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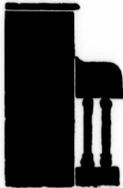
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The Farming World

For Farmers and Stockmen

Vol. XXI.

OCTOBER 14th, 1902

No. 16

Judging by Points

THIS question comes in for more or less discussion every fair season. Whether it will ever be settled to the satisfaction of everyone is doubtful. And yet there is good reason for believing that in judging live stock the score card or point judging is the only plan that can approach uniform methods in placing the awards. The present system of having no definite standard to guide the judge in his work often leads to varied and frequently amusing results. No two judges have the same ideals in every particular and while they may be perfectly honest in their convictions this lack of uniformity in ideals often brings them to totally divergent positions in placing the awards. Two or three cases of this kind occurred at the Toronto and London Fairs this year. At the former an animal would be placed at the top, while at London with the same competition, he would be dropped down to third or sometimes knocked out altogether under another judge. A case in point is given in our report of the sheep at London in the issue of Sept. 30. One could hardly conceive of two competent and honest judges differing so much in their ideals. And yet we find the same thing occurring over and over again to the utter confusion and mystification of the fair visitor seeking accurate information upon the subject.

Can this condition of affairs be remedied? There are surely right and wrong ideals in connection with every breed of stock, be it horses, cattle, sheep or swine. If so why cannot these right ideals be got into concrete form in the shape of a score card for use at all our fairs. We believe it is possible and that fair managers should bend their energies in this direction. No doubt different judges would vary somewhat in marking the score card and in allowing value to the different points, but there would be nothing like the variation we have under present methods. There is important work for our live stock associations along this line. They have gone over the various prize lists at our fairs often enough to have them perfected. Let them now bend their energies to securing a uniform scale of points for the use of judges at these fairs. The principle of judging by points is recognized at Toronto, Ottawa, London and other fairs in the live-stock judging competitions which are designed to train young men in judg-

ing stock. Why could not the same plan be used by the judge in awarding the prizes for the best animals. If the young man can pick out the best animal by points surely the older man can. With proper assistance a competent judge could quickly go over any section and mark down the value of points for each animal in the ring. Such marking would be of great value to the exhibitor as well as to the visitor. This question is well worth looking into by fair managers who will never have a perfect and impartial system of awarding prizes if they cling to the old plan.

The Jersey Advocate in advocating a scale of points for placing the awards on Jersey cattle at fairs says:

"The writer has followed with very considerable interest the awarding of prizes to the members of two herds which have been competing with each other at various fairs this year. One week, one cow or heifer is declared to be the best; the next week, another who has competed with the former champion defeats her. Does the exhibitor receive any instruction from such awarding of prizes? Emphatically, no! If his cow or heifer is placed first, he thinks the judge who so placed it is an excellent judge. If the same animal is defeated at the next fair under another judge, he votes him a poor judge. He recognizes that it is the individual opinion of the judge that is given; and in too many cases the judge cannot explain why his judgment was given as it was."

The same thing will apply to exhibitors in other classes. We frequently meet exhibitors who will not enter at a show till they know who the judge is going to be. If to their liking the entry goes in, if not the exhibits are kept at home. Such action is a rather sad reflection upon the ability or integrity of judges and would not be possible under more uniform methods of judging such as a proper scale of points would afford.

Improved Ocean Freight Service Needed

In the negotiations for a fast Atlantic steamship line between Canada and Great Britain the important point to be considered is the freight service. What this country needs is more and better ocean freight service for carrying our surplus food products to the British market. We published some data not long ago in which it was shown that the Canadian producer is placed at a decided disadvantage

as compared with his American competitor in getting his products carried across the Atlantic. The first consideration then on the part of the Government should be to secure better ocean freight service so that our products may be carried to the British consumer with the least possible delay and in the best possible condition. A fast steamship service that would land passengers at Canadian ports half-a-day sooner than at American ports would be a very nice thing to have, but if it is to be secured at the expense of the freight carrying service, we have no hesitation in saying that we don't want it. In any negotiations for an improved service the first consideration should be for better and more accommodation for carrying our products to the consumer, and if the passenger side of it can be worked in so much the better. But it should in any case occupy a secondary place.

We are glad to see that the Hon. Mr. Fisher, Minister of Agriculture, falls in with this view. In a recent interview at Montreal he stated that what was wanted was well equipped ocean steamships, making from 18 to 20 knots an hour, and capable of carrying a large amount of freight and a limited number of passengers. A very fast passenger service would be too expensive for this country to take hold of at the present time.

American and Canadian Prices for Beef Cattle

In a recent letter to the Toronto World, Mr. Andrew Webb, an Englishman seemingly conversant with the American packing house trade, points out that a concentration of the cattle trade in Toronto would aid greatly in increasing the price the farmer should obtain for his beef cattle. He points out that Canadian slaughter house methods are very wasteful and that our packers or dealers would be able to pay more for the animal on foot if they utilized the by-products to the best advantage as is done by the large American packing houses. He gives the prices paid on Sept. 23rd for beef cattle at Buffalo and Chicago, which were \$8.25 to \$8.50, and \$8.50 to \$8.75 per cwt. respectively, and compares these figures with the prices paid on Toronto market on the same day and which were only \$5.00 to \$5.80 per cwt. a difference of about \$2.65 per cwt. This difference, he claims, could be largely made up by a centralization of the market, which would make it possible to get full value for all

by-products. He also advises that the butchers should combine and erect an oleo factory for the better utilization of the fat which might be converted into oleomargarine for the British market. The Dominion laws against the manufacture of any spurious dairy goods of any kind would, however, prevent the carrying out of this proposal.

The same writer points out that though the Americans have a large market in Great Britain for their chilled beef, their home trade is growing so rapidly that they are gradually lessening their exports. There is a good opening here for Canadians to enter this field and be placed upon the same footing as the Americans in the British market if they take advantage of the situation by developing the beef cattle trade to its fullest extent.

He points out that for the first eight months of this year, as compared with the same period of 1901, there was a deficiency in England's imports of live cattle of 63,734 head and of fresh beef of 440,221 cwt. The home stock in England is also decreasing in numbers very fast. During a single year there has been a reduction in numbers of no less than 207,900 cattle and 611,494 sheep.

If these figures be correct, as we presume they are, we have a condition of affairs in regard to Britain's meat supply well worth looking into by Canadian breeders and feeders. Britain will continue to eat meat and must get her supply from some source. If the American and home supply is not adequate it must come from some other source. Why not from Canada?

of all grain shipped from Fort William and Port Arthur from Sept. 1st 1901 to August 31st 1902. The statement shows 29,754,574 bushels of wheat, 1,085,555 of oats, 52,185 of barley, 10,926 of flax.

The ports of destination for wheat were as follows:

Destination	Bushels.
Owen Sound	4,468,652
Midland	5,647,852
Depot Harbor	5,590,208
Point Edward	476,677
Meaford	543,351
Goderich	2,032,209
Kingston	5,446,533
Buffalo	9,501,737
Port Arthur	884,747
Detroit	198,000
Total shipped by boat	28,784,091

Shipped by rail to east. points 970,483

Total 29,754,574

This does not, of course, include grain shipped via Duluth, which has been variously estimated at from 10 to 15 million bushels. No official figures have been issued for that branch of the shipments.

There will likely be large shipments of Canadian cattle by United States railroads through the port of Boston. The Canadian Northern Railway is stated to have offered a lower rate through its United States connections than the C.P.R. offer via Montreal. As a result one large firm say that they will ship nearly 4,000 head by that route. It is said that large numbers are also to be shipped via Montreal and Boston, and Messrs. Gordon and Ironsides say that they are obliged to ship by this route as they cannot secure the necessary shipping accommodation at Montreal.

The average quality of this season's grain may be fairly judged by the following statement of inspections at Winnipeg on Friday last Oct. 3rd:

Wheat--	Cars.
1 hard	108
1 northern	58
2 northern	18
3 northern	4
4 northern	4
rejected one	4
rejected two	2
no grade	2
Oats--	
extra no. 1	2
extra no. 2	2
barley	1
flax	1

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It will be seen that more than two-thirds of the grain is of the highest, or fancy grade. For the information of those not acquainted with the grain standards it may be explained that No. 1 Northern is "contract grade."

Out of His Class

Mrs. Jones—Just think of it! That fellow came in and actually stole the clock right off the mantel-piece.

Mrs. Brown—And your dog was in the very same room!

Mrs. Jones—Yes, but that didn't count. Fido is only a watchdog, you know.—Boston Transcript.

Farm Implements Advance in Price

Grain Shipments in the West—Western Cattle go via Boston.

Winnipeg, Oct. 6th, 1902.

These are times of prosperity with the Western farmer and the dealers who sell them implements are anxious to secure a slice of the good times. With this object in view prices of almost all lines of agricultural implements and vehicles are to be advanced. Some of the advances have already been made and others are to come into effect before the travelling agents start out in the fall. This advance has been foreshadowed by numerous so-called interviews in the press wherein prominent dealers complained of the increased cost of manufacture which at present prices was robbing the manufacturer and dealer of their profits.

The advances already announced are as follows:

- Walking plows, \$1 to \$1.50.
- Gang plows, \$3 to \$5.
- Sulky plows, \$2 to \$3.
- Wagons, \$5.
- Carriages, 5 per cent.
- Drills and seeders, 7 per cent.
- Harrow, 8 to 10 per cent.
- Disc-harrows, 10 per cent.

The dealers claim that even greater advances in prices will be made in the United States. This will recall the paragraphs that have been so widely published to the effect that the new U. S. implement manufacturers' combine would reduce, of in any case make no increases in prices. There has of late years been a certain amount of competition here between American and Canadian machinery. Whether or not this will continue, or whether the Canadian and United States combines will arrive at a working agreement as to prices remains to be seen. These trusts seem to be inclined, generally speaking, to help rather than hinder each other.

The Territorial Grain Growers'

Association did not pass out of existence with the lifting of the grain blockade which called it into existence. It is still a live and active organization determined to protect and further in every possible way the interests it represents. Its members realize that the first grain blockade will not be the last, unless every effort is made by all those interested to avert such a calamity. The Territories are not so well provided with elevators and other storage as Manitoba, and the rapid increase in grain crops consequently oners even greater difficulties to the individual in disposing of his crop. The Grain Growers' Association are out with several propositions among which we might mention the "government elevator" system as one of the most favorably received by farmers generally. They propose asking the government to "build a sufficient number of elevators to meet the rapidly-growing requirements of the Territories." The association also proposes to appoint an agent at Winnipeg to look after its interests in the matter of car distribution, enforcement of the grain Act, etc.

As to the car supply we believe that there has been no such difficulty this year as last. We have heard of temporary blockades at various points but the railways are doing excellently this season, and hope to keep pace with marketing. The only danger is from a blockade at the lake. The daily reports show that grain is accumulating at Fort William and Port Arthur; each day shows a greater quantity on hand, and this may have unfortunate results. Should the lake elevators be unable, even for a single day, to receive grain it will entail considerable loss.

Inspector Horn has issued a statement showing the destination



A Threshing Scene in Moore Township, Ont.

Breeding Horses for Market

During the Prince Edward Island Fair, a report of which appeared in last week's issue, J. Hugo Reid, Professor of Veterinary Science, Ontario Agricultural College, Guelph, delivered a most valuable address to the Island horsemen, upon the demand of the horse market. Judge Fitzgerald presided, and a goodly number of horsemen were present. Dr. Reid's address is summarized as follows, by a special correspondent:

First, referring to the exhibit of horses which he had just finished judging, he said he found, in comparison with three years ago, some classes had improved and some had declined in both numbers and quality. The Standard breeds had suffered most, an occurrence which was probably due to the fact that Standard bred men had disregarded size, appearance and everything, except extreme speed. Colts from Standard bred horses were thus liable to be small, and if they could not trot fast were quite useless. The heavy horses had, he thought, improved, and there were some excellent animals on the grounds.

He then referred to his awards on thoroughbred stallions, and said if the owners of those two horses would bring them out he would be very glad to give his reasons for placing Woodburn ahead of June Day.

He had not given his reasons in the ring, because he did not think it was right to criticize any man's horse before the public, and so, perhaps, depreciate his property, but if the owners of these horses wanted to hear his reasons, he felt sure in his own mind he could justify his award, and would be glad of the opportunity of doing so. (The owners, if they were present, did not respond to this invitation.)

HE HORSE MARKETS.

He said Dr. Reid, a man is breeding for the market, he should find out what the market demands and then make up his mind as to what style of the horses in demand he can produce at most profit to himself. The best selling horses today are Heavy Draughts, Carriage Horses and Saddle Horses.

HEAVY DRAUGHTS.

Prince Edward Island is certainly in a position to produce good heavy horses. The Clydes are a good breed and seem to be in most demand. The stallions at present owned on the Island, when mated to good mares, will certainly produce colts that will sell well. A reasonably heavy mare of good conformation is required. There were instances on the grounds where Clyde stallions had been bred to light mares of Standard bred blood. They were non-descripts of no particular use and this was the general result of such violent crossing

CARRIAGE HORSES.

The distinction between carriage horses and roadsters is evidently not well understood by exhibition managements or people in the Maritime Provinces. These are two distinct types of horses and should not be judged in the same class. There should be provision at least for a single roadster in harness and for a matched pair.

The distinction between roadsters and carriage horses was not a matter of size nor of breeding. The road horse is valuable for his performance in getting over the road, the carriage horse for his attractiveness, his style and action, in addition to his road qualities. The carriage horse in demand to-day must have action, high action, folding his knees and hocks well and he must do this no matter whether going five miles an hour or fifteen. He must hold up his head without the aid of a check and always look proud. In size he may vary from 15.2 hands to 16 hands, or even slightly over.

As a general rule, the carriage horse should have more substance than the roadster, be more horizontal in the croup and above all, must have a high, proud head. The road horse with low action and, perhaps, low head, may go faster and farther and last longer than the carriage horse, but he is not so much in demand. In the large markets, Chicago, New York, Detroit and even Toronto, the carriage horse may sell from \$600 up, while the road horse will bring from \$150 up.

BREEDING CARRIAGE HORSES.

Standard bred owners claim that their stallions will get good carriage horses. This is true to some extent, but the percentage, is very small. In my opinion, he said, the surest way to get carriage horses is to use a stallion with the desired action. He is best got in the Hackney or in one of the Coaching breeds. Personally, I prefer the English Hackney. The dam must, of course, be carefully selected. To mate well with the stallions above mentioned, she must have more or less warm blood. She should have been sired by a Standard bred or Thoroughbred stallion. This is necessary, because the Hackney and Coaching breeds have not a long continued purity of breeding, and so have not that prepotency which the Thoroughbred stallion, for instance, has. They cannot, therefore, like the Thoroughbred, impress their individuality upon colts from mares of coarse type and cold blood. Kilnwick Fireaway, the Hackney you have here, should be able, if intelligently mated, to produce a good type of carriage horse.

