress of the breed on this continent. Public sales also contributed to the advancement of the breed. The Ogilvie sales in 1903 and the Hunter

sales about the same time being the first of importance in Canada. At the latter bulls sold as high as \$700, cows \$600 and calves \$285, the average being \$210 for 44 head. In later years the establishment of a better class of Ayrshires at the O.A.C. and the inauguration of advanced registry and R.O.P. work were the greatest steps in advance.

Prof. H. Barton, in a clear cut speech on "The Improvement of Ayrshires," outlined some methods by which still greater progress could be made than in the past. He claimed that there was still urgent need for further and rapid improvement in the breed. Of the different factors that would contribute to that improvement the show ring, extended service of bulls, and the careful and systematic elimination of inferior animals were the most important. A full report of Prof. Barton's address will appear in a subsequent issue of Farm and Dairy.

E. L. Richardson and W. J. Stark, of the Calgary and Edmonton Fair Boards, respectively addressed the meeting briefly, and W. Bert Roadhouse and I. Lockie Wilson brought the greetings of the Ontario Department of Agriculture. The Jersey men had two representatives in the form of Henry Glendinning and B. A. Bull. The greetings of the Holstein breeders, who were in session in an adjoining room, were conveyed to the Ayrshire men, these greetings being heartily reciprocated.

The Value of Variety in Crop Production

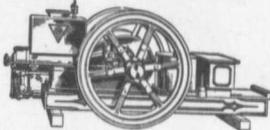
(Continued from page 4)

past year are very interesting and important in showing the great variation in different varieties. One variety, viz., The Snowball, gave a yield of only 13 bushels per acre, and another variety, viz., The Husler, under similar conditions gave a yield of 366 bushels per acre. The Extra Early Eureka, a medium early variety, gave an average of 326 bushels per acre in 1915, and an average of 232 bushels per acre for the past five years. This variety is not only a large yielder, but it is also one of the freest from rot of all the varieties of potatoes under experiment. In the average results for the past nine years the Davies' Warrior stands first with 235, and the Extra Early Eureka second with 230 bushels per acre per annum. In comparing the varieties tested, the longer period of time, the Empire State occupies the highest place in productiveness. These three varieties are all of good table quality, the Empire State being particularly good in that respect.

The State of Michigan has passed a law which prohibits the use of pictures of dairy cattle, name of creamery or dairy, a the manufacture and sale of oleo-margarine. Section of the law reads as follows: "No person shall use in any way in connection with or associated with the sale or exposure for sale or advertisement of 'butter', 'creamery', or 'dairy', or the name or representation of any breed of dairy cattle, or any combination of any such word or words and representation, or any other words or symbols or combination thereof, commonly used in the sale of butter."

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—Marcus Antoninus.

Victory on Windmill Row

By MABEL S. MERRILL
(Farm and Piredda)

THE two sisters stood still to look across the three-acre field of corn which stretched from the river on one side to the woods on the other.

"It's the best piece in town," announced Marion proudly. "And just think, Hugh has done all the work on it ever since it was put into the ground."

"Here he comes now," said Estelle, the elder girl, gazing critically at a long-legged boy of seventeen who was hurrying toward them across the field. "He looks as worried as if he had taken a contract to sail the ship of state."

Estelle's tone was ironical, but Marion ran to meet her brother.

"I can't hire a man to pick corn for love nor money," explained Marion in answer to her question. "The corn shop starts in the morning, and all of the men that haven't got corn of their own to pick are going to work for the packers. It's just possible I can get Captain Wheeler for a day, but he wasn't sure he'd come."

"The three acres of corn had been planted to sell to the canning factory—the 'corn shop' as Hugh termed it—and the crop was now just right to be gathered and delivered. If allowed to stand even a few days longer it would be too hard and dry for canning."

"Then we must go right to work and pick what we can ourselves," declared Marion. "Every ear we pick is so much saved. We can load it into the carts as we work, and cover it up for the night with big pieces of canvas in case it should turn cold or wet. I'll go this minute and get Clifford to help harness the horses and bring up the baskets and everything we want."

Estelle opened her mouth to speak, but Marion was already running and lay down the long field toward the house.

The elder girl turned sharply upon her brother: "It can't be you expect Marion to help with it?"

"I did the best I could to find a man," Hugh returned shortly. "I never asked Marion to help, but you can't keep her out of the field, when she sees anything going to waste for want of a hand."

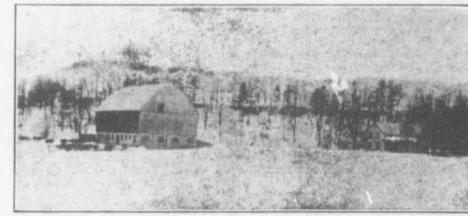
"Of course," snapped Estelle, "with Father sick and nobody to manage properly everything is in a mess."

"The saving of the corn crop means the saving of two or three hundred dollars to Dad," Hugh explained savagely, "and Marion knows how much he needs it."

Estelle turned her back impatiently and looked with a frown at the procession coming up from the barn. Marion was driving the pair of big farm horses harnessed to the largest cart. Behind her came Clifford, their fourteen-year-old brother, standing

jauntily upright in a smaller cart and urging old Maggie, the slow-stepping mare, by flourishing his flapping straw hat above her lean back. The elder sister bit her lip as she looked on, then she caught up an empty basket and fell to work.

"I suppose I must make up my mind to stay here and drudge with the rest of them," she thought drearily. "It does seem as if Father might have spared the money for my senior year



A Well Sheltered Homestead in Halton Co., Ont.

Mr. George Colston will admit that there are disadvantages in having the greater part of the farm on higher ground than the buildings. But what a splendid shelter is the high wooded bank.

—Photo by an editor of Farm and Dairy.

when I've worked all summer at private teaching to help out."

They worked until darkness crept upon them and rain began to fall. Heavily and steadily it fell all night, and when the corn pickers awoke in the morning they were not surprised to find that the river had overflowed its banks.

"I don't see how you girls can go corn-picking any more," observed Mrs. Deland, the mother of the family. "Clifford says the water's rising every minute and the boat has gone off."

Hugh's face grew gloomy. The help of the girls would be badly needed to-day, though he hadn't counted much on Estelle after her grudging assistance of last night.

But Estelle had been in her Father's sick-room and something in the sight of the worn and aging face had changed the color of her thoughts.

"We can ride up to the corn piece in the carts," she said promptly. "The water isn't too deep yet. And we'll take a roll of bedding and the oil stove, and a great basket of things to eat. The carts are sure to be high and dry to sleep in if we have to camp in the field, and not a thing can happen to us up there."

"Captain Wheeler sent word early this morning, that he would come and help all day," Hugh said as they hurried out and clambered into the wagons. "That will make three of you to pick. Cliff and I can haul the loads by the pasture road as fast as you can fill the carts."

They worked steadily all day, the carts being filled, and then emptied at the mill again and again. The day's work was giving Estelle a new understanding of what the "home team" as Hugh called it, had had to face during the three years she had been away at college. She felt increasing respect for the pluck and patience that had gone into the work of the farm.

"It's Father's sixtieth birthday," she thought once, stopping to straighten her tired back. "Poor Father, I never realized before what it meant—all this work that keeps coming and coming and piling itself up the year round. He's got food and clothes and comfort for us out of these old fields. He got my three years at college out of them—by work like this. It begins to seem a miracle to me that he could, and yet here I am sulking all the time because I can't go back and finish. The last payment on the mortgage comes due this week, and I suppose he hasn't any money."

Estelle was the first to finish her luncheon at noon, and then she slipped away and ran down to the brink of the rippling sheet of water that divided her from home. It was much deeper than in the morning, and the surface of it was red and yellow with apples and pumpkins from low-lying harvest fields above. But the girl was so intent on her mission that the significance of these changes escaped her.

She fluttered her handkerchief till the white signal brought her mother

dearly back upon them. She rose to her feet and peered anxiously down into the field where the black waves were catching the fire of the stars.

"Oh, here they come, I'm so glad!" she cried at last, as the heads of Hugh's horses came out of the darkness at the other side of the stream. Clifford and Marion were in the smaller cart which drove close behind into the water.

Suddenly Estelle sprang to her feet. "Hurry, hurry!" she called in sharp tones of alarm. "Something's happened down below—the water's just rushing back from the field."

The thing the Captain had predicted had come to pass. The flood, pent up below, was backing up the course of the small stream across the pasture road. The water was up to the bodies of the carts before dry ground could be reached. Hugh's horses struggled sturdily to the ridge where Estelle was, but old Maggie, floundering after them, was off her feet. Hugh led his own team and, dashing into the water, got her by the head and helped her out before she was able to get the cart body with Clifford and Marion clinging to it was swirling away on the flood that seemed to be running in all directions.

"They'll be drowned or smashed if they get out into the field," he muttered, staring into the dark.

"Come quick!" saw an old boat with the small crew where bushes. Wake up, Hugh, and do something," cried Estelle sharply, for the suddenness of the emergency seemed to have left the boy dazed.

It was Estelle who made sure that the old boat—a bit of the flood's debris—would hold them, who found the cars and got Hugh into his seat, and it was at her bidding that they waded across what had been the brook, and slid out upon the black wreck-strewn water beside the river whose bank was blotted out.

