# ARM AND DAIRY RURAL HOME



Toronto, Ont., December 28, 1916





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### President Creelman Becomes

MPORTANT changes in the con-struction of the Department of Agriculture in the Ontario Government have been effected, as a result of which Premier Hearst has become political head of the department and has called in as his assistant, Dr. G. has called it as his assistant, br. G. C. Creelman, President of the Outario Agricultural College. Dr. Creelman, as Commissioner of Agriculture, a new position that has been created for him, will presumably have direct charge of the affairs of the depart-ment. The agricultural work that has been carried under the department of the Provincial Secretary, and the Lakes, Forests and Mines Department, will all come under the direction of Premier Hearst. Dr. Creelman will have charge of the work of devising the best plans and means of placing returned soldiers upon the land. This it is believed, will be one of the most important subjects demanding the attention of the reconstructed depart-

Desiring to obtain further informa-Desiring to obtain the histories that the public announcements, Farm and Dalry called up Jion. Mr. Hearst over the long distance telephone. Hon. Mr. Hearst was unable to speak to us himself, but through his private secretary furnished the following information:

It seems that as a result of the war Guelph Agricultural College has fallen off to an extent that has very much lightened President Creelman's duties at the college. For the present least, therefore, he will continue For the present, at have oversight of the college. As yet the details of the duties of the Commissioner of Agriculture have not been He will, however, fully worked out. He will, however, occupy an entirely different position from that of the Depuly Minister of Agriculture. It is expected that the Commissioner of Agriculture will greatly lighten the work that hitherto fully worked out. has fallen on the Minister of Agricul-ture. Hon, Mr. Hearst desires it to be known that he is deeply interested in the agricultural situation in Ontario that he is prepared to spare neither time nor effort on his own part in order that the work of the Department of Agriculture and the general agricultural situation of the province agricultural situation of the province may be promoted in every way possi-ble. From the foregoing statement Farm and Dairy gathers that the time may come when Dr. Creeman will no longer act as president of Guelph Coliege, but wal give all his time to the lege, but will give all his time to the duties of the new position that has been created. Apparently the Commissioner will have a good deal to do with the executive work of the Department of Agriculture, leaving the gen eral supervision of the department largely in the hands of the Deputy Minister, as in the past.

Dr. Creelman's Duties.

Coupling with his duties as head of the O. A. C., Guelph, of which he re-mains president, Dr. Creelman will interest himself generally in agriculcultural education, and act as general advisor to all departments pertaining to agricultural affairs, with a view to co-ordinating all these departments so that they will be brought in closer tcuch with one another. It has not been decided whether the different branches of the Department of Agri culture, now under the control of other departments of the Government, will be placed under the immediate jurisdiction of the Department of Agricul-ture. It was stated that after Dr. Creelman gets under way with his ornization work the Government may take a step in that direction. At pres-ent, however, Dr. Creelman will not act as an administrative head.

One of the principal tasks ahead of Dr. Creelman will be the co-ordination of the farming work carried on in connection with Northern developnt, now under Hon. G. Howard here er years,

guson; the farming operations in connection with the public institutions, in the Provincial Secretary's Department, the Provincial Becretary's Department, and the general work of the Department of Agriculture. While these branches may not be included in the Department of Agriculture now they will in a sense be ander the direction of Dr. Greelman. His knowledge of the control experience are also expected to be of marked value in the working out of a general settlement policy for Northern

One of the first things for Dr. Creelone of the arst innigs for Dr. Credi-man to take a hand in will be the furthering of dairying in Timiskam-ing. It is announced that a cream-ery will be established at New Liskeard to encourage the farmers to go into dairying. Representatives of the deportment have been in the district broaching the idea to the farmers and enlisting their support.

Dr. Creelman has been President of

the Ontario Agricultural College since the Ontario Agricultural College since 1904, previous to which he was for several years superintendent of Farmers' Institutes for Ontario. In view agrations official capacities he has shown great ability-and energy, and will grove a tower of strength to the reorganized department.

Crop Yield in Nova Scotia

N Ontario and most of Quebec, the season of 1916 was one of marked extremes. During the first half of the season rain fell almost continuously, while during the latter half the pendulum swing to the other extreme, with a resulting drouth that very seriously reduced the yield of all farm erops. In Nova Scotia, however, the yields of many of the crops were above those of 1915, while in some instances, those of 2315, while it ambient and the yield ex-notably with potatoes, the yield ex-ceeded that of the average season. The ceeded that of the average season. The crop report issued under date f Dec. 1st, states that hay, blessed with beuntiful rains during the growing season, was harvested in a drouth and season, was harvested in a drouth and as a result both in quantity and quality was a record crop. Oats, wheat and other cereals on well drained land were almost equally good and even later seedings were almost up to the average. Polatoes, a signal fail-ure in 1915, were a record crop. Dry weather in the latter part of the season, however reduced the yield of mangels, turnios and other root crops and also made scant pastures. Apples were again a light erop, so that for two success; years the growers have harvested little more than a third of the record crop in 1911.

third of the record crop in 1915.

The following is the estimated yield of some of the leading crops and a comparison of the yields of 1916 with those of 1915 and with the average:

		Compared with 1915	Compared with Average
Crop	Total Yield		
Oats	4,794,430	106%	92%
Wheat	426,660	101	89
Barley .	167,384	100	83
Buckwhes	t 243,075	92	75
Detatoes	7,139,160	140	115
Turning	6,866,200	95	77
Mangole	590,320	100	91
mangen	Tons		
Hay	The state of the state of	115	117
rang	1,030;620 bbls.	TOP BUT	MARCH ST
	The state of the s		

The only products on the farm for which lower prices are than 1916 are hay and horses. Other products have increased from 10 to 40 per cent. The price of fertilizers, however, has greatly increased. Feeds, that have to be purchased in large quantities for all classes of live stock, are 40 per cent, higher than they were a year ago. It is doubtful, therefore, if the farmer is making much, if any, more for his crop this season than he did on form-

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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 Chalkam

VOL. XXXV

TORONTO, ONT., DECEMBER 28, 1916

No. 51

# The Maintenance of Pastures, Our Most Important Source of Feed Hitherto They Have Received Scant Attention—Cultural Methods Recommended

ORE milk is realized from pastures than from all other feeds combined, and yet they receive less attention than almost any other source of feed. Go to England, Scotland, or Denmark and you will find that our pastures are not to be compared with theirs. will find them carrying extraordinary crops of grass. The hay may be badly burned up, still their pastures are far superior to ours at their best. The reason for this is that their old pastures are not neglected. They do not look upon clover and timothy as pasture plants. Some of their fields have been down for hundreds of years and are still producing four or five times as much as our newer pastures. When in England I saw a large commons, the title of which is vested in the freemen of the city of Newcastle. Legendhas it that they distinguished themselves in Roman times by defending the city against the inroads of the Picts and Scots, and were granted a perpetual title to this commons. The pasture

It is so dense that mice cannot get through it, but must burrow under or run over it. What a coatr st this is to our old pastures in Ontario. Two Kinds of Pastures.

is now nearly 2,000 years old, the land has evi-

dently never been plowed, for it is still covered

with cradle knolls, such as we see in our old pas-

dure fields, and which have originally been caused

by the upturned roots of windfalls. The grass on

that pasture is so thick that as you walk over it

you can feel it spring beneath your feet like plush.

In Ontario we have two kinds of pastures, permanent and those fitting into a rotation. These temporary pastures are mostly seeded down to timothy mixed with alsike and clover. The first year a crop of hay is taken and the next year they are used for pasture, but it is generally found that the pasture consists mostly of timothy with probably a scant sprinkling of white clover. Now, of all grasses, timothy is about the poorest for pasturing milch cows. A reference to the table shows that 100 lbs. of average milk contains

Digestible Nutrient of Feeding Stuffs.

Name *	Dey Matter	Ash	Protein	Carbo- hydrates	Fat	Nutritive
June grass (green) Corn slage Mangels Timothy hay Red clover nay White clover hay Affalfa hay V heat bean Oats Milk	20.9	2.8 1.4 1.1 4.5 6.6 8.3 7.4 5.8 3.0	3.0 .9 1.1 2.8 6.8 11.5 11. 12.2 9.2 3.6	19.8 11.3 5.4 43.4 35.8 42.2 39.6 39.2 47.3 4.9	1.4 1.7 1.5 1.2 2.7 4.2	1: 4.0

3.6 lbs. of protein, while 100 lbs. of timothy hay contains only 2.8 lbs. of protein. How much would

a cow have to eat of this hay in order to get enough protein to make 100 lbs. of milk? It may be that some of us have condemned cows that were pasturing on timothy because they did not produce enough when, as a matter of fact, they have not had sufficient protein put into them for high milk production. Compared with timothy hay, we find that red clover Mass nearly three



The Position of Agriculture

AGRICULTURE is the chief basic industry of Canada, and those engaged in it are the most numerous, the most nucessary, the most moral, and potentially the most influential class in the community, but through lack of class coherence they have abrogated their chief functions as citizens, and have reduced themselves to a condition of political inferiority and economic servitude.

The law-making powers which they should, but do not, exercised by a small number of people engaged in the secondary interests, and particularly by those in financial, manufacturing, commercial, and transporting pursuits. These pursuits are carried on chiefly through artificial corporations, and the men who control these corporations control government, and exercise, through the Legislatures, the law-making powers of the state. Naturally they exercise these powers in making economic laws favorable to themselves, and so effective. In the processes of production and exchange, is so exploited that the greater part of the exactions on the farmer and advantages to themselves, the farmer, in the processes of production and exchange, is so exploited that the greater part of the interests has reached a stage where it inities that the production of the state of the control of the production of the production

Ager.

times as much protein, namely, 6.8 per cent,, while white clover has 11.5 per cent, protein, or four times as much as timothy. White clover is one of our best pasture plants, but unfortun tely cannot stand the drouth. The central root, sowever, is not killed by dry weather, so that it comes up quickly upon the return of moisture. Better results are obtained from it if it is pastured from new seedings. Red clover is good, but we have a much better general feeding plant in alfalfa with 11.0 per cent of protein. It has a great amount of foliage, more than any other clover. Many have had difficulty in getting a stand, but this is due to the use of wrong methods, generally the sowing of the wrong kind of seed. The common stuff will not grow, the only reliable varieties being Ontario Variegated and Grimm. We cannot at present, however, get enough seed of these varieties and other and inferior stuff has been sown. On my farm, Ontario Variegated is hardler than red clover. It would be a wise precaution to try and buy a little Ontario Variegated seed and sow it in the bare spots in the pasture fields.

The Permanent Pasture.

There will always be some land that is good for nothing but permanent pasture, and you will have noticed what good flows of milk we get from these pastures when they are in good condition. This is due to the large amount of protein which they generally yield. The June grass, which is generally found in them, contains protein to the extent of three per cent. of the green matter. There is also considerable white clover in most of these old pastures. Since they are so good for milk production, they should not be neglected, and the question is, how can we improve them. They are getting scant attention, and in many cases are growing up with mulleins or blue weed, neither of which produce milk. The first thing, then, in renovating an old pasture is to free it of weeds. Mulieins can be pulled. Being biennials, if this is done consistently for two years, the field will be rid of them. Blueweed is fond of lime and is worst in limestone soils. It can be eradicated by spudding.

One of the worst enemies of old pastures is moss. In some cases it flourishes and crowes the pastures out. It is capable of growing on acid soils and is generally most prevalent, therefore, where there is a shortage of lime. The best way to get rid of it is to go over the field with the harrows, just before-the frost comes. This rolls it up into balls and will generally dispose of it satisfactorily. Harrowing also tends to correct the root-bound condition of the pastures by breaking them up. You have all noticed in pasture fields that there is always a collection of manure around the gateway. This means that other parts of the

(Continued on page 6.)

\*An address by Mr. Henry Glendinning, Manilla, Ont., before several of the local dairymen's conventions resembly held throughout Eastern Ontario.

# Dairymen Discuss the Practicability of Cream Grading

Should Be Compulsory F. A. KEYES, Milverton.

THINK that in the first place cream grading should be made compulsory by an act of Parliament. This would place all the creamery men on the same footing. It is quite plain to me and has been for some time, that something will have to be done to better our quality of butter in Ontario. Just as soon as Ontario has to look for a market outside the province and go into competition with the other provinces and other countries, she will find her quality of butter much inferior to that of her competitors. If the factory owners would take hold of this proposition as they should, it would not be a very difficult matter to induce the majority of farmers to take much better care of their cream. I consider it very unfair that the man who takes good care of his cream and delivers it promptly and in good condition to

the creamery, does not get any more for it than the man who is careless in handling the cream and who delivers it when he has time, not caring whether the cream is four days or 10 days old. Cream grading would put the creamery business of Ontario on a much better footing, both for producer and manufacturer.

Some of the Difficulties JAS. STONEHOUSE, Port Perry.

THE difficulties are serious for the country creameries where the cream is gathered in large cans. The first difficulty would be to get men as haulers who would be qualified and who would have the courage to grade the cream before the eyes of the patron. The next difficulty would be where it is often difficult to get sufficient cans or wagons to bring in the load during the flush season, for under the grading system, one or two cans would always come in partly filled on every wagon. Vet room would be another difficulty where space is limi-

ited, for the vats would often be partly filled. It would also cause more work in churning, for there would often be two small churnings where it could be done in one under the present system.