To get carriage horses by the use of a Thoroughbred sire, you must have mares of high action for the Thoroughbred's natural gait is the run or gallop. He has long, low action. He is, however, the purest blooded animal in the world.

Referring to the term, "Thoroughbred," the speaker said the word was much abused. It could only be correctly applied to the English Thoroughbred racing horse or his pure bred descendant. The word cannot be applied to a Clyde nor a Hackney nor a bull, a ram or a boar. Such animals may be purebred, but never thoroughbred.

The Thoroughbred stallion from his purity of breeding can give better results than other stallions with rough and cold-blooded mares and will often get good saddle horses that way. It is the influence of Thoroughbred blood that has produced the Standard bred trotter of to-day. It is this Thoroughbred ancestry which gives him his courage and endurance.

ADDLE HORSES.

As above indicated, Saddlers can best be got by the use of a Thoroughbred stallion. Mares of strong conformation should be chosen. Strength of loin and quarter is an all-important necessity in a saddler. A good general purpose mare can be used and will give saddle horses for heavy weight riding more surely than mares of finer breeding. Good Saddlers are, perhaps, the most difficult horses to-day to buy and they will bring as good prices as the carriage horse.

GENERAL PRINCIPLES.

Whatever line of breeding a man may follow he must have a definite object and know which he is doing.

There are now on the Island a good many mares that would mate

well with the Thoroughbred and Hackney or Coaching stallions.

Ques.—What sort of mare would you breed to a Hackney?

Dr. Reid—I would not use a coarse nor cold-blooded mare, but would endeavor to get one with Standard bred or other warm blood. As a general rule a good driving mare will cross well with a Hackney.

Ques.—What do you think of Government inspection of stallions such as is carried on in Quebec?

Dr. Reid—If such an inspection could be carried out free from political intrigue it would be a good thing in any country. The horse-men have, however, the whole ques-

tion in their own hands, the scrub stallion only exists because he is patronized. If breeders demanded pure-bred stallions the scrub would have to go out of business. Some farmers seem to think that because they have not got a choice mare that it is not worth while to pay from \$10 to \$15 fee for a good stallion but they take a scrub at from \$4 to \$8. This is a great mistake. If the mare is worth breeding at all she is worth breeding to the best stallion procurable. The great need of the horse business is more intelligence and enterprise among the horse-men rather than Government regulations.

chable degree by this delay of one year before sowing. At the time of sowing the seed should be examined, and, if necessary, hand picked; every grain which has been perforated should be discarded, as it has been proved that it is impossible to grow strong plants from weevil-peas.

Better results will be obtained by applying the remedy earlier in the season than is usually done. Not only is the carbon bisulphide more easily vaporised in hot weather, but its effect on the insects is much more fatal than in cold weather, or later in the season, when the weevils are in the torpid state in which they pass the winter. The sooner the fumigation is done after the peas are ripe, naturally, the less the seeds will have been eaten away by the grubs and injured. Moreover, by postponing the fumigation until late in the autumn, in some seasons a large proportion of the weevils will have left the peas and escaped before the operation.

The Ravages of the Pea Weevil

The Remedy and How to Apply it to Advantage

The ravages of the pea weevil are fast becoming a serious menace to the cultivation of the pea crop in this country and especially in Ontario. Time was when peas were grown on nearly every farm in the province. But with few exceptions, the area devoted to this crop has been gradually moving northwards, where it was believed the pest would not prove so destructive. But even in the more northerly sections of the province reports come of the ravages of this pest and the determination of farmers to give up growing this profitable crop. The situation is becoming most serious and if some effective remedy is not forthcoming very shortly the trade of Canada in peas will be entirely lost.

As to a remedy, this lies almost entirely in the hands of the farmers and the seedsmen. It is pretty well known throughout the country that the treatment of seed peas with carbon bisulphide will prevent the ravages of the weevil. But the trouble has been that there has been no united effort on the part of farmers to utilize this remedy. In so far as getting rid of the pest in any district or locality it is perfectly useless for one farmer to treat his peas and his neighbor not to do so. There must be a concerted effort on the part of every farmer who grows peas. If this is done and the directions as given below carried out it would not be long till the pea weevil were exterminated and its ravages practically nil. The remedy then is in the hands of the farmer and if he applies it carefully and systematically he will soon be practically free from this pest.

Dr. James Fletcher, Dominion Entomologist, has made a close study of this question during recent years and believes that if farmers will work in unison the pea weevil will give them little trouble. He gives the following treatment as one that can be made by any farmer with his own seed easily and with perfect safety:

"Place the quantity of peas to be treated in an ordinary 45 gallon

coal-oil barrel, which will hold about five bushels of peas. The quantity of carbon bisulphide that has been found necessary to destroy the weevil is one ounce to every hundred pounds of seed—the treatment to last for 48 hours. Therefore, for the above quantity, as peas weigh from 60 to 65 pounds to the bushel, three ounces would be required if the barrel were filled. The chemical may be poured right on the peas, and the barrel must then be covered quickly and closely first with a thick cloth or canvas which has been damped in water, and then also with boards. The carbon sulphide will not injure the seed in any way, either as to vitality or as to its wholesomeness as food. Carbon bisulphide is a colorless liquid which readily turns into vapor when exposed to the air, except in very cold weather. This vapor is quite invisible, but has a very unpleasant strong odor. It is heavier than air and therefore sinks quickly to the bottom of and permeates the contents of any closed receptacle in which it is used to free grain of infesting insects. It is, however, extremely inflammable both in the liquid and vapor form; consequently great care must be taken not to bring any flame, not even a lighted pipe or cigar, near the liquid or barrel during the treatment. The peas or other grain must be left in the tightly closed barrel for 48 hours to destroy the weevil; it will, therefore, be best to place the barrel in an outside shed at some distance from the living house."

Dr. Fletcher considers an easy remedy and an excellent one when only a small quantity of seed is required is to hold over until the second year after harvesting. This must be done in close bags so as to prevent the escape of the beetles, which naturally emerge before the end of the second season, and, as they cannot perforate bags, even when these are made only of paper they must die; because, unlike the bean weevil, they cannot propagate in dry grain. The vitality of peas is not injured to any appre-

Feed for Fattening and for Eggs

In feeding poultry this time of the year, and for that matter any time of the year, a sharp distinction should be made between food that fattens and food that makes bone, muscle, tissue and eggs. The food that makes bone and tissue is also the food that makes eggs. If fed to the young chickens, it makes them grow in size and stature, with heavy bones and strong muscles. That is the kind of a frame we need in chickens, for then when the time comes they have a large carcass on which to lay their fat. If fattening food is given to them when they are young, they become plump and dumpy little birds, very pretty to look at and eat, but not practical for the commercial purposes.

The worst fattening food in the world is the old cornmeal mash, which we used to feed regularly to the chickens. Such mash would fatten any bird, and stunt its growth in bone and muscle. Do not feed that much to the young, thrifty chickens. Let them have rather good wheat bran, buckwheat bran or oatmeal. These contain the elements of bone and muscle making which they require. They will grow heavy and big of frame then, and when they begin to lay eggs the same food, mixed liberally with grits, ground bone, whole grain and seeds, will do wonders. Let the cornmeal mash be fed sparingly all the time, and in some cases not at all where the chickens are inclined to fatten up easily. Cornmeal mash should come in when fattening the birds for market. Then it can be fed as liberally as required. The birds not used to it will fatten up so rapidly that within a few weeks their big carcasses will be round and plump.

Annie C. Webster.

Pennsylvania.



Residence and Barns of Harry Shaw, East Colville, Ont.

Packing Apples for Export

A special correspondent sends us the following report of an illustrated talk on packing apples, by G. H. Vroom, Maritime Fruit Inspector at the Prince Edward Island Fair:

A goodly number of fruit growers, a barrel of apples and an empty barrel greeted Mr. Vroom when he appeared in the lecture-room on the Exhibition grounds. Rev. Father Burke, president of the Fruit Growers' Association, presided.

Mr. Vroom wasted no time on preliminaries. The first thing needed for the proper packing of apples is a good barrel. It should be neatly made, well hooped and strong. The flat-hoop looked neater, but it was not so strong as the round hoop, made from our native water-birch. The standard apple-barrel, prescribed by law, is 17 inches across the head, 26½ inches between the heads, inside, and 18 inches across the bilge, inside. A barrel with a little more bilge makes a stronger and better package. A good spruce stave, ½ inch thick, is better than a hard-wood stave for apple barrels.

In beginning to pack apples, he said, have them on a sorting table, or other convenient place, and use a basket that will turn easily in the barrel. First put a pulp-head in the bottom of the barrel and if the grower's name and address is on this, so much the better. Then select for the first layer apples of uniform size and well colored; take those of a medium size rather than the largest. Clip the stems off the apples required for the first layer. If this is not done, the stems will turn over and be pressed into the fruit, making a wound, which will soon start decay. Lay the apples in closely, all stem end down. For the second layer, place the best colored side of the apple so as to show between the apertures of the first layer. Then the apples may be emptied from the basket. While being filled, the barrel should sit upon a plank 10 inches wide. After each peck of apples is put in, they should be jarred down into their places by racking the barrel on the plank, giving a distinct, but not too severe, jar.

Qués.—If the stem of the apple is in the way on the first layer of ap-

ples, why could not the other end of the apple be placed down?

Mr. Vroom.—The apple would not look as well turned that way when the barrel is opened up, and they cannot be so conveniently placed as they will not stand upright on their small end.

R. W. Starr.—To cut the stem, you can use either the regular clippers made for the purpose, or a pair of large sized bent nail scissors. A jack-knife is, however, the most generally used.

After the first layer of apples was placed in the barrel, all present were invited to view it. As Mr. Vroom gradually filled the barrel, he racked it down and impressed upon the audience the absolute necessity of doing this if the barrel was to be properly packed. The barrel was filled until the apples stood a little above the edge. A barrel-head, faced with a piece of thick harness felt, and small enough to go into the barrel, was then placed on the apples and held firmly on the fruit while the barrel was racked. After the apples had evidently all found their places, the press was hooked onto the barrel and the soft head forced down with a gradual and moderate screw pressure until there was room to place another layer of apples to make the barrel even full. The soft head was then taken off and a layer of apples of uniform size placed in with the snuff, or small end, up. A pulp head was then placed over them and the head, or rather, the bottom of the barrel, was placed in position, screw pressure was applied and the bottom gradually forced down until it caught in the crown of the barrel. Then the hoops were tightened, a few nails driven in and the pressure was removed.

The barrel was then turned over and the name and address of the grower, the name of the apples and the grade were stenciled on.

Father Burke enquired as to the use of boxes for exporting apples.

Mr. Vroom replied that Prof. Robertson said it would pay to use boxes for early, larger, tender and choice fruits. As a commercial package for moving the fruit crop the box had not yet passed the experimental stage. He had just finished boxing some apples for the Wolverhampton & Cork exhibitions. Each apple had been wrapped in

oiled paper and then a soft paper. Some apples were packed with paper compartments like eggs. To use these fillers to advantage, the apples must be all of one size. He was in Montreal the other day and had assisted in the inspection of a great many barrels of Duchess apples that were on their way to England, all packed in barrels and they were evidently carrying all right, for they were netting the shippers from \$1.60 to \$1.80 per barrel. This variety is being sold in Ontario orchards for 50 cents per barrel on the trees.

To carry soft apples or, in fact, any kind of apples, we must have properly ventilated steamers. The large Montreal shippers were very particular in seeing that their apples were thoroughly cool before going into the vessel and then that there was a sufficient and constant circulation of air in the steamer's hold. Nearly all the steamers sailing out of Montreal had proper ventilating appliances. The Furness boats, sailing from Maritime ports, had not such appliances. Proper ventilation and not cold storage was what was wanted to safely carry apples.

At the request of several of the audience, the head was then removed from the barrel of packed apples and all present had a chance to see how a properly packed barrel opened up.

While opening the barrel, Mr. Vroom dropped the hint that to remove hoops from a barrel, you should pound in the one place until both the hoops started all round; then the nails were easily drawn.

Qués.—Is it advisable to put excelsior in the head of an apple-barrel?

Mr. Vroom.—I do not think it is necessary.

Senator Ferguson.—There seems to be a difference of opinion on this matter. Northard & Lowe, of London, like a little excelsior, while Pritchard, of Liverpool, will not have it on any account.

Storing Winter Vegetables

A great many vegetables put away for the winter become practically useless because no attention is paid to storing them properly. One of the hard things on winter fruit or vegetables is the frequent change in temperature. Therefore the first condition to be aimed at in housing vegetables is uniform temperature and the lower this temperature can be secured, so long as the freezing point is not reached, the better. Alternate thawing and freezing will spoil the best of vegetables. As a rule winter vegetables are stored in cellars, pits, barns or sheds and they keep almost indifferently in any one unless some care is given them. Most cellars are too damp and too warm to suit vegetables. A lower temperature and a dryer atmosphere is needed and this can usually be obtained by better ventilation. Cellars that have no ventilation can-

not have pure air. The moisture given off by the vegetables makes the air heavy which in turn injures the stored goods. An outside ventilation is absolutely necessary for a good vegetable cellar. This should be closed when the weather is wet or the temperature very low.

Most root crops, excepting perhaps, potatoes and onions, should not only be kept in a dry cellar, but they will keep better if packed in bins or barrels and covered with dry sand. Turnips, carrots, beets, parsnips and such like vegetables will in this way retain their plumpness and juiciness. As a rule in mid-winter under ordinary conditions these vegetables are so shrivelled up that they are almost useless. Cabbages in particular need to be packed away in dry sand or earth immediately after pulling so that they will retain their freshness. They should be kept where the temperature will not vary a degree till ready for use. Onions are often shrunken in winter due to being kept in a warm place where they dry out and even begin to sprout. They should be stored where they will stay almost at the freezing point till ready for use.

By attention to these little details farmers may have crisp, juicy vegetables for use during the winter. And if they have more than is required for household purposes they can be sold to good advantage in any of our towns and cities. Farmers this year should aim to keep their potato cellars dry and cool so as to save as many as possible for winter when prices are likely to be very high.