A small building of some kind was careening along in midstream; boxes, barrels, heavy logs, and sticks of hewn timber made the flooded field a perilous place for the old boat.

But Hugh had recovered himself now and rowed steadily, while Estelle, with a stout pole she had found, pushed away threatening obstacles. They soon found the castaways clinging to the small boat that they were mad itself against a tree. They were unhurt, and presently all four were in the boat fighting their way toward the nearest land, which happened to be the foot of the cornfield. A little later they were laughing at their mishap as they sat drinking hot coffee around a comfortable bonfire at the edge of the woods. Only Hugh remained silent. "Maybe college didn't spoil a girl, after all."

The makeshift dam between the islands broke that night, the water fell rapidly, and by noon of the next day they were able to walk home to dinner and to begin to recount their adventures to the anxious mother and father. They walked back again in the afternoon, however, for the corn job must be finished.

Estelle was very tired and depressed, and the feeling grew upon her that it was her duty to stay here and share the drudgery of the old farm.

"Have you," Marion, basket in hand, broke in upon her solitary musing, "mark your row with something pink and the fluttery, so you'll know where you stopped, and then let's go up and find Mother. She's at the top of the windmill row, picking corn, and it's too hard work after all she's done at home."

They went crosswise through the rustling corn forest to investigate the grounds at the top of the windmill row. Evidently the picker was gone out to the down river, and that a mass of debris should get jammed against it the barrier might become a dam which would send the water flooding sud-

(Continued on page 15.)

The Upward Look

Travel Stories No. 20 The Heavenly Vision.

"STRENGTHENED with all might, according to his glorious power, unto all patience and long-suffering with joyfulness," Col. 1:11.

The main architectural feature, at the San Francisco Exposition, was the majestic Tower of Jewels. It was admired and enjoyed by the throngs of visitors, not only on account of its great size, its lofty height, its graceful symmetry, its symbolical statuary but also for its thousands of jewels, cut out of glass by skilled workmen. The sheen and gleam and glimmer of those jewels were always changing under different light and atmospheric conditions. One could see the tower from almost every part of the grounds, I could never become accustomed to the beautiful surprises those changes were always affording.

I have heard much about the night illuminations. Great was my disappointment as the first few evenings were foggy, which sadly marred the effect. But the first clear sunset hour I had been enjoying a rare treat out across the bay. I sat for a long while after the dreamy, mystical whistler coloring had died away, watching the countless lights of cities across the water, and the nearer ones from boats and exposition itself, when I suddenly turned and saw my Heavenly vision, as I will always think of it.

The illuminations had been turned on, and there the Tower of Jewels arose, stately and iridescent at the entrance to the court of the Universe. The day colors had disappeared so that in the rays of the search-light there was no coloring in the tower, but pure white with faint touches of delicate cream, pale green, or old rose.

The jewels shone and sparkled so adding to the effect that the whole seemed almost too much for the physical eye to endure.

Why do I call it my Heavenly Vision? It is on account of the spiritual uplift that came with the first sight of it and comes every time I think of it. Its majesty suggested strength, when strength was needed, rising heavenward in the surrounding night black sky, it reminded me of God's Might, that must be behind all strengthening forces. Its whiteness in the blackness, suggested the purity of thought, life of actions of life; the ideal so longed for in spite of repeated failures. The sparkling, gleaming jewels seemed symbolical of the joy of self-sacrifice, of loyal endeavor, of Christ-like striving.—I. H. N.

Victory on Windmill Row

(Continued from page 14)

crimson scarf, spangled with silver, which was knotted about the pole of the windmill, she fell back against her sister.

"Pinch me, Marion! I know I'm dreaming a fairy tale. That's the dean's scarf. I'd recognize it in China. It's the only thing we girls have ever laughed at her for—it's so giddy compared with the rest of her belongings."

Marion looked incredulous. But just then she heard her mother's voice calling her, and without stopping to speculate about the scarf she ran swiftly down the row, leaving her sister to follow or not, as she pleased. Estelle made her way out of the everything beyond it. At the edge of the piece she found herself in the grasp of two hands that briskly turn-

ed her face to face with her roommate at college, Virginia Raynor.

"Here she is now!" shouted Virginia to the dean, who was emptying her basket.

"Where on earth did you drop from?" cried Estelle.

"You needn't be so amazed at my looking you up," laughed the dean, straightening herself and smoothing her hair. "Did you think you were going to slip through my fingers? I know all about your father's sickness and the other difficulties. I've been getting acquainted with your mother over the corn-picking. I came

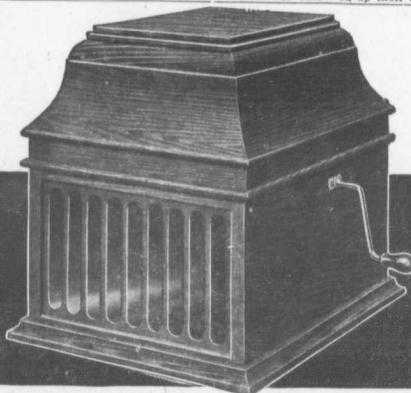
over from home to talk to her and I found her here, and we've settled a good many things."

"You've got the Remsen scholarship," broke in Virginia, flourishing her basket excitedly. "It isn't a large one, but it'll help. And you and I are going to set up a Saturday mending shop in our room and earn our board and keep."

"Haven't we done well with the corn, too?" demanded the dean, pointing to the overflow from the carts. "You are lucky girls to have grown up in a place like this." Estelle could not control her emo-

tions. She turned away to hide her face, but the sound of her sobs made everyone else feel happily tearful. Hugh reappeared just then, and after the dean had explained the situation to him, he went to Estelle and put his hand on her shoulder:

"I guess a college education is all right for a girl after all," he said. "Maybe it's that kept you cool when I didn't know enough to get a boat. I'm mighty glad you can go back." "Windmill Row seems to have taught us all a good many things," said the dean quietly, as they picked up their baskets and started home.



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It Isn't the Place—It's You
HAVE you ever stood by the side of the road and watched yourself go by? Have you ever taken an inventory of your real self, arranged a debit and credit column—and cast the totals? You have had trouble with that neighbor of yours; he is everlasting wrong and you are everlasting right. You are a good-natured, broad-minded, liberal man—all you ask is to be treated square; you believe absolutely in the application of the Golden Rule in all business transactions—in your own opinion. How much would you give to know just how that neighbor of yours would check up? You are an ideal hus-

band; give your wife all she ought to have; treat the children well; always good natured about the home; optimistic—happiest when you are able to make your own family happy. Suppose we get the confidential opinions of the members of your family—they all like you, but must confess that you: "Use your home as a kicking post;" "scold about the weather;" "fret about the crops;" "kick the dog and make yourself and every one about you miserable," about three days out of seven. Let company enter the home and you immediately put on company manners; everything is lovely. A sort of Dr. Jekyll and Mr. Hyde, are you? When the company leave you grunt and growl, snarl and find fault until every one within the sound of your voice is nervous and irritable.

The winter season is on; the ingathering time is with us now. We have more time with the family. Every member of the family circle should take an inventory of himself or herself, and firmly make this resolution: "Life is short at the longest; complete family circle at the longest; very short time. Some day brother and sister will be far away in homes of their own; father and mother are already journeying down life's highway which leads to the sunset lands; therefore I am determined to give my helpfulness, my smiles, my very best to my family, while yet I may, trusting that in the abundance of God's gracious goodness to me, I shall find time to help even those outside my family circle." Remember:

If you want to live in a happy home, Like the kind of a home you like, You needn't slip your clothes in a grip And start on a long, long hike. You'll only find what you left behind. For there's nothing that's really new. It's a knock at yourself when you knock your home, It isn't the place—it's YOU. The Cleaner.

Good Taste in Dress a Satisfaction

Farm and Dairy patterns shown in these columns are especially prepared for Farm and Dairy's Women Folk. They are the latest models, and include the most modern features of the paper patterns. When ordering Farm and Dairy your order please be careful to state bust or waist measure for adults, age for children and the number of patterns desired. Write to Our Editor, for each Address all orders to Patterns Dept., Farm and Dairy, Peterboro, Ont.



THIS question of dress may easily become a burdensome one if we allow it to be so. No sooner do we get things straightened up for one season than the styles change and we are in a quandary to know how to adapt our old dresses to the new styles. We should not allow this clothes problem to become bugbear; neither must we become careless and neglect our personal appearance. There is a tendency among hard working farm women to get into the habit of thinking that it doesn't matter much how they look. This is a great mistake and is sure to affect both the farm woman and the family. Let us then keep in mind, not the idea of trying to lead in the fashions of the community, by having extreme styles and lots of clothes, thus emptying our pocket books and wearing out our nerves in the attempt, but rather to dress neatly and becomingly. We can do this by studying the fashions and endeavoring always to decide on that which will look well on us, thus showing good taste, and it will also be a great satisfaction to us to know that we have not been extravagant in our outfit for dress.

