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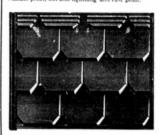
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The Farming World

For Farmers and Stockmen

Vot XVIII

DECEMBER 25th, 1900.

No. 17

A Happy New Year

The Closing Century—Our Hope in the New



HAPPY new century might be a more appropriate greeting at this juncture, when we are just on the threshold of another hundred years of the world's history. The world's history dates a

long time back; but not so with that of Canada. Three or four centuries are sufficient to take one back to the very beginning of the little settlement of early pioneers who first laid the foundations of this great Dominion. Even one hundred years ago Canada, as then known, formed a very small portion of the great territory stretching from the Atlantic to the Pacific, and from the great lakes to the regions of perpetual snow which it now occupies.

Truly marvellous changes have taken place even in connection with our own beloved Dominion, Fair Canada, the Land of the Maple, since 1800. What had we in the way of free institutions, government by the people, and freedom in the management of our own internal affairs? Practically nothing. We were governed directly from Old London by individuals who knew nothing of our land, of its people, and of their needs, and who farmed this colony, so to speak, in the interest of their own pockets and those of their satellites. In fact the century just closing had nearly run half its course before our rights in respect to making and administering our own laws were obtained. A century ago the Dominion of Canada was not known as such. What is now the glorious confederation of which we are so justly proud consisted of a few thinly-populated districts down by the sea, and two inland provinces separated from each other by diversity of race, religion and laws. The century has brought solidity, oneness of purpose, similar laws and similar institutions out of all this chaos, and given us the great Dominion of Canada; a nation within a nation that is without a peer to-day in the extent of her undeveloped mineral and agricultural wealth and her timber resources. Truly Canada enters upon the new century under the most favorable auspices, and those of us who are privileged to look over the period between now and twenty five years hence will see marvellous development along many lines.

But to return to the retrospective again. What great progress has been wrought in Canadian agriculture during the closing century! One hundred

years ago there was, practically speaking, no agriculture in Canada to amount to anything. In fact, there were grave doubts in the minds of many eminent men at that time as to whether agriculture as we understand it to-day could be carried on at all or not. The fisheries and lumbering were then the mainstays of the population. But how marked the change! Today agriculture is recognized as the great industry of the country, and the one from which our people derive the greatest amount of wealth. Canada is today essentially an agricultural country, and our people realize as never before that from this source must come the wealth, the energy, and the brains that are to bring about the development which every loyal citizen is predicting for this land in the early years of the new century.

We might enlarge on many phases of this question with interest and profit to all, but space forbids. A reference to some of the essential features in our agricultural progress during the century may be worth while. Canadian agriculture one hundred years ago was very primitive in its character. It was the time of the sickle and the flail. These conditions existed till nearly half the century had gone by to be followed by the cradle, later the reaper, and in these modern times the self-binder, the automobile mower, etc. In fact real progress in our agriculture and methods of work may be said to be confined to the last half of the century, and most of it to the last twenty-five years. Our agriculture has developed from what may be termed the mere tilling of the soil and harvesting the grain into the varied and special features we have to day, such as dairying, which brings into this country annually over twenty millions of dollars, and live stock as seen in the magnificent display at the Midwinter Fair a week or two ago. Other special features are now coming to the front, such as poultry, the bacon trade, fruit culture, so that the Canadian farmer enters upon the new century with more strings to his bow, so to speak, than he has ever had in the history of this country.

And then what wonderful development the century has wrought in the way of agricultural education, agricultural legislation and the social side of farm life. Development in these regards is just opening up to us, and twenty-five years hence we will wonder how we ever managed to get along in 1900 when knowing so little of the fundamental and underlying principles of soil cultivation, the growth of plants and the feeding and rearing of farm animals. Just as we marvel to day how our forefathers managed in the early days of the closing century, so our children and grand-

children will wonder as they look back upon these, the palmiest and most enlightened days of Canadian agriculture.

But a glance over it all cannot but make one rejoice that he is living in this age of Canada's history; an age of hope and bright prospects for the future. Have we not, therefore, great reason for mutual congratulations and best wishes? The Farming World thinks so and takes this opportunity of extending to its old and numerous friends a very Happy New Year. May each one live long enough to enjoy a large share of the good things which we are confident the new century will bring us.

The Tuberculin Test and Cattle Importation

One of the strong arguments advanced at the cattle breeders' meeting against the imposition of the tuber-culin test upon cattle imported into this country from Great Britain, was, that while it was allowable for a breeder whose animals at home were found to be diseased, to isolate them and put them under a special course of treatment with a view to eradicating the disease, the same breeder could not so treat an animal imported by him if found diseased when landed in quarantine. This does seem like a hardship. All imported animals cost big money and a breeder is not likely to bring in diseased animals if he knows it. But if after they are landed one or two are found to be diseased, the only course open is to slaughter them. Such a slaughter means a big loss to the breeder, and it does seem unreasonable that he should not be allowed to take the animal home and put it through the same course of treatment as he would be at liberty to do if this same animal were found to be diseased after it had arrived at the breeder's home.

It is this phase of the question that is a ost irritating to importers. To be compelled to slaughter a valuable imported animal because it re-acts to the test at the port of entry is a serious loss and one that few of our breeders are in a position financially to stand. Then if the test itself were infallible in every case this course of action on the part of the quarantine officials would not seem so harsh. But when our breeders know and everyone who has studied the question in an unbiased way feels that the test is not an absolutely correct method of diagnosing tuberculosis it seems like a great hardsbip indeed to enforce the present regulations in regard to the importation of pure-bred stock into Canada. Even Mr. Fisher admitted that there was no law of relation between the amount of re-action to the test and the extent of the disease. If there is so much general doubt as to the efficiency of the test, the demand of the breeders that its application in connection with the importation of cattle be discontinued seems to be a very reasonable request, and one that would not endanger the public health in any way to grant.

There has never been a question upon which breeders in all countries are so much united as this one of the application of the tuberculin test. During the International Show, live stock breeders met at Chicago and passed resolutions condemnatory of the test and asking the authorities at Washington to discontinue the use of the test in connection with the importation of pure bred stock into the United States. It is a well-known fact that the breeders in Great Britian are strongly opposed to its use, some of them refusing to allow their animals to be subjected to the test even if by so doing high prices for their stock could be obained. This unanimity of feeling in regard to the test makes it imperative that breeders in all countries

should co-operate in the matter and come to some definite understanding as to their attitude towards the test. Just now the breeders of the United States and Canada are of the same mind in regard to it in that they are both making the same request of their respective governments. If the breeders in the Old Land would co-operate with breeders on this side and positively refuse to allow their animals to be tested it would bring matters to a climax and compel the governments to admit cattle free of the test or put a stop to all importations of pure-bred cattle, which would prove such a calamity to our cattle industry, a condition of affairs that no government would feel like taking the responsibility for.

There can be no question that the proper methods to adopt in relation to this whole matter, both from the standpoint of the breeder and the public at large are to be found in a rational, intelligent, and energetic educational movement. There is not a breeder in the country but realizes that tuberculosis is a serious disease. At the same time he realizes that it is only a waste of energy to attempt to stamp out the disease by the indiscriminate slaughter of every animal that reacts to the tuberculin test. There is nothing to be gained by such action. Educate our people as to the seriousness of the disease and the best means to adopt to keep it under control and eradicate it from their herds. A great deal can be done by isolating diseased animals and giving them proper treatment in the way of pure air, clean surroundings, etc. The appli-cation of the test, and the restrictions placed upon the importation of pure-bred cattle into this country can have little if any effect in increasing or decreasing tuberculosis in Canadian herds. Its discontinuance therefore would not cause the least injury to a single individual while the cattle breeding industry would receive a stimulus from which the whole country would benefit.

Tree Planting on the Roadside

Parties interested in the question of road improvement should read the letter of Mr. T. H. Race, in our correspondence column this week on "Tree Planting on the Roadside." Several months ago a discussion took place in these columns on this subject in which Mr. Race took part. It was pointed out at that time that tree planting on the roadside and good roads were somewhat antagonistic to each other. That is, the shade from trees on the roadside tended to keep the road damp and was inimical to the making and maintaining of good roads. While this may be the case where trees are planted very closely together on both sides of the roadway, still we think tree planting carefully and judiciously planned would hinder, very little if at all, the making and maintaining of good roads.

But are not the advantages to be derived from systematic and judicious tree planting along the road-side more than sufficient to make up for any injury trees might be to the roadways in the wet season? We think they are. What adds more to the appearance or the value of a farm than fine avenues of trees along the roadside? Judicious tree planting carried on in a systematic way would add greatly to the beauty of the country and very much increase the pleasure of living in the country and of driving in rural sections. Then its influence on climatic conditions would be very marked. It would compensate to some extent the injurious effect upon our climate in the older districts, which the cutting down of forests and the clearing of the land have had.

The subject is important and should be taken up energetically by county and township councils. The

suggestion by Mr. Race that some of the moneys expended upon local fairs could very well be devoted to tree planting seems like a good one. There is no doubt that many of the local fairs throughout the country are not rendering half as much benefit as they would if their grants were expended in improving and beautifying the public highways. Then the suggestion that the clerk of foresty should give some attention to this subject seems also like a good one. But we will have to defer further comment for a later issue. In the meantime we would be glad to hear from parties interested in the subject of tree planting.

Ontario Fruit Growers

The thirty-first annual meeting of the Ontario Fruit Growers' Association was held at Brantford on Wednesday, Thursday and Friday, of last week. There was a good attendance of representative fruitgrowers. The first day's proceedings were taken up chiefly with a discussion of the transportation rates problem and the proposed Dominion Act to provide for grading and inspecting apples and pears, etc.

FREIGHT RATES.

On motion of Mr. D. J. McKinnon, the Convention unanimously adopted the following resolution:

That, in the opinion of this association, the time has arrived when a railway commission appointed by the Dominion Government, should be given full power to regulate freight and passenger rates upon

an equitable basis."

In the discussion on this question some valuable information was given by Mr. A. McNeill showing how the Ontario fruit grower was being discriminated against to the advantage of his American competitor: A basket of grapes, that sold here for II cents, had to be sold in Brandon for 50 cents, because of the freight rates. It cost \$100 to send a carload of grapes to Winnipeg in cars that otherwise would go empty, and it cost \$50 to bring a carload of other produce of no greater value from Winnipeg down Instancing the discrimination against them as Canadians, he said an Eastern Ontario canner could buy peaches in Grand Rapids, Mich., and get so much cheaper freight rates than from Essex County, as nearly to make up the duty. Freight on apples from Ontario to Liverpool was from 85 cents to \$1.25 and from the United States as far west as Mississippi from 56 cents to 80 cents. He knew also, he said, that this discrimination was retarding the live stock industry in the same way. Corn could be shipped from Detroit to Quebec for 11 cents, and from Essex County the rate was 18 cents. For the same reason, American corn could be laid down at less cost throughout western Ontario than could Essex County corn. There were, he claimed, but two ways of impressing the railway companies, one was through their self-interest and the other by Government supervision. There was, he urged, no competition between the railroads here. That was all arranged by the Freight Traffic Association, a scheme it had taken the railways twenty years to work out

FRUIT GROWING IN EASTERN ONTARIO.

Prof. McCoun, of the Experimental Farm, Ottawa, took up this subject. For apple growing in eastern Ontario and Quebec the essential requirements were warm, well drained soil, clover crops, preferably red clover, and hardy trees. There had not been very marked success in the cultivation of pears, plums, cherries and grapes. Dr. Saunders discussed the Canadian fruit exhibit at the Paris Exposition. It proved to be a source of wonder to all foreigners, who were not able to understand how such a cold country

could grow such splendid fruit. Some large sales were made by Mr. Allen, who was in charge, which showed that a large trade could be worked up with foreign countries not now dealt with. One of Mr. Allen's large contracts was for a shipment to Alexandria, Egypt. There was a market for ten times the fruit Canada could export at present. But every precaution must be taken to land the fruit in good con-

GRADING AND INSPECTING FRUIT.

An animated discussion took place upon the Dominion bill re grading and inspecting fruit in which it became evident that it was the shippers who were its strongest opponents. Mr. J. M. Shuttleworth, one of their champions, looked upon the bill as compelling



T. D. McCallum, Danville, Que. Late Manager Isaleigh Grange Stock Farm. Now in business for himself at "Nether Lea Farm," Danville, Que. See announcement in our Stock Notes column.

the inspection of all fruit exported. Hon. Mr. Dryden thought it meant only occasional inspection, holding that knowledge that inspection and fine were liable would largely prevent fraud. There was a general impression that all classes of fruit should come under the Act. A committee of growers was appointed to confer with the shippers and report later.

President Orr, in his annual address, advocated the establishment of a central experimental fruit station in one of the fruit-growing districts of the province.