Selecting Corn for Seed

Though the majority of Canadian corn growers prefer to buy their seed corn, especially for silo purposes, there are not a few who grow and select their own seed. For silo purposes it is better, perhaps, to import seed from districts where the varieties suitable for ensilage can be best grown to maturity. For grain purposes, where a variety needs to be perfectly matured, farmers can to advantage select their own seed.

The two plans most generally followed are to select the best ears from the cribs during the winter, or to pick them out at husking time. Of these two the latter plan is to be preferred. But there is a better one, and it is being followed now by the best seed corn growers in the Western States, that is to select the corn in the field before the regular crop is cut or ready for husking. A man with a sack on his back so arranged that both hands are free, will go along the row selecting the best ears, care being taken to note the kind of plant the ear is taken from and whether the ear is near the bottom or top of the stalk. An ear on the middle of the stalk is best.

In choosing good corn one of the first things to be kept in mind is maturity, and no ear should be se-

lected for seed that has not become thoroughly mature before the frost period has arrived. Of course one might err in this direction and select the small early ears and thus establish a variety that would not yield enough. The next thing to be considered is the size of the ear, this depending upon the latitude and also upon the variety. By selecting somewhat large ears one is apt to get a heavy yielding variety. Care should be taken to select only such ears as are well filled at tip and butt. No corn should be selected for seed that shows a tendency to become flinty at the ends. Ears carrying their width well from butt to tip and with kernels well packed and straight will give better results than tapering ones. The seed should also be uniform in color. Care in this matter will repay everyone in selecting seed corn.

Pruning Raspberries and Blackberries

A correspondent asks the Maine Experiment Station for information as to the time for pruning and transplanting raspberries and blackberries. In reply the following suggestions were made:

"The ideal treatment for raspberries and blackberries is to pinch them back at intervals during the summer and thus secure strong, sturdy bushes $3\frac{1}{2}$ to 4 feet high, with laterals 1 to 1 $\frac{1}{2}$ feet long, rather than to practise severe heading back after the plants have become long and 'leggy.' If, however, as is frequently the case even in the best managed gardens, the plants are at this season making vigorous growth which may not mature, they should at once be cut back to the desired height and the canes will harden before cold weather. Many prefer to cut back the bushes in the spring, after the extent of winter-killing is determined. Thinning the canes, which should always be practised, may be done at any time during the season. In general one-half, or more, of the young canes which appear should be cut out.

"Blackberry and raspberry bushes may be transplanted this fall if the work is done immediately but better results are usually obtained from spring planting. Currants, on the other hand, have given rather better result from fall setting.—W. M. M."

Clover as a Fertilizer

Maintaining the fertility of the soil is a question of the utmost importance to farmers. The old standby for replenishing worn out soils, and it is one not to be dispensed, is the application of barnyard manure. A system that goes well with this is the plowing under of crops of green clover. A combination of these two methods will also be found of very great value in maintaining the fertility of lands generally.

For some years past at the Cen-

tral Experimental Farm, Ottawa, a lot of experimental work has been conducted with a view to testing the usefulness of clover as a fertilizer. The results obtained have been most practical and convincing, as shown in the greatly increased crops produced. The plowing under of clover has been found to increase the crops for several successive seasons. Equally good results were obtained where similar experiments were conducted on the branch experimental farms, and there seems little reason to doubt that if this method of fertilizing the land were more generally adopted, a considerable increase might be had in the average production of the more important farm crops than in the past. The experiments conducted at Ottawa have been so planned as to realize the greatest advantages from the clover without interfering with the regularity of the farmers' crops.

Bulletin No. 40 by Dr. Saunders, director of the Experimental Farms, and Frank T. Shutt, M.A., chemist, gives a full outline of the experiments conducted and of the results obtained therefrom. It will prove a valuable acquisition to every farmer's library. In this bulletin the advantages to be derived from the plowing under of clover are summarized as follows:

1. There is an enrichment of the soil by the addition of nitrogen obtained from the atmosphere.
2. There is an increase to the store of available mineral plant food (phosphoric acid, potash and lime) in the surface soil taken by the clover in part from depths not reached by the shallower root systems of other farm crops.
3. There is a large addition of humus, whereby the soil is made more retentive of moisture, warmer and better aerated, conditions favorable to vigorous crop growth. Humus also furnishes the material best adapted for the development of those forms of germ life that act so beneficially in the soil.
4. As an agent for deepening and mellowing soils, no crop gives such satisfactory results as clover.
5. Clover also serves a useful purpose as a catch crop during the autumn months, when the ground would be otherwise bare, retaining fertilizing material brought down by the rain, and also that formed in the soil during the summer months, much of which would otherwise be lost through the leaching action of rains.
6. As shown conclusively by the particulars we have submitted, obtained by careful experiment over a number of years with the more important farm crops, the ploughing under of green clover has a most marked effect in increasing the soil's productiveness.

Josh—"Now, jest s'pose there's a milk trust. With only one concern to sell to, they kin pay ye anything they durm please."

Silas—"Yes; an' they mightn't buy ver milk at all if ye wouldn't stop waterin' it."—Puck.

The Sugar Beet World

Devoted to Sugar Beet Culture in Canada and Allied Industries. Specially Representing the Farmers' Interests

Edited by JAMES FOWLER

Sugar Beetlets.

Long experience has shown us that a beet sugar factory obtains the best results by working up the beets as soon as they come out of the ground, the sooner the better. Fresh beets give nice, even cossettes, which are easily diffused with little water. The juices thus obtained are very pure, the further process of manufacture is facilitated, and the tendency to crystallization is very marked.

The grave outlook for the beet sugar industry in Europe has induced the beet growers to make experiments with the drying of beets for stock food and the continued cultivation of this plant for feeding. Whenever the price of beets for the production of sugar becomes unprofitable, this expedient will be resorted to. In this way the farmer will not only be independent of the sugar market, but retain all the benefits of beet culture in the rotation of the crops.

If the beets are delivered in a frozen condition, they must be sliced as soon as possible. If they are pitted in a frozen condition, or if fresh beets are left for many weeks in the open air and covered only after they are partly frozen, as was done at Salzburg, or if they are placed in high uncovered piles, their decomposition will be hastened and great loss will ensue. We must also add that a single analysis of pitted beets does not prove the good condition of the pits.

Berlin

The finishing touches are being put on the sugar factory by Messrs. Dyer & Co., the contractors. This factory is unique in being built in two units of 350 tons each, that is there are two sets of nearly everything in the factory, so that, either one or both can be operated or shut down. The factory is most complete in all its details and will be in operation by the 16th of the month. Beets are being harvested and already some of the storage sheds are filled. The beet crop is very satisfactory in the St. George section; 120-tons of beets were harvested from 5½ acres. The present crop so far reported averages 12 tons per acre. Messrs. Dyer & Co. will operate the factory the first season, Mr. G. S. Dyer being the superintendent in charge.

Dresden

It is not expected that the Dresden Sugar Company will be making sugar before the first of Nov. The American Construction Com-

pany who are the contractors for the erection and completion of the plant are energetic people and when the factory is started there will be no delays for alterations or changes. It will run right from the time steam is turned on until the close of the season. Unfortunately, not so many beets are in sight or was hoped for and the season will therefore be a short one, but the prospects are satisfactory to the owner and the farmer is well satisfied with his venture in raising beets.

Wiar-ton

Steady progress is being made with the sugar factory. The roof is now on all but the storage warehouse. The boilers are in place and bricked up. The machinery is being rapidly placed, and the whole promises to be ready for sugar making on the 15th of November.

The Colonial Construction Co., of Detroit, who are building the factory for The Wiar-ton Beet Sugar Co., are certainly pushing the work and are sparing neither money or work to build and equip the most up-to-date plant that is possible to erect.

Mr. W. K. Snider, the Agricultural Superintendent, reports the crop as most satisfactory where the growers have followed the instructions. The farmers as a rule are satisfied with their year's experience and will go largely into growing beets next year.

Wallaceburg

The sugar factory at this point is now ready for operations, the finishing touches have been put on, and, as soon as sufficient beets have been delivered, the factory will be started and will run continuously as long as the supply lasts.

The extreme wet weather of this year has materially reduced the tonnage, but from general reports the farmers are well satisfied, the beet crop suffering less than any other crop. The roads are in a terrible condition and some fields are so wet that it is impossible to harvest the crop at the present time, thus delaying the factory. It is expected, however, that a sufficient supply will be delivered to enable the factory to commence operations by the 20th of the month.

Look Over Holdings

Mr. W. B. Rouse, one of the Bay City capitalists, who is interested in the Ontario Sugar Company's plant here spoke to the Record

on Saturday evening regarding their trip. None of his party had been in Berlin before, since becoming interested in the plant. They have all investments in Bay City or Saginaw factories and Mr. Rouse, when approached to take stock in this one, did so, because he considered it a good proposition. Persons in Michigan who have any sugar beet stock know what a good thing it is and are always ready and willing to take more. He said he could readily understand the timidity of people in subscribing for stock where beet sugar is a new thing, but that when they see the success in the new industry they will not be so any longer.

He is pleased with the condition of the crop and the stage that the refinery is in. He admires the energetic Superintendent, Mr. Bradrick, who, he thinks, is doing as much as any man can do.

With Mr. Rouse was Mr. Bell, superintendent of the new factory at Saginaw. He said that when the Dyer Construction Company hand over the plant as finished, it is finished. They never have to come back—even to tighten up a bolt.

Mr. Rouse considers that the country he has seen around about here is ahead of Michigan for sugar beets. Their land is low and level with not nearly so good a natural drainage. He estimates that 25 per cent. of the Michigan crop was drowned out by the rains this year, though some places the figure is at 15 per cent.—Berlin Record.

About Harvesting

SOME POINTS THAT WILL ASSIST IN DOING THE WORK

The Michigan Sugar Beets says: "Now that the harvest is about to commence a few general remarks on harvesting may be given for the benefit of our new growers, who will harvest this year for the first time.

"Important in the harvest is the lifting or loosening of the beets in the ground. There are several makes of lifters on the market, but those advertised in this journal will be found the most economical, as well as doing the work thoroughly and satisfactorily, but in case one does not care to go to the expense of buying a tool for this purpose a lifter may be made of any plow, where the handles are not fastened to the mold board and breaking off several inches of the share point, and running alongside the rows so that the beets are loosened in the soil. None of the

litters remove the beets from the ground.

"For the purpose of topping beets there are several makes of knives in the market, most any of which are good, or any strong bladed butcher knife can be made to answer the purpose.

"In starting harvesting it would be policy to lift with the plow a few rows ahead of the toppers but not lift the whole field before commencing to top. The cost of topping will depend a great deal upon the system adopted and the supervision. On small acreages, two or five acres, it will be an easy matter to do the work at the least possible expense, but on large acreages where several men are employed it will be necessary to adopt some plan, and a good method is to separate the toppers equally distant along the first row, i.e. if your rows are 40 rods long and you have five toppers, place them eight rods apart; then each one will pull the first two rows, laying the beets between the second and third rows with the tops toward the outside of the field. When he has pulled the first two rows to where the next topper began he could return on the third and fourth rows to his place of starting, placing the third and fourth rows on those of the first and second with the tops in the same direction; then by pulling the fifth and sixth rows and placing them across and between the sixth and seventh rows for the same distance he has pulled the other rows returning on the seventh and eighth, placing these on top of the fifth and sixth he will have eight rows pulled and placed into two rows of beets with the bottom turned toward each other. He then takes the beet in his left hand and the knife in his right hand, topping the first row that he has pulled, throwing into piles between the two rows and returning on the second row. This will complete eight rows pulled and topped and in piles. He then commences on the next eight rows and works his section across the field cross-wise of the row of beets.

"There are many advantages of this plan, which will be apparent after it is tried. Each topper does his own pulling and this change of work does not tire so much either as continued topping or continued pulling. The toppers are far enough apart so that there is no time lost by stories or jokes and more work will be completed. With each man working by himself it is easy to determine the kind and amount of work done, and in case of improper topping the fault can be easily placed. It will also cause the toppers to endeavor to keep up with each other. This plan can be applied to twelve or sixteen rows if desired, but eight is the most desirable number, making it more easily to load into the wagons, bringing the piles twelve feet apart. By this method one may be able to harvest beets with a yield of nine tons to the acre for less than \$5.50 per acre.

In topping and piling the beets, be very careful and remove all

stones, sticks, weeds, etc., where the piles are made. It is astonishing the amount of stones and sticks that are delivered with beets, and these are very injurious to the machinery of a factory.

In topping beets cut off clean and square at the lowest point where the leaves have grown without regard to their position in the ground. It is to the growers' advantage to cut them just as near to the point as possible, yet not to take too much time to cut them just on the line, but the nearer they are topped at the proper place the less will be the tare.

"Where beets are to be harvested as fast as possible it might be advisable to cover the pits at night with the leaves. This protects against cold at night and keeps the beets moist during the day.

"Be particularly careful this season and have your beets clean when delivered at the factory as it will lessen your tare and increase your returns. It may perhaps seem like a small matter a few small chunks of dirt on each beet, but you should remember that you have thousands of those beets in a ton and an accumulation of dirt on each one will reduce your tonnage and consequently your returns. The crop promises to be light this year and therefore all growers should use every precaution to make their

returns as good as possible. For those with small acreage there is perhaps no great hurry about commencing the harvest as long as the beets are increasing in value unless the growers' work is such or his acreage so large that it is absolutely necessary for him to commence in order to get through before freezing weather. As long as the tops of the beets are green it shows that they are increasing in tonnage and taking on sugar. When they begin to look yellow they are showing maturity. This does not mean when the lower leaves turn yellow, but the whole field shows up yellow, for the lower leaves are continually maturing and dropping off. If after beets have shown maturity or after the harvesting has begun, there comes warm weather or rains that start a second growth to the beets, the writer advise not to harvest until the beets have again shown a shade of yellow, for a second growth of beets has a tendency to reduce the content of sugar, and if left to mature again will take on all the sugar that is lost, and even more.

"Many growers use crates in harvesting the crop and top the beets directly into the crates. They are a great help in handling the crop and worth all they cost, as they can be used from the field to the factory if drawing to the factory is done direct from the field."

The **Booth Copper Co., Limited**
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 Established 1854

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The Agricultural Gazette

The Official Bulletin of the Dominion Cattle, Sheep and Swine Breeders' Association, and of the Farmers' Institute System of the Province of Ontario.

THE DOMINION CATTLE, SHEEP, AND SWINE BREEDERS' ASSOCIATIONS.

Annual Membership Fees:—Cattle Breeders', \$1; Sheep Breeders', \$1; Swine Breeders', \$1.

BENEFITS OF MEMBERSHIP.