1448—Costume for Misses and Small Women.—This dress while very simple indeed could be used on many occasions. The large collar and cuffs are all the trimming necessary on the blouse and the pockets in the skirt take away from the long plain lines. If desired, one could have two or three sets of collar and cuffs to wear with or take out. Three sizes: 36, 40 and 44 years.

1589—Girl's Dress.—A neat little costume for the small girl might be attractively fashioned from the model here shown. The collar, belt and cuffs of contrasting material show up nicely on such a dress. Five sizes: 4, 6, 8, 10 and 12 years.

1590—Lady's Costume.—If making up a new dress or remodeling an old one, the style herewith should prove practical. A

dress of last year's designs might be remodeled nicely from this style, as the front panel would allow the skirt to be widened considerably and such panels are being greatly shown this season. The neat little vest and collar are also worth while style features. Five sizes: 34 to 44 inches bust measure.

1577—Girl's Dress.—This style shows somewhat of a jumper effect. The large opening at the arm hole is quite chic this season. A blouse made from some pretty flowered, checked or striped material with a blouse of fine material of some description, would make a dainty outfit for special occasions for the little miss. The skirt shows a couple of rows of shirring at the waist line and either braiding or trims at the lower edge. Four sizes: 4, 6, 8 and 10 years.

1575—Lady's Corset Cover and Petticoat.—We show another model this week that can be used to good advantage after we have visited some of the whitewear aids. This outfit is very dainty and a very neat fitting combination. The shield sleeves are a commendable feature. Three sizes—small, medium and large.

1574-1576—Lady's Costume.—This is a practical costume, and has style features that should commend itself to many of our home dressmakers. It is unique in that the yoke effects in waist and skirt are similar, thus forming the trimming for the dress. As we believe this model will be popular for separate waists and skirts, the outfit calls for two patterns, 10 cents for each, so that if one wishes to get the skirt or waist only, are enabled to do so. The waist is cut in size from 22 to 42 inches bust measure, and the skirt from 22 to 32 inches waist measure.

1592—Girl's Dress.—The illustration here shown may be used as either an apron or skirt. Bloomers also are a part of the costume if desired. Five sizes: 2, 4, 6 and 10 years.



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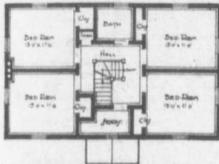
There is something very solid and dignified and comfortable about the outward appearance of this house, but there is one thing it lacks. It is the type of house which needs vines climbing up over the porch and around the windows, and clumps of shrubbery here and there to soften the lines. Given these it will take upon itself something of the charm of those beautiful old English farm houses which look as if they had grown up out of the ground rather than as if they had been made with hands.

to her elbows in the wash tub, to slip it to the dining room or the hall and open the door, thus bringing them into the main part of the house instead of the kitchen.

A Useful Main Floor Bedroom
Another feature of this house which will meet with the approval of many home builders is the downstairs bedroom. Where the housekeeper has also to be housemaid and nurse a downstairs bedroom is a great saver of steps making it possible to wait upon a sick person without the seemingly endless tramps up and down stairs.

If these many virtues fail to win the good opinion of the homemaker there still remains the upstairs with its four roomy bedrooms and lavish closet space providing a place for everything.

The cost of this house is thirty-six hundred dollars but it is



DEED DOWN PLAN
Planting Should be Begun Early

It is to be hoped, then, that the builder of this house will not leave it set up in an open field, stark and bare, but will proceed with all haste to plant out cuttings of the Virginia creepers and clumps of lilac and honeysuckle and a little farther away maple, oak, ash, elm or poplar trees. In planting the trees we trust that he won't arrange them in a stiff forbidding row about the lawn, but scatter them as nature does, two here, one there and another over yonder.

Having seen how it can be transformed into one of those stately old farmsteads, which will be a prized inheritance for generations, it should not be forgotten that this is a house with much interior charm and serviceability.

One of the most unusual features in a large screened-in back porch, which can be made into one of those outdoor living rooms becoming more and more popular as people realize the value of outdoor life and unlimited fresh air.

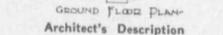
Instead of the back entry shown in former plans, the architect has cleverly worked out a plan which enables the housewife, when folk come knocking at the back door, when she is up

six hundred dollars invested in solid comfort and lasting satisfaction.
The house shown here is 24 feet by 40 feet over all and is very complete in all that goes to make up a comfortable home.

The lower portion of the house is six inch siding on a concrete or stone basement (use which is easiest to obtain in your particular neighborhood), with the upper part and roof of shingle. The shingle on the wall should be laid about nine inches to the weather to get the scale as against the siding, and that on the roof the ordinary five inches.

Paint the lower portion a rich old ivory and stain the wall shingle a deep bronze green with the roof a golden brown. Make the ceiling downstairs about eight and a half feet high and upstairs about eight feet and you will have well proportioned rooms.

The heating may be hot air, steam or hot water. The house is plastered throughout and should cost about \$3,600. The floors are edge grain fir and the trim plain plaster trim with neck and cap mould. A decoration scheme for this house will be published in next week's Farm and Dairy.



GROUND FLOOR PLAN
Architect's Description

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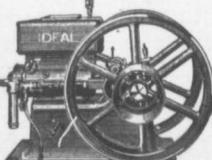
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British Columbia Dairymen in Convention

Both Clover and Corn Silage Receive Hearty Endorsement

WEATHER conditions were not favorable to a large attendance at the annual convention of the British Columbia Dairymen's Association, held at Westminister recently. The program, however, was a good one and in every thing but attendance, the convention was an outstanding success. Not the least appreciated feature was an exhibition of dairy products held in connection with the convention.

In his presidential address, Mr. William Duncan, stated that the dairy industry for the year 1915 had not been a particularly profitable one. High prices were paid for concentrates in the early part of the year and dry weather throughout the season had made the cost of production higher. The failure of the root crop was particularly felt. The dairymen who had reached the corn growing stage were the men who can defy weather conditions and president Duncan advised that where corn can be grown profitably, dairymen should grow all of it they can. Having made reference to the success of co-operative endeavor in European countries, Mr. Duncan said:

"It is true that in some parts of the province unsuccessful attempts to cooperate have almost had the effect of making farmers believe that the principle is at fault, but surely what has been done so successfully in other countries along the lines of agricultural cooperation can be done here, and no one will say that the need does not exist.

"I believe that where cooperation has failed, failure can be traced to one or more of three causes; first, carelessness on the part of the directors and insufficient management; second, carelessness and lack of effort on the part of the individual, and third, lack of cohesion among the members. Good directors, management and members doing faithfully their various parts, cooperation cannot fail.

In closing the president paid a tribute to the good work of the popular and efficient secretary of the association, Mr. Henry Rive.

Dairy Progress Given Statistically by W. E. Scott, District Minister of Agriculture, told the dairymen assembled that increased production is the paramount duty of the dairy farmer and that he can serve his country as well on the farm as in the trenches. To indicate the progress of the dairy industry, Mr. Scott noted that in 1914 the Lome production of butter was \$2,098,000 and imports \$5,085,000; in 1914, production was \$3,000,012, and imports \$4,489,000; in 1915, production was \$3,482,000 or nearly a million increase over 1914, while imports declined to \$3,485,000.

So far the province is not making much butter, but the time is coming when a greater proportion of the milk production must be used in that way.

The relative merits of corn, silage, and clover silage were discussed by P. H. Moore of the Dominion Experimental Farm at Agassiz. The cost of clover silage Mr. Moore estimated at \$8.50 per acre, an acre yielding eight tons. The cost to place the clover silage in the silo is \$1.30 a ton.

The chemical composition of corn silage as compared with clover silage is as follows: Dry matter, corn, 26 per cent, clover, 28 per cent; protein, corn, 1.2 per cent, clover, 2 per cent; carbo-hydrates, corn, 14 per cent; clover, 13 per cent; fat, corn, 7 per cent; and clover, 1 per cent.

In the tests when both corn and clover were fed to cows, the results were in favor of the corn. For the major portion of this report we are indebted to "The British Columbia," published at New Westminster, B. C.

clover silage were fed to cows the cost to produce 100 pounds of milk from corn silage was \$8.80 cents, while when clover was fed the cost was \$7.72 cents, leaving a difference in favor of clover of 87 cents.

To produce one pound of butter fat the cost where corn silage was fed was 1.02 cents, for clover silage 80.1 cents, making a difference in favor of the corn silage of 8 cents.

The speaker advised that clover for silage be cut very short and every particle wetted before it is placed in the silo, where it must be tramped down. Neither should clover be used pure, a mixture of red clover and alsike along with smaller proportions of white clover and dried grass being preferable. Although clover is one of the easiest crops to grow in British Columbia, Mr. Moore did not recommend doing away with corn silage, but the following of a crop of corn with a

Farmers Discuss Feeding Matters

One of the most instructive afternoons of the convention was given over to a discussion of feeding matters. Mr. E. A. Wells of Sardis strongly endorsed kale as one of the best feeds for the winter months, providing the cows are not too cold. In summer when the pastures dry up, other green feeds should be given, such as peas, oats and barley, while in winter cotton seed, oil cake, bran and shorts are all desirable for grain feeds. Mr. W. N. Townsend of Armstrong, was not so enthusiastic over kale as Mr. Wells as he had had to abandon it because the food on account of the taint it gave the milk. He said he had tried every method of feeding it without success. Mr. Wells, in reply, stated that there should be no taint when the kale was fed outdoors. It should not be fed when the cows were milking, nor should the milk be allowed to stand in the barn for any time if kale is fed inside. A number of other speakers commended kale and all agreed that it did not taint the milk. Mr. Townsend finally being forced to the conclusion that the kale he grew must be too strongly flavored.