If the grading system was to come into general operation, every patron should have his own individual can, and that should be brought to the creamery and graded there by one man. But there are difficulties in the way of adopting that method. A great deal of the cream has to be hauled by wagon, and the first gatherings of the cream in the morning have to be hauled around many hours in the sun and heat, and cans have to be protected or the cream will suffer. Cream should be gathered not less than twice a week, and many cans would be only partly filled. In fact but few 80-lb. cans would be full, and that would mean an enormous wagon platform to bring in any kind of a load. This would increase the expense of hauling the cream. One of the main questions which is agitating the mind of the creamery man to-day is how to keep down his expenses, for they are climbing higher and higher every year, and with \$12 to \$15 for coal staring him in the face, and nearly everything else in proportion, it is difficult for the average creamery proprietor to see where he is going to benefit financially by adopting the grading system. There

"Only a few extraots from letters received by Farms and Datey on the subject of Cream Gradue. Land weeks a summary of the opinions surface our dairy-men on this subject may be gradue to the control of the control of

are but few who will do it from sentiment or love of country.

#### Let Us Have Legislation F. M. SHOWERS, Brigden.

UCH has been said on the question of cream grading in Ontario, but very little done to carry out the suggestions. If Ontario is going to hold her place as the first province in the Dominion es regards dairying and dairy products, then the question of cream grading has to be tackled in a businesslike manner. When we look over the records of the new provinces, and also the chief butter producing states, we must admit that Ontario is far in the rear as regards quality. Nothing, in my opinion, would do more to build up the quality of our butter and incidentally put larger profits in the producer's pockets than cream grading. True, pasteurizing

Annette's Prince Abbekerk. The winner of the Sr. Holstein bull calf clars at the Gashh Winter Fair. Note his depth of body, straight lines and flashy appearance. He is one of the best his depth of body, straight lines and flashy appearance. He is one of the best his depth of body, straight lines and flashy appearance. He is one of the best his depth of body, straight lines, barded by A. E. Halet, Oxford Co. —Photo by an Editor of Farm and Dairy.

and ripening with a pure culture materially aids in correcting the faults of our butter, but if a system of grading were introduced, the pasteurization of cream would scarcely be needed; at any rate not to the extent that it is to-day.

The chief difficulty, I believe, lies at present with the creamery owners. By this I mean there is not the cooperation amongst the creamery owners that there should be if quality is to be paramount. For instance, in our section, should

we grade cream, there is i't the slightest doubt but that ome patrons who now send a very poor sample of cream would become dissatisfied at seeing a more careful neighbor getting a larger price for his butter fat because of better care, and immediately call in a hauler from an-Away other creamery. goes your cream because creamery owners would not get together and agree among themselves not to accept cream which was not up I beto the standaru. lieve, however, that this could be overcome by careful study, providing creamery owners are in nest, and it was been a constant or frequency

the business to build up quality and a future for our dairy products, regardless of the shortsighted idea of reaping a larger profit at the time; this being much to he detriment of future

In the creamery where I am engaged, I have had samples of very well cared for cream which would grade No. one in every respect, but they were dumped in the can with other cream, which, as the saying is, "would make a pig squeal" it was so rancid, sour, yeasty, and, in fact, rotten. Now, the farmer who cares for his cream and sends a nice, smooth, clean-flavored, low-acid article, is not getting any more than the one who separates and does not even stir his cream. Is it fair? I say not, and, more than that, it is dishonest to expect to churn all together and do justice to the producer regardless of the fact that the butter is not of good keeping quality. In this creamery we have an output of 100,000

lbs. or thereabouts, and I can say, honestly, though of course it is a disgraceful statement in a way, that we did not, during the summer months, make a pound of export batter, simply because of high acid cream, off-flavorod goods being mixed and paid for at the one rate. Had our cream been graded, we could have turned out a very superior article, as the most of our cream is high testing, and therefore much better for butter. We did not pasteurize, but used a cooler and plenty of ice. I am satisfied also that were the cream graded, much of the now inferior article would disappear, as the farmer would see the greater returns in his cream cheques, whereas now he has no encouragement to take any special pains with his cream, because his neighbor does not, and gets paid the same price per pound butter fat. Much more could be said regarding the subject, but it is sufficient to say that if Ontario is going to be in the place she should be as a butter

producing province, cream grading and butter grading must come, and with the competition growing keener all around us, the sooner it comes the better. If legislation is the only way to force it along, then let us have legislation at once, or in the near future.

It's a protty safe guess that the man who has no friends has done something to deserve the fix he is in.



Direct From the Stable to the Field. On a Nova Scotia Farm. Direct From the States to the French of the Arm in Kinga Ca., N.S., and This photo seedant and his two teams. Mr. Isley, won Army Army's Cutter of the Army Marrow Competition last wincer, see first believe in the "direct for the scriptions in tees them had a scriptions in tees than had a scription in tees the had been method, of handling manure,

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# Feeding Fat Into Milk

No Practical Method of Doing It Has Been Discovered

MANY dairymen who have never had experience in feeding cover ence in feeding cows for test purposes, seem to think that the men who handle the cows that make big records have possession of some secret for the combining or selection of certain feeds that will make a cow give abnormal quantities of butter fat. Some people have even gone so far as to state that they would give certain sums of money if they could only become the possessor of this secret. Many dairymen who are high up in this line of work have the idea that there may be a possibility of feeding a cow so that she will produce more butter fat. In other words, it is not altogether clear to the large majority of dairy farmers whether this is possible or not. The following article by E. S. Savage, an authority on the subject, which appeared in a recent issue of The Holstein-Friesian

World, is worthy of careful study:

"Ever since interest in high production records was stimulated by the dairy breed associations broaders have looked for ways and means of raising the normal percentage of fat in a given individual cow's milk for seven, thirty or longer periods of days, including semi-official and official yearly records. The writer has never yet seen but one way of doing this successfully. Many breeders have been sure that they had a way but no one way has been successful enough to give that breeder any lead over others. And so far as the writer is aware no method has ever been tested out carefully and scientifically excent one. That one method is to fatten an animal before the testing period and then feed her carefully so that she will lose her body fat and put it into the pail. This method has been described in a previous paper and is really so well known among breeders that test, that it is unnecessary to give it much more consideration here.

And after all, what would the economic effect of a successful method to feed fat into milk na short time test amount to? The partial success of feeding fat into milk by means of fattening the cow before testing, has already brought seven-day records into more or less disrepute as real evidence of what a cow can do as a breeder for total efficient production. The law of conservation of energy holds true no less with animals than with machines, and if a method of changing body substance into milk fat is found the same amount of food must be used to produce the body substance at some other time in the course of the period between the birth of two calves.

No, in the opinion of the writer, breeders who seek to find a method to increase the percentage of fat in the milk of any individual for any period of time short of the whole life of the individual, is not doing himself or the breeds any real good. The breeders of the Holstein-Friesian breed had better give their attention to the study of methods of breeding which may on the one hand increase the normal fat content of the milk of the breed, if that is deemed desirable, and which must be done at the expense of a less quantity of milk, and on the other, to methods of breeding which will increase the capacity of the breed as a whole to utilize feed above maintenance and change it into milk. Suppose a method should be found which would cause a cow to test higher than her normal inherited percentage for seven or thirty days or eyen a year. What good would that do the breed? Until it was established beyond doubt that a certain breeder was doing something which was influencing the production of his individuals for short periods of time of course he would make money, but it would react on him in the end and do him and the breed harm. It would be a great boon to the breed if some way could be found to enable a cow to turn more food into milk, but it is the firm conviction of the writer that it is futile to look for methods of this kind except through breeding for greater capacity and production. This kind of work will permanently better the breed.

To be somewhat sure of his ground, the writer has looked over rather carefully the literature on this subject in recent years by carefully consulting the Experiment Station Record. The only positive evidence that appeared was found in Bulletin 100 by C. H. Eckles of the Missouri Experiment

Ethel of Springbank.

She won out in the Ayrshire heifer class in the dairy test at the Guelph Winter Fair, with 112.3 lbs. of milk, testing 4.4% fat. She is a heifer of great promise and will likely be heard from at future tests of this nature. Owned by A. S. Turner & Son, Wentworth County.

> ment Station. Eckles' work was wholly along the line of feeding the animal previous to the beginning of the test and getting her fat. Where this was done the percentage of fat in the milk would be high during the first part of the lactation period. The effect persisted to a more or less extent through the whole lactation period. This kind of feeding is to be advised because undoubtedly the capacity of the animal to produce is increased in a perfectly legitimate and normal manner, and it is a case of actually turning more feed into milk.

> The experiments along the line of the specific effects of different feeds have been very numerous but any positive effect of any one feed or combination of feeds is shown to be short and slight, It is probable that in many cases the effect could be shown to be within the limits of experimental error if a careful study were made.

A number of experiments on the use of the ex-

tracts from certain glands of the body, particularly the pituitary gland, for the purpose of increasing the percentage of fat in milk and also for increasing the amount secreted, have given positive results for short periods of time, but these results usually have been followed by corresponding periods when the amount and quality have been below normal.

Some positive results have seen obtained by feeding a large amount of oil ... of fat in the ration. These experiments also have been attended without permanent results which would influence one to recommend definite procedure even for a short time test.

In conclusion, the author must confess that he sees little hope for any method for really increasing the fat percentage in milk except through breeding and rations, feeding to produce cows nearer the ideal that is held for the breed in question. The true method to get cows with high records is to breed for size and capacity, and perhaps if that is the desire and ideal of the

breed, to select for a higher percentage of fat.

# Clearing the Land of Stones

T was necessary for me to visit a friend some distance from home a few weeks ago. Everyone was busy at the time and I found my friend, with his two hired men, in the field plowing. In the course of our conversation he remarked that he was endeavoring to give his land a good plowing. The work had been left for a number of years to the hired man. Many of them were inexperienced and others did not care. Consequently, if the plow struck a stone and came out of the ground, they seldom, if ever, took the time or trouble to back up or dig out the offensive rock.

The work being done was certainly thorough this year. Each stone that the plow found was taken out. When these stones have been drawn away, the field will be in a much better condi-

tion than ever before. This question came to my mind, as I journeyed on, "Is all our land now under cultivation cleared?" There are many farnis where it is not. If the plowman would always take the trouble to dig out the boulders his plow strikes, many dollars would be added to the value of his farm. It takes time and energy of course, but it pays, for oftentimes these stones left in a field, cost the farmer many dollars. Plowshares are broken, mower knives suffer damage and sometimes serious mishaps occur. not only to the machines, but also the men, all because a little time has not been expended at the right time to dig or blast out the stones. Plowing matches are again becoming popular. Are not stones brought to the surface, trophies of importance as well as those won for fancy crown and straightness of furrow? Viewed only as a matter of dollars and cents it certainly pays to clear away the stones.



Nothing is too Good, in Horseflesh or Holsteins, for Lakeview Stock Farm, Halton Co., Ont.

# SELDOM SEE

a big knee like this, but your horse may have a bunch or bruise on his Ankle, Hock, Stiffe, Knee or Throat. BSORBINE

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### Wayside Gleanings

By W. G. Orvis, Field Repre-sentative, Farm and Dairy.

#### Feed Rations

TT is not often that we find a farmer so business like that he has every-things worked out ou paper. I hapchings worked out of paper. I hap-pened to be in a stable not long ago where the farmer had his different feed rations typed upon cardboard, which was framed. This neat little frame was attached to the wall of the feed room. It thus gave information to any chance caller, like myself, as to the different kinds of feed being used and in what combination with other feeds. It was interesting to note that there was carefully worked out a graduated increase in grains for the growing animals. There was also a ration for cows in milk and another a ration for cows in milk and another-for cows not milking. All this gave evidence that this man was a thorough-going business farmer, and that he was looking after the small details which, no doubt, was yielding him a profit. It may not be practicable for every farmer to have such an elaborate scheme as this, but it certainly is practical to have a definite feed ration practical to have a definite feed ration for every kind of live stock kept. This ration need not be followed at all times and seasons, but it should act as a guide. Some plan of this description smust lead to more economic feeding, that would give the greatest results from the feed consumed.

#### A Straw and Chaff Box.

Mr. Anthony Gies, Waterloo Co., Ont., -has in his barn a uniqui-way of keeping the chaff and straw confined to a place where it is not a nuisance and yet is always handy. The chute from the upper floor leads down into a large enclosed stall, upon which is a door, hinged at the top. To the bottom of this door a rope is attached. It passes through a nulley in the ceiling, and this door a rope is attached. It passes through a pulley in the ceiling, and carries on the other end a weight sufficiently heavy to blance the door. This large box or stall is filled with the staw and chaff from the barn and the staw and above, and when any is required to use in the stable, the door is lifted and held in place by the weight on the end of the rope. The straw can thus be taken from the box, and when the necessary supply is received, the door is again dropped in place, thus keeping the feed from scattering all over the floor. His stables are always near and clean. The feed alley was not covered two or three inches with chaff and straw. The passageway behind the animals was kept clean in the same manner. A contrivance such as this adds much to the appearance of the stable, and again brings home the wisdom of the old adage: "A place for everything and everything in its

#### Saving the Cow's Knees.

Many owners of high-class cattle are much annoyed by the presence of enlargements on their cowa' knees. In some cases these swellthey become so large that ings become so large that they make the animals lame, and in most cases detract materially from their selling value. One beautiful young heifer came under my observation that had a very pronounced swelling, and when her owner was asked the cause of it, he readily attached it to a bruise received by coming in contact with the coment floor. Ballantyne Brea, Dundas Co., Ont., have a device that some commendable features. The forward half of the stall floor is an inch this space are placed ordinary coorad fibre door mats. These mats make an excellent soft; and with a man of the mats make an excellent soft; and warm floor, and see the stall of the stall floor. of it, he readily attached it to a bruise

bruised knees are likely to develop. It might be claimed that these mats are expensive, and it is true, as far as initial cost is concerned, but they wear well, and if their cost is spread number of years, they will be found to be quite economical.