Each member receives a free copy of each publication issued by the Association to which he belongs during the year in which he is a member. In the case of the swine breeders' Association this includes a copy of the Swine Record.

A member of the swine breeders' Association is allowed to register pigs at 50c. per head; non-members are charged \$1.00 per head.

A member of the sheep breeders' Association is allowed to register sheep at 50c. per head, while non-members are charged \$1.00.

The name and address of each member, and the stock he has for sale are published once a month. Over 10,000 copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, also to prominent breeders and probable buyers resident in Canada, the United States and elsewhere.

A member of an Association will only be allowed to advertise stock corresponding to the Association to which he belongs; that is, to advertise cattle he must be a member of the Dominion Cattle Breeders' Association, to advertise sheep he must be a member of the Dominion Sheep Breeders' Association, and to advertise swine he must be a member of the Dominion Swine Breeders' Association.

The list of cattle, sheep and swine for sale will be published in the third issue of each month. Members having stock for sale, in order that they may be included in the gazette, are required to notify the undersigned by letter on or before the 25th of each month, of the number, breed, age, and sex of the animals, should they wish their name will not appear in that issue. The data will be published in the most condensed form.

A. P. WESTERVELT, SECRETARY.
Parliament Buildings, Toronto, Ont.

FARM HELP EXCHANGE.

The Farm Help Exchange has been started with the object of bringing together employers of farm and domestic labor and the employees. Any person wishing to obtain a position on a farm or dairy, or any person wishing to employ help for farm or dairy, is requested to forward his or her name and full particulars to A. P. Westervelt, secretary, Live Stock Association. In the case of persons wishing to employ help, the following should be given: particulars as to the kind of work to be done, probable length of engagement, wages, etc. In the case of persons wishing employment, the following should be given: experience and references, age, particular department of farm work in which a position is desired, wages expected and where last employed.

These names when received together with particulars will be published FREE in the two following issues of the "Agricultural Gazette," and will afterwards be kept on file. Upon a request being received the particulars only will be published, the names being kept on file.

Every effort will be made to give all possible assistance, to the end that suitable workers, male or female, may be obtained. Every unemployed person wishing to engage in farm or dairy work is invited to take advantage of this opportunity.

Help Wanted.

Wanted.—A man and wife or single man to work on a farm in Muskoka. Man must be sober, trustworthy, reliable and capable of looking after the work, do general farm work, look after the horses and help with the milking, a good ploughman required and one with some experience of farm machinery preferred. Wages \$17 per month or \$200 a year board included. Will to help with house work for board. Three of a family. No. 128. a.

Wanted.—A man to work on a farm for one or two months. Will engage by the year if satisfactory. No. 139. b.

Wanted.—Two men for dairy farm near Ottawa. Steady work by the year. Wages \$200 to \$240 a year. No. 141. b.

Domestic Help Wanted

Wanted.—A housekeeper. No outside work, no family. Farm situated five miles from Galt. No. 140. b.

Wanted.—A good general servant. Kitchen with modern conveniences. References required. No. 142. b.

Situations Wanted.

A position wanted by a married man with three children. Does not

use tobacco nor liquor and can give the best of references. Has had years of experience and understands the care of horses and farming in all its branches. Has been foreman on a milk farm for 7 years. House required. No. 605. a.

Wanted.—A position as foreman by a single man, 25 years of age, who understands the care and management of stock and farming in all its branches. Has been acting as foreman for four years; also a good bookkeeper, has no bad habits and can give the best of references. No. 610. b.

Wanted.—A position as foreman or looking after stock on a ranch in the West, thoroughly competent and reliable. Can supply references. No. 611. b.

N.B.—Where no name is mentioned in the advertisement, apply to A. P. Westervelt, Parliament Buildings, Toronto, giving number of advertisement.

Farmers' Institutes.

Under the head the Superintendent of Farmers' Institutes will each week publish matter relating to Institute work. This will include instruction to secretaries and other officers, general information about Institutes and Institute work, suggestions to delegates, etc. He will also from time to time review some of the published results of experiments conducted at the various Agricultural Colleges and Experiment Stations of Canada and the United States. In this way he hopes to give Institute members some valuable agricultural information which they might not otherwise receive, on account of not having access to the original publications. If any member at any time desires further information along any of the lines discussed, by applying to the Superintendent he will be put in direct communication with the Institute that has carried on the work.

G. C. CREELMAN,
Superintendent Farmers' Institutes

A Word of Warning by Prof. G. E. Day

In the course of his address on Wednesday evening, in speaking of the live stock exhibits generally, Prof. Day said: "The whole exhibition, so far as the live stock is concerned, must have been an inspiration to every young man who has seen it. It has served, too, as an extremely valuable object lesson on the sort of animals the market

calls for. This was to be expected in a country, of which James Leask is a resident—the man who captures prizes, not only here, but goes up to Guelph and takes everything in sight. It is a lamentable fact that we have not more men producing cattle of the same class. There are altogether too many animals of inferior quality being produced. Even in bacon hogs we are not making progress as fast as we should be making it. Old Country commission men tell us that we are in very serious danger of losing our entire bacon trade, because the Danes are outstripping us in the matter of quality. We cannot afford to sit still. Other nations are progressing, and if we rest on our oars we shall find ourselves left behind in the race."—Weekly Sun.

Farmers' Institute Meetings—November-December Series, 1902

SPECIAL NOTICE TO DIRECTORS AND OFFICERS OF FARMERS' INSTITUTES

Another Institute season is here, and I desire to call your attention to a few matters connected with the work.

In the first place the Institutes are becoming more popular each year, as indicated by the increased attendance. Those who attend are getting more out of the meetings each year, as indicated by the intelligent questions asked the delegates and the demand by the members for the reports and bulletins published by the Department.

So far, then, everything is running smoothly. Where must we look for expansion in the future? We must by persistent effort endeavor to get out to our meetings those farmers who need the instruction most. I realize that this class, the ones, who from ignorance of the best farm methods, are poor farmers indeed, are the very ones who most need instruction and are also the hardest to reach. Personal canvass is no doubt the best way to secure their attendance.

A WORD TO DIRECTORS.—Are you helping your secretary? Have you spoken to all of your neighbors about attending the nearest Institute meeting? Have you secured a large membership in your township and sent the names and fees in to your secretary? Have you thought over what you are going to say at the next meeting you attend? Have you taken any notes on farm work since the last meeting that would interest your neighbors and serve to bring out a discussion at the coming meeting?

If you have not done these things you have fallen short of the standard set for a director of a Farmers' Institute.

TO THE PRESIDENT.—Are you thinking of any plans by which you can make your meetings more interesting and instructive? Have you yet arranged in your mind or on paper a few suitable remarks for opening each meeting? Have you consulted with your secretary as to any new features you propose to introduce, or have you picked out and conferred with him about certain men who might read papers or deliver addresses at the meetings?

If you fail to think of these things you are not a model president, and your Institute will not make the progress that it should during your term of office.

TO THE SECRETARY.—To you must fall the heavy share of work. You are probably the most concerned as to the success of the year's work. What have you done by way of preparation for this winter's meetings? Have you spoken to any of the men or women in your district about helping at the meetings? Have you thought about any new features that might be introduced to help your attendance and increase your membership? Have you written to each of your directors asking their co-operation and advice? Have you consulted with your president as to a plan of work for your series of meetings?

ATTENDANCE, MEMBERSHIP, ETC 1901-1902.

The year ending 30th June, 1902, marks another season of progress in Institute work. We are pleased to report a steady increase in membership and attendance. The membership for the first six months of this year totals 22,948, an increase of more than twenty-five hundred over last year. The number of meetings held was 791, while the attendance is the largest in the history of the work, viz., 147,942.

The Institutes holding the largest number of meetings during the year ending June 30th, 1902, are:

Hastings, N.	19
Halton	18
Ontario, S.	18
Waterloo, S.	18
York, E.	18
Huron, W.	14
Dufferin, E.	14
Lambton, W.	14
Middlesex, E.	14
Northumberland, E.	14
Peel	13
Middlesex, N.	13
Ontario, N.	12
Durham, W.	11
Essex, S.	11
Wentworth, S.	11
Bruce	10
Kent, E.	10
Kent, W.	10
Perry Sound, E.	10
Prince Edward	10
Simcoe, C.	10
Waterloo, N.	10

The following is a list of the Institutes having the largest attendance at their meetings during the season:—

	No. of Meetings.	Attend.
Halton	18	5,599
Bruce, S.	10	5,375
Waterloo, S.	18	5,746
Northumberland, E.	13	3,999
Hastings, N.	19	3,500
Waterloo, N.	10	3,279
Huron, E.	12	3,221
Peel	13	2,775
Middlesex, N.	12	2,612
Huron, W.	14	2,415
Middlesex, E.	13	2,411
Wentworth, S.	11	2,383
St. Joseph Is.	7	2,373
Victoria, E.	7	2,340
Norfolk, N.	9	2,317
Wellington, C.	8	2,295
Peterboro, E.	7	2,250
Simcoe, C.	10	2,240
Essex, S.	11	2,210
Perth, S.	8	2,120
Lincoln	8	2,070
Oxford, S.	9	2,065

The Institutes having the largest membership to July, 1902, are:—

Halton	840
Waterloo, S.	732
Peel	669

Hastings, N.	590
Huron, E.	567
Oxford, S.	445
Ontario, S.	444
Waterloo, N.	439
Wellington, C.	425
Middlesex, E.	415
Middlesex, N.	394
Aldbrand	383
Norfolk, N.	383
Wentworth, S.	379
Lambton, W.	363
Dufferin, E.	334
Huron, W.	324
Perth, S.	315
Bruce, W.	312
Wentworth, N.	310
Perth, S.	309
Brant, S.	303

The following list shows the Institutes having the smallest membership for the year:—

Port Carling and Bala	36
Nipissing West	48
Amherst Island	57
Corwall	60
Brant, North	68
Addington	79
Muskoka, Centre	81
Frontenac	97
Northumberland, W.	99
York, N.	99

DIVISION 1.

T. G. RAYNOR, ROSEHALL.—“Feeds and Feeding” (illustrated); “How to Build up a Herd or Flock”; “Selling Stock”; “Dairying as it Applies to the Producer”; “Some Common Diseases Affecting Stock”; “The Plant and the Soil”; “Two Important Crops—Corn and Clover”; “The Production of Pork”; “The Uses of Concrete.” Evening subjects: “Mistakes in Farming”; “Agricultural Development.”

1. Desboro (Township Hall), North Grey, Nov. 27th.
2. Kilsyth (Township Hall), North Grey, Nov. 28th.
3. Annan (Orange Hall), North Grey, (afternoon), Nov. 29th.
4. Leith Hall, North Grey (evening), Nov. 29th.
5. Bognor Hall, North Grey, Dec. 1st.
6. Snyder's School house, North Grey, Dec. 2nd.
7. Holland Centre (Price's Hall), Centre Grey, Dec. 3rd.
8. Kimberly (Union Hall), Centre Grey, Dec. 4th.
9. Feversham (Orange Hall), Centre Grey, Dec. 5th.
10. Priceville (Watson's Hall), Centre Grey, Dec. 6th.

DIVISION 2.

ANDREW ELLIOTT, GALT.—“How to Maintain Moisture and Fertility in the Soil”; “Clover and Clover Hay”; “Corn and Silage”; “Roots”; “What do we do with our Crops?” “Better Factories and Better Cows Needed”; “The Cow we Want”; “More Sheep Needed”; “The Bacon Hog”; “Concrete.” Evening subjects: “Sugar Beets”; “Making the Most of our Farms.”

MISS BLANCH MADDOCK, Guelph.—“Science of Buttermaking”; “Bread-making”; “Our Women's Institutes.—How to Make them Interesting”; “A Talk on Digestion, with Simple Demonstrations in Cooking”; “Bacteria and Their Effect on the Home and Dairy”; “Domestic Science”; “Flowers.—Their Evolution and Cultivation.”

1. Kincardine (Town Hall), Centre Bruce, Nov. 18th.
2. Ripley (Agricultural Hall), Centre Bruce, Nov. 19th.

3. Bervie (Orange Hall), Centre Bruce, Nov. 20th.
4. Glamis (Methodist Hall), Centre Bruce, Nov. 21st.
5. Pinkerton (Johnson's Hall), Centre Bruce, Nov. 22nd.
6. Port Albert (C. O. F. Hall), West Huron, Nov. 24th.
7. Aldbrand (Temperance Hall), West Huron, Nov. 25th.
8. St. Helen's (Town Hall), West Huron, Nov. 26th.
9. Wingham (Town Hall), West Huron, Nov. 27th.
10. Fordwich (Doflaghey's Hall) E. Huron, Nov. 28th.
11. Molesworth, East Huron, Nov. 29th.
12. Bluevale (Foresters' Hall), East Huron, Dec. 1st.
13. Ethel (Town Hall), East Huron, Dec. 2nd.
14. Walton, East Huron, Dec. 3rd.
15. Manley's School-house, East Huron, Dec. 4th.
16. Murdie's School-house, East Huron, Dec. 5th.
17. Constance (Town Hall), East Huron, Dec. 6th.

DIVISION 7.

DUNCAN C. ANDERSON, RUGBY.—“Soil Cultivation”; “The Bacon Hog”; “Horse Breeding”; “Care of Grass Lands”; “Cattle Raising”; “Care of Manure”; “Green Crops as Fertilizers.” Evening subjects: “The Farm as an Investment”; “Our Country.”

MISS BELLA MILLAR, GUELPH.—“Butter-making”; “The Hand Cream Separator,—its Use and Abuse”; “Our Dairy Work in General”; “Emergencies.”

1. Campbellville (Town Hall), Halton, Nov. 21st.
2. Nelson (Township Hall), Halton, Nov. 22nd.
3. Glenwilliams (Town Hall), Halton, Nov. 24th.
4. Bellfontain (Library), Peel, Nov. 25th.
5. Streetsville (Oddfellows' Hall), Peel, Nov. 26th.
6. Woodbridge (Orange Hall), West York, Nov. 27th.
7. Weston (Dufferin Hall), West York, Nov. 28th.
8. Wexford (Methodist Hall), East York, Nov. 29th.
9. Agincourt (Temperance Hall) E. York, Dec. 1st.
10. Bowmanville (Good Templars' Hall), W. Durham, afternoon, Dec. 2nd.
11. Courtyce (Sons of Temperance Hall), W. Durham, evening, Dec. 2nd.
12. Orono (Town Hall), W. Durham, afternoon, Dec. 3rd.
13. Newcastle (Town Hall), W. Durham, evening, Dec. 3rd.
14. Millbrook (Town Hall), E. Durham, Dec. 4th.
15. Bethany (Town Hall), E. Durham, Dec. 5th.
16. Blackstock (Town Hall), W. Durham, Dec. 6th.