The present stations, while doing good work, were not sufficient. He suggested a further legislative grant in aid of lectures to horticultural associations. These associations numbered 48 and with the central organization formed the largest horticultural association in the world.

SHIPPING TENDER FRUITS.

The report of Secretary Wolverton showed that the season's experiments in shipping tender fruit to England had been eminently successful. The peaches and pears were the wonder of the English fruit market, and the price of the grapes, which were at first almost unsalable, had gradually risen. The reports received stated that for all classes of fruit shipped there was a prospect of a splendid market, if frequent and regular shipment could be insured.

COLD STORAGE TRANSPORTATION.

At the evening session on Wednesday Hon. John Dryden delivered an interesting and practical address, in which he dealt chiefly with the San Jose scale, and his efforts during the past season to perfect a system of continuous cold-storage transportation of tender fruits to England. Insect pests had to be fought by the farmers unitedly. Some people placed too great reliance upon law. It was necessary, but it could only be enforced when backed up by public opinion. No treatment yet adopted had absolutely killed the scale, and he knew no better way than the present method of spraying. The only thing discovered yet to ensure delivery of tender fruits in England was cold-storage. There was variance between himself and the Dominion Government on two points. He wanted lower temperature and circulation. wanted it remembered that if fruit was decayed no cold storage would put it in condition again, for which reason it was absolutely essential that it should be put in cold storage as soon as picked, and kept in cold storage until and after it reached Liverpool. He had had much labor and anxiety all summer over the question. The Dominion authorities had said Canadian tender fruits, pears, peaches, and grapes could not be shipped to England successfully, so he had started to work. If fruit could be held in cold storage on land he was convinced it could at sea. The cold storage should be provided, and they wanted boats leaving every week. He had met with opposi-tion, but to insure what he wanted he had built in the ship "Trader" a cold storage department. The results were shown in Mr. Woolverton's report. Mr. Dryden emphasized very strongly the need for continuous cold storage, and said if the fruit dealers wanted it they would have to have it. What, he asked, would the trade be worth to Ontario? Would it not be worth spending \$3,000 a year for several years to obtain? It would, a hundred times over, he believed. The Ontario Government would aid in be believed. The Ordano Government would aid in building cold storage houses here, and had provided a proper car—the car which had carried fruit suc-cessfully in South Africa. He had asked the lec-turers to Farmers' Institutes to explain the cold-storage problem. He believed it one of the greatest questions before the Province to day. It might be termed class legislation, but it benefited every class, and for his efforts on behalf of farmers Mr. Dryden said he sometimes had more appreciation from financiers and bankers than from farmers themselves. He urged the association to continue its work energetically in aid of one of the greatest of the country's industries.

(To be continued.)

Studies in Nature

Our Studies in Nature Department will appear in next issue. It will contain matter of special interest to farmers, the leading feature of which will be a treatise on the Hessian Fly which has proven so destructive in many sections of the country the past autumn. The information that will be given by Mr. Nash on this subject will be practical and to the point. No farmer should miss next issue.

Maritime Stock Breeders

Report of Annual Meeting at Charlottetown, P.E.I., by W. W. H.

The fourth annual weeting of the Maritime Stock Breeders' Association convened at Charlottetown on the 28th November ult.

It represented a union of interested stockmen of the three maritime provinces and also had a distinguished delegation from Ontario headed by the Hon. John Dryden, the Minister of Agriculture for that province.

In spite of a terrific storm which swept the country there was a representative gathering of Prince Edward Island farmers, though not nearly the numbers which would have come had conditions been favorable.

THE PRESIDENT'S ADDRESS.

President E. B. Elderkin, of Amherst, in calling the meeting to order, explained why the association had been organized, viz., to encourage in every possible way the keeping of more stock and better stock in our provinces. The Governments of the Maritime Provinces had recognized the value of the work, and were assisting, and there was ahead of the association a great field for missionary effort. He warmly welcomed Hon. Mr. Dryden and F. W. Hodson, the Dominion Live Stock Commissioner, down here to the front door of Canada, where we hoped to secure great assistance from their counsel. Association in the past year had been helped to some good work for education in live stock matters. Our live stock was backward in the Maritime Provinces, due largely, he thought, to the fact that most of our people were not depending upon their farms for a living. We had so many resources in these provinces that our farmers were only now beginning to give their attention to agriculture. Our farming had been exhaustive. Hay and grain had been the principal crops in many sections and these were deported off the farm.

As a consequence our annual crop production was decreasing and we were forced to change our methods. Live stock husbandry, in his opinion, offered the best way of building up our farms and bringing them back to raise old-time crops. We had here an excellent live stock country and there was no reason why we should not, in these provinces, be leaders in the breeding of live stock.

This association, with the help of many kind friends, had been fairly successful in calling the attention of the public generally and our maritime public men to the great importance of encouraging the breeding of more and better farm animals.

Reference had been made in the minutes just read to securing cheap transportation to our exhibitions. These exhibitions were a great educational force in agriculture and should be well supported and largely patronized.

It was necessary to make these exhibitions useful, that transportation should be cheap and easy. With this fact in mind the association had set to work to secure the best terms possible. A delegation had been sent to Ottawa in company with others from the Exhibition Associations to secure free transportation for exhibits over the Intercolonial Railway.

Sir Louis Davies had assisted the delegation very much and the Minister of Railways had seen the justice of their claim and granted the concession. This he felt would do very much to help our live stock interests.

We in the three Maritime Provinces should draw closer together and help each other. Our shows should be thoroughly inter-provincial. As an association we

had been well treated by the Maritime Governments who had given us everything we had asked for. had had grants from Nova Scotia and New Brunswick to assist in carrying on educational work and we now had come to Prince Edward Island to give the Government a specimen of our work and to ask their assistance for the benefit of our members and all the farmers in the Island Province.

Efforts had been made since the last annual meeting to extend the work of the association. Meetings had been held in Nova Scotia in February when Mr. Grisdale had made a tour with him through western Nova Scotia. Then some meetings had been held in July to introduce Mr. Hodson, made possible by invitation of the New Brunswick and Nova Scotia Governments, and he had also come to Prince Edward Island by invitation of Hon. Mr. Farquharson and his Government.

He felt Mr. Hodson was now in possession of information in reference to our provinces, and that with his energy and organizing ability we could look for

help that would be of great assistance to us.

As part of Canada the Maritime Provinces had a bright future. We had a position of our own at the front door of the Dominion. We had markets to the eastward, markets in the West Indies and South America, which were closer to us than they were to o.her priducing countries.

He believed if we all set earnestly to work to develop the agricultural resources of Canada that we could achieve wonders. Our young people were now leaving us in large numbers seeking work. They would not leave us if we gave them the proper conditions. We could, and we should, give them all a chance to make a good living here at home. This, he believed, was our privilege and our duty as citizens, and, especially, as members of the Maritime Stock Breeders' Association.

THE REGISTRATION OF LIVE STOCK.

C. A. Archibald, Truro, N.S., was then introduced to give an address upon "Registration." He in part said: "The Ayrshire and Shorthorn breeders of Prince Edward Island were more fortunate than their neighbors in Nova Scotia and New Brunswick in that they had such painstaking work done by Mr. C. C. Gardiner in starting their herd books that practically all their registered stock was eligible to any herd The books on the mainland, on the other hand, had admitted all sorts of pedigrees, and now some breeders, who thought they owned pure-breds, found themselves with cattle that were not eligible to enter Canadian or United States records, and were, consequently, of much less value. He described the starting of these provincial herd books; they had, perhaps, served a purpose, but had now outlived their usefulness, and all cattle in them that are eligible to the Dominion Records should undoubtedly be trans-

"Some of the advantages of this course to breeders would be: 1st. Shorthorn breeders, by recording in the Dominion Herd Book, would have the passport to any other herd book in existence; 2nd. All the railways recognize the Dominion Shorthorn and Ayrshire herd books and carry the cattle registered therein at the reduced pure bred rates, while the provincial herd books are not recognized. These and other reasons that might be mentioned were, he thought, sufficient to induce business men that one herd book for all breeds for all Canada from ocean to ocean would be in the interests of all breeders."

This paper was discussed at some length by Messrs. C. C. Gardiner, Hon. Jno. Dryden, Jos. Wise, F. W. Hodson, J. A. Macdonald, and others, after which the meeting adjourned for dinner.

THE DEMANDS OF OUR PORK MARKETS

At the afternoon session Mr. Hodson gave a most interesting address, illustrated by large charts and photographs on the requirements of the pork markets, Canadian and foreign. This evoked a warm discussion, in which Mr. James Courtenay, a large English produce dealer, gave some useful information relative to the demands of that great market. The latter is now connected with the Brantford, Ontario, Farmers' Co-operative Packing Company, and he warmly recommended that system of conducting the packing He would be open to make connections for such institutions in the Maritime Provinces, and to invest some money therein.

Following is a synopsis of the able and comprehensive address given by Mr. Hodson. We commend it to the favorable consideration of all pork raisers:

For more than a decade the production of the right sort of pig has received a good deal of attention in Ontario, and in the East and West it is being considered.

The export bacon trade and the home consumption has steadily increased, until now the curing of prime bacon has become one of our great natural enterprises.

The wise business man who has an article to sell will carefully consult the consumers' requirements, and try to meet them. In pork products we have the following markets:

The home market for fresh pork.
 The home market for hams and bacon.

3. The lumber woods and mines.

The export trade. For the first the demand is very insignificant, being confined chiefly to spare rib, sausage and tenderloin, known as offal, or to light, lean meat, in the shape of chops and loins. If heavier pork is used for this purpose, much of the fat is pared off.

In Canada the consumption of hams and bacon is rapidly increasing, but the demand is for lean, nicely marbled flesh, just the goods required by the best English trade.

The lumber and mining camps, as well as Montreal and British Columbia, will buy and use fatter meat than any of our other markets, but even here there is a growing demand for lighter and leaner goods-both as long clears and barrelled pork.

The Canadian export trade is almost entirely in lean, mild cured sides known as "Wiltshires." To produce this brand the packers require a long, deep, smooth pig, possessing a light head and shoulder; an even back, not too broad, but well covered with flesh; not fat, at the same time he must not be a razor back. The sides from ham to back of shoulder must be long and deep; the underline straight and free from flabbiness; the ham smooth and tapering, with the greatest amount of flesh on the outside. The pig must stand on strong (not coarse) well-set legs and feet, and he must be healthy, vigorous, and a good feeder. This is the style of pig required by both our home and foreign markets. Though the both our nome and toreign markets. Inough the greatest care may be taken by both our feeders and breeders to produce just what the markets require, there will always be enough of the heavy fat type to more than fill all demands. The aged sows and stags must be disposed of. To do this to the best advantage they should be made as fat as possible; their chief walve is for lard, and unless they are made very chief value is for lard, and unless they are made very fat they are little value to the packers.

The first plate shown by Mr. Hodson was a diagram presenting the various cuts of a side of bacon of the proper type, and the average prices realized during 1897. By this diagram it was shown that the most valuable meat was between the shoulder and the ham. There were next shown pictures of an unfinished pig wanted by nobody, but bound to be consumed some-

where, to the injury of the Canadian market at home and abroad. In England it is known as skin and misery. Another objectionable type was the forced pig, whose sides are too short and shoulders too heavy. He is pot-bellied, and will dress a large percentage of offal. Another type is the "too fat" pig, shoulders and jowl too heavy, back a little slack, neck too heavy, back too broad. When dressed there is altogether too much fat in proportion to the lean to be salable. Another style is too heavy on shoulder and jowl, short on the side, flabby on the rear flank, light on the ham, and heavy on the back. As well as being an off type, he is too fat; he belongs to a type that makes fat instead of flesh, and is now over fat. If a farmer has such a pig it will pay him to kill him when quite small, and use him as fresh pork. He never should be made into export bacon.

Other plates of different types were shown, four-

teen illustrations in all.

It has been proved by carefully conducted experiments that it costs no more to produce plgs of the right than of the wrong type; in fact some of the lean kind are more economically produced than the thick fats. Being full of lean meat, they weigh better for their appearance than do the others. are active and robust, and will consume and turn to good account coarse food not acceptable to the others.

The Canadian market demands a long, clean singer; therefore it is to the interest of Canadian farmers to supply the best pigs for the purpose. First-class goods mean a growing market at home and abroad; anything else means a stationary or receding market.

At the present time 25 per cent. of the pigs market-ed in Canada are "softs," 25 per cent. fats, 10 per cent. unsizable. Canadian farmers lose at least 20 cents per hundred on all pigs sold because of this condition-packers fixing their buying price according to their average receipts from sales. It is, therefore, to the interest of every citizen that the right sort of pigs be bred on every Canadian farm, and that they be properly fed. Pigs of the wrong type cannot be made good by any kind of feeding, yet bad breed. ing will spoil a good pig.