#### What is Roup

W HAT is roup? Writers say it is any disease of the nostrils, mouth or threat. Now it is a fact that fowls have as many diseases of the air passages as have human be of the air passages as have Juniar beings. They have chronic catarrh, acute catarrh, or influenza, contagious influenza, diphtheria, tuberculosis and common sore throat. And some writers will call all these diseases "roup."

The mere sneezing, or watering at the eyes, or even a swollen head, has time and again been termed roup, but the diagnose is wrong. These are conditions that if allowed to go unchecked will eventually lead on to roup, but never become that fatal disease until Then the breath in the last stages. becomes so foetid that there can be no mistake

#### Poultry Jots

HERE are "strictly fresh eggs" of-fered for sale in the city markets that have no right to that name. produce dealer said one day to a lived in the city, and did not know the taste of a really fresh egg until he moved out where he could keep hens himself. Any quantity of eggs that are put into the refrigerators in good condition, especially April receipts, are, after several months' storage, taken out and sold as iresh. Evan the best grocers that cater to the fancy trade handle them, and most people don't know the difference. There is one surrous and the several most proper than the several most properties. There is one purpose, however, that they will not do for and that is poach ing. If at a hotel you get a poached egg that does not break and hold its shape well, you may be reasonably sure that it is fresh. A commission chant said that dealers often come to him for eggs that will poach, and he has to refuse them, for he knows that even the best of held eggs will not be satisfactory. It is amusing to note customers at moderate-priced hotels and restaurants asking for poached eggs and getting them fried or scrambled. The waiter claims to be very sorry, but understood the cus-tomer to give the order in that way, and in most cases the man will not care to send them back and wait for another order. The real trouble was that the cook did not have any eggs that would poach properly.

Eggs are used for other purposes than food. Cracked eggs are gener-ally sold to bakers, confectioners and cheap restaurants. Calico printers buy from 5,000,000 to 8,000,000 dozen eggs a year. It is claimed that one biscuit firm in New York buya 4,000 dozen eggs a week, or more than 200,000 dozen a year. Coffee roasters, no on one a year. Come roasters, canufacturers of photograph supplies, cracker and biscuit makers and the chemical trade, are estimated to see \$6,000,000 dozens a year. The makers of patent food preparations, tanners, liquor refiners and dye manufacturers, need a great many eggs in their business.

Several consignments of live poul-try were one day unloaded at a poul-try dealer's and one of the shipments

received one cent a pound more than did the others. Asked why he had paid more for one lot than he did for the others, the dealer replied that the the others, the dealer replied that the lot that brought the best price were all of one kind (one of the well-known breeds), and would dress out better and sell for more when dressed. He was asked if it was because they were all of one color of plum ge that made them more valuable. To this he answered that it was the feather and color 't' Indicated the breed, and that shape and meat were indicated by the knowledge he had of the knowledge he had of that the breed.

The best table fowl is one that has the heaviest weight of meat on those portions of the body which are favorite portions of the body which are ravorite cuts. The breast and thighs must be heavy in a good table fowl in propor-tion to the remainder of the body. In order to have thick breast meat and big thighs, these muscles must be used by the fowl. In other words, the flyer and scratcher will prove to be the best table fowls, for their lively habita give the muscles of the legs and breast work that renders them firm and fine, instead of leaving them flabby and full of loose tissue in the shape of fat.

The natural construction of the The natural construction of the fowl's digestive organs points to a seed or grain site. No provision other than that of assimilation is made for the moisture taken into the crop. The fowls must have water, both to soften the food when taken into the crop and the control of th to enable the gizzard to grind it the more easily. The hen must also be more easily. The hen must also be provided with water to finish the egg which she lays.

All food consumed by the towl must pass from the crop into the gizard, where it is ground and prepared for assimilation. Unless the fowls are sumpiled with an abundance of good, sharp ril, the food cannot thus be prepared, and, in consequence, the fowls will suffer very much as does a pergon from an attack of indigestines. person from an attack of indigestion or dyspepsia.

#### The Maintenance of Pastures, etc. (Continued from page 3.)

held are being impoverished. In or der to keep them up it is necessary to give back something in return for what is being taken from them, and slight dressings of manure is the best way to accomplish this.

#### Seeding Permanent Pastures.

Old pastures are composed chiefly of common Canadian blue grass, Kentucky blue grass and an intermediate or hybrid between these two. With these a sprinkling of white clover is these a sprinking of the should, however, be able to improve on this mixture of grasses. We should have good pasture earlier and stand drought better. Six years ago I seeded down a pas-ture field with a mixture which has given satisfaction and should be suit able for almost any kind of soil The mixture contained four pounds of red top, (which does well on low land) two pounds of timothy; four pounds of orchard grass, (one of our best and earliest grasses, but one that must be kept pastured down or it will grow in bunches;) five pounds of alfalfa seed; two pounds of alsike; two pounds white clover; four pounds of Kentucky blue grass and four pounds of meadow fesque. A little trefoil will soon be fesque. A little trefoil will a found. It is a small clover found. It is a small clover which grows in gravelly solls and is berindry. No rod clover shall be belieded an the mixture with the strong covering plant of the strong covering plant crowds out the other reasons and the first year crowds out the other reasons of the covering covering the strong covering th which

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#### CITY MILK SUPPLY

#### Advertising Dairy Products

T the convention of Dairymen Feld in connection with the con-ference on Marketing and Farm Credits in Chicago recently, L. Brockway, from Syracuse, told of an advertising campaign Y, tell of an advertising campaign conducted in Syracuse, to show the public the value of milk as a food. He showed a sample full-page daily advertisement, in the ceptre of which advertisement, in the centre of which was a quart bottle of milk marked 10 cents. Around it were grouped other kinds of food, and figures showother kinds of food, and ngures show-ing their cost, based on their food value, as compared with that of milk. It proved a great surprise to the con-sumers and aroused keen public in-

#### Departmental Action

CORDING to a press despatch

A CCORDING to a press despatch
to the daily papers, a notification has recently been sent by
the Hon. Mr. Crothers, Minister of
Labor for the Dominion, to the milk
dealers of Sydney, NS. It appears,
it appears of that the dealers met recently and dethat the dealers met recently and dethat the dealers met recently and de-cided to raise the price of milk from 10 to 12 cents. The Minister has noti-10 to 12 cents. The Minister has noti-ted them that if the price is raised, they will be liable to criminal prose-cution for having combined to in-crease prices, an offence the punish-ment of which is a term in jail or a fine of \$5,000

The Milk Producers of Hamilton, at a meeting held in the Y.M.C.A. last week, decided to increase the whole-sale price of milk not later than Jan. lst. The price was not fixed, but it is. likely they will ask 25 cents a gallon. The milk distributors, it is claimed, are not disposed to pay the increase without a fight, and some difficulty

may arise When asked if he would take action when asked it he would take action against the Toronto and Hamilton Milk Producers, who raised the rates to dealers, the Minister of Labor stated that they were prepared to deal with these cities when the time came. He explained that under the new legislation, any agreement whatever be-tween two men, a body of men or cor-poration to increase the price of any of the necessaries of life, is a criminal offence within the meaning of the act.

#### Toronto Dealers Reaching Out

T HE scarcity of milk in the vicinity of Toronto has forced the milk dealers of that city to go much further afield for supplies than has hitherto been necessary. The Farmere' Dairy has built a large and thoroughly equipped collection station at Indian River, near Peterboro, and is now in a position to draw per-manent supplies from that section. Several other dealers are also bidding for the farmer's milk in the district.

The Shearer factory, owned by Mr. J.

J. Hogan, has run continuously for J. Hogan, has run continuously for the last four years, making butter dur-ing the wister. This winter, however, the city milk dealer is taking the milk. The patrons and Mr. Hogan are working in close cooperation, the milk being delivered at the factory at 22 a. owt, from thence being delivered by the maker to the train and shipped to Toronto. The contracts call for milk to be supplied to Toronto until next May.

A quart of milk is equal in food value to three-fourths of a pound of beefsteak, eight eggs, 15 pounds of oysters, two pounds of fish, six pounds of tomatoes or three pounds of apples, and the milk is more easily digested and far more economical than any of the other foods.

#### HORTICULTURE

Northern Grown Seed Potatoes TT has been found that northerngrown potatoes, when brought south, will increase the yield by as much as 25 per cent., besides being a week or so earlier. Some growers week or so earlier. Some growers have found that this northern-grown seed at \$2 a busle is cheaper than home-grown at 25 cents. Many car loads of seed potatoes have been brought from Wisconsin, but of late years it has been found that quite as satisfactory results have been obsatisfactory results have been ob-tained from seed brought from New Ontario. Seed produced near New Liskeard is quite equal to the Wisconsin-grown material. sin-grown material. In the North country, such big crops are not produced as further south, but a market is developing which will take care of the potatoes grown for seed purposes at a price that bids fair to make potato growing profitable for the

the Horticultural Convention At the Horticultural Convention held early in December, in Toronto, a resolution was passed asking the Government to provide a specialist to Government to provide a specialist to enquire into the growing and selection of potatoes for seed, and to assist in the certablishment of a seed potato industry in the north. It is necessary to have these potatoes shipped in the fall, as on account of the frost they cannot be shipped are potatoes shipped are cannot be shipped early enough in the spring to reach the southern potators and the southern potators.

The Winter Care of Trees

HERE are often many regrets in the early spring months among the early spring months among fruit growers who have failed to protect their apple trees during the winder. In many orchards where the wind has a clear sweep, the orchard, especially if the trees are headed low, eatches the snow, which soon drifts as high as the tree. Where such conditions high as the tree. Where such condi-tions occur, windbreaks of boards should be used, placing six-inch strips four inches apart on two by fours, ten four inches apart on two by fours, ten feet long, and bracing these up so that the snow will drift against this construction. Then plant a row of spruce at least sixty feet from the first row of apple trees, and in time these evergreen trees will act as a windbreak. Where the snow is piled up to the tips of the branches, the rabbles do a great of the branches the rabbles of the branches. of the branches, the rabbits do a great deal of damage during the winter. In this case, use bran, corn, or other foods mixed with arsenate of lead to eradicate the pest.

eradicate the pest.

If the trees are young, the bark should be shielded with quarter-inch mesh wire and a collar of tar paper put around the top to prevent the wire from scraping the bark. Whore possible, stake the wire to keep it firm sible, stake the wire to keep it firm and place it at least an inch below the surface of the soil to keep out the field mice. All grass and weeds should be removed from around the tree, and the wire protection made large enough so as not to interfere with the growth of the tree until it is from eight to ten years of age. The screen should be two feet high.

two feet high.

After a snow storm, tramp the snow
down to protect the young trees from
the work of the field mice, which is
often evidenced even Seneath the
wire, the mis having been driven to
this source of said by extreme hunger.

Now
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the weight of which often limb at the crotch.
Take two or hop poles, fasten them with the spike near the top; this contrivance may be raised or low-ered as is necessary. This support is put on a slant so as to stand, and the limb lifted holds the support firmly. This simple precaution may save that large limb with a bad crotch.-Hugh Findlay, B.S.A., in Rural Life.

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various phases of the dairy industry. Bring the ladies with you. They are specially invited to attend

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#### FARM CHATS H. Percy Blanchard, Hants Co., N.S.

Our Duties

His is rather an ambiguous heading, it may either be the caption of a distribe upon morality or essay on politics. Now, if I had used the word tariff, some dyed-in-the wool tories like myself would have given a sniff ana ektoped it. So, like the gentie angler, I baited the hook to aiure and not to offend. Julius Caesar tells us that all Gaul is divided into three nexts also. The workers were supported in the property of the support of the superior support of the support of the superior support of the superior support of the support of the support of the support of the superior support of the suppor parts, also, the average voters' list may be divided into three parts: free trad-ers, protectionists and money-down-

To the first class, all duties are abhorrent, except, of course, their moral duties; to the second, all duties are sacro-sanct; and to the third their duties are to vote as they are paid and not to spend all the money in rum, for fear of the tongue that-hangs-in-thefear of the ton middle, at home.

Again, in the cateohism of the pro tectionist, I find three dicta:—first, that raw materials should be exempted; second, that the manufactories (called infant industries) should be protected; and third that the luxuries protected; and third that the luxuries of the rich should bear the burden, rather than the necessaries of the poor. Now, I want to get this down exact, for woe bettde my eternal peace of mind should I promuleste a doctrine contrary to the teachings and principles on which so many of our family have been nutured. I am a farmer. Not much of a farmer I must admit; but then, when I want to feel big and proud, I pat myself on the back and pinch my brawny muscle and say: "I am a farmer." You know the tone of voice in which the smallest Italian of old would say, "I am a Roman Citi." voice in which the smallest Italian of old would say, "I am a Roman Citi-zen" and then he would roll up his eyes and put them back again into their sockets. But to lay aside my boasting and get back to the subject.