DIVISION 8.

D. DRUMMOND, MYRTLE.—“Improving a Grade Dairy Herd”; “Development of a Dairy Female from Birth to Maturity”; “Feeding”; “Rotation of Crops”; “Pork Production.”

J. H. SMITH, LANGBANK.—“Ontario as a Feeding Ground”; “The Clover Family”; “The Soil and its Cultivation”; “The Farm Garden”; “What to Sell”; “Keeping Farm Accounts, Records and Stock Registers”; “The Sun at work on a Hundred-Acre Farm.” Evening subjects: “Farming the Noblest Occupation”; “Canada for Canadians.”

1. Unbridge (Market Hall), N. Ontario, Nov. 24th.
2. Beaverton (Alexandra Hall), N. Ontario, Nov. 25th.
3. Woodville (Village Hall), West Victoria, Nov. 26th.
4. Little Britain (Village Hall), W. Victoria, Nov. 27th.
5. Fenelon Falls (Dickson's Hall), E. Victoria, Nov. 28th.
6. Bobcaygeon (Town Hall), East Victoria, Nov. 29th.
7. Peterboro County Council Chamber, W. Peterboro, afternoon, Dec. 1st.
8. N. Monaghan (Town Hall), W. Peterboro, evening, Dec. 1st.
9. Lakelield (Town Hall), West Peterboro, Dec. 2nd.
10. Norwood (Town Hall), East Peterboro, Dec. 3rd.
11. Keene (Town Hall), E. Peterboro, Dec. 4th.
12. Stirling (Music Hall), N. Hastings, Dec. 5th.
13. Madoc (Town Hall), N. Hastings, Dec. 6th.

DIVISION 9.

J. E. ORR, FRUITLAND.—"Some Insect Enemies of the Orchardist"; "Mistakes Made in Spraying"; "Notes on Plums"; "Controlling the Codling Moth"; "Clover Crops in the Orchard"; "The Black Knot and how we Exterminiated it in our Township"; "The Culture and Care of Fruit Trees"; "Can we Overcome Old Years in our Orchard?"; "Why, How and When to Prune"; "Some Common Diseases of Fruit Trees".

MISS LAURA ROSE, GUELPH.—"Butter-making as an Art"; "What Milk is and How it Should be Cared for"; "Make Dairying Pay"; "The Making of Bread and Buns"; "A Chat with Housekeepers on Housekeeping"; "Why I have a Garden"; "As Others See Us"; One Eye in the Field and the Other in the Town"; "From Ocean to Ocean".

1. Coloung (Town Hall), W. Northumberland, Nov. 22nd.
2. Fenella (Hall), W. Northumberland, Nov. 23th.
3. Warkworth (Town Hall), East Northumberland, Nov. 25th.
4. Brighton (Opera House), E. Northumberland, Nov. 26th.
5. Ameliasburg (Town Hall), Prince Edward, Nov. 27th.
6. Demorestville (Town Hall), Prince Edward, Nov. 28th.
7. Frankford (Sweetman's Hall), W. Hastings, Nov. 29th.
8. Wallbridge (Town Hall), West Hastings, Dec. 1st.
9. Newburgh (Finkle's Hall), Addington, Dec. 2nd.
10. Centreville (Town Hall), Addington, Dec. 3rd.
11. Tweed (Town Hall), E. Hastings, Dec. 4th.
12. Canifon (Town Hall), E. Hastings, Dec. 5th.
13. Marysville (School-house), East Hastings, Dec. 6th.

DIVISION 10.

DR. H. G. REED, GEORGETOWN.—"Breeding Horses to Meet the Present Market"; "Milk Fever in Cows and Preventive Treatment"; "Influence of Natural Laws in the Breeding of Live Stock"; "Diseases of the Digestive System of Cattle"; "Diseases Likely to be Produced in Horses by Improper Feeding." Evening subjects: "The Care and Education of Young Horses"; "Some Reasons Why the Boy Should Stay on the Farm."

N. G. SOMERVILLE, BROCKVILLE.—"Why and How to Control

Temperature in Curing Rooms"; "What the Farmer of To-day Must do to Secure More Profits in Dairying"; "Proper Care of Milk for Cheese Factory, Creamery and Private Dairy"; "Use of the Babcock Test, its Value on the Farm and at the Factory"; "Paying for Milk According to Quality." Evening subject: "Influence of the Farm Home."

1. Spencerville (Town Hall), South Grenville, Nov. 24th.
2. Algonquin (Temperance Hall), S. Grenville, Nov. 25th.
3. Lyn (School-house), Brockville, Nov. 29th.
4. Athens (High School Hall), Brockville, Nov. 27th.
5. Newboro (Town Hall), South Leeds, Nov. 28th.
6. Lansdowne (Town Hall), South Leeds, Nov. 29th.
7. Battersca (Temperance Hall), Frontenac, Dec. 1st.
8. Harrowsmith (Town Hall), Frontenac, Dec. 2nd.
9. Stela (Town Hall), Amherst Island, Dec. 3rd.
10. Emerald (Cheese Factory), Amherst Island, Dec. 4th.
11. Adolphustown (Church Hall), Lennox, Dec. 5th.
12. Selby (Town Hall), Lennox, Dec. 6th.

DIVISION 11

G. H. BARR, WATFORD.—"The Benefits of Co-operation and Concentration in Dairying"; "How Milk is Affected by its Surroundings on the Farm, and the Results in the Factory"; "Cheese-Makers and Cheese-Factories as They Should Be"; "Cream Separation and Butter-making"; "The Possibilities of the Boys on the Farm."

W. S. FRASER, BRADFORD.—"Corn as a Fodder Crop"; "Clover—its Value to the Farmer"; "Cultivation of the Soil"; "Management of Sheep"; "Underdraining"; "Noxious Weeds on our Farms" (illustrated); "Grains and Fodder Crops" (illustrated). Evening subjects: "Home Life on the Farm"; "What Farmers Need"; "Home Dairy."

1. Cumberland (Town Hall), Russell, Nov. 25th.
2. Russell (Town Hall), Russell, Nov. 26th.
3. Morewood (Foresters' Hall), Dundas, Nov. 27th.
4. Berwick (Township Hall), Stormont, Nov. 28th.
5. Aultsville (Township Hall), Stormont, Nov. 29th.
6. Moniette (Township Hall), Cornwall, Dec. 1st.
7. Cornwall Centre (Township Hall) Cornwall, Dec. 2nd.
8. Martintown (St. Andrew's Hall) Glengarry, Dec. 3rd.
9. Maxville (Public Hall), Glengarry, Dec. 4th.
10. Vankleek Hill (Town Hall), Prescott, Dec. 5th and 6th.

DIVISION 12.

T. H. MASON, STRAFFORDVILLE.—"The Hog as a Money Maker"; "Care and Feed for Dairy Cattle"; "Growing Corn for Grain and Silage"; "Butter-making"; "Red Clover." Evening subjects: "Poultry-Raising for Boys and Girls"; "Changing Conditions in Canadian Agriculture."

L. A. ZUFELT, CHESTERVILLE.—"Influences which Affect Milk, and the Care of Milk for Cheese and Butter Factories"; "The Science of Cream Separation and Value of the Centrifugal System over all Others"; "But-

ter-making on the Farm"; "Equipment of Cheese Factories, and the Duty of the Patrons to Factory." Evening subjects: "Our Dairying Industry and How to Improve it"; "Higher Education in Relation to Dairying."

1. South Mountain (Fenton's Hall), Dundas, Nov. 22nd.
2. Oxford (Town Hall), Leeds, N. and Grenville N., Nov. 24th.
3. Merrickville (Town Hall), Leeds, N., and Grenville, N., Nov. 25th.
4. Carp (Town Hall), Carleton, Nov. 26th.
5. Galetta (White's Hall), Carleton, Nov. 27th.
6. Renfrew (Temperance Hall), S. Renfrew, Nov. 28th.
7. Stewartville (Township Hall), S. Renfrew, Nov. 29th.
8. Cobden (Town Hall), N. Renfrew, Dec. 1st.
9. Westmeath (Public Hall), N. Renfrew, Dec. 2nd.
10. Almonte (Town Hall), N. Lanark, Dec. 3rd.
11. Carleton Place (Town Hall), N. Lanark, Dec. 4th.
12. Smith's Falls (Town Hall), S. Lanark, Dec. 5th.
13. Perth (Town Hall), S. Lanark, Dec. 6th.

A Scale of Points for Jerseys

The American Jersey Cattle Club is giving some attention to compiling a new scale of points for judging Jerseys. Other breeders' organizations should give this matter some attention as well. The following is a scale of points proposed by the Jersey Advocate and Dairyman for that breed:

	Points.
Head fine, dished, eyes prominent.....	2
Jaw strong, nostrils open.....	3
Neck thin, long; clean throat; thin at withers.....	5
Body wedge shape, on short legs, with deep, large paunch.....	10
Deep through heart.....	5
Back straight to hips.....	2
Back level from hips to tail setting	8
Tail well set on, thin, long, with good switch.....	2
Hip bones high; flat thighs well cut out.....	5
Hip bones wide apart; loins broad and strong.....	3
Hip bones long to tail setting.....	2
Udder large and not fleshy.....	7
Fore udder well up on belly, full and well rounded.....	10
Rear udder well rounded and well out and up behind.....	8
Udder broad, level or spherical and not cut up between teats.....	3
Teats good length, wide apart and squarely placed.....	5
Milk veins large, tortuous and elastic.....	5
General dairy conformation and capacity.....	15
Total.....	100

Instructions to the Jockey

Owner (before the race)—"Now, then, my boy, watch the starter at the get-away, and mind that sharp curve in the first quarter, and keep an eye on that Dashway horse, and take care you don't get crowded into a pocket on—"

Jockey—"Say, Gynvor, cut it out! If I have to carry much more instruction I'll be overweight."—Exchange.

The Farm Home

The Farmer Feedeth All

The king may rule o'er land and sea,
The lord may live right royally,
The soldier ride in pomp and pride,
The sailor roam the ocean wide;
But this or that, whate'er befall,
The farmer he must feed them all.

The writer thinks, the poet sings,
The craftsman fashion wondrous things;
The doctor heals, the lawyer pleads,
The miser follows precious leads;
But this or that, whate'er befall,
The farmer he must feed them all.

The merchant he may buy and sell;
The teacher do his duty well;
But men may toil through busy days,
Or men may stroll through pleasant ways;
From king to beggar, whate'er befall,
The farmer he must feed them all.

The farmer's trade is one of worth;
He's partner with the sky and earth,
He's partner with the sun and rain;
And no man loses for his gain;
And men may rise and men may fall,
The farmer he must feed them all.

God bless the man who sows the wheat,
Who finds us milk and fruit and meat;
May his purse be heavy, his heart be light,
His cattle and corn all go right;
God bless the seeds his hands let fall,
For the farmer he must feed us all.

Uses for Apples

Apple Cake.—Make a batter as for sponge cake; bake in three layers. When cold spread between the layers a filling made as follows: Grate sound, tart apples quickly; add whites of two eggs, sugar to taste, flavor with lemon and whip to a froth. Nice served with whipped cream.

Baked Apple Dumpling.—Roll rich pastry thin, and cut into squares. Pare and core tart apples. Place one in each square, sprinkle with sugar and nutmeg; close and bake till apples are tender.

Apple Shortcake.—Make a dough of a pint of flour sifted with two teaspoonfuls of baking powder and a little salt. Rub a tablespoonful of butter thoroughly into the flour, and add a teacupful of sweet milk, or enough to make a soft dough. Divide into three equal parts and roll, handling as little as possible. Lay one in a greased pan, lightly grease the top of dough with butter, lay on the second sheet, grease, and add the last sheet of dough. Bake in a hot oven till done. Separate the sheets and spread between them warm apple

sauce seasoned with sugar, butter and a pinch of salt. Serve warm with cold cream or rich milk.

Apple Compote.—Put a cupful of sugar and one of water into a preserving kettle, add the juice of one lemon. Boil five minutes and skim; add six large, tart apples, peeled, quartered and cored. Boil until nearly tender, then remove from the syrup and bake in the oven. Boil syrup until nearly thick and pour over the apples. Eat with cream when cold.

Apple Batter Pudding.—Make a batter of one cupful of milk, one egg, one heaping teaspoonful of baking powder and two cupfuls of flour. Pour over quartered apples and steam two hours, or bake if preferred. Serve with sauce.

Apple Cream Pie.—Strain good tart apples through a colander, sweeten, and flavor to taste. When cold add to each pint of apple pulp three eggs and one teacupful of whipped cream. Bake with one crust.

A Little Garden Well Tilled

In an address before a Minnesota farmers' institute, Professor Shaw told of a small garden, in his knowledge, including less than one-sixteenth of an acre, that was made so rich, cultivated so carefully, and managed so well that it furnished all the vegetables required by a family of six, excepting part of their potatoes and cabbage. Much of the little garden was planted two or more times, in early, medium, and late crops. All was well fertilized and watered, of course. Such an item may not interest farmers very much, as they generally have plenty of ground to spare for garden. But it is a great advantage to have the vegetables grown near the house, where they are convenient to the cook, and room for a little three-foot square patch can generally be found pretty close to the kitchen door.

In this wonderful little garden, among other vegetables, were the following, by number: 312 tomatoes, 262 cucumbers, 28 squashes, 21 pumpkins, 21 citrons, 10 water-melons, 196 ears corn; and these by measure: 88 quarts onions, 13 quarts beans, 102 quarts peas, 118 quarts potatoes, 24 quarts carrots, 24 quarts beets, besides 161 beets used before maturity. Any farmer or farmer's boy can find time to tend such a garden, especially if he has a wheel hoe and a good fine tooth steel rake. It is only fifty feet square. A better shape would be twenty-five by one hundred feet.

"I don't like your milk," said the mistress of the house. "It's dreadfully thin, and there's no cream on it."—"After you've lived in the city a while, mum," said the milkman, encouragingly, "you'll get over them rooral ideas o' yourn."—Chicago Tribune.

Feeling Good

An eastern Colorado editor, whose name is withheld through respect for his real nice family, threw off this jingle while laboring under a temporary rattling of the mind:

A short time since the cow was sad—
She scarce could raise her head, be-gad!

Her hoofs were sore, her tail was lump,
Her mane and bangs had lost their crimp.