SWINE FEEDING.

J. H. Grisdale, agriculturist to the Experimental Farms, next spoke upon the importance of good methods of feeding in making a marketable hog.

While food would do much to change the characteristics of the animal we must first select the animal with a tendency towards the type demanded. We must

get a good broad sow of a long type.

The pigs in the Maritime Provinces were to-day too chunky for English bacon, and this must be corrected by breeding for length and depth and thin feeding in a consistent and rational manner. We must feed the breeding sow with plenty of roots and give her exercise in the winter time and keep her active and healthy.

She should have a pen with a guardrail round it eight inches out from the wall and ten inches from the floor. Cut straw is best for bedding. After the farrowing is over and the fever gone we must feed for milk production. Feed the sow as you would a cow that you expected to make 21/2 lbs. of butter per day.

As the young pigs grow they should have some milk placed for them in an adjoining pen, where the mother cannot go. This should be cleaned out regularly and fresh milk given with each meal. They will soon learn to drink and at the age of six or seven weeks stop suckling the mother of their own will. From the time the pig is three months old till sold is the time when the quality of the meat is made.

Grain can be best fed to pigs raw, ground and dry. All kinds of grain have been used. Too much corn

gives inferior meat. Skim-milk, roots and pasture all help the quality of the meat. Skim-milk in small quantities is very valuable. Skim-milk acts not only as a feed but as a stimulant. It had been found worth as high as 502. when fed in small quantities. While in large quantities it is only worth down to 10c. per 100 lbs. It is relatively more valuable for young pigs than for older. Six pounds of whey are as good as three pounds skim-milk and, in his opinion, better. It was about the same value sour as sweet. About three to four pounds grain per 100 lbs. of live weight is a sufficient grain ration.

Ques.—Do you feed the grain dry or wet?

Ans.—We prefer to feed our grain ration finely ground and dry.

Ques.—Is it a good plan to feed young plgs dry grain?

Ans.-No, I had to try some at six weeks old

with dry grain and they nearly died.

Pigs must be well started; after they reach three months they will then make better use of their food than if they got a poor start. He believed in giving pigs a pretty large ration of digestible protein and had found that in proportion to the protein we gave them they made gains.

Hon. John Dryden-Is it not possible to feed too much grain? And is it not possible to make your

young pigs too fat for their good? Ans.—Yes! In both cases. We must feed green feed and roots along with the grain to give them growth and health and the quality of meat the market demands.

-What is the advantage in feeding grain Ques .dry?

1. It is less labor. If you feed grain cooked and hot the results are better in cold weather, but fed cold there is no advantage.

2. The pig's digestion begins in the mouth and dry grain makes him chew his grain better than when it is fed wet.

He believed thoroughly in pasturing pigs in sum-

1. It saved cleaning the pens, the manure got on the ground early and was well distributed.

2. It made better pigs, $i \in$, the quality of meat was better than pen-fed pigs and it was also much cheaper meat.

It will not do, however, to take a pig off pasture and kill him. He must be topped off with grain feed-

Portable pig pens built upon skids about 6x8 ft. in size are most useful in pasturing pigs. Shelter from rain and sun is a necessity and good results from pasturing could not be had unless a dry shelter was pro-These pens have board floors to insure a dry vided.

Clover was an excellent crop for summer pasturage and tares (vetches) and oats were also good.

Another excellent crop was rape which would yield as high as 281/2 tons to the acre. Dwarf Essex was the best variety of rape. It could be sown any time from April till August. It was a splendid late autumn feed for pigs and sheep but not good for milch cows on account of its turnip-like flavor.

In answer to a question as to how many pigs could be fed upon an acre of rape he said that, of course, depended upon the vigor of the crop. At the Experimental Form they had put six pigs on 1/6-acre of rape. For two months they did well and then the crop began fail. You must, he said, stock pretty heavily to keep the plant from getting too coarse at first. When pasturing on rape pigs will not root so do not have to be rung. Rape and clover are of almost the same feed-

ing value. Artichokes are a good pig feed. Plant them in rows 2 to 3 feet apart and let them get a start before the

pigs are turned in. They will eat them both root and branch.

Ques.--Can you get seed for artichokes easily? Ans.—There are some people growing artichokes for seed purposes and it will no doubt soon be more plentiful than at present.

Ques.—Is there any hog cholera in Canada? Ans.—None, I am thankful to say near Ottawa.

Ques.—Will corn cause it?
Aus.—No sir. It is a germ disease and has been studied by the United States' and other pathologists for some time. As yet no cure has been found for

Ques. -Would you cook roots for pig feeding

Ans.—Only potatoes. Young pigs seems to do somewhat better on cooked food but for older pigs experience seems to favor the uncooked food if anything.

Give the pigs sods in the winter. A pig needs a change in his ration. A steady diet day after day will sicken them. Feed mixed rations and change

frequently

Ques.—Do you feed your roots whole or pulped? Mr. Hodson then took a hand in the discussion and said he desired to emphasize the point that to feed pigs on pasture successfully small shelter houses with flours must be provided. In buying rape, he said, be sure you get Dwarf Essex Rape. The ordinary German rape is a most pernicious weed and should on no account be sown.

You can turn 30 young pigs on an acre of tares when they are six inches high and let them stay there till the vetches die down and then put them on to rape sowed about the middle of June. The Harry Vetch is the best variety of tares. In pasturing rape it is best to cut your field in two by a fence and alternate the stock. Another way to use rape is to sow 2 lbs. rape with oats and it will grow in the oat stubble and make great fall pasture for sheep. He sowed rape in his orchard broadcast but he preferred rape sown in drills from 2 to 21/2 feet apart.

Mr. Hodson said he liked to sow bis turnips on the flat and cultivate them crosswise with a Breeds weed-

THE ANNUAL DINNER.

At 8 p.m. that evening the association entertained its guests at a dinner at the Hotel Davies. About seventy covers were laid in mine host Doherty's best style. The menu was choice and varied and the service excellent.

The toast list drew forth addresses from Lieut.-Governor McIutyre, Hon. D. Farquharson, Hon. John Dryden, F. W. Hodson, F. L. Hassard, T. G. Raynor, Judge Warburton, C. A. Archibald, B. M. Fawcett, W. W. Hubbard, Editor Cotton and others.

Hon. Mr. Farquharson extended a warm welcome to the visiting stockmen. Hon. John Dryden with Mr. F. W. Hodson made the speeches of the evening. The former in his dignified and forceful eloquence dealt with the trend of events agricultural. Education, organization and co-operation were, he said, the passports to success. Mr. Hodson dealt with the resources of our great Dominion and some of the essentials to their development. He paid a tribute to the railways, which, in their management, had so helped in this work.

THURSDAY'S SESSION.

On Thursday morning the meeting opened at 10 The first business was the election of officers,

which resulted as follows:

President, E. B. Elderkin (re-elected); vice-presidents, for Nova Scotia, C. A. Archibald, Trure; for New Brunswick, Col. Campbell, Apohaqui; for Prince Edward Island, F. L. Hassard Charlottetown; direc-tors, for Nova Scotia, Fred. G Black, Amherst, F. L.

Fuller, Truro, and W. W. Black, Amherst; for New Brunswick, Bliss Fawcett, Sackville, M. H. Parlee, Sussex, and John F. Frost, Hampton; for Prince Edward Island, E. R. Brow, Charlottetown, J. W. Callbeck, Augustine Cove, Senator Ferguson, Marshfield; auditing committee, R. Robertson, Nappan, N.S., and J. R. Starr, Starr's Point, N.S.; representatives to the exhibition managements-From Prince Edward Island, John Richards, Bideford, and Walter Simpson, Bayview; from New Brunswick, Col. Campbell, Apohaqui, and J. Gilchrist, Central Norton; from Nova Scotfa, Frank Dickie, Canard, and Stanley Logan, Amherst.

At a subsequent meeting of the directors W. W. Hubbard was re-appointed secretary-treasurer.

T. G. Raynor, Rose Hall, Ont., was then introduced to speak upon "Feeds and Feeding," and gave an intensely practical and interesting address, which elicited a lively discussion.

A committee was appointed to prepare a letter of condolence to be sent to the widow of the late John I. Hobson, of Guelph, Ont., the noted Shorthorn breeder, who was so well and favorably known in the Maritime Provinces, and whose sudden death occurred a few days ago.

THE IMPORTANCE OF LIVE STOCK HUSBANDRY.

R. Robertson, Superintendent of the Maritime Experimental Farm, was next introduced. He thought a man to be a highly successful farmer to-day must be a live stock man. Live stock is emphatically necessary to the prosperity of this country. was no more important organization in this country than the Breeders' Association. It could do very much to help raise the quality of live stock to the highest possible pitch to enable its owners to make a profit out of the best.

The mere fact of having a country produce crops without taking steps to keep up its productive power is not a desirable condition, said Mr. Robertson. Pertility can be exhausted, and it must be kept up

by some variety of live stock.

Prince Edward Island is emphatically a stock country, and its farmers must be governed by their owr special conditions and tastes as to the variety of live stock they keep, whether for beef or dairy, sheep or swine or poultry, and they must keep the stock best adapted to their purposes and then care for it in the very best possible way

For himself, he preferred dairy farming and winter dairying as a main feature. We should he said, dairy all the year round and make the winter work

the special feature.

On the Experimental Farm he had been trying to see how a fair herd of thirty cows would pay in these

provinces.

He had tried an experiment as between cows calving in the fall and those calving in the spring and had found that the winter cows gave \$10.75 more profit than the spring cows and they consumed, at market rates, over fifty per cent. more of the farm products than the summer cows and they also made paying labor all winter on the farm. There was also a great difference in individual cows. Some of his cows had given a profit of \$6 and others had run in debt.

We must, in all cases, pick out the very best cows in the country by selection, by care and improvements. The same was true in the beef business. He had last year put in twenty steers costing \$45 aplece, altogether \$900. They sold for \$1,650 and eat \$500 worth of feed. The labor cost \$100. This left a balance of \$150, of which \$50 should be allowed for interest on the money invested. This gave us \$100 and a great

blg manure heap from \$500 worth of feed.
In a breed test for beef he found the Polled Angus a little ahead, four scrub steers showing no partic-

ular breed, and what there was of dairy breeding were also in this breed test. These badly-bred steers made the same gain in weight as the others, though he thought this was an exceptional case. selling price of these steers was one cent less per pound But the than the others. Thus the steers weighing 1,500 pounds each meant \$15 less per head, all the difference between a fair profit and a considerable loss.

There is only money in the beef business when the animal is built for beef and fed for economical meat

ESTABLISHING AND MAINTAINING A HERD.

Hon. John Dryden received an ovation on rising and disclaimed the praises bestowed upon him. He had simply tried to do his duty and had been following a

subject very near to his heart.

It is not a light thing to establish and maintain a herd successfully and he wanted the young men here to realize this. It required a lot of knowledge and skill that is very difficult to acquire. Perhaps the best way to learn was to begin to do it. We would make a lot of mistakes no matter how hard we tried.

The first essential to success, he said, is a clear conception of what we are seeking to accomplish. must look ahead and plan our work. There can be no success by haphazard work. You cannot build a house without a plan.

Our farmers must have before them, constantly, proper ideals. The lack of this purpose is hurting our live stock terribly. We had a mixture of all sorts and breeds due to no clear conception of what they were trying to do. He illustrated by referring to the various excuses which farmers had for changing

1st. Decide on the breed. This will depend upon his circumstances, his farm, his taste and his family, as well as the markets. Fancy has lots to do with it. I always fancied Shorthorns and disliked Holsteins, but that is not saying that one breed is better than

the other.

2nd. Then study the correct type of that breed. Spend a year or two in finding out what you want before you begin. In Shorthorns a type had come in at the instance of the Scotch breeders. The leader was the late Amos Cruickshank. He had an ideal of an animal suitable for the Scotch tenant farmers. This was a blocky type suitable for the butcher any time

after they were twelve months old.

Fashionable pedigrees were valuable as some people liked to pay for them. But we must have animals valuable as well for their intrinsic value. A pedigree is, however, very valuable. Buy your stock as much as possible from one good breeder; otherwise you may get mixed blood. There are pedigreed scrubs. You cannot expect to get a perfect animal, but we must be guided by our capital. I would rather buy two good animals for \$500 than ten medium ones. There is no money for a breeder in being sharp. will pay a good breeder who wants to stay in the business to be honest, to give his buyer always good value; it will lead to future business and good sales.