The Greatest Manufacture

Some wise man has said that the greatest manufacturer America is the farmer; only he runs his factory with the roof off and has God for his partner. Now, a raw material in the lexicon of the statistician is not necessarily a thing merely dug from the ground or found in the woods. from the ground or found in the woods. It consists of the ingredients which are worked up by the factory to make its finished article. Pig iron, or ingot steel has gone through many processes since it was a heavy, rusty rock dug out of the mountain. Galvanized steel wire has undergone a few more processes. Yet, to the wire fence makers it is raw material. The flustrations could be largely extended. To all these "raw materials" the proall these "raw materials" the pro-tectionist tariff, even the Chinese wall of the United States, gives either free entry or a very low rate of duty. But what are the "raw materials"

of the farmer, the manufacturer in chief? Not loam and clay, rain and sunshine alone; but seeds, fertilizers, feeds, plows, binders, tractors, all the material and machinery which he converts into the finished products or uses in the process. Even his inexpensive automobile is not so much a luxury as a recessity. The Apostle Paul admonishes his hearers to be just to their servants. It behooves us then to see that when we claim and receive justice we must do no injustice to our servants, the makers of farm ma-

Free Admittance.

implement manufacturers Our implement manufacturers in Canada still pay duty on many of the things that go into their own product and it must be remembered that they (protected by a duty) compete with the big country below the line. On a good gasoline engine there are many small parts not made in Canada, or, it they are, at a much higher price. Bright finish machine bolts, standard sizes, carburetors, oil and grease cups, pipe fittings, all these are imported. In fact, there are not two engine plants in the States that do not buy most, if not all the above named fitmost, it not all the above named fit-tings outside. For that reason it is only just that they should be admitted free into Canada, if the implement maker in Canada is expected to com-pete on fair terms in manufacturing his unprotected implements, the farmers "raw material;" and with "equal goods at equal prices;" I for one would buy the Canadian.

The old fifth proposition in Geometry was a sticker to all of us school boys, because one had to prove cer-tain angles equal that did not seem to matter and then with these shown to be equal, it was easy to prove equal the essential angles. So why not reach the essential angles. So why not reach our own particular end by two tacks to windward, if a free sheet and a straight course is impossible. Bend our efforts to have the duty removed from all the raw materials that enter like the manufacture of their goods, like the manufacture of their goods, for the manufacture, get a refund of what a straight of the course, get a refund of what a straight of the course of the facturers pay on article with same afacturers pay on articles going into their finished product, according to sworn invoices? That would remove every handicap, as compared with American factories, except extent of home market territory, and should enable the Canadan factories to sell at the same prices as the States, where labor is higher. So in the meantime, why not first assist the manufacturer. why not first assist the manufacturer. Then, when that is accomplished, and he does not need any protection, we may be does not need any protection, we may be does not need any protection we may be does not need any protection. When You Write---Mention Farm and Dairy fortical Limited.

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11. Have you full use of your arms?	9. If not, are you naturalized ?
12. Of your legs? 13. Of your sight?	15. Which are you-married, single or a widower?
14. Of your hearing?	16. How many persons besides yourself do you support?
17. What are you working at for a living?	
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19. Have you a trade or profession?	20. If so, what ?
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"Read not to contradict and to confute, nor to lieve and take for granted, but to weigh and con-ler."—Bacon.

A New Year's Resolution

TEW Year's resolutions, it is proverbially stated, are made only to be broken. Probably the reason why so many of them go to the scrap heap is that the New Year's season does not lend any material advantage in carrying them out. One resolution, however, that is peculiarly suited to the New Year, is the determination to begin keeping farm accounts. Not only is such a resolution supported by the sentiment attached to the season devoted to turning over a new leaf, but it is strictly in accord with the best business practice. With the retail merchant and a great many other business men, the beginning of the year is stocktaking time. They close their financial year with the calendar year. This system is equally well adapted to the operations on the farm. The season's sales have been made and the bulk of the business done. If there is a slack season during the year in which time can be devoted to such work, it is at this particular time. It is favorable for taking stock, for making an inventory, and for starting off with a new set of accounts.

Many are the systems of bookkeeping recommended for the farmer. They vary from a simple method of making out an annual statement of assets and liabilities, to exhaustive systems of cost accounting that would tax the academic skill of a chartered accountant to keep in order. Much has still to be done before a system of bookkeeping or cost accounting has been evolved that is suitable to the average farm. The most practicable system will probably be found to be one which makes wide allowance for the farmer's intuition and business judgment in determining whether this or that course should be pursued. The accounts kept, however, should be as complete as the business training of the farmer will allow. They should, in any case, include annual statements of assets and liabilities, which may be compared from year to year, to see whether or not the farm business, as a whole, is progress-

ing, and to show if or not the year's labor has yielded a laborer's wages. For the dairy farmer the keeping of the records of production of the different cows in the herd, to determine which to get rid of and which to keep, is also one of the most important considerations.

WITH the unofficial announcement of a new world's champion in butter attention is again turned to the possibility of the 50-lb. cow. -Many breeders thought that the record of 44.42 lbs. of butter in seven days, held by Ormsby Jane Segis Aaggie, was about the limit. When, however, we hear of Hester Aaltje Korndyke, making 46.772 lbs. butter in seven days, it shows how far wrong was the judgment of those men.

The reality of the 50-lb, cow may not be far distant when we realize that the record of the new world's champion has only to be raised 3.228 lbs., or less than one pound more than the new champion has raised it. The breeding and feeding for these big records is an art which is occupying the attention of many of our best men in America, and the making of new records will go on until the point is reached where the constitution of the animal will stand no greater strain. This point may be at the 50-lb. mark, or still higher, but the limit of production is not likely to stop short of this point. It is true some animals will stand greater strain than others, but the limit of nature's endurance of development along one line is sure to be found. When that time comes the person who endeavors to press things further will find that he has an animal deficient in other things in so marked a degree that she will be unbalanced

The Dairyman as a Scapegoat

THE Department of Labor has not been long in taking action under the new regulations regarding combinations to increase the cost of living. Its activities in this regard have not been directed against the milling trust, the canning trust, the pork packers, or the storage men, nor yet against those who by the closest kind of collusion keep the price of everything the farmer has to buy at the maximum height, and therefore increases the cost of production of food stuffs to the maximum extent. In searching for a place to attack the cost of living problem, one of the most complex of all the problems with which we have to deal, it has lit on the milk producers and placed its official imprimus on the popular notion that the farmer, and especially the dairy farmer, is making too much money, and should, therefore, be made the scapegoat upon whose head the sins that have been committed in connection with the food situation should be laid. The milk dealers of Sydney, N.S., no doubt taking into consideration the increasing cost of feed and of help, and the fact that their produce is still the cheapest food that reaches the consumer's table, decided to raise the price of their milk. They were immediately notified that if the price is raised they will be liable to criminal prosecution, with the prospect of a term in jail or a fine of \$5,000. Later reports state that Toronto and Hamilton producers have been served with a similar warn-

Before the Department has recourse to what amounts to price regulation, it would do well to conduct an investigation into the cost of milk production. At the conference of milk producers held in Chicago recently, and which was attended by an editor of Farm and Dairy, it was shown by the results of investigation that were given out that milk was being produced at a loss in many of the States, and that this had resulted in a reduction of over 100,000 in the number of cows, within a few years, in New York alone. Similar investigations here would show that

with feed at present prices, with labor dear and scarcely obtainable, and with production at low ebb, milk producers are having one of the leanest winter seasons for years. Superficial thinkers, of whom there seem to be some in high places, may think that the profits of the city milk producer have increased in proportion to the price of milk and have need of such information. In any case, threats of terms in jail-the \$5,000 fine is for the accommodation of malefactors of great wealth should the unheard of situation arise in which one of them should be convicted-will not attain the end aimed at. Butter and cheese is still required for export and for home consumption. Those who seek to keep the price of city milk below its normal market value, will find that instead of solving one of the problems of city consumers, they have deprived them of their milk

Majority Favors Dairy Act

TLY three out of the seventeen conventions held throughout Eastern Ontario for the purpose of discussing the Dairy Standards Act, passed resolutions against it. Practically all the others strongly favored the legislation. Considering the far-reaching nature of the Act, this is a favorable showing, and demonstrates that the Department did not err in its estimate as to the number of dairy farmers who were waiting for this reform. The soundness of the principle of being paid for milk at factories according to its value for cheesemaking purposes, strongly appeals to the business judgment of the great majority of cheese factory patrons. Some who, realizing the importance of having the testing done accurately when the distribution of the patrons' money depended upon it, foresaw difficulties in the way unless the testing were in the hands of thoroughly competent men, free from local influences, have had their objections removed by the action of the Department in making provision for the instructors to do the testing. Everything now goes to show that there existed a widespread demand for a change in our methods of paying for milk at cheese factories.

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There are, of course, some who are opposed to the Dairy Standards Act. But is there not just reason for believing them to be fair-minded men, willing to stand behind the grand old principlo of majority rule? We believe they are. We have met and talked with many of them, and have found that they are perfectly willing to abide by the will of the majority. They recognize that only by uniformity in the method of paying for milk throughout the province could friction between factories be prevented, and that the compulsory clauses of the Act were necessary to secure such uniformity. They also recognize that the Provincial Legislature is the only body having authority to fairly legislate in that matter, and that it would be impossible for them to have a spotted law exempting certain districts. While the matter was under discussion at the conventions they were not backward in voicing their opinions, but when the vote had been taken and resolutions favoring the Act passed, as they were at over three-quarters of the conventions, they acquiesced with good grace in the will of the majority. There is no need for apprehension re garding the working out of the Dairy Standards Act. The attitude of factory patrons throughout Eastern Ontario warrants the prediction that within a short time after its inaucuration, opposition to it will have entirely died away.

One-fourth of the popular vote in Oregon was in favor of a straight out single tax proposition. submitted recently as an amendment to the State constitution. In view of the vast power that is opposed to the principle of this act, and the strenuous opposition it is meeting from the great proprietors, this is a very creditable showing.

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### In Union There is Strength

The Fire Sufferers

The latest word received by Farm united. It is not the Grain Growers and Diary from the fire sufferers capital to \$8,000,000, but the new joint out during the fire last summer, shows that at last they are beginning to get matters adjusted and settled for the new company does not propose matters adjusted and settled for the matters adjusted and settled for the settled for the fire last summer, shows that a last they are beginning to get matters adjusted and settled for the settled for the fire last settled for the settled for the settled for the settled for the fire last settled for the settled for t who have been making contributions and sending forward supplies. Mr. Alfred Gibson, of Matheson Station, writes: "I am very much pleased with the help received. The fire was a knock-out blow to us farmer, as we lost all we had. We thank you very much for your kindness, and hope that God will return it to you one hundred things over?"

Another lotter of thanks has been received from Mr. Hugh Moore, of Matheson, for flour received by him. Mr. Moore along the spherospherical for the fire weet down which we of thee showed Matheson, who have not been showed from the whole and the showed from the down that a dozen buildings left. Another showed frammer districts which after the fire looked like a veritable wilderness. Another letter of thanks has been ness. Another photograph showed the orphaned children of Dr. Reid of Kelso. This last will be published in Farm and Dairy.

Farm and Dairy.

The last contribution received by Farm and Dairy was in the form of a pocal and for 67 85, received from Mr. Wm. J. Webster, Secretary of the Lansdowne Farmers' Cub, Leeds County, It was sent by the members of that club. This donation, as well as others, has been used to purchase goods through Secretary J. J. Morrison, of The United Farmers' Cooperative Co. Ltd., of Toronto, thus giving the fire sufferers the benefit of wholessle prices in the purchase of

The Western Amalgamation

newspaper despatch that was sent out from Western Canada by a reporter not too well inby a reporter not too well in-formed as to the facts, in reference to the recent decision of the share-holders of the Grain Growers' Grain Co., and of the Alberta Parasers' Co-operative Elevator Co., to unite their two companies, has been recopied in a number of eastern papers, including some of our farm papers. As it contains several errors, it is only right that the facts should be made plain.

One report of this character that ap-

peared in an Ontario farm paper read in part as follows:

in part as follows:

"The Grain Growers' Grain Company, the United Farmers of Alberta, the Alberta Farmers' Cooperative Elevator Company, and the Manitoba Grain Growers' Association have thagan in their lot together under the name of the United Grain Growers, Limited, and it has been decided to increase the capital of the Grain Growers' Grain Company from \$2.00,000 to \$5,00,000. It is also intimated that the organization in the west is contemplating electing twenty or thirty of its members as parliamentary representatives at the next election." representatives at the next election."

There are a number of errors in the

There are a number of errors in the foregoing. In the first place, the United Farmers of Alberta and the Manitoba Grain Growers' Association have not united in the propose to do so, and there is no reason way they should. These organizations do not deal with business matters, but only with public issues as they affect the

have farmers nominated and elected to parliament, but this is something that is entirely aside from the farmers and the state of the saketchewan Cog, manner of the Sackatchewan Cog, manner of the Sackatchewan, be immediately resigned his position with the company. The companies do not intend to become mixed up in politics. It is interesting sometimes to find he we ay mistakes can be crowded into it is short paragraphs. This is especia, likely to be true of despatches of this character, for the average city man or reporter known little indeed about the affairs of the different farmers' organisations. of the different farmers' organizations.

Two Good Meetings in Algoma

T was our good fortune to have another visit from Mr. J. J. Morrison on the evening of Dec. 5th. On that night he was billed to address a meetpostal note for \$8, received from Mr. night he was billed to address a meetWm. J. Webster, Secretary of the
Lansdowne Farmers' Club. Leeds
County. It was sent by the members were
of that club. This donation, as well
as others, has been used to purchase
goods through Secretary J. J. Morrison
on, of The United Farmers' Cooperative Co., Lid., of Toronto, thus
giving the fire sufferers the benefit of
the goods.

The Western Amalgamation

Mr. Morrison address a meetmeeting at Goulais Bay. Mr. A. S.
Smith, the district representative, was
a spiring the fire sufferers the benefit of
the goods.

The Western Amalgamation

creamery on an actensive scale.