And miles she trudged from grass to drink,
With scarcely strength enough to wink.

Her owner, too, looked blue and glum,
And cursed the cattle business some.

But since the rains the grass is tall—
The cow can raise her head and bawl.

Her sides are slick, no bones pro-trude,
She prances like a city dude.

Her tail is slick, her eyes are bright,
She snorts and dares the crowd to fight.

Her owner, too, digs up the chink
And asks the boys to have a drink,

God bless the rain! God bless the rain!
It makes a cuss feel young again!

He feels like tossing up his hat
And howling like an autocrat!

—Exchange

Colored Lawn Skirts

To a person with a limited income the colored lawn skirts now so much in vogue certainly must be a boon. They are as pretty as silk and not nearly so expensive, and if a woman likes to sew it is light and pleasant work to make them. Lace-trimmed flounces figure largely as a trimming on these skirts, and it is always better taste to have them the same color as the gown. Another advantage of these skirts is that they can often be pressed, after which they look fresh and clean, where white skirts would require laundering.

"You, William!" exclaimed the old man, "what are you doin' on dat white man's fence? Ain't you afraid you'll fall off?" Then, after a moment's thought the old man resumed: "But ef you does fall off you might ez well fall on de side whar de watermillions is, you hear me, don't you?"—Atlanta Constitution.

Hints by May Manton.

WOMEN'S SLOT SEAM SHIRT WAIST,
4253.

To Be Made With or Without The Fitted Lining.

Shirts waists made with slot seam effects are exceedingly effective and eminently smart. This stylish example is shown in cream white brilliantine with stitchings of black corticelli silk and large pearl buttons, but the design suits all the season's wool and silk waist materials as well as the heavy and fleece lined cottons that are so much liked.

The lining, that can be used or omitted as preference and material may decide, is snugly fitted and



4253 Slot Seam Shirt Waist.
32 to 42 bust.

closes at the centre front. The waist proper consists of back and fronts only that are laid in slot seams from the shoulders and a central box plait. The sleeves are in the new bishop style and fall in soft puffs over the pointed cuffs. The collar also is novel and is pointed at the front to match the cuffs.

The quantity of material required for the medium size is $4\frac{1}{2}$ yards 21 inches wide, $3\frac{3}{4}$ yards 27 inches wide, $2\frac{1}{2}$ yards 32 inches wide or $2\frac{3}{4}$ yards 44 inches wide.

The pattern 4253 is cut in sizes for a 32, 34, 36, 38, and 40 inch bust measure.

The price of the above pattern post-paid is only 10 cts. Send orders to The Farming World, Confederation Life Building, Toronto, giving size wanted.

Ingrowing Nail

Tardif says that he has been able to cure all cases of ingrowing nail without recourse to the knife. He proceeds as follows: With a flat probe, or a match, he slips a bit of cotton between the edge of the nail and the inflamed flesh. Another strip of cotton is put along the outer margin of the ulcerated area, and the space between these two strips of cotton, and which is occupied by the ulcer, is thickly powdered with nitrate of lead. The whole is covered with cotton and the toe is bandaged. The dressings are repeated the following day, and

every day until the incarcerated edge of the nail is plainly visible. Usually four or five dressings suffice. Then, with patience, the edge of the nail is lifted away from the flesh, and a bit of cotton is introduced under it to keep it up. As it grows it will gradually take its proper position above the flesh, this having in the meantime shrunk and shrivelled by reason of the applications of lead nitrate. The lead is to be discontinued as soon as it appears that the exuberance of the fleshy bed of the nail has been overcome. The difficulty seldom recurs. If this does happen it is necessary to repeat the treatment from the beginning.—Anjou Medicale.

How to Take Care of Your Eyes

An authority on the care of the eyes emphasizes the fact that in this day of reckless misuse of the eyesight, the rules laid down must consist of warnings regarding things to be avoided. Here are some of the main rules for the care of the eyes, which should be of interest to everybody:

First: Do not use the eyes in poor light, or too far from a good light. Second: Do not have the body in the way of the light, nor the light directly in front. One is almost as bad as the other. The light should fall without interruption from one side. Third: Do not use the eyes much when recovering from illness, or when very tired. Fourth: Do not use the eyes when they become watery, or show signs of indistinctness of vision. Fifth: Do not work with head bent over. This tends to gorge the vessels of the eyes with blood, and to produce congestion. Sixth: Do not read lying flat on the back or reclining, unless the book is supported in the same relative angle and position as when erect. This is so difficult to do that it is better not to attempt it. Seventh: Do not go a single day without glasses after you should put them on.

Test of Merit

This story was told by the prototype of Capt. Joe, the hero of F. Hopkinson Smith's novel, "Caleb West":

An Irishman once applied to him for a job on board his ship.

"Well," said the captain, "where are your recommendations?"

"Shure, an' I haven't enny, sur."

"Can't take you then—got a German here with fine recommendations—have to give the job to him."

Pat begged so hard, however, that the captain finally agreed to take him and the German both on a trial trip, the best man to have the permanent job.

They were well out at sea when a storm arose one day while Pat and the German were scrubbing the deck. A big wave came along and swept the German overboard with his bucket. Pat immediately picked up his bucket and started after the captain, whom he found below.



Unless the soap you use has this brand you are not getting the best

Ask for the Octagon Bar. 244



are timekeepers—for the movements are as good as money will buy—our cases cannot be excelled in appearance and quality—our prices are interesting to all purchasers. Call and inspect, or if out-of-town write for Catalogue. It's yours for the asking.

AMBROSE KENT & SONS

MANUFACTURING JEWELERS LIMITED
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567 RICHMOND ST. WEST

"Well, Pat, what's the matter now?" the captain inquired.

"Faith, sur, ye know that German what had such foine recommendations?"

"Yes, what of him?"

"Begorra, sur, an' he's gone off with one o' your buckets."

Learn This by Heart

Betty Botter bought some butter; "But," she said, "this butter's bitter;

If I put it in my batter It will make the batter bitter; But a bit of better butter Will make my batter better." So she bought a bit of better Better than the bitter butter And made her bitter butter better. So 'twas better Betty Botter Bought a bit of better butter.

—American Agriculturist.

Kind Old Gentleman—"Why do you carry that umbrella, little boy? It's not raining."

"No, sir."

"And the sun's not shining?"

"No, sir."

"Then why do you carry it?"

"Well, when it's raining pa wants it, and when the sun's shining ma wants it, and it's only this kinder weather I can get to use it at all."

The Farming World.

A PAPER FOR FARMERS AND STOCKMEN.

D. T. McAINSH, — — — PUBLISHER
J. W. WHEATON, B. A. — — — EDITOR

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Discontinuances.—Following the general desire of our readers, non-subscriber's copy of THE FARMING WORLD is discontinued until notice to that effect is given. All arrears must be paid.

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Advertising Rates on application. Letters should be addressed:

THE FARMING WORLD,
CONFERRATION LIFE BUILDING,
TORONTO

Killing Lice on Hogs

A well-known American swine breeder gives his experience in destroying lice on hogs, in a recent issue of Rural New Yorker, as follows:

"I always use an emulsion of crude petroleum. If you think it too strong, dilute with warm water, say one-fourth; get the hogs in a close pen, take a hurdle and bunch them close together. Then have a fine sprinkler, or better still, a spray pump with rubber hose, and thoroughly spray each hog; be sure to hit the ears, flank and fore arm, where the eggs are laid. Repeat this in two weeks, in order to get the nits that are not killed by the first application. I think this will be successful, and yet inexpensive. I would be careful about using this or any other remedy while the weather is cold. Select a warm spell near spring. Then have the hog nests thoroughly cleaned and disinfected by using carbolic acid, 20 per cent. solution, or zenoleum, one ounce to 30 ounces of water. After this take air-slaked lime and thoroughly sprinkle the walls, partitions and floors. Sprinkle floors heavily, then bed your pens thoroughly, so that the hogs will not come in contact with the lime or other applications. You will find nothing better than this formula. By having your hog nests kept clean and free from dust and once a month giving them a good sprinkling of strong air-slaked lime you will have no trouble with lice, and not only that, but will kill the germs of disease that might be lurking around the quarters."

Sheep and Goats Compared

As summing up the strong and weak points of sheep and goats by way of comparison, and pointing out the environment best suited to

the character of each, the following from Prof. Thomas Shaw can be commended as judicious and fair:

1. There is not much difference in the size of the two animals when matured, but the sheep matures much more quickly than the goat.
2. The goat lives to a much greater age than the sheep. Some authorities claim that the average age of a goat is about twice that of a sheep.
3. The goat is a browser, and will from choice gather its living from leaves, twigs, barks of trees and weeds, whereas sheep prefer pastures, although they will eat many weeds and will also eat leaves and brush, but not in preference to pasture.
4. The meat of the sheep is as yet preferred, on the whole, in the market, but the goat meat is coming more and more into favor.
5. The goat produces hair and the sheep wool. The fleece of the latter weighs more on an average than the fleece of the former.
6. The great use of the sheep on the average farm is to clean up scattered vegetation, especially what is of the gleaning order, while the best use of the goat is in cleaning up the brush land.
7. Sheep will not do well if confined wholly on brush land, while just such land furnishes exactly the conditions which goats enjoy. There is room for more flocks of goats and sheep in all parts of the country.

Kept His Eye On Him

A gentleman took his little boy to church with him for the first time. Instructing the lad about his behavior, he wound up by telling the boy to keep an eye on him and do just as he did. When the contribution box was passed, papa dropped in a coin. Tommy saw his father's hand go into the box, and, remembering the advice, put his hand in also. When the box was passed by, the lad whispered out loud enough to be heard all around: "Sav, papa, I got a quarter; how much did you get?"—Exchange.

Poultry and Eggs

Advertisements under this head one cent a word. Cash must accompany all orders under \$2.00. No display type or cuts allowed. Each initial and number counts as one word.

BROWN Leghorns, Prolific early layers; Strain won at Pan-American. Stock for sale—Minorcas, Barred Rocks, Choice Strains, Eggs in season. JOHN B. FETTER, Fruitland, Ont.

BUFF ORPINGTONS, imported this season from England, 8 birds costing \$125. Solid buff eggs \$3 per 13. Also breeder of Brown Leghorns, continuous layers. Barred Rocks, E. B. Thompson's White Wyandottes, Indian Games, true black type for export. I won leading prizes and sweepstakes at the Ontario and Brantford shows. Incubator eggs \$2.50 per 100. J. W. CLARK, Importer and Breeder, Oranodge, Ont.

GET Free Catalogue on Fattening Poultry. MORGAN'S INCUBATOR WORKS, LONDON.

BUFF ORPINGTONS—For sale, choice breeding stock. Prices on application. All Cockerels of value to breed with ordinary farm fowl, especially Barred Rocks. Price \$1.50 each. R. F. HOLTERRMANN, Brantford, Ont.

The "NATIONAL" Cream Separator



The "National" is a purely Canadian made machine throughout, which cannot be said of some others. Intending purchasers are invited to call at our factory in Guelph, where they may see the machine and all its parts in course of construction.

Superiority of the "National"

It possesses all the strong points found in other Cream Separators, while it is free from objectionable points that make other machines hard to run, and a source of trouble to those who operate and clean them.

The National is simple in construction, handsome in design, and finely finished; easy to operate, and few parts to clean; a perfect skimmer with a larger capacity than any other separator at the same price. Every machine guaranteed to do good work.

Capacity of No. 1—330 to 350 lbs. per hour.

Capacity of No. 1 A—450 to 500 lbs. per hour.

Give the "National" a Trial.

—GENERAL AGENCIES—

Creamery Supply Co., Guelph, for South-western Ontario.
T. C. Rogers Co., Guelph, for Ontario North and East.
Jos. A. Merrick, Winnipeg, for Manitoba and N. W. T.

MANUFACTURED BY

The Raymond Mfg. Co. of Guelph, - Limited
GUELPH, ONTARIO.

Exhibit in Dairy Building, Toronto Exhibition.

Cattle Outlook in the Western States

The following from the Nebraska Farmer shows a condition of things in connection with the cattle trade of the Western States that may lead to a great scarcity of beef making material in the near future:

"There is a general disposition among cattle raisers and cattle owners, over the cattle growing districts of the West, to market all animals that can be safely classed as grass fat, both steers and cows. The strong feeder demand that the big corn crop has encouraged, has also induced a close culling of the herds of all young steers that can be reasonably turned in the demand for feeders. Thus it is observed that not only are the fat steers and dry cows coming from the range, but also the two-year-old steers, and strong shipments of the best quality of yearling steers. In addition to these sources of reducing the cattle population of the range herds, are the shipping out of all cattle in many of the drought districts of Colorado and other parts of the West and Southwest, where the subject of wintering has become a matter of serious consideration.

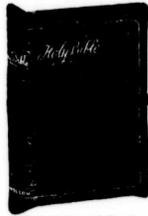
"That there is now in active operation one of the most systematic and effective depletions of the herds of the country that has ever been experienced there can be but little doubt. The great shortage of corn-fed cattle that has prevailed for the past year has caused an active demand for all the grass fat cattle that the ranges can supply, and this demand will continue until the supply is exhausted, and then no appreciable change in the lowering of beef prices will be experienced.

"The big corn crop will be consumed mainly in the interest of lower priced beef, and the steers of the country, of feeder age, will go into this effort, and next year will find a dearth of steer cattle for the feed yards, because the present demand will have encroached upon next year's supply of feeders. The extraordinary effort that is sure to be put forth to satisfy the present demand for beef at the present high prices, must necessarily consume all available beef animals.

"The disposition to become steer handlers instead of calf raisers has become quite common over the cattle-raising districts. The tendency among the larger cattle owners and ranchmen is to concentrate all efforts to the growing of steers, and turn the breeding interests over to the smaller cattlemen. The weeding out of the stock of the country is a necessary and legitimate work, and in the interest of herd improvement and business advantage. But the wholesale destruction of the young and serviceable she stock of the herds, by shipping to the beef and canner markets, cannot be justified in the face of present conditions of cattle supply throughout the country."

THE NEW

Teacher's Bible



Exact size of Book 5 1/2 x 8 inches

LARGE, new, clear type. Bound in Egyptian seal flexible, yapp edges, round corners, red under gold edges, head bands, special fine thin paper. References.

This is a most beautiful and perfect copy of the Holy Scriptures.

Job's innocency.

JOB 23, 24, 25, 26.

Judgment for the wicked.

CHAPTER 23.