Mr. R. U. Hurford, of Courtenay, emphasized the value of feeding for milk production before the cow freshens, as he believed better results could be secured than when the cow freshens thin. He also emphasized the value of succulent foods. He concluded by asking whether it was profitable to feed cows grain in summer when the pasture was fairly good and the production 80 pounds of five per cent milk a day. Mr. A. H. Menzie, of Pender Island, replied with an emphatic affirmative.

The latter stages of the discussion dealt largely with the use of silos and ensilage. Mr. Tom Shannon of Cloverdale, stated that he had made his ration 30 to 45 pounds of silage a day, 10 pounds of hay in the evening and a mixture of bran, oats and oil cake, one pound to every three and one-half or four pounds of milk. In summer he depends very little on pasture using cut clover, peas and oats and in the fall lots of kale, which is available from Oct. 15 to Sept. 15. Next spring he intends using clover silage instead of green feed, believing it gives a more even yield of milk.

The silo found an enthusiastic advocate in Mr. John W. Berry of Langley, who last year had 15 acres in corn. When it was touched by an early frost he cut and put it into the silo, but as a result of his experience he would not cut so soon again. He also advised leaving the corn in the field a day or two after cutting in order that it might wilt. His second silo he will fill with clover.

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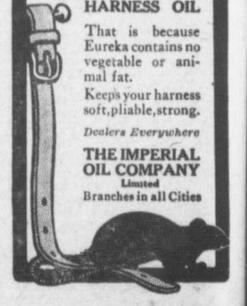
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It is his intention next year to cut clover early in June and get a crop of clover hay off the land as well as ensilage. Mr. Hugh Davidson of Langley Fort, said he had two silos and will build a fourth, all for clover. His system is to allow the clover to come to its full growth and then cut it before it ripens. Allow it to wilt slightly and put it into the silo with a fork, tramping it down. He adds no water except right at the top, after a six inch dressing of wild hay. Feeding a Record Breaker

Mr. J. M. Steves, of Steveston, described the system of feeding used with his cow Lady Fietje Canary's Jewel, which holds the Dominion record for butter production for any cow of any age, and has but one peer in the world for a cow of her age. The record in question was the production of 24,140.9 pounds of milk, with 938.93 pounds of butter fat, equivalent to 1,173.55 pounds of butter, in 365 consecutive days. The cow was three years old, and had been dry about seven weeks. She was milked five times daily, being fed mostly mangels and a little hay, but no grain for a few days after freshening. When turned out she was fed a mixture of three parts of oats, one of oil cake and one of barley. After two or three weeks she was given about four pounds of grain and some hay four times daily. There was very little clover in the hay. As winter came on the grain feed was increased to about five pounds of mangels at each feeding. Later on, when there was no grass, she was given six pounds of grain and the same quantity of hay and mangels. It is Mr. Steves' opinion that any cow will do better by being fed often and less at a time.

In answer to questions asked by a number of delegates, Mr. Steves said this cow was out day and night in the summer and in the winter was turned out every five days, but kept in the barn on bad days and every night. She had no special feeding before freshening; was fed four pounds of grain each feeding while on pasture; did not drop much on account of flies, being sprayed; was milked at eleven and five, and in summer got no mangels, no clover hay, no bran and no turnips.

Milk and Cream Contest

In the third annual milk and cream contest, prizes were offered in three classes: Approved milk, market milk, and market cream open to producers only. The milk was drawn on January 20th and scored Jan. 24th on bacteria, flavor, sediment, acidity, fats, solids not fat and package. The highest count in either of the milk classes for bacteria was 8,000 per c.c. and in the cream classes 6,000 per c.c. The average count of all exhibits in number being 800 per c.c. Eleven samples resulted with a count of 600 per c.c. and under. The market milk entry of Joseph Thompson, Sardia, B. C., scored highest with 99.05 points. In the approved milk class, J. M. Steves of Steveston and Shannon Bros., of Cloverdale, tied for first place with a score of 98. In market cream, Wm. Hampton of Fort Hammond was first with a score of 97.3. The butter exhibits were judged on a score card allowing 60 points for flavor, instead of the previous 50 points. Mr. C. K. McLeod, manager of the Chilliwack Creamery and one of the judges of the butter competition stated that all the samples received were very good, while the number of entries showed that a good beginning in the work has commenced.

The results of the competition were as follows:

First, A. P. Slade & Co., Clayburn, B. C.; second, Nanaimo Creamery Association, Ltd., Nanaimo, B. C.; third, Comox Creamery Association, Ltd., Courtenay, B. C.; and fourth the Vancouver Creamery Co., Ltd., B. C. For prints the results were: First, A. P.

Slade & Co., B. C.; second Nanaimo Creamery Association, Ltd., B. C.; third, the Comox Creamery Association, Ltd., B. C.; while the Westminster Creamery Society, Ltd., tied with P. Burns & Co. for fourth place, with 94.5. Officers Elected

William Duncan, of Sandwick, B. C., was re-elected as president. The other officers for the year are: Hon. President, Mr. A. C. Wells, Sardia; vice-president E. A. Wells, Sardia; directors for the lower mainland, Messrs. J. M. Steves, Steveston J. W. Burry, Murrayville and F. H. Moore, Agassiz; for Vancouver Island and the Gulf Island, E. Raper, Victoria, and N. Grimmie, Pender Island; for the Upper Country, Messrs. W. N. Townsend, Armstrong; M. Herron, Kelowna, and J. Pringle, Cranbrook. Mr. Henry Rive is nominal secretary-treasurer, but as he leaves for overseas service, Mr. T. A. F. Wiancko is acting secretary.

Dairy School Creamery Meeting

THE Dairy School of the Eastern Dairy School Creamery, Kingston, Ont., held their annual meeting at the School on Thursday the 3rd inst. The visitors, Messrs. Henderson and Stewart, submitted a very favorable report on the year's business, the following being a short summary:

Total pounds of butter manufactured 90,444
Average price per pound received for the same 32.8c
Total amount received by patrons of this \$26,894.89
Average price paid per lb. of fat to patrons for the year 87c
Average price paid per lb. of fat for the year 87c
April to October 86c
Taking the average percent of fat in milk for the twelve months to be 3.6 and for the 10 months corresponding to the cheese made to be 3.4 the above prices would be equivalent to \$1.33 and \$1.22½, per cwt. of milk respectively.

Cream to Be Graded
A resolution was proposed and unanimously adopted that beginning April 1st next, all cream be graded and paid for in accordance with its quality. For this purpose it was decided to make two grades, No. 1 and No. 2; No. 1 to be paid a premium of 2 cents per pound of fat over that allowed for No. 2.

Cream, in order to grade No. 1 must be perfectly sweet and clean in flavor, No. 2 being sour or slightly sour. Any cream offered which cannot be classified as either the No. 1 or No. 2 to be either rejected or accepted at a price in accordance with its condition, at the discretion of the buttermakers.

The management of the Eastern Dairy School are desirous of setting the advantage of all creamery patrons to have provided, means whereby this individual will be able to receive a direct reward for their individual efforts toward the production of a higher quality of raw material.

Girl, Champion Hog Grower

ANNA Barrett is a high school girl of Larimore, North Dakota, and last year was a member of the National Pig Club. She was the champion pig club member of the United States last year. She raised a litter of 14 pure-bred Duroc-Jersey pigs which weighed 3,811 pounds when they were 209 days old.

The pigs were fed 21 bushels of corn at 30c per bushel, 14 bushels of barley at 45c, 20 bushels of oats at 30c, 4,765 pounds of screenings at \$10 per ton, 86 pounds of shorts and 98 pounds of bran at \$19 per ton, 1,400 pounds of milk at 20c per 100 pounds and were fattened 183 days. The total cost of feed and pasture was \$91.49. The pigs were sold at 6½c per pound, amounting to \$247.71.



"Velvet" For Dairymen

West Chester, Pa.

February 3rd, 1916.

Mr. Dairyman:

We have a wonderful new invention and I want to tell you about it myself. It is a source of new profit for dairymen without added expense which I call "velvet," for it is all profit.

Thirty-five years, longest in America, the Sharples plant has been devoted exclusively to the Cream Separator.

Its inventors produced the first cream over-flow bowl with its superior quality of smooth even cream, the first directly driven Steam Separator, saving power, fuel and wear, the first and only tubular bowl with its doubled skimming force and efficiency and extreme simplicity, the bottom feed, the hanging tubular bowl, all making for convenience, durability, economy of maintenance and operation.

Now we have made another great invention, greatest of all as a profit producer, though so simple that it seems we should have had it long ago.

Thousands of carefully made observations by competent investigators, government officials and scientific men have proven beyond question that 95% of all the hand driven cream separators in America are turned below regulation speed, below the speed marked on the handle, a great part of the time and every hand separator is under-speeded some of the time.