Mr. Morrison smoke on the importance of cooperations down the formal factor of cooperations are supported by the corresponding of the work of the war supported by the comparation of the mean factor of the people were enthusiated and we expect to hear encouraging news from the Goulais Bay Club.

The next night, Mr. Morrison addressed the members and sympathics of the Bar River Club. Mr. Smith work of the Bar River Club. Mr. Morrison in a very able manner discussed the importance of farmers gotting to-gether. This address was intently listened to, and several questions listened to, and several questions. Helican Mr. Morrison is existent to the highest profession of the second selection of

The College of Agriculture of New The College of Agriculture of New York announces that several fires have been caused in that state by the explosion of dust in threshing ma-chines. A fire extinguisher has been devised which automatically ex-tinguishes the fire when it breaks out.

Commercial ferthizers are like commercial stock foods. They are good for sick soil and should only be used as supplementary to barnyard manure.

INDISPUTABLE PROOF OF

DE LAVAL

CREAM SEPARATOR SUPERIORITY

Since 1822 the National Entiremaskers' Association has held butterscoring contest seedly-remoded on with its Annual Convention
by a De Laval Separator has severed higher the Separator of the Separator has severed higher the Separator has severed higher the Separator has considered the Separator has considered the Separator has considered the Separator has severed higher severed by the Separator has severed higher the Separator has severed higher than the Separator has severed by the Separator has been severed by the Separator has severed by the Separator has been sev

But that is not an unusual record for the De Laval. At the great National Dairy Show at Springfield, Mass, in October, 1916, butter made from De Laval-produced cream scored highest in both the creamery and dairy classes, while De Laval cream scored highest in the cream classes.

The juries at the great national and international expositions have invariably acknowledged the superiority of the De Laval. They awarded the Grand Fritze to the De Laval at the Panama-Pacific Exposition, as also at Buffaio, Chicago, St. Louis, Paris, Brussels, and all the great world expositions for 25 years.

As a matter of fact, it is very easy to prove De Laval superiority. All this, is needed is a careful composition with any other machine, either not obeding and construction, or, more matter or and the fact and proved of the Laval superiority piled up and multiplied on many times taked in no longer open to question by anyone. If



If you are without a cream separator or need a new one, the only question you need to ask is, "Which is the proper size De Laval for me to

See our De Laval agent im-mediate.y, or, if you don't know him, address the nearest De Laval main office as below for any de-sired particulars.

THE DE LAVAL COMPANY, Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA. Sole distributors in Canada of the famous De Lavai Cream Separators and Alpha Gas Engines. Manufacturers of Ideal Green Feed Silos. Catalogues of any of our lines mailed upon request.

PETERBORO WINNIPEG VANCOUVER 50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER

"Metallic" Ceiling

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COTTON SEED MEAL CRACKED CAKE

HULLS

Bar Z Brand Owl Brand

"Our Brand on the Tag, Means Quality in the Bag"

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Pioneers in Cotton Seed Meal—It is Our Specialty We Can Quote You to Your Station

advertising reliable goods. They want to know you; also want to know you saw the Ad. When writing them don't forget to tell them



REAT things always come in shoals of countless little things, which look like insignificant atoms as we pass through them and only seem a shoal when we have passed beyond them.

# Winning the Wilderness

(Continued from last week.) ing this morning, but how could any

CHAPTER III.

carrying every movable thing before it. Whatever was tending in its direc-

tion, it helped over the ground amaz-

gritty dust. The cottonwoods along the waterway moaned as if in pain and flung up their white arms in feeble protest. The wild plum bushes in the

draw were almost buried by the wind-

borne drift smothering the narrow crevice, while out on the plains the long lash ug waves of bended grass

The open door gave the wind a new crevice to fill, and it slapped wrathfully at the buckets, splashing the con-

"We have to put wells close to the

"We have to put wells close to the water in this country. I put this one in before I built here. And if we have a well, we are so glad we don't try to move it. The wind might find it out and fill it up with sand while we were doing it. It's a jealous wind, this." Asher's smile lit up his dust-strengt free.

tents on the floor.

\ ingly.

protest.

garment stay on the line out there and not be whipped to shreds?" The Will of the Wind. "Virginia, did you ever do a washing before the war?" Asher asked through the towel. He was trying to scrub his face clean with the least

Naught but the endless hills, dim and far and blue,
And sighing wind, and sailing cloud, and nobody here but you.

—James W. Steele. possible amount of water. THE next day, and for many days following, the wind blew; fiercely and unceasingly it blew,

possible amount of water.

"Oh, that's ancient history. No, nor did I do anything else. I was too young. Did you ever try to till a whole section of land back in Ohio before the war?" Virginia asked laughingly

Asher took the towel from his head

Asher took the towel from his head to look at her. "You are older than when I first knew year older than when I first knew year older than the histolay of the old years and you have I look any of that girl's one with the years."

Let be the year of the you will be you w tion, it neiped over the ground amaz-ingly. Whatever tried to move in the face of it had to fight for every inch of the way. It whipped all the gold from the sunflowers and threshed them merellessly about. It snapped them mercilessly about. It snapped he slender stems of the big, bulgy-headed tumble-weeds and sent them

needed tumble-weeds and sent them tumbling over and over, mile after mile, until they were caught at last in some draw, like helpless living things, to swell the heap for some prairie to feed upon. It lifted the sand from the river bed and swept it then," Virginia demanded.
"I did pitch my tent there at first, but it is too near the in a prairie simoon up the slope, wrapping the little cabin in a cloud of gritty dust. The cottonwoods along

river, and several things hap-pened, beside," he replied,

pened, bestde," he replied,
"Is that a river, really".
In that a river, really".
It looks like
"yeef it is" very real when
it elects to be. They call it
Grass River because there's
no grass in it—only sand and
weeds—and they call it a
river because there is seldom fong lashing waves of bended grass made the eyes burn with weariness. And the sun watched it all with un-pitying stare, and the September heat was maddening. But it was cool in-side the cabin. Sod houses shut on the summer warmth as they shed of Virginia Avdelor stood at the war. river because there is seldom any water in it. But I've seen such lazy sand-foundered streams a mile wide and swift as sin. So I take no swift as sin. So I take no risk with precious property, even if I have to tote barrels of water and slop the parlor Virginia Aydelot stood at the west rug on windy days."

Virginia Aydelot stood at the west window watching her husband trying to carry two full pails, of water which the wind seemed bent of water which proadcast along his path. He had been plowing a double frequard around the premises that morning and his face and clothes were gray with dust. These days of unceasing winds seemed to Virginia to sap the stoom of her energy. But she was young and full of determination. "Why did you put the well so far away, Asher?" she asked, as he came inside. rug on windy days."

"Then, why didn't you put another door in the kitchen end of the house!" Virginia questiened. "Two reasons, dearie. First, can you keep one door shut on days like this, even when there is no house?" he inquired.
"Yes, when I mut a chair.

"Yes, when I put a chair against it, and the table against the chair and the bed against the table, and the cookstove to back up the bed. Shortage of furnisee.

"No, the effect on this cabin if the wind had a sweep through two weak places in the wall. I built this thing to stay till I get this thing to stay tiff I get rendy to go away from it, not for it to go off and leave me sitting here under the sky some stormy day. Of course, the real home, the old Colon-ial style of house, will stand higher un after awhile sprof the table. I meant to do a wash higher up after awhile, em-

bowered in trees, and the wind may play about its vine-covered verandas, and its stately front columns, but that

"All right, but what was the second "all right, but what was the second reason for the one doorway? You said you had two?" Virginia broke in. 'Oh, did 1? Well, the other reason is insignificant, but effective in its way. I had only one door and no lumning the second reason in the second reason in the second reason for the second reason in the second reason for the ber within three hundred miles to make another, and no money to buy

umber, anyhov "You should have married a for-true," his wife said demurely.
"I did." The smile on the lips did not match the look in the gray eyes, "My anxiety is that I shall not squan-

"My anxiety is that I shall not squan-der my possession, now I have it."
"You are squandering your dooryard by plowing out there in front of the house. Isn't there ground enough it the wind will be merieful, not to use up our lawn!" Virginia would not be

"I have plowed a double fireguard, and I've burned off the grass between the two to put a wide band of pro-tection about us. I take no chances. Everything is master in the wilder-ness except man. When he has tamed ness except man. When he has tamed all these things—prairie fire, storm and drouth, winds and lonely distances, why, here isn't any more wilderness. But it's tough work getting acclimated to these September brenzes, know.

Virginia did not reply at once. All day the scream of the wind had whipped upon her nerves until she wanted ped upon her nerves until she wanted to scream herself. But it was not in the blood of the breed to give up easily. Something of the stubborn determination that had made the old-time Thaines drive the Quakers from Virginia shone now in the dark eyes of this daughter of a well-bred house.

"It's all a matter of getting one's system and this September wind sys-tem to play the same tune," she said.

"Virginia, you look just as you did that day when you said you were going through the Rebel ranks in a man's dress to take a message for mo to the Union officer of my command, although you ran the risk of being although you ran the risk of being shot for a spy on either side of the lines. When I begged you not to do it, you only laughed at me. I thought they you were the bravest girl I ever saw. Now I know it."

they you were the braves age.

Now I know it."

"Well, I'll try not to get hysterical over the wind out here. It is a matter of time and adjustment. Let's adjust ourselves to dinner now."

Beyond her lightly spoken words Asher caught the undertone of coursel, and he knew that a battle for age, and he knew that a battle for

age, and he knew that a battle for supremacy was on, a struggle between physical outery and mental poles.

After the meal, he said, "I stake my plow down to Shirley's this atternoon. He is broken and I can mend it while he puts in his freeguard with mine. I don't mind the wind, but I won't ask to face it clear down to Shirley's claim. I don't like to leave you here, either."

"I think I would rather stay indoors. What is is there to be afraid of. any.

"I think I would rather stay indoors.
What is there to be afraid of, any-how". Wirelin asked.
"An in the world but lonell-see" mer husband replied.
"Well, I aust get used to that, you know. I can begin now," Virginia suid lightly.

know. I ca But for all her courage, she watched

But for all her courage, she watched him drive away with a sob in her throat. In all the universe there was nothing save a glaring sunlight and an endless cringing of yellow, windthreshed grass.

Asher Aydelot had come here with half a dozen other young fellows, all oftwhom took up claims along Grass River. Six months later Jim Shirley like company who extended the free-hed company who extended the free-heldings until it was seven miles by the winding of the river from Ayde-

claim on the lot's north-west down the river to Shirley's claim on the southeast.

on the southeast.

Eighteen months later only two men were
ieft in the Grass River
valley, Aydelot and
Shirley, The shorter trail as the crow flies between their claims was marked by a gold-en thread of sunflowers. At the third bend of the winding stream a gentle ripple of ground rose high enough to hide the cabin lights from each other that otherwise might have given a neighborly comfort to the two lone settlers.

Shirley's cabin stood on a tiny swell of ground, mark of a onetime island, set in a wide bend in the river that was itself a natural fireguard for most of the circle of the premises.

The houes was snug as a squirrel's nest. Before it was a strip of white clover, as green and fresh looking as if it were on the banks of Clover Creek in Ohio. Above the door a plain board bore the one word, "Clover-

Jim Shirley watching Asher coming down the trail against the wind, followed by the big shepherd dos. Pilot, who had bounded off to meet him.

"Helio! How did you g : away on a day like this?" he called, as the (Con. on page 14.)



"The Kind that Mother Used to Make."

THE

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Regrets-) NE that acti the sad c foreseen to ord, whi wish recal It is str

most impr we know less self-co is an outle tation. Ye most kee afterwards After a his wife w and compa years of co to her ever ing to chu grief, his fi forth he we and those

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May one tions be th Christ's ind have no reg just over. the question there was any commu tell how se as we did? by His help our associa thoughtful, all our acti be accompli we yield on permit Him Let us rem the fifteent the vine, y the breach except it al can ye exce same bringe also Paul's spirit is lov ing, gentlen ness, self-co

A Ho "Cousin E H have marry ow m

question cor people, it is little deliber Some your all they need mistaken, as expect a gir not provide come doesn' ous apartme dwelling wit I am not as marrying, be maintenance dea of mise: cases, howev

Any young deprived of money suffic a few hundre ed to start need conside

#### THE UPWARD LOOK

Regrets-A New Year's Thought

NE of the worst punishments that follows as the result of our actions is that of vain regrets; regrets when an action has been done, the sad consequences of which were foreseen too late; regrets for a hasty word, which for a life-time one may wish recalled

It is strange, but so often we are It is strange, but so orten we are most impatient and unkind tov/ards those we love the most. Just because we know them so well, we exercise less self-control in their presence. It is an outlet for our own nervous irratation. Yet it is they towards whom impatience and unkindness will be most keenly and bitterly regretted afterwards

After a few short weeks of illness Arter a rew short weeks of ilinesa, his wife was gone—his life's comfort and companion. He, all through those years of comradeship, had been loyal to her every wish but one, that of go-ing to church. In the stunned, biter grief, his first resolve was that hence-forth he would see a would see the forth he would go to church regularly, and those who knew him felt sure that he would. But think of the countless times in that church when she had longed for him! Think, too, of those hours afterwards when he would wish that he had not let her go

tions be that we may so act through Christ's indwelling spirit that we may have no regrets each night for the day just over. We ought to ask ourselves the question, if we had known that there was to be a separation without any communication by which we could tell how sorry we were, would we have acted or spoken, or even thought as we did? Love is the most precious of God-given gifts. In this New Year, by His help and in His name, may all our association with loved ones be thoughtful, tender and unselfish. In all our actions may there be no sor-rowful aftermath of regrets. This will emplished only in proportion as we yield ourselves to Christ, and thus permit Him to live out His life in us. permit Him to live out His life in us. Let us remember His admonition in the fifteenth chapter of John: "I am the vine, ye are the branches:" "As the breach cannot bear fruit of itself, except H abide in the vine, no more can ye except ye abide in Me." "He that abideth in me and I in Him, the that abdeth in me and I in Fins, the same bringeth forth much fruit," and also Paul's words, "The fruit of the spirit is love, Joy, peace, long-suffer-ing, gentleness, goodness, faith, meck-ness, self-control."—L. H. N.