1 WHEN Job answered and said,
2 Even to day is my complaint bitter:
 my stroke is heavier than my grievance.
3 Oh that I knew where I might find him!
 that I might come even to his seat!
4 I would order my cause before him,
 and fill my mouth with arguments.
5 I would know the words which he would answer me,
 and understand what he would say unto me.
6 Will he plead against me with his great power?
 No; but he would put strength in me.
7 There the righteous might dispute with him;
 so should I be delivered for ever from my judge.
8 Behold, I go forward, but he is not there;
 and backward, but I cannot perceive him:
9 On the left hand, where he doth work,

B.C. 1520.
1 Heb. my hand.
2 Ps. 10. 8.
3 Ps. 17. 16.
4 Prov. 7. 9.
5 Ps. 10. 11.
6 Heb. setteth his face in secret.
7 ch. 9. 11.
8 John 3. 20.
9 Ps. 139. 1-3.
10 Heb. the way that is within me.
11 Ps. 17. 3.
12 Ps. 139. 10.
13 Jas. 1. 12.
14 Heb. visibly take.

clothing, and they take away the sheaf from the hungry;
11 Which make oil within their walls, and tread their winepresses, and suffer thirst.
12 Men groan from out of the city, and the soul of the wounded crieth out; yet God layeth not folly to them.
13 They are of those that rebel against the light; they know not the ways thereof, nor abide in the paths thereof.
14 The murderer rising with the light killeth the poor and needy, and in the night is as a thief.
15 The eyes also of the adulterer waiteth for the twilight, saying, No eye shall see me; and he disguiseth his face.
16 In the dark they dig through houses, in which they had marked for themselves in the daytime; they know not the light.
17 For the morning is to them even as the shadow of death; if one know them, they are in the terrors of the shadow of

(Exact Size of type)

This Beautiful Bible contains besides the authorized text of the Old and New Testaments with references,

A NEW COMBINED CONCORDANCE with subject index and index of proper names. This new concordance contains a number of features which combine to make it one of the most useful and handy concordances ever published.

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A COMPLETE BIBLE DICTIONARY This new Dictionary is written by leading scholars in Great Britain and America, each one a recognized authority on his own subject. Contains short articles about the Bible, its contents, language, text, Life of Christ, etc., with numerous beautiful illustrations.

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A PERFECT BIBLE ATLAS This Atlas contains twelve beautiful maps specially engraved from latest surveys and printed in colors. The position of Bible places can be easily found by the complete reference index which accompanies the atlas.

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BOTH FOR \$2.00

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 The New Teacher's Bible..... 3 00
BOTH FOR \$3.00

ADDRESS

THE FARMING WORLD

TORONTO

Raising Mules

In view of the effort being made to encourage the breeding of mules in Canada the following from the pen of an experienced Missouri mule breeder will not come amiss:

"The mule is large or small, good or bad, as you breed him. Occasionally a small jack may breed large. These exceptions must be noted carefully. But small jacks and small mares are uncertain quantities in profitable breeding. Good mules can only be counted on from good parents.

"Select a good jack of known breeding qualities, dark color, light points, big head, long ear, big bone well coupled, and a good, big foot, and standing square on it. While I want a large jack as indicated above, I want good action, and I want a deep, sonorous voice, not a squeaking bray. I want him docile and sensible.

"If you want very heavy draft mules, select large, heavy, well-formed mares. But if you want a fine, stylish, all-purpose mule, select a warmer-blooded mare, of good size, active good bay or black. The more style, the better and finer the mule. With the above suggestions adhered to, you may count on some stock that will fill the bill anywhere. I would suggest that neither jack nor mare should be overburdened with fat before the breeding opens.

"Too many farmers with little plug mares will patronize a little tow-headed, squeaky, cheap jack, and expect to sell the mule for the current price at weaning time. The buyer cannot afford to pay nearly so much for those little dish-faced, cat-hammed, sorry mules. Breed to have the mule dropped about April 15 to May 1, so that the dam may have good weather, good grass, and grow a good colt."

(Probably a later period, say from May 15th to June 15th, for having the mule dropped, would best suit Canadian conditions as to weather and grass. Editor.)

Scours in Calves

Although somewhat out of season for Canada the following method of treating scours in calves as practised in New Zealand will be found of value:

Diarrhoea in calves is produced by various causes, the principal of which are: Feeding unwholesome milk; eating coarse food, upon which the digestive organs are not prepared to act; irregular feeding; allowing too long time to elapse between meals and then permitting the calf to engorge itself; breathing obnoxious gases, especially carbon dioxide and sulphurated hydrogen in badly ventilated and filthy stables. These debilitate the general health, and, as a result, digestion is impaired, which leads to an accumulation of undigested materials in the stomach and bowels, and the consequence is fermentation, irritation and diarrhoea. The formation of hair balls in the first, third and sometimes in the fourth

stomach is also, occasionally, a cause of diarrhoea in calves. In the treatment of this disease, the removal, if possible, of the causes mentioned or any other known cause, is of the greatest importance. Affected calves should be removed from those not affected, and cleanliness and good ventilation should be strictly observed in relation to both the diseased and healthy animals. The medical treatment has to be regulated by the stage of the disease. If in the first stage, a laxative should be administered for the purpose of expediting the removing of the cause of irritation, and for this I would recommend from one to three ounces of castor oil and an equal quantity of lime water, well shaken together. When the offending agents are supposed to have been expelled, give three times daily, until the stools become normal, one tablespoonful of this mixture: tincture of catechu, tincture of rhubarb, tincture of camphor, tincture of opium, of each four ounces; dose to be given in two ounces of lime water.

In the second, or "white scours," stage, which is always more or less contagious, the precautionary measures in regard to isolation is still more imperative. In this stage the castor oil and lime water dose should still be administered. Give four times daily two tablespoonfuls of the following: Chalk mixture, 4 ounces; creosote, half an ounce; wine ipecacuanha, 2 ounces; tincture of opium, 1½ ounces. Put into a full quart bottle and fill up with good port wine. The milk on which the calf is fed should be boiled. If the abdomen is tender, rub with the following liniment twice daily: Soap liniment, four ounces; tincture of cantharides, two ounces; liquor ammonia, 1 ounce; tincture of opium, 2 ounces. Mix.

Argentine Stock

The total available stock in the Argentine Republic is officially estimated at 25,000,000 head of cattle and 90,000,000 sheep. In 1899—the year prior to the stoppage of importation—85,365 bullocks were imported by us and 382,080 sheep. The statistics for last year show a significant growth in the importation of frozen meat, 771,929 cwt. having been imported of frozen beef and 1,271,654 cwt. of frozen mutton. South Africa has been a considerable customer of the Argentine Republic both for live cattle and dead meat during the war. Time will determine whether or not Canada, Australia, and New Zealand can secure among them a monopoly in South Africa.

Little Willie—"Say, pa, what does cleave mean?" Pa—"It means to unite or stick together." Little Willie—"Then if the butcher cleaves a bone does he stick it together, pa?" Pa—"Why—er—I guess it does mean to separate, my son." Little Willie—"And when a man separates from his wife does he cleave to her, pa?" Pa—"It's time you were in bed."

STOCK

DAVID McCRAE, Jansfield, Guelph, Canada, Importer and Breeder of Galloway Cattle, Cheadale Horses, and Cotswold Sheep. Choice animals for sale.

FOR SALE.

Large English Yorkshires. Bears fit for service; Sows ready to breed; Boars and sows 8 weeks to 3 months old from imported and Canadian bred sows.

Write JAS. A. RUSSELL,
Precious Corners, Ont.

JOHN DRYDEN

BROOKLIN, ONTARIO

BREEDER OF

CRUICKSHANK SHORTHORNS and CHOICE SHROPSHIRE SHEEP

Choice Young Bulls and Ram Lambs for sale. Write for prices.

QUEENSTON HEIGHTS

SHORTHORNS.

Scotch and Scoten-topped choice young cows and heifers for sale at moderate prices.

HUDSON USHER,

Queenston, Ont.



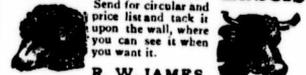
ROCK SALT for horses and cattle, in ton and car lots. Toronto Salt Works, Toronto

Maple Lodge Stock Farm

Scotch Shorthorns, Choice Milking Strains, Prize Winning Leicesters, Young Stock for sale—imported and home bred.

A. W. SMITH, Maple Lodge P.O., Ont.

Live Stock Ear Labels



R. W. JAMES,
Bowmanville, Ont.

WOOD ENGRAVING,
PHOTO ENGRAVING,
HALF TONES
168 BAY ST
J.L. JONES ENG. CO.
TORONTO

We have not advanced the price of our tobaccos. Amber smoking tobacco. Bobs Curceny and Fair Play chewing tobaccos are the same size and price to the Consumer as formerly. We have also extended the time for the redemption of Snowshoe tags to January 1st, 1904. THE EMPIRE TOBACCO CO., Limited.

PURE-BRED STOCK

NOTES AND NEWS FROM THE BREEDERS

These columns are set apart exclusively for the use of breeders of pure-bred stock and poultry. Any information as to importations made, the sale and purchase of stock and the condition of herds and flocks that is not in the nature of an advertisement will be welcomed. Our desire is to make this the medium for conveying information as to the transfer of pure-bred animals and the condition of live stock throughout the country. The co-operation of all breeders is earnestly solicited in making this department as useful and as interesting as possible. The editor reserves the right to eliminate any matter that he may consider better suited to our advertising columns.

Horses.

Mr. J. B. Hogate, Sarnia, Ont., reports the sale of a Spanish Jack, one of his recent importation to Mr. J. E. Dyer, Enfield, Ont. He is a three year old and a very fine type of the breed. Mr. Hogate reports good inquiry for Jacks. The above sale was effected directly through his advertisement in The Farming World.

Mr. Hogate has another importation of Clydesdale horses on the way. They will arrive on the Donaldson line steamer, Marina, about October 12th. Mr. Hogate states that this is the best importation of Clydesdale horses ever made by him, which is saying a good deal.

Mr. William Brown, Craigton, Bishopton, sailed last week for Canada with three well-bred young horses of considerable promise. One of them was Royal Lockhart, 11504, a two-year-old, by Carthuis, bred by the late Mr. Lockhart. This colt was bought from Mr. Walter Park, and is up to a good size, in addition to being quality-like. Another colt of the same age was also bought from Mr. Park. This one was bred by Mr. D. Henderson, Netherton, and was got by Mains of Airies out of a dam by Scottish Pearl. The third animal in the lot was a yearling bred by Mr. John Armour, Kilmeshmahan, Campbeltown, and by Gordon Brown, by Ethiopia out of a dam by Ettrick Shepherd. All three colts are well colored, and should suit the Canadian market.—North British Agriculturist.

Cattle

Many who followed the dairy tests at the Industrial and the Provincial Winter Fair a few years ago, will remember the great record made by Geo. Rice's Holstein cow, Calamity Jane. She has an official record of 572½ lbs. of milk and 25 lbs. 9 oz. butter in seven days. This cow has become the head of a family of great milk producing Holsteins that is attracting much attention in the United States. In the Holstein-Friesian Register for October, W. A. Matheson, a well-known American breeder, has this to say of Calamity Jane: "It is probable that Calamity Jane is as well known throughout the United States and Canada as any other living cow, and she won her great reputation by performance." All honors is due Mr. Rice for having brought to the front a cow whose offsprings are becoming famous in American Holstein-Friesian circles.

Sheep

The first annual ram sale and show under the auspices of the Northwest Territories Pure-bred Sheep-breeders' Association, held on Oct. 2nd and 3rd was successful. The animals comprised both Ontario and home bred stock and numbered about 300 in all of fine type and character. Car lots were brought up by J. A. Turner, of Calgary, J. McCaig, of Lethbridge, and D. McKerracher, of Medicine Hat. The display was as fine as one as could be gathered up anywhere in the Dominion, as to both quality and numbers. The opportunity for securing improving stock was fully appreciated by the ranchmen, who were in considerable force to make purchases. The supply was probably above the demand, but most of the stuff was disposed of at satisfactory prices. The association had the active assistance of the Dominion and Territorial Departments of Agriculture and of the Canadian Pacific Railway, who gave free transportation to two cars of rams. The success of this first sale will, it is expected, lead to annual sales, and through these the ranch stock of the country will be built up to a high mutton standard.

Breeds of Dairy Cattle.

AYRSHIRE.—Originated in the County of Ayr, Scotland. They are of mixed origin, very hardy, medium in size, and give a medium quantity and quality of milk. The fat globules are very small, hence the cream does not readily separate from the milk, and is therefore specially suitable for cheesemaking. Many of the cows belonging to this breed are over-nervous, and have short teats. A very valuable breed for cheese factory and general farm dairy sections.

BROWN-SWISS.—Home in Switzerland. These cattle are heavy and coarse in the bone. Milk is of good quality and adapted for general dairy work. There would seem to be no room for this breed in Canada.

CANADIAN.—Originated in the Province of Quebec. Descended from the cattle of France, imported by the early French settlers. They are a small breed, usually dark in color, and give a fair amount of milk slightly above the average in fat content. They make good use of a limited amount of feed, but lack capacity in production for first-class dairymen.

DUTCH BELTED.—Holland is their home. They are a black cattle with a belt of white color about the body, hence the name. Characteristics similar to Holstein, but not such large producers. They are not likely to become numerous in Canada.

DEVON.—A very ancient breed found in Devonshire, England. Size, medium, red in color, and hardy. Some representatives are very excellent dairy cows. On the whole they

HORSEWELL THE ONLY GENUINE IS

COMBAULT'S

CAUSTIC BALSAM.

*The genuine without the symptoms of
No. 10,000,000, Williams Co.
Sole Agents & Proprietors for the
U.S. & CANADA, CLEVELAND, O.*

The Safest, Best BLESTED ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. **SUPERSEDES ALL CATTLEY or FURIN.** Impossible to produce scurf or blemish. Every bottle is warranted to give satisfaction. Price \$1.00 per bottle. Sold by Druggists, or sent by Express, charges paid, with full directions for its use. Send for free descriptive circulars. **THE LAWRENCE-WILLIAMS CO., Toronto, Ont.**

Horse Health



is one of the most important things for every farmer to consider.

Dick's Blood Purifier

will build up a run down horse. It tones up the system, rids stomach of bots, worms and other parasites which undermine an animal's health.

50 cts. a package.
LEEMING MILES & CO.
AGENTS, . . . MONTREAL.



FLEMING'S LUMP JAW CURE

LUMP JAW
Easily and thoroughly cured. New, common-sense method, not expensive. No cure, no pay. A practical, illustrated treatise on the absolute cure of Lump Jaw. Free if you ask for Pamphlet No. 257. Fleming Bros., Chemists, 28 Front St., West, Toronto, Ont.