No matter which separator, whose make, or what it is capable of doing when turned at full speed, it will lose cream and a lot of it, when the speed is allowed to drop even for a moment, and with the cream goes the profit.

THE NEW SHARPLES SUCTION FEED

Separator will stop this loss, aggregating millions of dollars annually to America's dairymen—stop it at once and forever.

No matter if you turn this Separator at widely varying speeds, fast or slow, it skims equally clean—no cream will be lost. The bowl drains its force within the bowl. At slower speeds it draws less, at faster speeds more, but always just the right amount for clear skimming.

A thousand of these machines are in regular daily use; demonstrated them to a finish before announcing them; it is the Sharples way—absolute perfection before sale.

The Sharples Suction Feed Separator has several very important advantages in addition to its certainty of clean skimming at any speed. The varying of speed does not change the thickness of cream; fast turning increases the capacity much above normal, just as you whip up a home, through it is simpler and better than ever.

We sell our Separators now, as always, subject to free trial by the buyer; but a stronger guarantee than any trial is the unbroken record of the growth of this business from the small beginning of 35 years ago to its broken rule of complete satisfaction to customers.

Lack of space prevents explaining more fully; but send today for new book, "Velvet for Dairymen," that tells all about this money-saving invention.

Sincerely yours,

O. M. Sharples
President,

The Sharples Separator Co.

Also Mechanical Milkers and Gasoline Engines

Toronto

Canada



A Few Canadian Ayrshire Breeders and Their Friends.

MARKET REVIEW AND FORECAST

TORONTO, Feb. 14—More seasonable weather has given a flip to business generally. The snow fall has been especially welcome as it has given a great impetus to trade in the interior towns. In some sections of Ontario, particularly, there was almost a famine in some lines of farm produce, particularly horse feed, because bad roads prevented deliveries.

The feature of the produce markets has been the heavy slump in grain. Mill feeds, however, are firm and higher. Hay is fairly held, dairy produce is steady and live stock strong.

WHEAT.

The market has been fluctuating wildly this last week and the final result is a drop of several cents. The drop is due in part to holders cashing in on their profits. The action of England in commencing supplying wheat to Australia at below previous prices, and also shipping at a lower rate, has influenced the market. The difficulty of transporting wheat from America is shown by a comparison of 20 a bushel a year ago and 50 a bushel to Liverpool now. Most holders, however, anticipate still higher prices before another crop is available. No. 1 Northern is quoted at Ft. William \$1.35; No. 2, \$1.25; No. 3, \$1.20; Ontario wheat, No. 3, is quoted \$1.15 to \$1.11; lighter sprouted and tough, \$1.07 to \$1.11; sprouted or smutty and tough, \$1 to \$1.04; feed wheat, 90c to 85c.

COARSE GRAINS.

Coarse grains, in sympathy with wheat, are being weakening. Oats and corn show sharp recessions, leaving the market indifferent. Wholesale quotations follow: Oats, C.W., No. 2, at Fort William, 46c; No. 3, 46c; No. 1 extra feed, 40c; Ontario oats, No. 3, 45c to 44c; commercial oats, 42c to 40c; corn, American, 85c; Canadian, 76c to 75c; pass, \$1.35 to \$1.75; barley, matting, 84c to 86c; feed, 81c to 80c; rye, No. 1, 72c to 74c; rejected, 68c to 66c; buckwheat, 75c to 77c.

Montreal quotes as follows: Oats, local white, 48c to 50c; corn American, 85c; barley, matting, 78c to 75c; feed, 80c to 83c; buckwheat, 75c to 77c.

MILL FEEDS.

The mill feed market is quiet but quotations are higher than a week ago. Linseed and oil cake meal are both fairly held and gluten feed tends to higher levels. Bran is being quoted \$22, shorts, \$23; middlings, \$27; feed flour, bar, \$1.75; corn meal, \$2.30 to \$2.50; oil cake meal, \$32; gluten feed, \$21. Montreal quotes as follows: Bran, \$24; shorts, \$26; middlings, \$28 to \$30; meal, \$31 to \$33.

HAY AND STRAW.

The hay market continues steady with receipts larger on account of better roads in the country. The embargo placed on hay being shipped to the United States is regarded as unfair by some hay dealers in the Eastern Provinces of Quebec in that the United States market is higher than the Canadian. No. 1 hay at Toronto is quoted, \$19 to \$20, No. 2, \$15 to \$16; baled straw, \$6.50 to \$7. Montreal quotes No. 2 hay at \$20 to \$20.50, and other grades proportionately.

DAIRY PRODUCE.

The Trade Bulletin of Montreal quotes it as characterized as "one of our leading and level head dealers," as stating that he felt confident that the price of butter on that market would reach 40c lb. before the next season. At the present time, the highest price that can be obtained for best Eastern townhouse creamery at Montreal, September or October make, is 36c, but dealers are not willing to sell at that price. Considerable of Eastern Ontario butter has been placed on the Montreal market and has been

ricia Snowdrift, consigned by R. J. Kelly & Sons, went to H. C. Holby of Belmont, paid \$28 for J. W. McQueen's Teresa, Gadie Vale. Some other good prices realized were as follows:

R. J. Kelly's Consignment: Netherland Spot Sophia, \$106, R. O. Chambers, Hatchery; Ideal's Bibby's Pontiac, \$115, J. Chandler, Outrigger; Lady Calamity Snowball, \$115, Neil McQueen, Rheden; Edna Yeaman De Kol, \$135, Neil McQueen; Canary Yeoman P.ech, \$130, J. V. Allen, Tilsonburg; Netherland Floss De

AYRSHIRES

Neidpath Ayrshires Bulls of all ages up to 18 months. Oldest by Duke of Arr, son of ex-Champion R. of P. cow record 1610 lbs. milk and 730 lbs. butter; others by brother to Champion R. of P. two-year-old heifer record 1431 lbs. milk and 607 lbs. butter, and from dams by Duke of Arr, Ayr. Choice individuals from R. of P. cow and at reasonable prices.

W. W. Ballantyne & Son, R. R. 3, Stratford, Ont.

LAKESIDE AYRSHIRES

A select lot of young bulls, all ages, sired by Auchenbrain Sea Foam (Imp.) 35758 (8865), Grand Champion at both Quebec and Sherbrooke, from Record of Performance Dams. Write for catalogue.

Proprietor: **GEO. H. MONTGOMERY**
Dominion Express Bldg., MONTREAL

Manager: **D. MCARTHUR**
PHILLIPSBURG, QUE.

KORNGOLD IMPROVED ENGLISH YORKSHIRES

Shown bred to farrow in April; also a choice lot of Young Pigs, just ready to wean.

F. J. McALPIN, Korngold Stock Farm, GANANOQUE, ONT.

This Year Grow Bigger Crops

MAKE up your mind that you will make each acre yield a bumper crop this year. Fertilize more thoroughly than you have ever done before.

Harab-Davies FERTILIZERS

are strictly high-grade. They have proved their worth and are recommended by progressive Canadian farmers from the Atlantic to the Pacific. They are thoroughly mixed, well balanced, complete in every way. Following are the principal lines for 1916.

Guaranteed Analysis

Amounts	Available Phos. Acid	Potash	Amounts	Available Phos. Acid	Potash
2	10	0	3	10	1
3	10	0	4	9	1
4	10	0	0	10	2
5	12	0	2	9	2
0	12	1	3	7	2
1	12	1	1	8	3
2	10	1	2	7	3

Our 1916 Fertilizer folder contains complete particulars about Harab-Davies Fertilizers. Write for it.

The Ontario Fertilizers Limited

West Toronto, Ontario

ANOTHER 100 LBS. FOUR YEAR OLD.

A particularly good record has just been established in the Holby herd with a four year old averaging 94.5 lbs. in the 24 hours and going to 100.5 lbs. in the 24 hours. A big strong type of heifer, she is a daughter of Sir Wayne of Hiversdale bred by J. H. Richardson herd. Mr. J. H. Purvis of this herd has been fortunate in securing this cow from the Holby herd. This is a new beginner in the breeding of registered black and whites, and this is his second female. She should make 30,000 lbs. in the coming year.

LAKESIDE NOTES.

In a letter the other day Mr. Dawson, manager of the Lakeside Holstein herd, of Mr. E. F. Oler, at Bronte, tells us that he has sold the foundation stock advertised in Farm and Dairy a short time ago. Note that he has changed the pricing that has appeared in our columns and at present is offering some choice young bulls, some of them sired by the Dutchland bull. This makes them half-brothers to the new Canadian champion cow, Lakeside Dutchland Arla, that will appear in Farm and Dairy next week.

These bulls are sons and grandsons of well known cows such as Queen-Jane De Kol, the 24,277 lb. cow; Lakeside Battler; Lakeside Daisy; and the noted Chervaine winner—all of which went at very good prices, the highest price, \$358, being paid by F. E. Robb of Rhoden, for Forest Edge Fayne Arla, consigned by I. H. Lipsett. The highest priced female, Pat-

HOLSTEINS SELL WELL.