It is said that the bull is half the herd. I think sometimes he is far more than that. Appearance has much to do with the animal. He must be masculine, he should hold up his head as if he was not afraid to face the world. I want a bull to be bold, but with a kindly expression; one that will respond to kind treatment. The bull must have quality. The greatest quantity of the best quality is the right motto. Don't choose size at the expense of quality. Let him be vigorous and evidencing a good constitution and suited to correct any defects that your females may possess. Otherwise you may establish a defect in your herd. A man must be a judge of what he wants and know why he wants it. We want education along this line. A man must know that he knows what he wants and then stick to it. Such a man will undoubtedly make mistakes. It is only in this way that he can learn.

Now comes the maintenance of the herd. Such cattle will not shift at the straw stack for themselves. We must exercise care and judgment in feeding. 1st. We must keep them healthy, under natural conditions, as nearly as possible. Fresh air is the first essential. A car-load of cattle perished the other day by being tightly closed up in a box car. Fresh water of good quality is necessary. No barn yard puddle will do. Fresh food. No rotten hay, ensilage or roots. Have everything sound. The stables must be warm, light and well ventilated.

Sometimes people take a fad on a particular food and only feed along that line, as with ensilage and roots. This is a mistake; a variety in food is important. Exercise is another important point in keeping up the health of the herd. You cannot well maintain a herd by continual stabling. Give exercise in the open air as nearly as possible every day. I don't believe in dogs on a stock farm. I have never had a dog on my place since I was 20 years old. They are no good anyway. John Gould says he would rather have \$1.00 worth of bran than \$5.00 worth of dog.

Successful breeding requires the highest kind of skill and judgment. It is easier to find five prime ministers of England than one eminent breeder. we can all improve ourselves in this line. I believe it should be a matter of education. At the Agricultural College we have arrangements for giving this instruction as far as possible. We should instruct our young

people in judging.

At the Provincial Winter Fair we hope to give information on the intrinsic value of animals for the block and will give visitors at that show every facility for seeing how certain animals are judged and then how they are killed out. He hoped to see a goodly number of visitors from the Maritime Provinces to join with his people in the object lesson to be had at this show.

In eloquent terms he concluded his address by asking that all good Canadians, no matter in what province they lived, should work together to secure for themselves and their sons and daughters such practical education in agriculture as would fit them to compete with the best farmers in any country and here on their own fertile soil within the greatest and grandest empire of the world enable them to prosper and de-velop this Canada of ours until she should become

one of the first nations of the earth.

A discussion then ensued upon freight rates to and from Prince Edward Island. It was felt by many of the speakers that the people of Prince Edward Island had many grievances in this matter, and a committee was appointed, consisting of Hon. D. Farquharson, Hon. D. Ferguson, C. C. Gardiner, Hon. J. Wood, Sackville, and R. Robertson, Nappan, to arrange with the Steam Navigation Company and the Intercolonial Railway for better terms on the carriage of live stock and other farm products.

At the closing session Hon. John Dryden and F. W. Hodson de-livered stirring addresses, the former on "The necessity of organized effort from a Government standpoint" and the latter on "The details of organization as applied to the lower provinces." We have se copies of these addresses which we will publish later.—Editor. We have secured

CORRESPONDENCE

Poultry Schools

Editor THE FARMING WORLD:

I notice that your journal is giving considerable attention to poultry courses at the college. Would you allow me to call attention to the fact that in connection with our farm dairy course, students take

lectures and practical work in poultry rearing along with the farm dairy work. This course has now been established for three years. We commend this course especially to boys and girls on the farm, who wish to know more about farm dairying and poultry. It will add to the income of young farmers, and make them better citizens.

Yours, H. H. DEAN.

Ontario Agricultural College, Guelph,

Dec. 14, 1900.

Tree Planting on the Road Side

Editor THE FARMING WORLD

It is probably twelve months or more since this subject was only briefly referred to in THE FARMING WORLD. Since that time I have had no less than four communications from readers of THE FARMING WORLD in different quarters of the province asking if the matter is going to be allowed to drop just where it began. All of those readers agree with the suggestions I made with regard to the manner of plant-ing trees, and one of them asks if the Good Roads Commissioner should not take up the planting of trees as a part of his work. Another asks-and it is a question quite to the point—if we have not a Clerk of Forestry now, and if it would not be in his line to take up this matter of tree planting on the road side.

From the remarks make by the Road Commissioner a year ago, and published in THE FARMING WORLD, I concluded that he had not given much thought to the subject of tree planting, or to the ornamental side of road-making in any sense. He dwelt more upon the variety of trees suitable to plant than with the manner of planting and the means for getting them planted. I firmly believe that there is money going out of the Agricultural Department for township shows and other things that might be named that would be better and more profitably expended in tree planting. If the Clerk of Forestry would take the question in hand and devise some means of co-operating with the county and township councils, as the ating with the county and township councils, as the Road Commissioner is now doing, something surely might be accomplished by way of improving the appearance of our country, bettering the climatic conditions, and making our country roads much more pleasant to travel upon. Will The Farming World lend its influence and aid to this end?

Mitchell.

The Rainfall in British Columbia

It would be interesting to British Columbians to be told what Mr. Lester Higgins means by the expression, when writing in your issue of the 6th November of British Columbia, that "rain falls about six months in the year." If he means to imply that it rains continuously for six months in any settled part of the province, he should know, if he does not, that it is a gross misstatement; if, on the other hand, he means that some drops of rain fall during six months, the same may be said of any other province in the Dominion. In any case, the expression is unmeaning and misleading. The fact is that Mr. Higgins, like many other writers, evidently did not take the trouble to inform himself before committing himself to an unwarranted statement. He should know that British Columbia is an exceedingly large province; that on account of its topography, the climatic conditions vary very greatly within a few miles; that the rainfall varies all the way from two and a half to sixtysix inches during the year, in the settled parts, the most of which falls during the months of November, December, January and February. In point of fact, the average precipitation is probably not any

greater than in other portions of the Dominion. Oblige me also by correcting the statement that Mr. Hadwen acted for the Government of British Columbia in the matter of the importation of live stock. Mr. Hadwen acted as secretary of the Dairymen's Association only.

I have the honor to be, sir, your obedient servant,
J. R. Anderson,

Deputy Minister of Agriculture. Victoria, B.C., Dec. 6, 1900.

A Re-Union at Chicago

There are so many in my old Province of Ontario who have a lively interest in anything pertaining to the Ontario Agricultural College, that I cannot refrain from noting for their benefit an incident of the recent great gathering at the International Exposition in Chicago.

Many positions in the leading agricultural colleges this side the line are filled by men who have been connected with the O.A.C. as professors, graduates or under-graduates. A large number of these were here in attendance at the exposition. A re-union of these was arranged for and a banquet enjoyed on the evening of Thursday, Dec. 6, in the parlors of the Wyoming Hotel. There were covers laid for twelve; a right royal time was the order of the evening and many were the reminiscences of old days and scenes "on the hill." Many peculiar, circumstances and pranks of early days were cleared up by erstwhile dignified professors. It is well for some of the narrators that some of the deeds recounted do not come within the scope of the extradition laws.

Those present were Prof. Thos. Shaw, of the University of Minnesota; Pro. W. S. Carlyle, of the University of Wisconsin; Prof. A. M. Soule, of the University of Tennessee; Prof. W. J. Kennedy, of the University of Illinois; J. J. Ferguson, State College, Michigan; Prof. G. E. Day, O.A.C.; Prof. J. H. Guidale, Ottawa; Dr. A. G. Hopkins, University of Wisconsin, and the following undergraduates of their respective colleges, W. J. Black, Ontario: F. R. Marshall and M. C. Cummings, formerly of Guelph, now of Iowa; Pid. Carlyle, Wisconsin, and W. M. Newman, of Illinois College of Medicine.

In order to have a more finite bond of sympathy between the Canadians in American colleges a permanent organization, to be known as the American O.A.C. Union, was decided upon and the following officers were elected: Hon. Pres., Prof. Thos. Shaw, University of Minnesota; president, Prof. W. S. Carlyle. University of Wisconsin; vice-president, Prof. A. M. Soule, University of Tennesee; sec.-treas.,

Prof. J. J. Ferguson, State College, Michigan.
It was decided to hold an annual meeting with banquet attachment during the time of the International Exposition another year. We hope to have a much larger gathering, but it could not surpass the first one in hearty goodwill. The secretary was instructed by resolution to convey an expression of the kind regards of the "Canadians abroad" to the O.A.C. people, graduates and students assembled in the annual union meeting.

While we, who have cast in our lot with this great republic, feel that the best that is in us is due the people whom we serve, we cannot forget the land of our boyhood days. In our hearts there is a very warm spot for our old college and the old college friend-ships. With the feeling that our hearts are large enough for the old and the new we had our spread under the folds of "Old Glory" and "The flag that's braved a thousand years the battle and the breeze," a combine that is ready to face the world.

J. J. FERGUSON.

The Agricultural Gazette

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

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

Annual Membership Pees:--Cattle Breeders' \$1; Sheep Breeders', \$1; Swine Breeders', \$2.

BENEFITS OF MEMBERSHIP

Back 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.

string 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 voc. per head; non-members are thereof \$1.00 per head.

A member of the Swine Breeders' Association is allowed to register sheep as 500. per head, while non-members are charged \$1.00 per head.

But a summary of the Swine Breeders' Association is allowed to register sheep as 500. per head, while non-members are charged \$1.00 per head.

The same and address of each member, and the stock he has for sale, are published once a month. Over the same and saddress of the directory are malled monthly. Copies are sent to each Agricultural College and each sexpectation to the directory are mild only be allowed to advertise stock to prominent breeders and probable buvers resident to candat, the United States and elsewhere diseases and elsewhere the same per of the Dominion Cattle Breeders' Association to which be belonging; that it, to advertise cattle he must be a member of the Dominion Swine Breeders' Association, and to advertise steep he must be a member of the Dominion Swine Breeders' Association, and to advertise steep he must be a member of the Dominion Swine Breeders' association, and to advertise steep he must be a member of the Dominion Swine Breeders' association, and to advertise steep be swing stock for sale, in order that they may be included in the Gazette, are required to notify the understand by fails to do this his name will not appear in that issue.

The data will be published.

Perilament Buildings, Toronto, Ont.

List of Stock for Sale.

DOMINION CATTLE BREEDERS' ASSOCIATION.

Attrill, E. C., Goderich-3 bulls, 1 and 2

Bonnycastle, F., Campellford-20 cows,

heifers and heifer calves.

Brodie, G. A., Bethesda—18 bulls, 7 to 18 months; 12 heifers, 2 years; 11 yearling heifers and heifer calves. Birdsall, F. & Son, Birdsall—Bull, 12

Bettschen, G., New Dundee-2 bulls, 1 and 2 years.

Chapman, J. G. & Son, St. Thomas-2 bulls, I year; bull calf, three months.

oulis, I year; bull calf, three months.
Dickieson, R., Guelph—3 bulls, 10, 12 and
13 months; bull, 3 years.
Douglas, Jas., Caledonia—9 bulls, 7 to 27
months; belifers, various ages.
Davis, J. F., Tempo—7 bulls, 5 to 20
months.

months.

Fitzgerald Bros., Mount St. Louis—10 bull
caives; 5 cows and heifers; 5 heifer calves.
Grainger, W. & Son, Londesboro—8 bulls,
7 to 25 months; females all ages.

Garaham, E. A., Straffordville—5 bull lives, 7 months; bull 2 years.
Golding, H. & Son, Thamesford—2 bull

calves, 8 and 9 months.
Harper, R. Cranston—2 bulls, 11 and 12

ontins.

Jeffs, E. & Sons, Bond Head—8 young lils; young cows: heifers and calves.

Milne, D., Ethel—11 bulls; choice of 30

Milne, D., Ethel—11 bulls; choice of 30 cows and heifers.
Martindale, F., York—6 bulls, 6 to 18 months; 2 yearling heifers; young cows.
Riddel, J., Beeton—3 bulls, 9 to 18 months; young heifers.
Rankin, S., Fairview—Bull, 15 months; young cows and heifers; 3 cows; 5 heifers, 1 year.

Smith, J., Inglis Falls-5 bulls, 9 to 17

Sinith, J., lagits Fairs—5 Dulls, 9 to 17 months; cows and heifers.

Sibbald, F. C., Sutton West—8 bull calves; 5 heifer calves.

Turnbull, A., Cranston—4 bulls, 7 and 12

months.

Caskey, Jas., Tiverton—4 bulls, 8 months to 2 years; cows; heifers.

Birdsall, F. & Son, Birdsall-Bull, 5

Herefords.

Stone, F. W. Stock Co., Guelph-6 cows; 13 bulls ; 2 heifer calves.

Guy, F. T., Bowmanville-2 bulls; heifers and heifer calves, all ages. Yuill, J. & Sons, Carleton Place-4 bulls, 2 years; 6 yearling bulls; 4 bull calves, under months; cows and heifers, all ages.