The Best Advertising Proposition

In Eastern Canada--Bar-ring no Paper--is the **MARITIME FARMER.**

It is used by all the leading Ontario manufacturers selling goods in the Maritime Provinces. Many of them have been in its columns since the first issue, seven years ago. That's the best proof we can offer that

IT PAYS.
For full particulars address
THE MARITIME FARMER,
Sussex, New Brunswick.

Market Review and Forecast

Office of The Farming World, Confederation Life Bldg.

Toronto, Oct. 13th, 1902.

Wholesale trade continues in a healthy condition. The cool weather has brought more active buying in the country. Remittances show some improvement over a week ago. The unsettling factor in trade is the money shortage. There appears to be enough for all legitimate purposes. Call loans are quiet at 6 per cent. and discounts steady at 6 to 7 per cent.

Wheat.

The wheat market shows a firmer feeling though prices do not show any great advance. On this point the Price Current says:

"The wheat markets have been comparatively steady during the past week, with prices generally a fraction higher than a week ago, for both spring and winter wheat. The movement of wheat is fairly liberal but does not accumulate rapidly, being absorbed readily by mills and exporters. While the visible stocks are making but little increase the world's visible is increasing heavily, there having been large exports lately, both from this country and Russia. In Chicago speculative trading has been of only moderate proportions and there has not been much fluctuation in any future. May wheat closed yesterday at 71½¢ or 2½¢ above lowest point reached this season in this option."

The English market is firmer and higher, though importers are not buying any more than is required for present wants. Manitoba No. 1 hard is quoted afloat at Fort William at 70c and No. 1 Northern at 68c. Ontario farmers are seemingly in no hurry to market their grain and consequently receipts at local points have not been large. Here quotations are 65c for red and white, 63c to 64c for goose and 65c for spring at outside points. On Toronto farmers' market red and white brings 67c to 68½¢, goose 63c to 64½¢, and spring life 64c a bushel.

Oats and Barley.

The oat market has improved considerably during the week. Canadian oats are selling higher in England. At Montreal 33c is being paid for storage. Here the market is higher at 30c for No. 2 white cast, and 29c middle freights. On the farmers' market they bring 32½¢ a bushel.

The barley market is firmer. At Montreal 48½¢ afloat is quoted for No. extra. There is a good demand here with prices ranging from 35c to 43c as to quality. On Toronto farmers' market barley brings 42c to 44½¢ per bushel.

Peas and Corn

The pea market is steady at 71c for choice milling and 67½¢ for No. 2 export at outside points.

The American corn market is

Poultry and Eggs Wanted

<p><u>CHICKENS</u> <u>DUCKS</u> <u>TURKEYS</u> <u>GOOSE</u></p>	<p>Empty crates forwarded on application.</p> <p>Highest market prices paid.</p> <p>Correspondence solicited.</p>
---	---

Toronto Poultry and Produce Co.

Office 470 YONGE ST., TORONTO

firmer owing to unfavorable weather conditions in the corn belt. At Montreal car lots in store are quoted at 72c. American No. 3 yellow is quoted at 70c in car lots Toronto. Canadian is firmer at 62c to 62½¢ for yellow west.

Bran and Shorts

At Montreal Ontario bran is quoted at \$14.00 to \$14.25 in car lots and Manitoba at \$15.00 to \$15.50 in bags. City mills here sell bran at \$15.00 and shorts at \$20.00 in car lots l.o.b. Toronto.

Potatoes and Beans

Car lots of potatoes are quoted at Montreal at 60c to 70c as to quality. They are in good demand here at 70c to 75c for car lots on track. On Toronto farmers' market potatoes bring 90c to \$1.00 a bag.

The bean market is much firmer and prices have taken a big jump upward. At Montreal car lots of primes are quoted at \$2.00 to \$2.05 per bushel on track there and \$2.10 to \$2.25 in a jobbing way. In New York choice 1902 crop are quoted at \$2.50 to \$2.55 per bushel.

Seeds.

Montreal quotations are: Alsike, \$14.00 to \$17.00; red clover, \$9.00 to \$10.50, and timothy, \$4.50 to \$6.00 per 100 lbs. On Toronto farmers' market alsike brings \$6 to \$7.10, red clover \$5.25 to \$6.00 and timothy \$1.40 to \$2.00 per bushel.

Hay and Straw.

There is more activity in the hay trade. Cable advices show a healthier tone in the English market for Canadian hay. The quality of this year's Canadian hay is said to be much better than that of the United States and England, so that there is likely to be a fair demand from these countries. A Hay Trade Association was formed in Montreal last week for the purpose of securing better freights and facilities for shipping on steamships and railways. There has been more active buying in Quebec where \$7.00 to \$7.50 l.o.b. for No. 2 and \$6.00 to 6.50 for clover and clover mixed have been paid. Montreal quotations for baled hay

are: No. 1 timothy \$9.00 to \$9.50; No. 2, \$8.00 to \$8.50, and clover, \$7.00 to \$7.50 in car lots. Loose hay sells at \$7.00 to \$7.25 per load. No. 1 timothy is quoted here at \$9.00 for car lots on track Toronto, and baled straw at \$5.25. On Toronto farmers' market timothy brings \$12.00 to \$15.50; clover, \$6.00 to \$9.00, and sheaf straw, \$11.00 per ton.

Eggs and Poultry.

The egg market continues strong with a good local demand and export enquiry at Montreal where quotations for choice stock are from 17c to 17½¢ in case lots. Strickly fresh gathered are scarcer here and the market is firm at 17c to 18c in case lots. On Toronto farmers' market new laid bring 20c to 22c and held stock 15c to 17c a dozen.

There are no new features in the dressed poultry trade. Offerings are light and trade is quiet. Thanksgiving turkeys will likely be very hard to get. There is an excellent demand for choice young fowl. In a wholesale way dressed chickens sell here at 40c to 80c and live chickens and ducks at 45c to 60c, and old hens at 40c to 45c a pair, geese at 7c to 8c, young turkeys 11c to 12c and old turkeys at 9c a lb. On Toronto farmers' market dressed chickens bring 60c to \$1, live 50c to 70c, and ducks 60c to 90c a pair and turkeys 12c to 14c and geese 7c to 8c a lb.

Until further notice the Toronto Poultry and Produce Co., 470 Yonge street, Toronto, will for poultry and eggs pay the following l.o.b. at shipping point:

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CHICKENS, DUCKS and TURKEYS

wanted for local and foreign market. We pay highest price, supply crates and remit promptly by P.O.O. Correspondence solicited

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Chickens (this year's) per lb. 7c, chickens (last year's) per lb. 5½c, turkeys (this year's) per lb. 8c, ducks per lb. 7c, geese 5c per lb., eggs per doz. 15c l.o.b. Empty crates, egg cases and butter boxes are supplied free of charge, the outgoing charges being paid. The net express charges are paid on butter and eggs.

Fruit

At Montreal car lots of apples have sold at 50c to \$1.45 per bbl. At Toronto fruit market apples are quoted at \$1.00 to \$1.50. Peaches at 20c to 30c for common, and 40c to 50c for choice, and pears at 20c to 35c a basket. On Toronto farmers' market apples bring \$1.00 to \$1.25 a bbl.

Cheese

The cheese market has taken another strong upward turn and prices are now 1c to 1½c higher than a month ago. The English market is higher and importers there seem to be getting more anxious about their supplies and consequently have been increasing their orders on this side. At the local markets during the week there has been much active buying. Prices have ranged from 10 13-16c to 11 1-16c from 10½c to 11c being the ruling figures. At Woodstock on Wednesday and at Brockville on Thursday cheese sold as high as 11 1-16 with some salesmen asking 11½c to 12c. Montreal quotations are 11½c to 11¾c for finest westerns and 10½c to 11c for finest easterns. There are some doubts as to the genuineness of the advance, some considering it due to speculation. But time will tell.

Butter

While the cheese market has been most active there has been a lull in the butter trade and less activity prevails. On this point the Trade Bulletin says:

"Although the market at the moment has assumed a quiet and easier tone, there has been considerable buying in the country since our last report at ¼c to ½c less money. The market, however, is in that condition, that to realize upon a line of choice Eastern Townships creamery 20½c would have to be accepted; but to fill an order for same on spot 20½c would have to be paid. The export demand has fallen off, owing to the advance having brought out goods held in cold storage on the other side at profitable prices; but as soon as they are worked off, a resumption of orders from the other side is expected. Finest Western creamery has sold at 19½c to 20c and as low as 18½c was accepted for a lot of off-flavored cream gathered Western. There has been more enquiry for Western dairy and several good sized lots of selected have been placed at 16c to 16½c. Stocks here are large being estimated to-day at 160,000 pkgs against less than half that quantity a year ago. But as the Danish, Russian and Irish supplies are falling off, and very little is expected

from Australia before December, it will not require much of an export demand to reduce the volume of stocks held here. In the meantime, however, a number of factorymen are meeting the situation by selling their product at regularly stated periods at current rates, all the way from 19½c to 20½c as to quality."

There is a good demand for choice quality here with creamery quoted at 19½c to 20½c for prints and 18c to 19c for solids and 15c for dairy tubs and 15c to 16c for pound rolls. On Toronto farmers' market lb. rolls bring 18c to 20c and crocks 15c to 17c a lb.

Cattle

There is a stronger feeling at most American cattle markets with prospects of a little improvement in prices. Cables quote live cattle slow at 12c to 13½c a lb. Receipts at Toronto cattle market on Friday comprised 880 cattle, 1,700 hogs, 761 sheep and lambs and 25 calves. The quality of the fat cattle was not as good as it should be at this season of the year. There were too many unfinished common rough half-fat cattle offered. Trade was not as good as on Thursday. Prices for exporters declined from 15c to 25c a cwt; the bulk sold at \$4.65 to \$5.00 per cwt. there were a few loads that brought from \$5.00 to \$5.30. Pickled lots of butchers' cattle were not plentiful and prices for these were steady. But the common to medium class sold at from 10c to 15c lower. The best grades of heavy feeders were firm with the commoner quality easier and lower.

Export Cattle.—Choice loads of heavy snippers are worth from \$5.00 to \$5.30 per cwt., medium exporters \$4.65 to \$5.00. Heavy export bulls sold at \$4.00 to \$4.25 and light ones at \$3.75 to \$4.00 per cwt., choice export cows sold at \$3.75 to \$4.00 per cwt.

Butchers' Cattle.—Choice picked lots of these, equal in quality to the best exporters, weighing 1,075 to 1,150 lbs. each sold at \$1.75 to \$5.00 per cwt. Choice picked lots of butchers' heifers and steers, 950 to 1,055 lbs. each, sold at \$4.25 to \$4.50, good cattle at \$3.85 to \$4.25 medium at \$3.25 to \$3.60 and inferior to common at \$2.40 to \$3.00 per cwt. Loads of butchers' and exporters' mixed sold at \$4.20 to \$4.40 per cwt.

Feeders.—Steers, 1,100 to 1,100 lbs. each, are worth \$4.25 to \$4.50 per cwt., and light feeders, 800 to 900 lbs. each, \$3.75 to \$4.00 per cwt.

Stockers.—Well bred young steers weighing 500 to 700 lbs. each, are worth \$3.25 to \$3.50 and off colors and those of inferior quality at \$2.50 to \$2.75 per cwt.

Calves.—At Toronto market good to choice calves bring \$3.50 to \$5.00 per cwt. and \$3.00 to \$12.00 each.

Milk Cows.—These sold at \$30 to \$50 each.

Sheep and Lambs.

Prices for sheep ruled steady at \$3.25 to \$3.40 per cwt. for ewes

and \$2.50 to \$2.75 for bucks. Lambs were easier at \$3.50 to \$3.75 per cwt. The Buffalo market for Canada lambs has ruled higher during the week. Some carloads sold during the week at \$5.65 to \$5.70 per cwt., and trade is reported strong on the basis of \$5.60 to \$5.65 per cwt.

Hogs

The hog market has kept gradually getting lower. Evidently pack-

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WANTED Reliable Men in every locality throughout Canada to introduce our goods, tacking up show cards on trees, fences, along roads and all conspicuous places, also distributing small advertising matter. Commission or salary \$50.00 per month and expenses, not to exceed \$2.50 per day. Steady employment to good, honest reliable men. No experience needed. Write for full particulars. THE EMPIRE MEDICINE CO., London, Ont.

We have not advanced the price of our tobaccos. Amber smoking tobacco. Bobs. Currency and Fair Play chewing tobaccos are the same size and price to the consumer as formerly. We have also extended the time for the redemption of Snowshoe tags to January 1st, 1904. THE EMPIRE TOBACCO CO., Limited.

ers are preparing for the usual holiday slump in bacon prices in the old land a month or six weeks hence. If farmers could lessen their supplies at this season and increase them when there is a better market, things would be more satisfactory in this trade. The American market has also taken a drop. Late Buffalo advices advise owners to buy in the country at \$6.00 to \$6.50 per cwt.

At Toronto market on Friday select bacon hogs sold at \$6.37½ and lights and fats at \$6.12½ per cwt. with an easier feeling.

For the week ending Oct. 18th, The Wm. Davies Co., Toronto, will pay \$6.25 for select bacon hogs, \$6.00 for lights and \$6.25 for over-weights.

The Montreal market is lower. Packers there are paying \$6.50 per cwt. for bacon hogs.

The Trade Bulletin's London cable of Oct. 9th, re Canadian bacon, reads thus:

"The market has suddenly turned weak and is 2s lower. Canadian bacon quoted at 64s to 68s per cwt."

Horses.

There is nothing new to report in the horse market this week. Quite a few have been selling here, mostly horses that have been in use in the city during the summer. The big sale of Percheron and Shire grades at Grand's this week is attracting some attention.

A Record Attendance

The attendance at the Ontario Agricultural College at the opening of the fall session the first of the month was far ahead of any previous opening. It was as follows: First year, 93; second year, 73; third year, 26; fourth year, 17; total 209. By the erection of new buildings the dormitories in the main buildings were enlarged to accommodate 49 additional students. Even with this increase 39 students are at present compelled to room outside of the college. The above figures refer only to the regular classes. The special courses begin later.

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Green—"And does she lose her temper?"

Brown—"No, indeed! She keeps it and uses it over and over."

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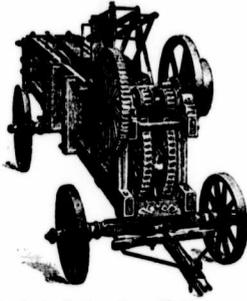
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In the back shooting down the limbs,
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