THE animals offered at the Southern Ontario Consignment Sale on Tuesday of last week went at very good prices, the highest price, \$358, being paid by F. E. Robb of Rhoden, for Forest Edge Fayne Arla, consigned by I. H. Lipsett. The highest priced female, Pat-

Febru
OFFICIAL
FRIESI
Mature
L. Lawr
5y. 10m. 2d
30-day recor
milk, 110.0
60-day rec
milk, 144.7
Allison Bro
C. Victori
lbs. milk
—James A
3. Lynda
1m. 61. 0
30.0 lbs. b
30-day rec
milk, 95.84
lbs. milk, 127.70
Allison Bro
4. Magda
174. 71.9
lbs. butter
30-day rec
milk, 100.13
G. A. Gilroy
& P. Fisher
153; 613.8
lbs. butter.
154 day rec
milk, 44.16
30-day rec
milk, 25.7
A. E. Hule
1. 561.9
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7. Wooder
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8. Netherl
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9. Hoeselli
604.1 lbs. n
butter—Don
15. Minnie
661.1 lbs. n
butter—Fred
11. Broom
8m. 254. 4
25.43 lbs. b
12. Anne
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30-day rec
milk, 84.49
A. C. Hardy
174. 655.7
lbs. butter.
13. Sr. Four
1. Piete S
599.5 lbs. m
butter.
30-day rec
milk, 89.57
A. C. Hardy
2. Welcome
lbs. milk 21
—Lona L.
3. Piete K
154. 22.5 lbs
lbs. butter—
4. Rose Bu
42.8 lbs. m
butter—Jam
5. Ordyke
47. m. 161.
25.34 lbs. bu
30-day rec
milk, 75.9
James A. Oe
6. Beas Ger

MARCH 2, 1916
In the date for the
30 HEAD AUCTION SALE
of
Registered Holsteins
THREE MILES EAST OF NORWICH
This herd of Registered Holsteins are from No. 1 Stock and prove their worth at the sale. Interested parties will do well to write for Catalogue and look up their extended records. You will find some of the best here.
There will also be sold a number of good Grade, Two Percheron maros rising 3 and 4 years. These are beauties. Also 4 Horses. All farm implements, hay, grain, pigs and poultry. Having sold the farm everything will go with it.
TERMS: Four months credit on bankable paper. Six per cent. off for cash. Sale starts at Ten o'clock sharp. Cattle sold between 12 and 4.30 train.
LONGWORTH and ALMAS, Auctioneers
CHAUNCEY POOLE - NORWICH, Ont.

FAIRMONT HOLSTEIN HERD
Is headed by King Segis Alcatraz Calamity, the \$2,000.00 son of the \$500.00 Bull. Young bulls for sale ready for service from high record dams at value. Others a little younger sired by King, with two nearest dams averaging over 30 lbs. in 7 days. If you want to raise the standard of your herd, write—
PETER S. ARBOGAST, R. R. No. 2, MITCHELL, ONT., SEBRINGVILLE STN.

LAKEVIEW STOCK FARM, BRONTE, ONT. Lakeview Dutchland
Milk 67.7 in 7 days. Highest day's milk 86.6. Average 81.1. Fat 27.75. But-
ter 34.61, 4.88 per cent.
Milk, 1100.5 in 14 days. Highest day's milk, 87.3. Average, 82.9. Fat, 49.255. But-
ter 61.97, 4.24 per cent.
Milk, 530.2 in 30 days. Highest day's milk, 87.3. Average 76.66. Fat 98.67. But-
ter, 110.54. Average test, 3.86 per cent.
E. F. ONIEN, Proprietor. T. A. DAWSON, Manager

VILLA VIEW HIGH-TESTING HOLSTEINS
Now is the time to buy a son sired by King Segis Alcatraz Calamity, the \$2000
15-lb. show bull, sired by the \$500.00 bull. Only three youngsters, three months
old to offer, at prices that should move them quickly. Do you know that the
1925 Quebec Champion and two of her sisters are at our farms to be bred to
King? Send for Pedigree and Price.
ARBOGAST BROS., SEBRINGVILLE ONTARIO

RIVERSIDE HOLSTEINS For Sale, Choice Young Bulls, sired by
King Johanna Pontiac Korndyke, a grand-
son of Pontiac Korndyke, and a brother of Pontiac Lady Korndyke, 26.02 butter
in 7 days, 156.95 lbs. 28 days—world's cord when made. Also females bred to
King.
J. W. RICHARDSON CALEDONIA, ONT.

KING SEGIS PONTIAC WAYNE
A fair individual, born Dec. 6, 1914. His dam, Elmida Mabel, a 100-lb. 4-year-
old, with 23 lbs. butter. His sire, KingSegis Pontiac Duplicate, a son of King
Segis Pontiac and a sister to the first 46-lb. cow.
R. M. HOLTRY R. R. 4 PORT PERRY

Choice Ones for Alberta College
The Agricultural Department of the University of Alberta at Edmon-
ton has just recently secured some well-bred and well-backed Holstein
foundation stock from the Hillside herd of W. A. McElroy of Chesterfield,
Ont. They include two daughters of 20,000-lb. R.O.P. cows and a gd.-daugh-
ter of a 20,000-lb. cow out of a 16.79-lb. two-year-old. These calves were pur-
chased for class work at the College and are necessarily good individuals.
Mr. McElroy is to be congratulated on placing such well-bred material to
form the nucleus for the College herd. In writing us a few days ago, he
also states that through Farm and Dairy he has also sold to Mr. Elaric
Fillon, Maxville, Ont., a young sire to place at the head of the latter's fine
herd of big animals.
There is still a big demand for the right kind of well-backed Holsteins.
If you, as a breeder, have them to offer, **FARM AND DAIRY** is able
to locate you a prospective buyer. Write us.
FARM AND DAIRY PETERBORO, ONT.

not qualify under the R.O.P. rules?
I see from time to time stock pens and display ads. headed by the name of a
cow as Canadian champion, and she is
not bred to qualify. Is this square busi-
ness? I don't think so. If it is, pretty
soon our old cow can be called Canadian
champion, and you haven't to breed her to
get it either.
Now, Editor, I own the present
Champion R.O.P. cow of Canada, and
frankly believe that if she were not bred
to Freedom stock for finishing her test
she would have made about 5,000 more
lbs. in her record, and the other fellow
who didn't breed his cow but made a large
record, get the honor. Judge for your-
self. Is it square?—Breeder's.

**THE PEACH BIRD HERD OF Ayr-
SHIRES.**
A PARTICULARLY attractive type of
Ayrshire exhibited at Ottawa, Winter
Fair were four from the herd of I.
T. Brownlee of Hemmingford, Que. This
is one of the coming herds. At the pre-
sent time, it consists of 50 head of regis-
tered Ayrshires, practically all of which
have been raised and bred on the Peach
Bird. Mr. Brownlee has specialized
his entire herd of animals on the use
on a utility short horn. One of the
cows in his herd would pass for a full
sister to Jean Armour. She has the
correct, straight top and strong back,
and the big development in digestive capacity
and udder, which are typical of the breed.
A feature of the udders in this herd is
the development of the large, well-placed
teats. This was first brought out in
four animals that he had at Ottawa. Al-
though these have never received more
than the usual good care on the Peach Bird,
yet every one of them came within the
major, second prize of \$17.50 to \$17.54;
169.02; 123.76, in the test. They are a
clean, vigorous, strong-bodied type, fit for
both show and utility purposes. The of-
ferings of young stock from the Peach
Bird herd will make the right kind for
foundation purposes. The offerings will
be found listed in Farm and Dairy from
week to week. Look them up.

WHAT IS A CHAMPION?
EDITOR, Farm and Dairy—I would like
to have you let me know through
your valuable paper why a breeder
can advertise his cow "Canadian Cham-
pion," when she does not freshen inside
of the required 15 months, and therefore does

SHADELAWN STOCK FARM DISPERSION SALE
To be held at my farm Two Miles West of
NORWICH, ONT.
Wednesday, Mar. 1
ONE P.M. SHARP
Conveyances will meet trains at Norwich at
11.50 a.m. on day of sale.

50 HEAD 50 PURE BRED Holstein-Friesian Cattle

In placing our herd of Holsteins at your bid on March 1st, we are offering to the Holstein breeders of Canada the result of thirteen years of consistent breeding and selection to produce a business herd backed by the best of breeding. When you see our herd you will say that in a great degree we have succeeded. The foundation animals for Shadelawn Holsteins came from the well-known "Lakeland" herd of Mr. H. H. Lattin, who was strengthened by our purchase with Mr. Bettie of two carloads of purebreds of the high-testing "Canaries," from H. B. Day, the Michigan breeder. On these females we have used only sires of the best of breeding. Here are a few of them:

1st—COUNT MERCENA POUCH 2nd—PRINCE ABBEKERK PAULINE
With 25 officially tested daughters, (With 14 tested daughters and 5 proved sons.)
and whose dam Mercena—a Canadian champion—made 27.63 lbs. in 7 days. (From Mr. Bollert's great cow—Tidy Abbecker, with 27.37 lbs. in 7 days.)