#### A Home is the Essential

"Cousin Eva," Stormont Co., Ont. OW much money should a man

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dog

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have before asking a girl to marry him? Although this is a question continually before all young people, it is apparently given very little deliberation.

little deliberation. Some young wen seem to think that all they need is money enough to buy a license. Here they are absolutely mistaken, as a man has no right to expect a girl to marry him if he cannot provide a home for her. A good home fourth. not provide a home for her. A good home desen's necessarily mean invar-sous apartments, but a comfortable dwelling with a reliable maintenance. I am not averse to penniless people marrying, but where there is no maintenance it usually suggests the idea of misery liking company. Some

ices of misery liking company. Some cases, however, prove successful.

Any young man of to-day, who is not deprived of his attenuate, could carn money sufficient to start a home in a very short time. He would only need a few bundred deliars, unless he wanted to start 'azming, when he would need considerable more. But even

that amount is easily available, if he is

not wasting his time.

I believe a wife should help in every and any way she can, but I can't see why a woman should be desirous of marrying a man who cannot earn a home for her. It would seem unreasonable to say, "girls, would you like to have a home when you get married, or would you rether the says to be a say have a nome when you get married, would you rather work for a few years without a home?" I would hate to leave my home if I had no place to go, besides I' wouldn't want to bo recognized as some poor thing without a home. I think if there was more forethought in these matters there would be fewer unhappy homes.

#### Establishing the Home, a Pleasure "Maude Stewart," Lanark Co., Ont.

HIS question of money and marriage is a very difficult one to answer, as so much depends on circumstances and the disposition of the girl the young man is going to ask to share his fortunes. In towns and cities, probably the amount of money required will depend on the young couple's standing in society. In the country, people are nearly all on the same social standing. Here the the same social standing. Here the clighley young men are the farmers sons. Some of these go into business in town, but the majority count on possessing a farm some day and a home on the farm is the ideal one. The energetic, independent Cana-dian girl will value her home infinite-

dian girl will value her home infiniteity more if she helps to pay for it. It
is the working for a limit that gives
us pleasure. The girl that gives
us pleasure. The girl that we helps to
pay for her home will have being to
pay for her home will have being to
pleasure as each installment that of
pleasure as each installment that of
the will take a great deal of interest in
all improvements that are made from
time to time in the home, as well as
the stock, garden, poultry and so forth
stock, garden, poultry and so forth
stock, garden, poultry and so forth time to time in the home, as well as the stock, garden, poultry and so forth. Feeling that she is working with her husband for her home, she will value it and love it accordingly. A woman said the other day, "I was far hap-pler when my husband and I were working the said of the said of the said of the received the said of the said of the said of the pier when my husband and I were working and striving to pay for our farm than I am now with thousands of dollars in my possession."

Money is an incentive to work, but it is the pleasure we derive from ac complishing something, that makes life so sweet to men and women alike,

#### Make a Careful Choice "Cousin Dell," Norfolk Co., Ont.

S I am a reader of Farm and A Dairy I would like to give my views on the subject of "mone; and marriage." In my estimation there is no home ever quite so dear to the heart as the one that two willing workers earn together, and I have had experience along this line. In order to make a success of this, however, the wife must have a practical knowledge of work

knowledge of work.

The trouble with too many mothers of to-day is that they bring their daughters up to think that the main object in life is to make a good appearance in society, and by so doing to secure a husband with money, so that they will not have to work. This that they will not have to work. is commendable, in a way, but di such homes prove to be the happiest ones? I think not, and if a girl so reared finds her life's companion has his home yet to earn, she is wholly unprepared for the duties that await her. They will start out, though, in good faith that all will be well, and if she faith that all will be well, and it she has the pluck and perseverance necessary, she will make good. There will be hardships which she will have to overcome single-handed that would have been quite unnecessary? If the mother had given her the practical that the property of the propert good and is unable to do her part, both will become discouraged, and the out-

# Ottawa Winter Fair HOWICK HALL, OTTAWA January 16, 17, 18, 19, 1917

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# The Farm and Dairy Herd Record

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come will be an unhappy home, the kind that is all too frequent throughour land.

So in my opinion, unless the man has a home to take a wife to, he should be very careful what kind of a wife he

#### Awards in Bread-making Contests

N connection with the Rural School Fairs held throughout Ontario dur-Fairs need throughout Ontale dul-ing the fall under the auspices of the Provincial Department of Agri-culture, the Campbell Flour Mills Co., Ltd., of West Toronto, offered a series of interesting prizes with the idea of stimulating competition in breadat the local fair automatically became a contestant for the Provincial prizes, the prize loaf from each fair being sent to Guelph and judged according sent to Gueiph and Judged according to a previously advertised standard by Miss M. A. Purdy of the Department of Flour-testing and Breadmaking at of Flour-testing and Breadmaking at the Ontario Agricultural College. The prize winners in the Provincial cun-test have been announced, and the prizes awarded were as follows: First Prize, Short Ocurse (three months) in Domestic Science at Mac-tivities (include well as

months) in Domestic Science at Macdonald Institutic Greiph, valued at
\$75, won by Mus Elsic Bird, Norval
\$75, won by Mus Elsic Bird, Norval
\$75, won by Mus Elsic Bird, Norval
\$75, won by Rena C. Lunan, Union,
\$75, won by Rena C. Lunan, Union,
\$75, won by Mesa C. Lunan, Union,
\$75, won by Mesa C. Lunan, Union,
\$75, won by Miss Lexic James, Woodville, Fourth
prize, same as third, won by Miss
Ruby Walker, Kinburn. The remainder of the prizes each consisted of a
copy of the Boston Cooking School
Cook Book.

Cook Book

#### Amusements Conducted by MARION DALLAS

#### Holiday Frolics

TEW Year's Eve affords opportun-New Year's Eve affords opportun-ity for a merry time in a "Watch Night Party." Novel invitations may be made by cutting a cardboard circle and marking it with pen and link to represent the face of a clock. Make two slits in the circle, through which inch-wide ribbon is yur, the ribbon bales ganded to take is run, the ribbon being marked in ink with the date and hour of the party.

Current Events Contest.

"Current Event Contest" will prove very entertaining for such a party, and will recall the events of the year, which has been one of the most important in the world's tory. Cut from magazines and daily papers cartoons illustrative of events which have taken place during the year. These should be numbered and year. These should be numbered and pinned up in conspicuous places, minus their titles, of course. By the corre-sponding numbers on cards distribut-ed to the guests, can be written the pictured happening.

Funny "PI." After the contest of "Current Events," distribute cards with this jingle printed or written on, in red ink:

"Sing a song of New Year's, Hopes all high;

Find nine things In this funny "Pi."

On the other side of the card have the nine things, which are usually associated with the Yuletide. Instead of writing them in the corre t way, transpose them. Here is one list of

questions:
No. 1, Whe Raye (New Year); No.
2, Leyn Ogl (Yule Log); No. 3, Liyon
Rhwtae, (Holly wreath); No. 4,
Teomeliat (Mistletoe); No. 5, Saamehtir Reet (Christmas tree); No.
Figstl (Giffe); No. 7, Reafht Emit

(Father Time); No. 8, Asnat Ulcas (Santa Claus); No. 9, Iesw Emn (Wise

For the most correct list, a Christ-

mas stocking might be the award.
The "Watch Contest," which appeared if these columns a short time ago, would be a suitable game for a Watch Night Party."

A Twelfth Night Frolic.

Twelfth Night offers so many alluring possibilities for successful entering possibilities for successful enter-tainment that it is a favorite date with many a hostess, closing, as it does, the round of Yuletide merry-making. The following jingle may be written on an oblong card of rough paper or cardboard. If the hostess is paper or cardboard. If the hostess is paper or cardsoard. If the hostess is able to draw or paint, these could be decorated nicely with holly or little Christmas cakes. These cards could be rolled and fastened together with Christmas seals in lieu of envelopes.

welfth Night after Christmas We shall celebrate;
And as cakes must be made,
Won't you please come at eight.

Partners for the evening are cho Partners for the evening are chosen in a novel manner. A large Twelfth-Night cake is brought in by the host-ess. One half of it is leed in pink, and the other half in white. The boys are requested to cut a slice from the pink side and the girls from the white. Instead of finding the traditional hapen one, the boys and side. tional bean or pea, the boys and girls find small favors which, when matched, determine the partners.

#### Making Cakes.

The game of the evening is called "Making Cake," and it is quite appropriate to the occasion. In the centre cardboard cakes of different colors, the manner of a picture puzzle. Bits of snuff-colored cardboard are parts of White pieces, decor ginger snap. a ginger snap. White blossoms, belong to a wedding-cake. Yellow pieces represent a sponge cake. Pieces bearing a weuding-take. Tensow pieces represent a sponge cake. Pieces bearing letters, which when fitted together, bid one to "Vote for Suffraze," compose an election cake; and pieces bearing pictures of currants and raising age and of a fruit cake. Siftage. sins, are part of a fruit cake. minutes are allowed for this pastime at each table, then a bell is rung, and the partners who have made the most cakes progress to the next table. At the end of 10 progressions a prize, consisting of a tissue paper cake. filled with home-made candy, is awardthe guest who has made the highest score.

#### A Cake Contest.

This contest would fit in nicely with e game of "Making Cake." The answer to each question is the name

No. 1, What kind of a cake should a jeweller wear? gold and silver; No. 2, What kind suits a politician? election cake; No. 4, What kind suits a man who imposes on his friends? sponge cake; No. 4, What kind for a maker of gloves? lady's finger; No. 5, What kind for a gardener? fruit cake: No.6, What kind for a lover? kisses; No. 7, What kind for a lover? kiases; No. 7, What kind for a puzillat? pound cake; No. 8, What kind for a geologist? layer cake; No. 9, What kind for his Satanic Majesty? Devil's cake; No. 10, What kind for his rangel's cake; No. 11, What kind for the heavenly triangel's cake; No. 11, What kind for the heavenly triangle cake; No. 11, What would one have if he ste all these cakes? stomachache.

The suburban teacher had been tell-ing her pupils of different wild ant-mals. The last named was the rhi-

"Now, James," said she, "name something that is very dangerous to get near to and that has horns. Little James stood up and with much

Winning the Wilderness

(Continued from Page 12.)

team drew near. you old granny!" Asher "Why, you stopped here

Both men had been on the Kansas plains long enough not to mind the wind. It flashed into Asher's mind wind. It fiashed into Asher's mind that Jim was hoping to see his wise with him, and he measured anow the loneliness of the man's life.
"Most to rude for ladies just yet, although I didn't like to leave Vir-

ginia alone."

"What could possibly harm her?

Your fireguard's done, double done; there's no water to drown in, no indian to frighten, no while beast to eater, no white man, in God knows how many hundred miles. Just nothing to be afraid of."

"Your like, it, lengt nothing and

to be afraid of."
"Yes, that's it—just nothing. And
it's enough to make even a braver
woman afraid. It's the eternal vast
nothingness, when the very silence
cries out at you. It's the awful boneliness of the plains that makes the advance attack in this fight with the wild,

vance attack in this right with the wild,
ernem. Don't we both know that,"
reckon we do, but we got over
the word will Mrs. Aydelot."
"How do you know that," Asher in,
euired eagerly, "I believe she could
hardly keep back the tears till I got

Then why didn't you I know she will get over it, because she's as good a woman as we are men, and we stood for it."

"Well, here's your plow. Better get your guard thrown up. I can smell

smoke now. There's a prairie fire sweeping in on this wind somewhere. There's a storm brewing, too. Remember what a fight we had with fire year ago?"

Asher was helping to put Jim's team in the harness.

"Yes, you saved your well and a wo other little things. But you've got your grit, you darned Buckeye, to hold on and start again from the

hold on and start again from the ashes. And now you have your wife here. You are lucky," Jim declared. "Where's that broken plow of yours? Is it hold or weld? Maybe I can mend it." Asher was casting about for tools.

"It's bolt. Everything is on the "It's boil, Everything is on the stable sherves," Jim called back against the wind, as he drove the plow deep in the black soil. "Be sure you gut 'em back when you are if rough wit 'em, too."

"Poor Jim!" Asher said to himself with a gmile. "The artist in him.

"Poor Jan: Aside with a smile. "The artist in him makes him keep the place in order. He'd stop to hang up his coat and vest if he had to fight-a mad bull. Poor judgment puts a good many tragedies into lives as well as stage villain types of crime."

And then Asher thought of Virginia, and wondered what she was doing through the long afternoon. He was whistling softly with a smile in his eyes as Jim Shirley made the tenth round of the premises and stopped opposite the stable door.

"Hey, Asher, come out and see the sky now," he called. "It's prairie fire and equinoctial storm combined."

and equinocial storm combined."

Asher hurried out to see the dull contrives heavens shutting off the sunlight out of which raged a wind searing the sky to a dun gray. "Don't stand there staring, you ido." Who you've got your plowing done?" he cried to Shirley.

Shirley began to loose the tracechain from the plow.

"That strip is wide enough now," he declared, "Tre got a chover guard, anyhow." I don't need to bankfare like my neighbors do."