Gifford, A., Meaford—Bull, 2 years; 4 bull calves; 4 heiters, 1 year; 3 heifers, 2 years; 3 cows. Would exchange any of above for

3 cows. Would exchange any of above for Cotswold sheep or Berkshire pigs.

Hallman, A. C., New Dundee—Cow, 3 years; heifers 3 and 9 months; bulls, 3 and 9 months. Smith, S. E., Dundas—Bull, 6 months; 2

heifers, 7 to 11 months; 2 heifers, 2 years; cow, 6 years.

DOMINION SHEEP BREEDERS' ASSOCIATION.

Bonnycastle, F., Cambellford—7 ram lambs; 15 ewes and ewe lambs.

Douglas, Jas., Caledonia-Shearling ewes:

ewe lambe: Jeffs, E. & Sons, Bond Head-Aged ram; ram lamb; aged ewes; shearling ewes & ewe lambs.

Yuill, J. & Sons, Carleton Place-Rams and ewes, all ages.

Dorsets

Hunter, J., Wyoming- Ewes and rams, all

8outhdowns

Jeffs, E. & Sons, Bond Head—2 aged rams; 2 shearling rams; 10 ram lambs; aged and shearling ewes and ewe lambs.

DOMINION SWINE BREEDERS' ASSOCIATION

Berkshires.

Bonnycastle, F. Campbellford—Boar, 6 onths: 15 pigs, 6 weeks to 3 months.

Bowman, T. E., Berlin—Sows, 7 months;

boars and sows, 4 months.

boars and sows, 4 months.

Decker, C. R., Chesterfield—17 head.

Harris, G. N., Lynden—Sow; 9 boars and

Harris, G. N., Lynden—Sow; 7 months: sows, 6 months; 9 boars and sows, 3 months; 5 boars and sows, 5 weeks.

Jeff., E. & Sons, Bond Head-Yearling

boar; boar and 3 sows, 6 months; young pigs. Yuill, J. & Sons, Carleton Place—3 boars, over 8 months; sows, all ages.

Tamworthe

Brandow, A. W., Walsingham Centre-Boars and sows, 3, 4 and 5 months; 20 pigs,

Hallman, A. C., New Dundee-Boars, 8 and 14 months; sows, 2 and 8 months; 6 sows, 2 months; 6 boars, 2 months.

Ghester Whites

Bowman, T. E., Berlin-Sow, 8 months; pigs, 6 weeks.

Birdsall, F. & Son, Birdsall — pigs, 8 weeks.

Yorkshires.

Barr, D., Jr., Ren'rew-12 aged sows; boar; 50 head, under 4 months, both sexes. Copland, S. R. Harriston-Young stock. Davis, J. F., Tempo-Sows, 8 months. Rogers, L. Weston-15 boars and sows, 2

and 3 months.

FARM HELP EXCHANGE.

FARM HELP EXCHANGE.

The Farm Help Exchange has been started with the object of bringing together employers of farm and domestic labor and the another of the farm and domestic labor and the another of the farm and domestic labor and the another of the farm and domestic labor and the another of the farm and domestic labor and the another of the farm and the farm work in which a see, particular department of farm work in which a see, particular department of farm work in which a see, particular department of farm work in which a see, particular and the farm work in which are supposed.

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

Help Wanted

Single man, used to Down breeds of sheep, wanted at once as shep-herd. Apply to W. H. Gibson, Pointe Claire, Que.

Young man wanted, on a yearly engagement, for general farm work. Not much milking, as steers are mostly kept. No. 620.

Wanted, at once, a young married Canadian for general farm work, Steady employment by day or year. No. 621.

Young man required for general farm work. Wages \$150, board and washing. No. 622.

Steady young man wanted by the year on a farm. No. 623.

Young man wanted on a farm in Huron Co. to do general farm work and chores and cutting wood in winter. Must have no bad habits. Wages, \$160 a year. Also servant girl wanted on a farm where family is small. Wages, \$6 a month in winter and more in summer. No.

Wanted, married man, with wife and son able to milk. Man to draw milk to Toronto. Good wages and free house to a suitable man. No other need apply. Everything convenient. No. 625.

Single or married young man wanted for general farm work, either by month or year. Would engage now or on April 1. No.

Would engage a man by the year. Must be used to all kinds of farm work and be good with horses. Wages, \$150 a year. No. 627. a

Married man required as farm manager where stock is kept. No.

Respectable young man can get a place on a farm in Renfrew Co. No. 629.

Wanted a first-class man, good at tending stock, handy with machinery and tools and of steady hab-Will engage by the year and pay fair wages. If a man is single he will get board and washing; to a married man a house will be furnished. Must have no children. Work to commence about January 1. State wages wanted. No. 630. a

Domestic Help Wanted.

Woman wanted to take charge of farm house where two or three men are kept in the winter and three to six during spring and summer. Other duties would be to make butter for the house. References required. Applicant must be a strong, healthy woman. No. 631.

General servant or housekeeper wanted on a farm. Wages \$10 a month. No milking. Must be steady and reliable and kind to children. No. 632.

Situations Wanted

Position as herdsman wanted, where beef cattle are kept, by young married man. Reasonable wages asked. No. 463.

Married man, good plowman, wants a place. No. 464.

Farm Wanted.

Wanted, to purchase, on time only, or to rent, a fully-equipped and stocked dairy and poultry farm. Must be in good order and have plenty of accommodation for poultry and be near good markets. Send full particulars to W. B., care of A. P. Westervelt, Parliament Buildings, Toronto.

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

Farmers' Institutes.

Farmers' Institutes.

Under this 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 Secretaries and other officers, general information to the secretaries and further than the secretaries and control of the secretaries and the secretaries and

G. C. CREELMAN, Superintendent Farmers' Institutes.

Round-Up of Institute Workers at Guelph.

TALKS BY DELEGATES.

"The best tribute I have ever heard to the usefulness of the Institute system was," said Duncan Anderson, "pronounced at the meeting at Winchester. Andrew Kennedy said that some years ago, as a result of what he had heard at Institute meetings, he had begun grading up his herd with Holstein and Jersey sires. Before doing this his cows did not average over 3,000 lbs. of milk per year. As a result of grading up, his 26 cows. milking eleven months, averaged 6,236 lbs. last year, and gave him at the factory an average return in money of \$52 45 each. He feeds 50 lbs. ensilage, not over five lbs. bran, and about six to nine 1bs. clover hay. He says the silo is the salvation of the dairy farmers. He has two silos now and intends building a third next summer."

"I find," said Andrew Elliott, " that the eastern portion of the province is this season more prosperous than the west. For one thing, the people down east have had a better season (more rain) than we have had. But the chief cause for their prosperity is found in the fact that they are all into dairying down there, and this year dairying has paid exceptionally well."

THE FARMERS' INSTITUTES.

"The Farmers' Institute as an Educator" was the subject taken by Mr. G. C. Creelman, the able Superintendent of Farmers' Institutes. In an eloquent and interesting preamble to the subject, Mr. Creelman spoke of the need for all to work in order to live, and the sterling worth of Canadians, on account of their virility and strength as a people and their capacity for work thus engendered. Everywhere one went was found the impression that Canadians were good workers and were willing to work.

GOOD CITIZENSHIP.

Industry, intelligence and morality were the three fundamental principles of good citizenship.

Further than this, to be a good citizen every man must be a pro-ducer—either a direct producer from the soil or a producer of something which will sell and buy for him the necessaries of life produced from the soil by others.

PRACTICAL EDUCATION NEEDED.

Of late there had been important changes in the higher education. The practical subjects were taking their place beside the studies of medical science and of law, and were demanding attention, not for their ethical value, but for their practical worth to humanity as a whole, in the improvement and uplifting of the race. It was now acknowledged that the best thoughts and highest culture should be made to develop the industrial arts, and science was being made the hand-maid of the soil in this onward march of progress.

AGRICULTURAL EXTENSION WORK.

The School of Practical Science in Toronto and the Ontario Agricultural College were the children of this new dispensation in Canada, and yet, crowded as it was, the O. A. C. only reached one per cent. of the great farming community of Ontario. It was with this in view that the Farmers' Institute work had had its commencement, and had gone forth to preach the gospel of good farming to every creature. Thus the work had started as an educator to the farmer, and last year there were 98 Institutes in the province, at which 715 meetings were held and 3,328 addresses delivered to 138,982 people, of whom 18,158 were active Institute members.

In interesting sentences Mr. Creelman then reviewed some of the difficulties experienced by the Institute as an educator, and the many wrong notions that prevailed regarding its object and usefulness.

FARMERS SHOULD BE BUSINESS MEN.

The great aim of the Institute work was to get farmers to do business on a business basis, and yet reducing farming to an exact percentage of profit and expendi-ture was one of the most difficult things imaginable. There was this difference between farming and mercantile pursuits: In the latter a certain regularity of gains could be reckoned, in farming the gains were as irregular as the variance of weather and crop conditions could make them.

CONTENT WITH A MERE LIVING.

Some had asked why the farmer needed so much educating, so much

telling how to do his business. The reason was that so many farmers were quite content if they made a living. Nowhere could a living in return for labor be made as easily and as surely obtained as on the farm. Most farmers raised nearly all they ate, and many were content to eat all they raised.

There was every chance for profit in farming to the thinking man, to the man who would learn, and to these the Farmers' Institute came as an educator by offering a means of interchange of idea and thought and the possible harmony of something new.

LOOK AFTER THE WASTES.

The Farmers' Institute was an educator against waste on the farm. The fortunes of the world to-day were made by the utilization of the waste products of manufacture, and on the farm this was where the money would be made.

CANADA IS ADVANCING.

In conclusion, Mr. Creelman reviewed the rapid growth of agriculture in Canada along certain lines, all of which were fostered and encouraged, and, in many cases, had been originally suggested by Institute work. He spoke of the improved live stock, the more intelligent and less expensive feeding of animals; the growth of the market for Canadian bacon, poultry and fruit; the more intelligent ideas of the soil and its needs; the increased knowledge of the uses and dangers of the weeds, insects and birds; and the general thirst after agricultural knowledge which was spreading wide the newer and more profitable methods of work. This was the field for the Farmers' Institute as an educator, and, in the opinion of the speaker, its work had only begun.

The practical and timely thoughts contained in this address were the signal for an animated and interesting discussion, taken part in by those present.

Mr. Clendinning, of Manilla, spoke of the Institute meeting. He thought more good was done in the afternoon meetings than in the evening gatherings.

Mr. Andrew Elliott, of Galt, thought that an advance was needed on the part of the Institute workers themselves. He also felt the growing importance of the use of the silo in stock raising.

Mr. G. C. Caston, of Craighurst, made reference to one cause of prejudice against the Institute meetings. Many farmers thought the Institute speakers came to teach them how to farm. This was getting hold of the wrong end of the notion. The Institute was to pro-

voke discussion and work improvements, not to lord it over anyone. It was an agricultural experience meeting.

meeting.

Mr. T. G. Raynor felt sure that
Institute work had placed agriculture on a higher plane. It had
caused the subject to be introduced
into the schools, and it had very
largely contributed to the growth
of the O.A.C. He would favor
two-day meetings instead of one
as at present.

as at present.

A. W. Peart, of Burlington, said the Institute was only on the threshold of the good work it was bound to accomplish. There was great need for closer agricultural study and the better marketing of products.

Alex. McNelll, Walkerville, thought that the Farmers' Institute had really outgrown itself. This was a chance for the younger men, with new thoughts and new ideas, to take the burden from the shoulders of the old men, and carry on the work with renewed vigor. The Institute work had been the means of saving and making money for the farmer.

Mr. Simpson Rennie, of East York, referred to the great increase in the number of questions asked by the audience.

Messrs. C. W. Nash, of Toronto, T. H. Mason, Staffordville, J. E. Orr, of Fruitland, and Major Sheppard, of Queenston, also took part in the discussion. The meeting closed with a general summary by Mr. Creelman.

Changes in Division 2.

Owing to the death of Mr. John I. Hobson after the publication of our annual bulletin, it has been necessary to make a change in the delegates who are to address the regular meetings in division 2 in January.

Mr. W. N. Hutt, of Southend, will attend all the meetings as advertised. During the first week at Atwood, January 8; Millbank, January 9; Mitchell, January 10; Brucefield, January 11 and Exeter, January 12, he will be assisted by Dr. J. Hugo Reed, professor of Veterinary Science. Ontario Agricultural College. His subjects are as follows: "Breeding Horses for Profit," "The Ordinary Diseases of the Stomach of the Ox Which a Farmer Should Understand," "The Prevention of Parturient Apoplexy Commonly Called Milk Fever in Cows." Any subject relating to veterinary science.