3rd—MAY ECHO SYLVIA'S GERREN 4th—PRINCE ECHO SYLVIA
The only bull in the world, unless (Most of our young stock is by this son of Sire's. He is out of our own cow, Belle Abbecker, that made over 25 lbs. as a Jr. 4-yr.-old. He is in the sale. Mark him.)

Could you ask for better sires? This is the blood behind our great string of females of which there are—
20 GRAND-DAUGHTERS and GREAT-GRAND-DAUGHTERS of the GREAT MAY ECHO SYLVIA
We invite every breeder to attend our Sale on March 1st, and see these and our other splendid offerings. Write to-day for a catalogue. It gives you full details.

MOORE & DEAN T. L. DUNKIN, Shadelawn Stock Farm, NORWICH, Ont.
Auctioneers



53 HEAD Pure Bre
On

OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS FROM JAN. 1 TO JAN. 31, 1916.

Mature Cows over 23 lbs. Butcher.
 1. Lawrence's Echo Poach, 16053, 5y. 10m. 5d.; 701.3 lbs. milk, 27.0 lbs. fat. 30-day record: 5y. 10m. 5d., 3034.4 lbs. milk, 110.25 lbs. fat. 60-day record: 5y. 10m. 5d., 4040.7 lbs. milk, 147.75 lbs. fat. 120.50 lbs. butter.—Alison Bros., Chesham, Ont.
 2. Victoria Burke, 7103, 5y. 6m. 16d.; 490.6 lbs. milk, 25.94 lbs. fat. 30 lbs. butter.—James A. Caskey, Madoc.
 3. Lyndale Pietje Abbecker, 17488, 5y. 10 d.; 684.0 lbs. milk, 24.00 lbs. fat, 30.01 lbs. butter.
 30-day record: 5y. 10m. 6d.; 2711.7 lbs. milk, 95.84 lbs. fat. 125.63 lbs. butter.
 60-day record: 5y. 10m. 6d.; 5481.8 lbs. milk, 187.78 lbs. fat, 159.69 lbs. butter.—Alison Bros.
 4. Magdalena of Avondale, 13197, 6y. 6m. 17d.; 710.9 lbs. milk, 33.71 lbs. fat, 29.65 lbs. butter.
 30-day record: 6y. 6m. 17d.; 3022.5 lbs. milk, 100.13 lbs. fat, 123.13 lbs. butter.—G. A. Gilroy, Glen Buell.
 5. Pauline Colantha Poach, 6784, 5y. 12d.; 613.8 lbs. milk, 25.57 lbs. fat, 29.35 lbs. butter.
 15-day record: 5y. 6m. 12d.; 1023.0 lbs. milk, 44.16 lbs. fat, 55.21 lbs. butter.
 30-day record: 5y. 6m. 12d.; 2220.1 lbs. milk, 82.71 lbs. fat, 118.50 lbs. butter.—A. E. Hulet, Norwich.
 6. Netherland Schulling, 8914, 7y. 2m. 3d.; 661.9 lbs. milk, 28.56 lbs. fat, 29.31 lbs. butter.—W. J. Biggar, Jarvis.
 7. Woodcrest Colantha Poach, 26256, 5y. 10m. 2d.; 681.2 lbs. milk, 31.26 lbs. fat, 29.71 lbs. butter.—Dr. L. de L. Harwood, Vandriell, Que.
 8. Netherland Beauty Poach, 11047, 6y. 11m. 8d.; 615.2 lbs. milk, 20.97 lbs. fat, 22.32 lbs. butter.—W. H. Cherry, Hagersville.
 9. Hensoltje Xanthos, 17357, 5y. 9m. 1d.; 604.1 lbs. milk, 20.50 lbs. fat, 21.15 lbs. butter.—Donat Raymond, Montreal, Que.
 10. Minnie May Keyes, 12511, 6y. 3m. 15d.; 661.1 lbs. milk, 20.70 lbs. fat, 23.69 lbs. butter.—Fred Stock, Tavistock.
 11. Irisomir Iosco De Prin, 13524, 6y. 5m. 25d.; 474.4 lbs. milk, 20.46 lbs. fat, 23.43 lbs. butter.—W. J. Biggar, Jarvis.
 12. Anna Lora, 14101, 7y. 3m. 24d.; 547.8 lbs. milk, 20.63 lbs. fat, 25.79 lbs. butter.
 30-day record: 7y. 3m. 24d.; 2281.5 lbs. milk, 64.89 lbs. fat, 106.78 lbs. butter.—A. C. Hardy, Brockville, Ont.
 13. Magdalena of Avondale, 13197, 6y. 6m. 17d.; 653.7 lbs. milk, 30.44 lbs. fat, 28.46 lbs. butter.—G. A. Gilroy.
Fr. Four-Year Class over 17 lbs. Butcher.
 1. Pietje Sara Jewel, 19303, 4y. 6m. 11d.; 595.5 lbs. milk, 22.27 lbs. fat, 27.64 lbs. fat. 30-day record: 4y. 6m. 11d.; 2234.1 lbs. milk, 89.57 lbs. fat, 117.11 lbs. butter.—A. C. Hardy.
 2. Welcome Lee, 16893, 4y. 11m. 23d.; 478.4 lbs. milk, 21.30 lbs. fat, 26.60 lbs. butter.—Louie L. Westlauffer, Tavistock.
 3. Pietje Korndyke Queen, 26257, 4y. 6m. 15d.; 523.3 lbs. milk, 20.50 lbs. fat, 26.96 lbs. butter.—Dr. L. de L. Harwood.
 4. Rose Bud Iosco, 18007, 4y. 6m. 6d.; 447.8 lbs. milk, 20.00 lbs. fat, 25.11 lbs. butter.—James A. Caskey.
 5. Orndyke Adirondac Korndyke, 20388, 4y. 6m. 16d.; 539.5 lbs. milk, 18.95 lbs. fat, 23.24 lbs. butter.
 30-day record: 4y. 6m. 16d.; 1984.0 lbs. milk, 76.59 lbs. fat, 95.78 lbs. butter.—James A. Caskey.
 6. Bess Gerben, 26353, 4y. 6m. 6d.; 479.0

lbs. milk, 17.90 lbs. fat, 22.40 lbs. butter.—Dr. L. de L. Harwood.
Fr. Four-Year Class.
 1. Pauline Colantha Mercona, 19402, 4y. 6m. 25d.; 461.4 lbs. milk, 22.46 lbs. fat, 26.08 lbs. butter.
 15-day record: 4y. 6m. 15d.; 920.9 lbs. milk, 33.67 lbs. fat, 38.72 lbs. butter.
 30-day record: 4y. 6m. 15d.; 1774.2 lbs. milk, 55.36 lbs. fat, 72.83 lbs. butter.—A. E. Hulet, Norwich.
 2. Speckle Pietje, 21311, 4y. 3m. 15d.; 620.0 lbs. milk, 23.75 lbs. fat, 27.20 lbs. butter.—A. C. Hardy.
 3. Orville Roberta Colantha, 16795, 5y. 11m. 25d.; 624.4 lbs. milk, 21.16 lbs. fat, 26.46 lbs. butter.—Laidlaw Bros., Aylmer.
 24d.; 419.7 lbs. milk, 19.25 lbs. fat, 20.32 lbs. butter.—M. H. Halsey Springfield.
 419.7 lbs. milk, 19.25 lbs. fat, 20.32 lbs. butter.
 15-day record: 4y. 3m. 15d.; 211.8 lbs. milk, 20.13 lbs. fat, 21.41 lbs. butter.—J. K. Ouloulen.
Fr. Three-Year Class over 19 lbs. Butcher.
 1. Colantha Buter Girl, 22503, 3y. 10m. 20d.; 526.0 lbs. milk, 24.69 lbs. fat, 30.87 lbs. butter.
 30-day record: 3y. 10m. 10d.; 2440.1 lbs. milk, 100.19 lbs. fat, 126.34 lbs. butter.—M. H. Halsey.
 2. Mildred Pieterje Abbecker, 21509, 3y. 10m. 8d.; 674.6 lbs. milk, 24.27 lbs. fat, 30.34 lbs. butter.—Dr. L. de L. Harwood.
 3. Daisy, 18256, 3y. 10m. 2d.; 464.1 lbs. milk, 18.26 lbs. fat, 23.89 lbs. butter.—Edwin C. Chambers, Hatchley St.
 4. Helinda Colantha, 22596, 3y. 11m. 17d.; 612.7 lbs. milk, 24.15 lbs. fat, 30.20 lbs. butter.—Thomas Pearce, Tillsonburg.
 5. Bess Warne, 21509, 3y. 10m. 11d.; 406.0 lbs. milk, 15.78 lbs. fat, 19.72 lbs. butter.—Donald A. McPhee, Vanklok Hill.
 6. Bessie Council, 22599, 3y. 7m. 25d.; 404.4 lbs. milk, 15.27 lbs. fat, 20.09 lbs. butter.—Donald A. McPhee.
Fr. Three-Year Class over 18 lbs. Butcher.
 1. Daisy Fayne 2nd, 25621, 3y. 11m. 1d.; 627.7 lbs. milk, 18.25 lbs. fat, 23.15 lbs. butter.
 30-day record: 3y. 11m. 1d.; 2198.4 lbs. milk, 77.41 lbs. fat, 96.59 lbs. butter.—M. H. Halsey.
 2. Calamity Snow Meckhilde 2nd, 26707, 3y. 10m. 1d.; 482.1 lbs. milk, 17.50 lbs. fat, 21.89 lbs. butter.—Walburn Rivers, Ingersoll.
 3. Lady Pauline Colantha, 22540, 3y. 6m. 18d.; 411.5 lbs. milk, 16.23 lbs. fat, 30.29 lbs. butter.—E. Hulet.
 4. Colony Bessie Canary, 26306, 3y. 11m. 1d.; 486.5 lbs. milk, 15.86 lbs. fat, 19.83 lbs. butter.
 30-day record: 3y. 11m. 9d.; 1996.1 lbs. milk, 61.60 lbs. fat, 76.86 lbs. butter.—Alison Farm, Woodville, Ont.
 5. Mutual Netherland Korndyke, 21382, 3y. 11m. 18d.; 422.2 lbs. milk, 15.11 lbs. fat, 18.90 lbs. butter.—D. A. Grant, Cornwall.
Fr. Two-Year Class over 17 lbs. Butcher.
 1. Dolly Henserveld Korndyke, 27048, 2y. 6m. 25d.; 337.7 lbs. milk, 17.82 lbs. fat, 21.73 lbs. butter.
 30-day record: 2y. 6m. 25d.; 1534.4 lbs. milk, 51.77 lbs. fat, 69.22 lbs. butter.—James A. Caskey.
 2. Blossom Henserveld, 26309, 2y. 6m. 6d.; 412.6 lbs. milk, 16.78 lbs. fat, 20.99 lbs. butter.
 14-day record: 2y. 6m. 6d.; 806.4 lbs. milk, 21.43 lbs. fat, 29.30 lbs. butter.—A. C. Hardy.
 3. Beauty De Kol Calamity, 23953, 3y. 9m. 5d.; 401.8 lbs. milk, 16.55 lbs. fat, 20.69 lbs. butter.—Charles E. Holborn, Glidden.
 (Continued next week)