As Asher untied his ponses and chimbed into the wagon, Jim heal

their reins. "Stop a minute. Let a single man

emphasia replied: (Continued on page 15.)

a good ti out of the follow the may profile to our at Styles in but one from yeas the popula shirtwaissi ent one features i or aquare, of materia or a plain style, is on from some from some from some from some from some from some time of y necessary style from Ekther io utilized.

# Preparing for January Sewing Days

Farm and bury patterns shown in these columns are especial j pre-pared by the property of the paper pattern. When sending your order please the careful feature of the paper pattern. When adults, age for children, and the number of the pattern described. Order adults, age for children, and the number of the pattern described. Order to Our Women Folk, 10 set of the pattern of the pattern and Dalry, Peterboro, Ont.



The last two or three weeks have leen stylish on a dress if fashioned from some busy ones for all of us, they was also been luteresting ones, for what times of the year is more approped than the last few days we have probably been had few days we have probably been day to result on the feetivities of Christians as but right on our routine of duties in the feetivities of Christians and be the feetive of the season for make the feetive of the season for make the feetive of the season for make of the feetive of the season for make follow the styles closely in order that we near young and styles may come and styles and

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Winning the Wilderness

(Continued from page 14.)
offer you a word of advice, will you?"

he asked.

"All right, I need advice," Asher smiled down on Jim's earnest face.

"Then heed it, too. No use to tell you to take care of your wife. You'll do that to a fault. But don't make any mistake about Mrs. Asher Aydeshe west through Rebel and Union to west through to hold be you will not only the same and the own here as soon as the first fight is over. She is like that Kentucky thorover. She is like that kentucky thor-oughbred of hers; she's got endurance as well as grace and beauty."
"Bless you, Jim," Asher said, as he clasped Shirley's hand. "I wish you

"Well, they are something of an anxiety, too. Huatle home ahead of the storm. I've always wished that bluff at the deep bend didn't hide us from each other's sight. I'd like to blast it out.

Diast it out."

Asher Aydelot hurried northward ahead of the hot winds and deepening shadows of the coming storm.

And all the time, in spite of Jim's comforting words, an anxiety grew and The miles seemed endless the heavens darkened, and the wind suddenly gave a gasp and died away, leaving a hot, blank stillness every-

where.

Meanwhile, Virginia, alone in the cabin, had fallen saleep from sheer norve weariness. When she awke, it was late in the afternoon. The secreaning outside had cassed, but the whir and whine were still going on, and the blaring light was toned by the dust-falled air.

"I was only tired," Virginia said to herself. "Now I am rested, I don't mind the wind."

mand the wind."
She went out to watch the trail for
Asher's coming. He was not in sight,
so she came inside again, but nothing
there could interest her.
"I'll go out and wait awhile," she

thought.

Tying a veil over her head, she shut the cabin door and sat down outside.

The wind died suddenly away, the trail was Mielees, and all the plain cut by the Irail as well. Then the solitude of the thing took up the flight where the wind had left-off.

"How can I ever stand this," Vir-ginia cried, springing up. "But Asher stood it before I came, or even prom-ised to come. No knight of the old chivalry days ever endured such hard-ships as the claimholders on these kansas plains must endure. But it takes women to make homes. They can never, never win here without wives. I could go back to Virginia if I would." She slut her teeth tightly, and the small hands were clenched. "But I won't do it. I'll stay here with "But I won't do it. I'll stay here with Asher Aydelot. Other men and wo-men as cager as we are will come soon. We can wait, and some day, Oh, some day, we'll not miss what the Thaines lost by the war and the Aydelots lost by the Thaines, for we'll have a prince's holdings on these decolate plains!"

desorate plains:

She stood with her bands clasped looking with far-seeing dark eyes down the long trail by the dry river bed, like a goddess of Conquest on a vast untamed prairie.

A six den sweep of the wind aroused her, and the loneliness of the plains

rose up again. "I'll get Juno and follow the trail till I meet Asher. I can't get lost where there's nothing but space," she sald aloud, as she hueried to the stable and led out the petted thorough-

(Continued Next Week.)

For thickening brown gravy, use browned flour. Put it in a pie plate and set on top of the stove, or in a very hot oven. When it begins to brown it should be constantly stirred until brown all through.



# Coffee Icing

Cook two Cups of Lantic Sugar with half a cup of strong coffee until the syrup forms a soft ball when dropped in cold water. Add a teaspoon-ful of vanilla extract and beat until cold enough to spread.

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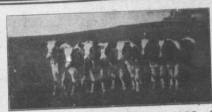


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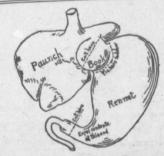
"Good Luck" Calf Meal is noted for its richness and absolute safe-ness, and is an ideal substitute for milk for young calves. Try it on your young stock and note the results.

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produces a large quantity of high quality milk at a low cost. Many breeders and dairymen are puzzled at this season to account for the lessened production of their herd, with a consequent reduction in the milk cheque. The question is largely a matter of the right kind of feed. "Good Luck" Cotton Seed Meal is guaranteed by the Dominion Government to contain not less than 41% of protein, which is so necessary If you want a large flow of rich milk. We also supply Flax Sero (futen Meal, Oil Cake Meal, Cr. Corn, Whole Corn, Feeding Corn Meal, Ground Gats, Cr. Cora, Coats, Cats Feed, Bran, Shorts, Poultry Feeds, Poultry Supplies, Distillers' Dried Grains. Ask your dealer for quotations. If he cannot supply you write us. produces a large quantity of high quality milk at a low cost. Many

We are also buyers of Wheat, Buckwheat, Barley, Oats, Corn, Peas, Beans., etc. State quantity and send sample.

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# **Wanted---Calf Rennets**

We are in the market for large quantities of Domestic Calf Bennets, prepared for shipment by blowing and drying or in the green state, cut onen and packed in sait. Butchers and drying or in the green state, cut onen and packed in sait. Butchers and drying or in the profusble to one and packed in sait. Butchers and drying or will find it profusble to the from any party or quantity of such goods to offer. Each of the from any party-product; there is no tariff on them, an approved market of the product of the prod

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#### The Makers' Corner

Butter and Cheese Makers are In-vited to send contributions to this department, to ask questions on matters relating to cheese making, and to suggest subjects for discus-

#### The E.O.D.A. Convention

The E.O.D.A. Convention

The 40th Annual Convention and
Winter Dairy Exhibition of the
ern Ontario will be been for Cashern Ontario will be the Cashpoly and Cashpoly and Cashby Jan. 4 and 5,
1917 Taylogram includes addressesby Jan. 5 and 5 and 5 and
addresses and
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#### The W.O.D.A. Convention

HE 50th annual convention of the Dairymen's Association of West-ern Ontario will be held at Wood-A crn Ontario will be held at Wood-stock, on Wednesday and Thursday, J.a. 10 and 11. Among the speakers scheduled to speak are Hon. Martin Burrell, N. W. Rowell, Prof. H. H. Dean, W. Bert Roadhouse, J. A. Rud-dick, Geo. A. Putham, Geo. H. Barr, C. F. Whitley, G. C. Publow and many other well known men. An junguest. other well known men. An interesting feature of the program, which may be obtained from Secretary Frank Herns, London, is a series of illustra-tions showing likenesses of the presitions snowing likenesses of the presi-dents and secretaries of the association since organization. The Winter Pairy Exhibition, held in conjunction with the convention, will be in the Wood-stock market building and the cheese and butter will be sold on Thursday at one o'clock.

#### Frontenac Dairymen Convene

T the District Dairy Convention for Frontenac county held at Battersea, on Nov. 30th, the assembled dairymen passed a strong re-solution asking the federal government not to remove the legislation prohibiting the trade in margarine. Both farmers and cheesemakers present proved to be somewhat hostile the Dairy Standards Act. The objections of the cheesemakers were that it added to their work which it is hard to get men to do. The farmers objected that a great deal of mistrust would arise as to the reliability of the test, since they were not in a position to know what was being done. It was also objected that the government had also objected that the government had not been requested by the farmers to pass such legislation and that ordin-ary herds varied so little in butter fat

that it was not worth while going to the trouble of conducting a test of each herd's milk. No resolutions were moved regarding the Act.

Mr. Joseph McGrath, who has for str. Joseph accorate, with has for the county on the board of the E.O.D. A. was again nominated for the year.

#### Turnips and Testing Discussed

T a special meeting of the pat-A T a special ineeting of the par-rons of the Shearer factory in Peterboro Co., Ont., held on December 12, turnip feeding and testing of milk were thoroughly discussed. At the annual meeting held some time At the annual meeting 13th ago, it was decided by a majority of 18 to 15, to adopt the fat plus two system. Afterwards some dissatisfaction tem. Afterwards some dissatisfaction regarding the motion arose, and an-other meeting was called. Before this meeting a motion and three amend-ments were put. The motion, moved by Mr. Sam Armstrong, was that the by Mr. Sam Armstrong, was that the fat plus two basis he adopted: An amendment, specifying that the two systems used for periods of one month of the systems milk into three vats according to the fat content as shown by the May test ing, and to make these up separately whienever came the nearest to divid-ing the money properly would be the system adopted. The amendment re-quiring that the straight fat basis be adopted was carried. Whichever came the nearest to divid

The effect of rape, turnips, kale and cabbage on milk for cheese-making purposes was thoroughly discussed. G. A. Gillespie, M.L.A., stated that, under ordinary conditions the flavor of rape or Swede turnips would affect or rape or Swede turnips would affect the price on the European cheese market. Both he and Instructor Ward, of Peterboro, were of the option that greystone and white turnips, kale or cabbage, would not affect the market price of cheese. Though for the last 15 years or more the feeding of turnips has not been allowed by the patrons, it was agreed that henceforth it would be permissible to feed turnips after October 1st.

#### John Bright Opposes Margarine

"I want to sound a word of warning to the live stock men of Canada," said Mr. John Bright, Dominion Live Stock Commissioner at a directors' luncheon at Guelph during the week of the Winter Fair.

"There are a number of people in the cities who do not know very much the cities who do not know very much about producing live stock, who are agitating for the admission of oleo into this country, and some of the are doing it for the purpose of the pro-fit they think they will be able to make. These men know very little

### Amount of Cheese From High and Low Testing Milk

The following are the results of the during the menths of October and experiments in making cheese from November by the cheese instructore. The work was all done under the usual conditions prevailing in the average were made under factory conditions cheese factory.

were made	under factory	Lbs. Milk Required	Per cent.
Lbs. of	Per cent.	Lbs. of to Make One Cheese Lb. of Cheese	in whey
Milk 4,578	3.6	Experiment No. 1. 10.21 448.75 9.49	.25
4,578	4	Experiment No. 2.	.27
7,470 5,355	3.7 4.2	561 9.54	.25
2,072	3.3	Experiment No. 3. 196 1.138 9.90	.31
11,274	3.7 4.1	Experiment No. 4. 10.06	.24
3,408	4.1	371	

Decembe about wh You gentle that it wor say to yo of Agricult ada is opp admitted to "We hav re a num

ing on the watch it ar to stop it." Governo

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vincial cre have been Two spec ing farmen the purpose ation, and cate that t success. T cattle-breed Ontario will to some of for dairying

More C 66 WISH ing r up the bus said Chief of the re "There is a ers through will be a st they are bet vices and ment in imp

mend a con whom I kne competent as factory pr been factorie that would doors becau Good men m in the work The

WE are of ren which states secure as me a coagulant, forth in their "We are af high price of fied. The tre the fact that

cheap in year been for the of Russia, wh ect the raw have been po \$5 a gallon. in what other body would un cure, dry, par and deliver c three cents e turers. The when you or remet in one and one-half t to curdle 1.00 average of 16 gallon rennet and if this c ounces only o cents a chees quarter cent : bsurd to run sin for one-qu

cheese, when

about what they are talking about. You gentlemen will all agree with me that it would be suicidal to allow that that a would be suiched to allow that stuff to be made in Canada. Now, I say to you live stock men, keep a watch on that question: The Minister of Agriculture of the Dominion of Can-

of agriculture of the Dominion of Can-ada is opposed to allewing eleo to be admitted to this country.

"We have a big cobinet, and there are a number of men who are agita-ing on this question, and you must watch at and go to Oltawa if necessary to stop \$t."

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#### Government Creamery at New Liskeard

W ITH a view to encouraging the live stock and dairying industry in Northern Ontario, the plans for the establishment of a Provincial creamery at New Liskeard have been completed.

Two special agents have been visit-ing farmers in Northern Ontario for the purpose of enlisting their cooperthe purpose of enlisting their cooper-ation, and the reports received indi-cate that the new venture will be a success. The farmers have agreed to do all in their power to stimulate the extite-breeding and dairying interests, and predict that in a short time New Ontario will be running a close second to scine of the older parts of Ontario for dairying honors.