From January 14 to 19 inclusive Dr. James Mills, president of the Ontario Agricultural College will attend meetings at St. Mary's, Kintore, Lambeth, Ilderton, Coldstream and Ailsa Craig. His subjects are:
"Cultivation of the Soil," "Suggestions as to Needed Improvements Amongst General Farmers, Stock Raisers and Dairymen,"
"Farming as an Occupation."

From January 21 to 25 inclusive, Prof. G. H. Day will address meetings at Parkhill, Thedford, Wyoming, Petrolia and Brigden. Prof. Day's subjects are as follows: "Swine Feeding," "Cattle Feeding," "Stock Foods and How to Use Them," "Conserving Soil Moisture."

A Striking Comparison.

Yields in the Experimental Plots Compared with Yields of the Average Farm.

I have referred incidentally to the difference between the yields per acre in this experimental work and the yields from the average farm in Ontario. Let this be given a little more fully. The following table shows the best average yield per acre obtained from the leading crops in conducting these experiments and the average yield per acre received from like crops in the Province at large this season as stated by the Bureau of Industries.

Crop	Best yield per acre in experi- ments.	Average yield per acre on Ont. farm this year.
Fall wheat	30.1	21.9
Spring wheat	20.5	18.4
Barley	37. I	29.3
Peas		21.2
Oats	53-4	37-4

If the average yield per acre had been as great on the average farm as on these experimental plots there would have been added to the fall wheat crop of Ontario this year 8,309,000 bushels; to the spring wheat crop, 753.000 bushels; to the barley crop, 4.622 000 bushels; to the pea crop, 2,646 000 bushels; and to the oat crop of Ontario, 43,180,000 bushels. And the combined value of all this extra grain, at fair market value, would be, in round figures, \$20,000,000.

A Corner in Pork.

Farmers who raise hogs know very little of how the pork made from them is sometimes manipulated to make large fortunes for one or two individuals. During October the price of barreled pork advanced rapidly. About the beginning of the month it was selling for \$11 per bbl. By October 31, when the corner closed, the price was \$20 per bbl. This rapid advance was due to one individual, Sir Thomas Lipton, the great English grocer, buying up all the pork in the United States and then manipulating the market for a rise. He is reported to have cleared \$350,000 on the deal.

The Farm Home

The Little Feller's Stockin'.

Oh, it's Christmas Eve, and moonlight, and the Christmas air is chill,

And the frosty Christmas holly shines and sparkles on the hill,

And the Christmas sleigh-bells jingle, and the Christmas laughter rings,

As the last stray shoppers hurry, takin' home the Christmas things, And up yonder in the attic there's a little trundle bed

Where there's Christmas dreams a dancin'

through a sleepy, curly head,
And it's "Merry Christmas," Mary, once
agin fer me and you,
With the little feller's stockin' hangin' up beside the flue.

'Tisn't silk, that little stockin', and it isn't much fer show, And the darns are pretty plenty round about

the heel and toe, And its color's kinder faded, and it's sorter

worn and old, But it really is surprisin' what a lot of love 'twill hold;

And the little hand that hung it by the chimbly there along

biy there along

Has a grip upon our heart-strings that is
mighty firm and strong;
So old Santy don't forgit it, though it isn't fine and new,

That plain little worsted stockin' hangin' up beside the flue.

And the crops may fail, and leave us with our plans all gone ter smash,

And the mortgage may hang heavy, and the

bills use up the cash, buils use up the cash,
but whenever comes the season, jest so long's
we've got a dime,
There'll be somethin' in that stockin'—won't
there, Mary !—every time.
And if, in amongst our sunshine, there's a
shower er two of rain,
When we'll fore, it heavels smilin', and we'll

Why, we'll face it bravely smilin', and we'll

try not ter complain
Long as Christmas comes and finds us here together, me and you, With the little feller's stockin' hangin' up beside the flue.

-Joe Lincoln, in The Saturday Evening

Home for Christmas. By Emily Woodley.

It is the day before Christmas, and Mrs. Allan and her daughters are busy preparing for it. The married sons and daughters are coming, as is their custom every year, to spend the happy celebration at the old nomestead, and as they mingle together once again, the past year is forgotten, and they all enjoy themselves in blissful reunion.

Clara and Alice, the only "unclaimed blessings" left at home, always can remember somehow what their sisters and brothers always like, and you perchance would smile should you over-hear them saying, "Oh, I know Will likes lemon tarts," and "Mary always thought I made delicious mince pie, and so on.

Father gets the wood all ready, and puts it into the great fire-places, and mother follows after to make sure he leaves the carpet without shavings strewn about.

Everything looks home-like and cheerful, as it ought, for the girls have spared no pains in fixing the rooms with beautiful green boughs from the woods beyond, and above the fire-places where their little nieces will hang their stockings.

Tea is over, the dishes washed, and all are in a feverish expectation, when, Hark! Nero springs from the veranda and runs barking down the lane, to meet, yes, it is them! Father, mother and sisters rush out to meet their loved ones once more and welcome them home, and "A Merry Christmas," shouts every one, even down to the little tot, who clings to Grandma.

The nieces and nephews do not forget to hang up their stockings over the fire place and retire, pondering in their heads what Santa Claus will

After the elders have distributed their gifts to one another, with much merriment, they retire also.

Early in the morning there is a patter of feet on the stairway, and Aunty, of course, has to get a light to let them find out if Santa really came. Oh what a din! No more sleep for any one; so all will have to be content with what they had.

After the breakfast is over, sisters and sisters-in laws (with a great dash of clatter) prepare the dinner.

Dinner is ready at last, Father asks the blessing, and then helps every one to a bountiful supply of turkey, and all are in high spirits.

After dinner, Mother says, "Children, how would you like a sleigh ride?" And shouts of, "Do you really mean Grandma?" So Grandpa gets out the sleigh, robes, bells and drives up to the gate. The faithful horses seem to know what is expected of them, and away they all go. Such a merry time as they have, shouting and singing, till passers by smile at their laughing faces, and Grandpa enjoys the fun too. The gay party returns home with keen appetites.

After tea the children try their games and Grandpa sits by the fireplace, and tells them endless stories, which you may be sure they greatly The elder sons and daughters "sing the songs they used to sing," and the old room resounds the merry

The happiest day, and evening too, must come to a close, but will never be

forgotten by the happy group.

The morning finds all en route for their homes, and as they bid a fond good-bye, tears shine in Mother's eyes, and turning to the girls, she says, only hope that every home has had as happy and as merry a Christmas as we

Hints by May Manton.

Woman's Fancy Waist, No. 3694.

The bodice that gives a waistcoat effect is much in vogue and is attractive in the extreme. The very charming model illustrated is adapted to theatre wear and all the many occasions that call for semi-dress. shown it is of white taffeta with black velvet and cream lace over white, but innumerable combinations can be devised, and all the popular blouse materials are suitable. Black, with Turkish embroidery and deep cream chiffon, in place of lace, is chic. Russian blue panne, with black and Russian lace, is elegant and a host of similar and simpler suggestions might easily be made.

The foundation is of a fitted lining, the back and under-arm gores of which are smoothly covered with the material and which should be carefully boned. The yoking material is faced into the back, but is made separately at the



3094 Fancy Waist. 32 to 40 in. bust.

point, where it is included in the right shoulder and under arm seams and hooks over on to the left. The fronts proper are laid in three tucks at each front edge, and are joined to the narrow vest portions, which are held in place by shaped straps and trimmed with tiny enamel buttons. The deep bertha is joined to the fronts and at the lower edge of the yoke in back, the stock collar being attached to the plastron and closing at the centre back. The sleeves fit snugly at the upper portion, but flare slightly at the lower edge where they turn back to form pointed cuffs. The undersleeves are full in Paquin style and are arranged over the fitted lining, which is cut full length, pointed bands finishing the wrists.

To cut this waist for a woman of medium size 31/4 yards of material 21 inches wide, or 2 yards 44 inches wide will be required, with 11/4 yard of allover lace 18 inches wide and 1 yard of velvet 21 inches wide.

The pattern No. 3694 is cut in sizes for a 32, 34, 36, 38 and 40-inch bust

measure.

The price of above pattern post-paid is only 10 cents. Send orders to "The Farming World." Confederation Life Building, To ronto, giving size wanted.

A German Christmas Cake.

LEBKUCHEN.

1 lb. of almonds, blanched, cut fine; 2 oz. citron, cut small; 2 oz. orange peel, cut small; 2 oz. cinnamon, 1/4 oz. ground cloves, 1/4 oz. grated nut

Put these ingredients into a bowl, and moisten with a wine-glass of Prune brandy. Then melt 4 lbs. of strained honey (dark preferred), gradually add to this 5 lbs. of sifted flour. out upon the kneading board, add I oz of pearlash, then the moistened ingredients, then the grated peel of one lemon, and, lastly, 1 lb. of powdered sugar. Work the dough with flour until ready to roll out. Roll out one-quarter of an inch thick. Spread the sheets in buttered pans, bake in a medium oven, and, after baking, cut into rectangular pieces while still warm. After taking the cakes from the tins, spread the tops with a syrup made of granulated sugar and water boiled until it threads. Apply with a stiff brush.

To make a good batch of lebkuchen was considered quite a test in this same family, of one's ability as a cakemaker. In fact there was quite a friendly rivalry among the various aunts and mothers as to whose should be the lightest and most delicately flavored. She whose lebkuchen were pronounced the best by these able connoisseurs had reason to be very proud indeed of her achievement. For judgment was passed, not only upon the lightness and the flavor, but even upon the delicate odor, which must have just the proper degree of spiciness to be considered perfect. Both the anise-seed cakes and the lebkuchen were thenceforth served on all state occasions in this Old World family.

They are delicious for luncheon or dinner with any light dessert, and although of German origin, lend themselves most satisfactorily to our Anglo-American custom of afternoon tea .-American Kitchen Magazine.

Sir Henry Thompson's Pudding.

Sir Henry Thompson has been interviewed by some enterprising reporter anxious to gain his views of the diatetic value of plum pudding. In answer to the question whether

this compound was equivalent to beef steak in nutriment, Dr. Thompson replied that such parallels could not be fairly drawn, but that a fatty steak and a plum pudding were pretty evenly balanced in food value. While a vigorous man might dine off plum pudding alone, one of sedentary occupation should be advised not to attempt it. The famous authority on dietetics then gave the following recipe of his own for a plum pudding:

One lb. raisins, stoned; i lb. currants, washed and dried; 6 oz. candied peel (mixed) cut in small pieces; I lb. suet, chopped as fine as possible; 1/2 lb. bread crumbs, fine; 1/2 lb. sugar, a pinch of salt; six or eight eggs (about nine eggs make a pound); a full wineglass of brandy; a little grated nutmeg; a little milk.

To be tied up tightly in a cloth or basin and boiled for six hours. may be long kept hanging in a dry place, and is by some regarded as improved thereby.

The Gospel of Saving.

In the Christmas number of the Saturday Evening Post Russell Sage presents some of the best advice that has ever been given to young men regarding the handling of their money. In the course of the article he says:

"No matter how fast a man may make money, he owes it to society as well as to himself to be economical.

Any young man who will live up to the following set of rules will get more genuine happiness out of life than his neighbor who violates them :

"Out of every dollar earned save twenty five cents. Save seventy five cents if you can, but never less than

twenty-five.

"Get up at a regular hour every morning and work till the things that are before you are finished. Don't drop what you have in hand because it is five o'clock.

"Be honest; always have the cour-

age to tell the truth.

"Don't depend on others. if you have a rich father, strike out for yourself.

"Cultivate independence at the very outset.

"Learn the value of money. alize that it stands, when honestly made, as the monument to your value as a citizen.

"Be jealous of your civic rights. Take a wholesome interest in public affairs, but do not let politics or any thing else, interfere with the rigid administration of your private duties.

The state is made up of individuals.

"Be clean and decent. Don't do anything that you would be ashamed to discuss with your mother.

"Don't grumble.

"Be circumspect in your amuse-

"In connection with amusements, I have never been able to understand why the young men of to-day deem

the theatre an absolute essential in seeking diversion. An evening with a good book is, or ought to be, more satisfying to the young man of brains than an evening in a hall where a lot of make-believe characters are strutting up and down the stage, like children at a masquerade. When the human race reaches its highest mental development there will probably be no

On Washing Real Lace.

Fashionable as this is, and seeing that old lace has a value the costliest new lace can never gain, the mending and washing of old lace is very important.

Mend before you wash, if possible, with linen thread, and using lace stitches.

Use very thin isinglass or cornflour instead of starch; never make it thick or stiff

Iron the wrong side first, to throw up the pattern, then on right side through a cloth, or thin white tissue paper.

If a very bad color, and you have to boil, sew it (tacked in shape) on linen, and boil in a muslin bag. Before ironing, pull out each point. After roning, do not leave it in damp places or air, or near a kettle and its steam especially.