Watch Our Ad. for the Next 6 Weeks LAST BUT NOT LEAST!
 Third and last offering of Young Bulls fit for service. A 10 months' son of Pontiac Hermes out of an A.O.P. dam, 5369 lbs. milk as a 2yr-old milked twice daily. Price \$75, delivered anywhere in Ontario.
E. B. MALLORY, Bayside Stock Farm, BELLEVILLE, Ont.

Bulls Fit for Service
 A No. 1 Bull, dam Helena Pauline Korndyke, 1115 lbs. milk in one day, 29.97 lbs. butter in 7 days. Over 100 lbs. milk in one day; also two more bulls closely related to this cow. For full particulars write—
B. E. HAGERMAN - R. R. 1 - HAROLD, ONT.

Yearling Bull for Sale
 Yearling Bull from a heifer with 91.35 lbs. butter in 30 days, R.O.M., as a 2yr-old; 3 bulls coming a year and one 6 mos. old. Also some choice young females bargain. If you are all from dams with high official records. They are going at a price you want one write quick.
W. J. BAILEY - Lyndenwood Farm - JARVIS, Ont.

Elmcrest Holstein-Friesians
 Almost sold out of Bulls. The two 2yrs. Bulls are both 300-300s epoch too late. I have some excellent. Cows and heifers for sale, all ages, and if in need of a car or two of good Lacarne just write or phone.
W. H. CHERRY - Bell Phone, HAGERSVILLE, ONT.

GLENDALE STOCK FARM offers for sale Six Bulls ready for service, sired by Woodcrest Argyle Lad (Imp.) His first five sons and daughters at an average age of fourteen from 90 to 87% blood of the great 30 lbs. cows "May Echo Sylvia" and "Lulu Keyes".
 Full particulars on application to
WM. A. SHAW - R.R. No. 1 - FOXBORO, Ont.

SIRES READY FOR SERVICE
 Today we are offering several good quality sires ready for work. One of these is out of a sister of Het Leo Boon (23.38 at 2 yrs.)—a daughter of the E. H. according quality. Write us about your needs.
 We have also some very fine young sires from record dams. They are sired by the Leavens & Furtelle great herd sire, King Segis Alcantra, the son of Artmann's King Segis Alcantra. These young sires are not ready for service but they are open to your purchase if you are seeking the best in Holstein blood.
JAS. A. CASKEY - MADOC, ONT.

For Sale—A Fine Holstein Bull calf
 A splendid individual. A dandy. Dam, Perrina Faforis Buller Girl, a Junior three-year-old, is entered in R.O.P. test, and has produced in first six months 6,000 lbs. milk testing almost four per cent. butter fat in first six months.
 Sired by Michael, Sir Penck Colantha, a grandson of Colantha Johanna Lad.
MICHAEL A. ARBOGAST - Easy Terms for Quick Sale. Fineview Stock Farm, R.R. 3, STRATFORD, ONT.

4 HOLSTEIN BULLS FOR SALE
 daughters of Sir Pieterje Poach De Boer, with milk up to 100 lbs. per day. Good C. DUPE NELLE.
R. R. 1, SCOTLAND, ONT.

53 HEAD PURE BRED HOLSTEIN CATTLE 53 HEAD PURE BRED
 To be held on the Farm, three miles North from Norwich and two miles East from Burgessville, Ont.
TUESDAY, FEBRUARY 29th, 1916



For twenty-two years, we have been breeding Holsteins, during which time we have been devoting special attention to developing a strain of heavy producing, high-testing individuals of true Holstein type. The herd consists of nine head over five years; Five 4 year olds; Nine 3 year olds; made a good showing.
 The last two years' crop of calves are from bulls whose dams have records of over 30 lbs. butter in seven days and many from cows with good official records. The young stock affords a great opportunity in getting the very best of breeding at your own price. Daughters of some of the best cows that have been in Canada.
CATALOGUES GIVE ALL INFORMATION. WRITE FOR ONE.
 Will meet eight o'clock train from south and west at Burgessville only. 11.30 trains at Norwich and Burgessville.
MOORE & DEAN AUCTIONEERS RETTIE BROS., R.R. No. 1, BURGESSVILLE, Ont.



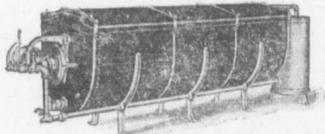
The Canadian Point of View

There has never been a more opportune time for Canada to make large sales of butter in the United States than now.

But this butter **must** be made from pasteurized cream!

The New York City daily papers have been conducting a very vigorous campaign for better butter that has been **pasteurized**.

This campaign has resulted in an enormous demand for the pasteurized product.



The BEAVER-JENSEN Ripener-Pasteurizer which we are selling meets every requirement of pasteurization and "makes good" wherever it has been installed.

We will be glad to furnish full particulars upon request.

W. A. DRUMMOND & CO.
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Is the greatest Clover producing fertilizer obtainable. By growing clover you build up the fertility of your farm. Ask any man from the Old Country what Basic Slag has done for the farmers there. Try Basic Slag for yourself this season. It costs \$20 per ton, which is better value than you can get in any other fertilizer.

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SYDNEY - NOVA SCOTIA

McCormick



The Lily Bowl
Gets the Cream

CREAM is worth too much to waste, yet it is being wasted by the ton every day by old-fashioned methods of skimming. Today there is no excuse for such waste. The Lily bowl gets all the cream it is possible to get, leaving only a drop or so to the gallon of skimmed milk.

Let's take a close look at this wonderful bowl. It is compact and convenient to handle. It lifts off the spindle, leaving the spindle in the separator where it belongs. It comes apart easily, but it can't leak. The disks provide a greater skimming surface than is found in other bowls. Combined with them are six cream gatherers—just twice the number other separators have. Separation begins the instant the milk enters the bowl, and there is always a clear passageway for the cream.

There is not even a cream regulating screw in the cream passageway. You make your cream thicker or thinner by regulating the amount of milk mixed with it, but thick or thin, you get all the cream when you use a Lily cream separator.

The bowl is not the only good Lily feature. The McCormick local agent, who sells Lily cream separators, will show you how every other feature is worked out just as carefully. See him or write us at the nearest branch house.

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At Brandon, Calgary, Edmonton, Estevan, Hamilton, Lethbridge,
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Henry Glendenning Says:

"It's the best tillage
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**CUTAWAY
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Has been endorsed by the Leading Farmers and Agricultural Experts of the Dominion. A user of the Cutaway has never been known to discard it for any other disc. On any kind of land—at every season—it will do better and quicker work than any other. It is one of the implements that should be on every progressive farm.

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Any farmer or farmers' club can secure one of these harrows without any cash outlay. We are devising a scheme by which one can be obtained by only a few hours' work. Watch for the announcement of our great

Farm and Dairy has made arrangements to secure a few of these popular discs to offer to its readers. Each has twenty 24-inch scalloped steel discs—the scalloped disc that is the distinctive feature of the CUTAWAY HARROW.

CIRCULATION CONTEST

It will be given in next week's issue of Farm and Dairy. If you are interested write for particulars.

FARM AND DAIRY - PETERBORO, ONT.