#### More Cheesemakers Wanted

66 WISH to sound a word of warning regarding the necessity of inducing more good men to take up the business of cheese making," up the business of cheese making," said Chief instructor Publow at one of the recent dairy conventions. "There is a secarcity of qualified makers throughout this district, and there will be a still greater scarcity unless they are better rewarded for their services and receive more encouragement in improving their ability as makers. It I had refued to recommend a considerable number of men whom I knew were not sufficiently competent as cheesemakers to conduct a factory property, there would have competent as neesemakers to conduct
a factory properly, there would have
seen factories during the past season
that would have had to close their
doors because of lack of makers.
Good men must be encouraged to stay

#### The Cost of Rennet

E are recently in receipt of a letter from a well known firm of rennet makers in England, which states that they are willing to

which states that they are willing to secure as many rennets from Canada as possible. The claims of rennet as a coagulant, in spite of the high prices that at present prevail, are set forth in their letter as follows:

"We are alraid the outery about the high price of rennet is hardly justified. The trouble should be found in the fact that rennet has been too cheap in years some by and had it not och prices of the prices of Russia, which was employed to collect the raw unaterial, it would never have been possible to self rennet for \$5 a gallon. We would like to know in what other part of the world any in what other part of the world any-body would undertake to collect, clean, cure, dry, pack, dispatch, pay freight and deliver calves' rennets at two or three cents each to rennet manufacthe deriver carries requests in two or three cents each to remnet manufacturers. The outer's is also too abourd when you consider the cost of the whom you consider the cost of the work of the cost o

#### HOLSTEIN-FRIESIAN NEWS

Farm and Dairy is the leading exponent of dairying in Canada. The great majority of the members of the Canadian Holatein-Friesian Association are readers of the paper. Members of the Association are lavited to send items of interactions in the column of the column of

THE OXFORD DISTRICT HOLSTEIN

As reported and week, the sale of the Oxford Holstein Club was a splendfild fold for the fit animals of \$8,87,50, or an average of \$375 animals of \$8,90, or an average of \$375 animals of \$375, or an average of \$375, o

ings Brace, or the sure of the control of the contr

#### FORSTERCREST HERD NOTES.



# The Future Prosperity of the Farmers of Ontario

Lies in Mutual Respect, Mutual Confidence AND CO-OPERATION

We have to offer a few cars of Cotton Seed Feed Meal, 20 to 24% protein, Toronto freight basis, at \$40. We can also supply a higher grade brand containing 36% protein, and one other brand containing 38% to 41% protein. Prices quoted on application. Present prices cannot be guaranteed after January 1st. This is good buying at present. Take advantage

Our business in Cutters and Sleighs has been moving briskly. Customers are well satisfied. Get our prices.

Remember, we are in a position to take care of your Clover Seed requirements, and hope to be favored with your orders. Get our quotations on Gasoline and Kerosene Engines, Coal Oil and Gasoline is in great demand. We can supply your needs

# The United Farmers' Co-Operative Co.

"THE ONTARIO FARMERS' OWN ORGANIZATION"

110 Church Street Toronto, Ont.

### Skimmed Milk Wanted

I is this not the expression on the faces of your Calves and Pigs when you of its o, give them what they require.

If it so, give them what they require.

If it so, give CREAM to us and have two cheques coming in instead of one, and the company of the company o

Cornwall City Dairy, Adolphus Street, Cornwall, Ont. 

#### CREAM WANTED

Prompt Service, Accurate Records, Highest Prices. Write for particulars-it will be worth your while.

Toronto Creamery Co., 9-11 Church St. Toronto

SHIP YOUR **BUTTER & EGGS** 

WILLIAM DAVIES COMPANY Extablished 1854. TORONTO, ONT.

SEEDS TOTAL Preparedness While it hats we can augply like the second of the province of the province

of fat whey

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safe and reliable. JOSEPH L. BATZINGER.

\$1 a bottle-6 for \$5, at druggists-or write for copy or our book "Treatise on the Horse" free, Dr. B. J. KENDALL COMPANY

Enosburg Falls, Vermont, U.S.A. 118



The Leading R. O. P. Herd Large Cows, Large Teats, Large Re-cords, High Testers. Choice Young Bulls and Bull Calves and a few Cows

W000045SE 8893 R. R. NO. I. MODREFIELD, ONT.

#### Just Two wy To Choose from Old Enough for Service

Butter is 50c. a lb., Butter fat is 55c., Milk is \$2.25 a cwt. f.o.b. Can you afford not to try winter dairying? Get your bull early and prepare for next winter.

E. B. MALLORY R.R. 3 Belleville, Out. Long Distance Phon ······

### WANTED

Pure Bred Holstein Bull Calf Must Re a Real Bull

STEWART & ACRES WART & ACRES
Qu'Appelle, Sask., Can.

CHEEREMAKER WANTED.—To make per hundred in a factory making over one hundred tons. State terms. Wen. Chaimers, Poole, Ont.

-FOR SALE-A number of pure-bred Ayrshire cattle. Apply to H. C. ROBLIN - Ameliasburg, Ont.

#### Holstein Cows Excel All Others

Proof is Found in 100,000 Official Pesta For Profitable Yield of Milk, Butter and Cheese, No Other Breed Can Equal Them For the Production of High Chas Yeal, When Accident Ends Their San Accident En W. A. Clemons, Sec'y., H.-F. Assn., St. George, Ont.

#### Fairmont Holsteins

Young bulls for sale, all sons of the great king Seals Alcartra Calamity, whose ten nearest dama average over 30 met. All from any the same over 10 met. All from 25,000-th granddaughter of Colambia Johanna Lad, at prices that will sell those. Also cows and helfers bred to King.

PETER S. ARBOGAST R.R. No. 2, Mitchell, Ont.

which have been sold are proving their worth as hert henders and in the sold worth as here in the sold with the sold worth the sold with the sold with the sold with the sold with the sold worth the sold wort

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old. the fifth time this year, Mr. David to, of Glenford Sta., Ont., has come tiverside to secure females for

WHAT THE BREEDERS SAY.

"Your Orbismas and Breeders' Nurser Is just received. I consider it well worth a year's subscription. Mall me five extraories for filling and reference purpose to the filling and reference purpose that we will self to keep or hand a small supply of extra copies that we will self to head to the filling and the

foundation stock. Mr. Smith is characing from the dust-purpose ow to the
Holstein, baying found mit on the
Holstein having found mit of the
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A NEW SIRE AT THE O.A.C.,
We have just been informed by Mr. q.
A Brethen. Norwood, Ont., that he has
recently sold to bead the herd of floisteins at the O.A.C., Guebello, of floisteins at the O.A.C., Guebello, and
Hillicrostiate very long in making his
choice when he saw this young calf. He
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THE 25.000-Ltf. HEIFER.

THIS week we are offering one of the grandes bed helfers that has been grandes bed helfers that has been some the second of the sec Arrad \*

No. 85 days. Woodness Broos, Moorereducingly, 7979, 9.794 his milk, 385 hisfact, 48 per cent, fat, 885 days. Woodsizes Broos.
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good addition. He is still in his prime and may historicos desurbing forth even a greater than historicos desurbing forth even a greater than historicos desurbing the prime and may historicos desurbing the prime and the prime

AYRSHIRE FIELD DAY AT EVIE

THEOUXH the kindness of Mr. J. J.
Ballantyne, of Montreal, one of the
proprietors of "Evic Stock Parm"
at Chesterville, Ont., the members and
friends of the Dundar-Grown therestshire Breeders' Club enjoy in the resting day at this farm on Tuesday, Dec.

ibb. milk, seven, assister traces direct to the greatest milk and butter producing strains of the breed. Jos. O'Reilly is received in the greatest milk and butter producing the greatest milk and butter producing the greatest milk and butter producing the greatest milk and the producing day at this farm on Tuesday, Dec. Manual Programment of the great milk and the greatest milk and the greatest

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GIPSY MAID SCORED 178.599 PTS. GIPSY MAID SCORED 178,569 PTS.

In the table shower the results of the Dairy Tent of Dec. 14, the total points and the property of the total points of the total score for total one of the total score for tot

We a Born often. still. JOS

December

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days.

8,223 t. fat,

89 lbs. 137 lbs.

milk, stary. EVIE

# A 25,000 lb. Heifer -

We are offering a daughter of "Calamity Johanna Nig." 25,443 lbs. milk, 1,0071/2 lbs. butter one year; 108 lbs. milk one day Born May 4, 1916; a beauty. Her sire is "May Echo's Prince," three-quarters brother to the great "May Echo Sylvia." It isn't. often you get a chance to buy this kind of stuff, so act at once. We also have a few fine bull calves. Write, phone, or better

JOSEPH O'REILLY, R. R. 9

PETERBORO, ONTARIO

# Market Review and Forecast

Toronto, Dec. 33.—The total value of the cheese and butter survey trade for 1516 amounts to \$17,000,000, cheese before the cheese and butter \$1,000,000, cheese before the cheese and \$13,000,000, cheese before the cheese and \$13,000,000, and butter of \$1,000 to \$1,00



#### MAYRSHIRE BULLS

W. W. BALLANTYNE & SON,

- R.R. No. 3, Stratford, Ont,

#### 5..... LAKEVIEW HOLSTEINS

We are now effering the highest producing x-yr-nois in Canada. In Lekeview Dutchland Agis, the 346-64, Can. Chempion, the in Francisco. In Lekeview 2 daughter2s, her own dam, her full sites and her daughter. Also sweenly , her bulk, all sites of y Dat, Go, Sir Mona, and half bruthers to the 346-61b, con-bulk, all sites of the state of the state of the state of the state of the bulk, all sites of the state of the state of the state of the state of the bulk, all sites of the state of the state of the state of the state of the bulk, all sites of the state of t . T. A. DAWSON, Mgr. BRONTE ONT.

#### WHEN HIGHLAND LAKE FARMS

Offer for sale at attractive prices a few choicely bred Holsteins. No. 1—A yearling son of a 3t bs. bull and a 20 bs. 3 year old prize-winning cow. No. 3—An 8 months son of a 4t libs. bull and a 16.21 lbs. 2 year old grandsaughter of King Segis. The dams of these bulls are in our production herd, and will be tested again at next freshening. Write for price the production here, and will be tested again at next freshening. Write for some control of the production here is not some second size. KING SEGIS POWTHAC CANADA. R. W. E. BURNABY (Farm at Stop 55, Yonge St. Radial) Jefferson, Ont.

#### 30 Lb. BULL WANTED

I am on the market to purchase a bull fit for service, whose records average over 30 lbs. Kindly send me photo, extended pedigree, and price of the best Hoistein you have to offer.

W. G. BAILEY

DAK PALK STOLK ARM

R.R. No. 4, PARIS, ONT.

Could spare 10 cows or helfers bred to the Great Bull KING SEGIS PON-TRAC DUPLICATE. Have one yearling bull, and calves from 10 months down. Myrtle, C.P.R. Manchester, G.T.R.

Port Perry, R. R. 4

#### PEACH BLOW AYRSHIRES

Young Stack for sale, always on hand (both sexes), from high-testing heavy producers. Good udders and large test a special feature of my herd. Three fine young Sires ready for service. Get particulars of these if you need a sire. R. T. BROWNLEE, Peach Blow Farm, HEMMINGFORD, Que.

Apply to Robert Sinton, Manager Riverside Farm, Monte Bello, Que. Or to Hon. W. Owens, Westmount, Que.

HOTEL CARLS-RITE The Plan \$2.50 or 10 of the Company Plan \$1.50 of the

The O.A.C. Sire.

The Quality Breed



Substance-Style-Breeding-Prepo-

tency. The outstanding feature of Ayrahire stres is their prepotency. This makes them of such special value in improving any grade herd, in both fat test and total production. A. S. Turner & Sons' London Sr. Champion (1915) Netherton King Theodere (Imp.).

# The Short Cut to Dairy Profits Through Ayrshire Sires

C HREWD dairy farmers over Canada and the United States are realizing as S never before that the value of a cow or a herd for dairy purposes depends on only must the production be liberal, but the fat test must be creditable.

The Government acknowledges the wisdom of this when after March 31st, all

milk at our factories will be paid for according to its food value, i.e., fat test.

Thousands of our grade herds over Canada could be made much more profitable by the use of good sires—sires that come from blood of high fat test, and large total production. The dairy branch has shown where this has been done in hundreds of cases over the Province. Is your herd among these? Make it so for 1917.

# **17% INCREASE IN BUTTER FAT WOULD MEAN**

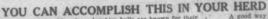
Suppose we figure it out. Say that you have 12 cows (about the average for Ontario), each giving an average of 6,600 lbs. milk in a year.

it Would Mean— \$12.00

20 lbs. more butter fat per cow at 40c., worth ... \$12.00

360 lbs. more butter fat from your herd, worth ... \$144.00

And this without increasing your labor or feed cost in the least.



By using a good Ayrshire sire. Ayrshire bulls are known for their prepotency and easy feeding. They come of naturally high-testing, blood-hardy, 'thrifty, and especially suited to average farm condi-

A good way to get a start in Ayrshires is to buy an Ayrshire bull from a good milking dam and buy a site with a good dam and start gradias up your herd. BETER STILL, buy a registered Ayrshire cow or helier and GET A START in pure-breds.

# The Ayrshire has long been acknowledged as the economical producer among dairy breeds

THE REASON IS THAT

THE REASON IS THAT

A PERSISTENT HEAVY PRODUCER—TO May 1st, 1916, 224 mature cows gave an average of 10,254 lbs. in milk and 413.90 lbs. fat.

R.O.P. two-year-olds averaged 7.352 lbs. milk over 4% fat.

AYSHIRE SIRES are very prepotent—they transmit the high-testing virtue.

AY SHRE SIRES are thritty, good grazers, and very prolific. And, above all, THE AYRSHIRE IS A SHOW ANIMAL, admired by all who love the attractive form of the perfect dairy cow.



The Aged Ayrshire Cows at the Canadian National, Toronto, 1916.

Ayrshires have a national monor and reputation for beauty and symmetry of form. In the line-up here shown, note the strong, straight lines and the wonderfully uniform udder development—beauty and performance combined.

Write for Booklet and Further Information About Ayrshires to

The Canadian Ayrshire Breeders' Association

W. F. STEPHEN, Secretary, Huntingdon, Que.