Preserving Fruit

The following is a formula for preserving fruit for exhibition purposes: 2 per cent. of formalin, 20 per cent. of alcohol, and 78 per cent. of water.

Plums put in the above mixture were found by experiment to be well preserved twelve months after. fruit remains firm, and in the lightercolored varieties the color was well preserved and the liquid remained clesr The color was not so well preserved in the case of the dark purple Plums that were put in the varieties. mixture slightly immature cracked badly in every case, while those put in fully ripe remained without cracking. Currants, raspberries, and blackberries placed in the preservative remained firm, but did not keep their color well.

Orangeade.

Orangeade may be a flat, tasteless beverage or a delicate, delicious, refreshing drink, iced to just the proper point, and possessing a number of mingling flavors suggestive of an Oriental sherbet. In making orangeade it must be remembered that the rind is a very important factor. Shave off the peel of six oranges and two lemons into a quart of water, add two pounds of sugar and infuse on the back of the range for ten minutes. Meantime squeeze the juice of the lemons and oranges into a quart of cold water, and a cup of the pulp of pineapple and one of red banana, and set the mixture on the ice to become chilled. Serve in thin glasses with crushed ice.

The Farming World

A PAPER FOR FARMERS AND STOCKMEN.

Managing Director, Editor, . D. T. McAINSH

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Continuan 88.—Following the general desire of our readers, no 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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> THE FARMING WORLD. CONFEDERATION LIFE BUILDING TORONTO

More Laurels for the Ontario Agricultural College.

At the great International Live Stock Exposition, which closed at Chicago on December 8, there was held an "Inter-Collegiate judging contest," open to students of American and Canadian agricultural col-leges. Forty-six students, in all, entered the contest, and the competition was of the keenest character. The students were required to judge three classes of horses, three of cattle, three of sheep, and three of swine. Prizes were given in the various classes, and sweepstakes prizes were added for the best all round judges. The latter prizes were awarded on the aggregate scores made by those students who judged throughout all the classes. Fourteen men qualified for this part of the competition.

The Ontario Agricultural College entered only one man, Mr. W. J. Black, of Shelburne, Dufferin Co., Ont. Mr. Black received practically no special training for this event, and had to depend entirely upon the ordinary training in live stock judging, such as is given to every student who takes the regular college course. Notwithstanding this fact Mr. Black succeeded in carrying off the following

Sweepstakes (general proficiency) third prize...... 30 00

Total\$73 00 Mr. Black won more money than any of his competitors; and, as will be noticed in the statement given above, only two men had higher aggregate scores in judging. Considering that the O.A.C. had only one man in the competition this is certainly a creditable record, and one which greatly enhances the already enviable reputation held by the institution.

There were eight sweepstakes, or general proficiency prizes, and it is an interesting fact that six of these prizes were taken by men trained by graduates and associates of the Ontario Agricultural College, vis.. Prof. Carlyle and Dr. Hopkins, Wisconsin; Prof. Kennedy, Illinois; Prof. Craig, Iowa, and Prof. Day, of Guelph.

Farmers' Institute Report.

The annual report of the Superintendent of Farmers' Institutes for 1899 1900 is now ready for distribution. The appreciation of the Farmers' Institutes is shown by the continued increase in membership which has grown to nearly 19,000 members. There were 715 meetings held during the year. A noteworthy feature of the work of recent years is the organization of women Institutes. There are now ten successful women Insti-

tutes in the province.

The annual report contains selections from 3,328 addresses, delivered at the meetings during the season, covering a variety of subjects in connection with agriculture, live stock, dairying, horticulture, poultry, etc. These papers embody the experience of the leading practical farmers and others engaged in kindred pursuits and the results of tests and experiments made by professional instructors and scientists on the more advanced lines. The report is a very valuable one, indeed, and should be in the hands of every Ontario farmer.

Veterinary Elements.

This is the title of a new book on veterinary science with practice, which promises to serve a most useful purpose as a manual for agricultural students and stockmen. The author, Mr. A. G. Hopkins, who, by the way, is one of the many Canadians who have made their mark to the south of the line, is instructor in veterinary science and stock judging at the University of Wisconsin. The work is elementary in its character, though giving full information in regard to the structure of the animal, his habits of life, and treating of the nature and cure of the more common diseases of live stock, including poultry, the aim being to use as few technical terms as possible, and to bring the work within the scope of the stockman and the average student. The book should prove very useful on every farm where live stock are kept. The book is well illustrated, and is published by the author, whose address is Madison, Wisconsin.





Hp With the Times...

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Nova Scotia Farmers' Association

The annual meeting of the above association will take place at Kentville, Kings County, N.S., on January 30, and continue in session the two following days. As usual, a good programme is being prepared, and the meeting bids well to be the most successful one ever held.

On the three previo

January 28, 29 and 30, the annual meeting of the Nova Scotia Fruit Growers' Association takes place at Wolfville, seven miles from Kentville, so the farmers of the province by the sea will have a week of good things.

Devon Cattle Club.

The annual meeting of the American Devon Cattle Club will be held at the Mansion House, West Chester, Pa., on Dec. 26 next, at 7 p.m. The secretary, Mr. S. P. Sissons, Newark, extends a cordial invitation to Canadian breeders to be present.

Wants to Buy Live Stock.

Mr. John Murray, Olds, Alta, N.W.T., writes Mr. F. W. Hodson, Dominion Live Stock Commissioner, as follows:

"I take the liberty of writing to you in reference to live stock. As soon as spring opens there will be a demand for young milch cows. If you know of anyone who is in a position to ship stock up here, any age from eight months to three years old, I would handle them on commission, and, in the case of steers, could handle one hundred, keep them till maturity, sell them, give them full value when first received, and 10 per cent. in addition. For example: 100 steers, value \$30 per head in spring, fatten on grass here, sell for \$35 or \$40 in fall. First price, \$3,000; interest, 10 per cent., 6 months, \$150. Price received, \$3,500; interest, \$150; profit, \$350.

"Of course, it looks a large profit, but I would probably have to put quite a few through the winter, but whatever were left would still bear the interest of 10 per cent, which the increased value of the steers would counterbalance, besides the pay for their keep. Of course, on these terms I would stand the loss, which is nominal with good, healthy strong steers. If you could put me in communication with parties who would speculate along this line I can give good references. I own about \$2,000 worth of stock."

Dorsets on the Range. By Joseph E. Wing, Ohio.

Quite often we are asked by Western sheep men concerning the value of Dorsets on the range. Frankly, we do not recommend pure-bred Dorset ewes for range use—or Dorsets as wool sheep—but when the lambs are to be sold or fed, there is no such cross in existence. The day is com-

ing fast when the Dorset, as sire of quick-maturing mutton lambs, will be everywhere conceded to be the best. The following letter from a well-known sheep breeder and feeder in Colorado is a typical one, and good food for thought to the wide awake ranchman:

"No doubt you think I have given up the Dorset business in disgust, but no indeed, I am more in love with them than ever. Our lambs are pretty enough to eat raw, though I would be slow about shipping in again from a low altitude. I have learned that they must be in prime condition to stand the change, and then by all means advise shipping in cool weather.

"We put all the rams that lived in the range herd-lambs dropped in March. Well, the lambs are 'pony built,' and all I could wish for. other rams I used were said to be half Shrop and half Dorset, and were from Ft. Collins. Their lambs are about as good as the others. We will feed all the lambs, ewes and wethers. We buy ewes and keep no lambs except Dorsets registered. We have 18 lambs to register from the imported ewes, and think more of them than anything we have next to our wives and 'kids.' They are every one beauties. A man in Idaho wants five lambs, and we will price them to him, but I suppose the price will bluff him, and we do not We were busy feeding lambs last winter and let the ewes get too fat on alfalfa and straw, so when they lambed we lost several. Some that had twins lost one or both-lambs came dead-then we had some trouble with 'milk fever'-same trouble on range-so it is evident we need to 'know how' to breed them. We just bought a car of Shrop rams, and would give \$5 a head if they were Dorsets. We fed a bunch of quarter-blood Dorset lambs last winter, and when we began to pick out to ship, the Dorset grades went first. We have some Southdowns, and class them second and Shrops third. I want a shortlegged, barrel-shaped sheep. Then I have feeders. We are ready to start 3,000 lambs on feed. They came in March, April and May, are even and we think good as the best. So you see what we think of the Dorset. We are only losers by not having more of them, and more Dorset blood we must and will have.

"L. E. THOMPSON.." "Las Animas, Colorado.

National Live Stock Convention

Mr. Chas. F. Martin, secretary, announces that the fourth annual convention of the National Live Stock Association will be held at Salt Lake City, Utah, on January 15-18, 1901, when what promises to be the largest



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t the various exhibitions is conclusive proof that these rands of salt stand unrivalled. For prices, etc., address

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FREE CAMERA ?

gathering of the kind ever held in America will take place. Special low rates have been made by all the railroads in the United States for those who desire to go. The Secretary's addressis Salt Lake City, Utah, from whom any information regarding the meeting may be obtained. The membership of this association represents 10,000,000 head of live stock, with an invested capital of \$500,000,000 scattered through every State in the Union.

Every Breed Has Merits.

There is some certain place which each of our main breeds is apt to fill better than any of the others, and the breeder or dairyman, who, studying the economics of his business, may know from the results obtained in competative trials within which breed he will be most likely to find the characteristics he desires, and his endeavors will next be to get such cows within the breed that are possessed of the typical breed characteristics and will meet his demands. It is one of the most far-reaching influences of the invention of the Babcock test that dairymen and breeders may now know exactly what their cows are doing and in how far they are economical producers, and the further result of this influence is that cows of the different breeds are now bought and sold less on fancy points, like color, length of tail, etc., and more on actual merits than was formerly the case. - F. W. Woll, Wisconsin Experiment Station.

Hen On

The old hen flew to the top of the cold storage warehouse and perched upon the ridge.

Then she cackled in loud tones:

"Old eggs! Old eggs! Back numbers! Old eggs! Old eggs! Cold storage! Old eggs! Old eggs! A million! They're in! Their second childhood! Old eggs."

And then the angry proprietor came out of the building and stoned her off the roof.—Chicago Tribune.



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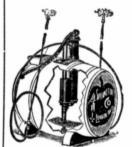
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Then you can spray your potatoes, kill the wild mustard in the growing grain without injury to the crop, kill the horr fly and other insects that infest your stock—or fruit trees; disinfect and keep your and in one-treenists her time that and keep your

your stock—or fruit trees; disinfect and keep your buildings pure, very much better, and in one-twentieth the time that you can do it in any other way.

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PURE-BRED STOCK

NOTES AND NEWS FROM THE BREEDERS

Cattle

The sales of pedigreed beef cattle held in connection with the great International Live connection with the great International Live Stock Show of Chicago were most successful. The 95 Herefords sold averaged \$400 seach, of which 48 females averaged \$400 each. The highest priced bull was March On 13th, sold to Wm. Mrfatt & Bro., Paw Paw, Ill., for \$3,500. The highest priced ow was Dolly, 571,988, sold to C. A. Jameson for \$3,150. son for \$3,150.

The Shorthorns did not average so high, owing largely to the fact that the class of catowing targety to the mast that the class of cat-tle offered was not of the highest. Bidding was brisk on all desirable lots. The highest priced bull was Star of the North, 132,076, priced bull was Star of the North, 132,070, which sold for \$1.840. and the highest priced female sold for \$5.95. The 46 females sold averaged \$346 each, the 50 bulls \$326.90 each and the 96 head \$336 each.

The Aberdeen-Angus sale was a marked success. "Doddies" were contributed from

all parts of the country. There was no ex-treme price, \$1.205 paid for the beautiful blackbird bull, Woodlawn, being the extreme One cow, Adeline of Meadow Brook, brought \$1,000. The 76 females sold against the cow, sacrine of areans blook, 33,441, brought \$1,000. The 76 females sold averaged \$330.50 each, the 24 bulls \$370.83 each and the 100 head sold \$340.20 each.

each and the 100 head sold \$340.20 each.

Rettle Bros., Norwich, Ont., whese Holsteins swept everything at the dairy test, in addition to the prizes won in the regular classes, woo several specials. These included the Reliable Feed Cooker, valued at \$45, donated by the Ripley Hardware Co., Crafton, Ill., for the two best heifers (under 36 months) of one herd and owned by exhibitor; a National Cream Separator. donated by the months) of one herd and owned by exhibitor; a National Cream Separator, donated by the Raymond Manufacturing Co., Guelph, for two best cows (36 months or over) of one breed owned by exhibitor. The value of the separator is \$75. They won also the specials offered by the Canadian Holstein-Friesian, one of \$25 for the base; was head delivery the contract of the contr offered by the Canadian Hoistein-Friesian, one of \$25 for the best pure-bred dairy cow, and \$15 and \$10 given for the next two best Holstein-Friesian dairy cows registered in the C. H.-F. H. B. This is a record of which any breeder might be proud of. The specials total in value \$170.

Mr. T. D. McCallum has severed his con-nections with Isaleigh Grange Farm and pur-chased the old Homstead "Nether Lea" situated one mile from Danville, Que., where he intends to increase the already fine herd of he intends to increase the already fine herd of Ayrshire cattle and Berkshire swine and is also breeding Yorkshire and Shropshire sheep. The ability which Mr. McCallum has shown in building up the fine herd of dairy cattle which are now at Isaleigh Grange Farm should enable him to do a good business in the above lines. Mr. McCallum also expects to go to Europe in the spring to brigg out an importation of Ayrshires and Gurnseys and would be pleased to execute any commissions which he might receive. The cattle which Mr. McCallum selected and brought out are as fine a lot as ever came to this country. as fine a lot as ever came to this country.

as the a for as wer came to this country.

Kindly note that we have a new advertisement from "Nether Lea" in this issue which
intending purchasers of good stock should make a special note of.

A. & W. Whitelaw, Guelph, Ont., won the sweepstakes for the best Leicester sheep at the Provincial Winter Fair, the prize being the "Little Champion" grain grinder made by S. Vessot & Co., Joliette, Que. This is a most useful and valuable prize.

most userul and valuable prize.

On Thursday, the 29th inst., Messrs Alfred
Mansell & Co., live stock exporters. Shrewsbury, shipped from Liverpool, per the White
Star Line, on account of Mr. H. R. Gardner,
of Tasmania, a high class Shoroshire the shipe. Star Line, on account of Mr. H. R. Gardner, of Tasmania, a high class Shropshire shearling ram purchased at Mr. Andrew Mansell's annual sale at 80 guineas, sired by Fortification 9498, dam by the renowned Montford Dreamer, and then tracing to those successful sired Bonny Beau 3886, The Partician 1768 and The Gentleman 1765. This ram was accompanied by two ewes specially selected as being superior specimens in every particu. as being superior specimens in every particular of the best type of Shropshire, one being

sired by Ulster Rose 9734, and the other by Dream Star 8977, both of which were served by Montford Kaiser bred by Mr. T. S. Minton, of Montford.

Winners in the Block Test.

The following are the winners in the dressed carcase classes at the Provincial Winter Show at Guelph :

CATTLE.

Best dressed Shorthorn carcase—I, J. Fried & Sons, Roseville; 2, W. J. Biggins, Clinton; 3, H. K. Fairburn, Thedford.
Best Hereford or Polled-Angus carcase—I,

James Bowman, Guelph.
Best Galloway or Devon carcase McCrae, Guelph; 2, W. J. Rudd, Eden

Grand sweepstakes for the best carcase, any breed-J. Fried & Sons.

SHEEP

SHEEP.

Dressed Cotswold carcase—wether, one year and under two—1 and 2, Ino. Park & Sons, Burgessville. Ewe or wether, under one year—Jno. Park & Sons.

Dressed Lincoln carcase—wether, one year and under two—1 J. T. Gibson, Dennield, Ewe or wether, under one year—1, L. Parkinson, Eramosa; 2, J. T. Gibson.

Leicester carcase—wether, one year and

Leicester carcase—wether, one year and under two—1, Orr & Lillico, Galt. Ewe or wether, under one year-1, Orr & Lillico; 2,

Kelly, Shakespeare.

Kelly, Shakespeare.

xford carcase—wether, one year and under Oxford carcase—wether, one year and under wo—I and 2, Andrew Elliott, Pond Mills. Ewe or wether, under one year-1 and 3, An-

Ewe or wether, under one year—I and 3, Andrew Elliott; 2, Smith Evans, Gourock, Shropskire carcase—wether, one year and under two—I, T. I loyd Jones & Sons, Burford; 2, D. G. & J. G. Hanmer, Burford; 3, John Campbell, Woodville. Ewe or wether, under one year—I, R. Gibson, Delaware; 2, T. Lloyd Jones & Sons; 3, W. E. Wright, Glanworth. Glanworth.

Southdown carcase-wether, one year and Southdown carcase—wether, one year and under two—1, Telter Bros., Paris; 2, W. E. Wright; 3, W. H. Beattie, Wilton Grove. Ewe or wether, under one year—1, Teller Bros.; 2, John Jackson & Sons, Abingdon; 3, T. C. Douglas, Galt.

Dorset Horse and Maxings, Creases, 2019.

3, T. C. Douglas, Galt.

Dorset Horns and Merinos, carcase, ewe or wether, one year and under two—1, W. E. Wright; 2 and 3, R. H. Harding, Thorndale; ewe and wether, under one year—1 and 2, R. H. Harding.

Hampshires and Suffolks—Ewe or wether.

one year and under two-1 and 3, W. J. Rudd; 2, James Bowman.

Oxford Specials—Best yearling wether's carcase, Andrew Elliot; best wether lamb's carcase, Smith Evans.

Grades and Crosses-Ewe or wether, one year and under two—1. John Campbell; 2, Telfer Bros.; 3. W. E. Wright; 4, James Bowman. Ewe or wether, under one year —1, R. H. Harding; 2, W. E. Wright; 3,

John Kelly.

Grand Sweepstakes—Best sheep carcase, any breed, John Campbell.

Dressed carcases, two Berkshires-1, W. J.

Brethour & Saunders; 5, J. Featherston & Son, Streetsville

Son, Streetsvill...

Two Tamorths—1, J. R. Newell & Sons,
Crampton; 2, H. George & Sons, Crampton;
and 4, Andrew Elliott & Sons, Galt; 5, W.
M. & J. C. Smith, Fairfield Plains.

Two Chester Whites—The judges made no
awards, as carcases were all too fat. No
awards were made in the Poland China
and Divocal Least of Leaster Classes.

awarus were made in the Poland China and Duroc-Jersey classes. Two Grades or Crosses—1, Rettie Bros., Norwich; 2, A. Elliott & Sons; 3, H. George & Sons.

Sweepstakes—Best two carcases, any breed -1, Rettie Bros.; [2, Brethour & Saunders;



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Offers free treatment to all who desire a cure

To heal the sick! To bring back health and strength to the pale cheeks of men and women suffering from that terrible disease, Consumption, is the life work of that Eminent Scientist and benefactor of the human race, Dr. T. A. Slocum. Dr. Slocum has made this disease a life study, and no man in the medical world stands higher as an authority on all lung diseases. the medical world stands higher as an authority on all lung diseases than the man whose name heads this article. Dr. Slocum says, no matter how many discouragements you have met with his cure is swift, certain, and permanent. To prove the truth of his statement the doctor is willing that every victim of Consumption shall have a free trial of his famous remedies. Here is his offer.

You or your sick friends can have a FREE course of Treatment. Simply write to The T. A. Slocum Chemical Co., Limited, 179 King Street West, Toronto, giving post office and express office address, and the free medicine (The Slocum Cure) will be promptly seen.

When writing for them always mention this paper. Persons in Canada, seeing Slocum's free offer in American papers, will please send for samples to the Toronto laboratories.

3, J. R. Newell & Sons; 4, G. B. Hood. Grand Sweepstakes—Best pair swine car-cases, any breed—Prizes not yet decided. Judges gave first to Rettie Bros., but they had not entered in this class. Brethour & Saunders are not in Saunders are next in reserve.

Market Review and Forecast

Office of THE FARMING WORLD, Confederation Life Building, Toronto, Dec. 24, 1900.

Business in wholesale lines is quiet, though very active in the retail trade as is to be exvery active in the retail trace as is to be ex-pected at this season of the year. The year's business is likely to wind up very satisfactor-ily. Money is quiet and steady at 5 per cent, on call, and discounts on mercantile paper rule steady at 6 to 7 per cent.

There is nothing assuring in the wheat situation. Reports from the Argentine indicate a much larger yield than was estimated a month or two back, when the balls were figuring on a shortage, thus influencing the market in their favor. Wheat is practically out of the field as a speculative article just now and the bears are having their own way neitly largely. pretty largely.

European stocks of wheat and flour from the United States for December 1 were 72,450,000 bushels, compared with 74,380,000 November 1 and 71,130,000 December 1, 199, showing only 1,230,000 Increase for the year. vember 1 and 71, 130,000 December 1. 9,9 showing only 1,320,000 increase for the year. The English wheat visible, which includes stocks in ports, quantity affoot and reserves in farmers' hands, shows total of 70,754,000 bushels, compared with 80,520,000 last year, or 0,716,000 decrease. Since December 1.

bushels, compared with 80,520,000 last year, or 9,736,000 decrease. Since December 1 there has been 3,657,000 decrease in European and American stocks, against 5,060,000 increase last year, or 8,717,000 net difference in two weeks' movement in the two years. There seems to be a general tendency towards weakness in the local markets, and wheat, especially fall wheat, has sold at ½c. less during the week. 63c. is being paid at Oatario points for export. Red and white are quoted here at 63 to 63½c. middle freights, goose at 60½ to 61c. aiddle freights and 60c. north and west. On Toronto farmers' market red and white bring 67 to 68c., spring fife 68c., and goose wheat 61½ to 62c. per bushel.

Oats and Barley.

The good demand continues in England for The good demand continues in England for Canadian oats, and there is a good export demand at Oatario points at 24½ to 25c. high freights. Oats are firmer here at 27c. for No. 1 white, and 26½c. for No. 2 middle freights. On Toronto farmers' market oats brings 29 to 30c. per bushel. Malting grades of barley seem to be in demand at Montreal at 51 to 52c. The market bare is quiet at 37½ to 42c. as to quality and location. On farmers' market barley brings 41 to 44c. per bushel. 41 to 44c. per bushel.

Peas and Corn.

A fairly good business in peas is reported at 60½ to 61½c. at points west and north of here. On the farmers' market peas are worth 64 to 65c. per bushel.

The corn market keeps quiet. Car lots of No. 2 Chicago corn are quoted at Montreal at 46 to 47c. No. 3 American yellow is quoted at 44c. Toronto, and Canadian yellow at 35c. west.

Bran and Shorts

Ontario bran in bulk is selling at Montreal Onianto brain in builts is estiling at Montreal at \$15 to \$15.25 in car lots on track and shorts at \$16 to \$17. City mills here sell brain at \$14 and shorts at \$16 f.o.b., in car lots f.o.b. Toronto. At points west of here shorts are quoted at \$14 and brain at \$12 in large lots. large lots.

Eggs and Poultry

The egg market continues strong under light receipts. Fresh gathered, western stock commands 20c, at Montreal in large lots. Considerable quantities of Canadian eggs continue to go forward to Great Britain.

New-laid eggs are worth 28 to 30c. here wholesale and selects 20 to 21c., while held

wholesale and selects 20 to 21c., while held stock ranges all the way from 15 to 18c. On Toronto farmers' market boiling eggs bring 35 to 40c., and fresh stock 25 to 30c. per dozen. There has been a most active demand for poultry, especially dressed turkeys, and dealers have laid in a good supply for the holiday trade. At Montreal fresh killed turkeys have said at 10 to 10 kc. in large lots, but the bulk sold at 10 to 10 ½c. in large lots, but the bulk at 9 to 9½c., chickens at 7½ to 8c., geese at 6½ to 7c., and ducks at 7½ to 92. per lb, for fresh stock.

Offerings of turkeys have been very heavy here. Turkeys in jobbing way are quoted at 7½ to 8½c., and geese at 5 to 6c. per lb., and chickens at 25 to 65c., and ducks at 50 to 70c. per pair. On Toronto farmers' market turkeys bring 8 to 10c., and geese 6 to 7c. per lb., and chickens 40 to 75., and ducks 50 to 90c. per pair. Live ducks brings 45 to 70 per pair.

The supply of Ontario potatoes seems to be getting smaller though ample for all requiregetting smaller though ample for all require-ments. Sales are reported for the English as well as the American. Montreal quotations are 42 to 45c. per bag in car lots. Trade here is quiet with car lots quoted at 33 to 34c. per bag on track Toronto. On the farmers' mar-ket potatoes bring 35 to 40c, per bag.

Hay and Straw.

A good export demand continues for baled hay, and it is expected if prices do not go too high a big business will be done. The Americans are buying largely in Quebec. The Americans are buying largely in Quebec. The scarcity of cars is hampering business somewhat. No. 1 Canadian is reported selling in New York at \$19 to \$20 per ton. At Montreal prices are firmer at \$9 to \$9.50 for No. 2, and \$8.50 for clover. No. 1 is scarce at \$10 to \$11. Here there is a good demand but receivits are small. uoutations are \$0 to sio to \$11. Firer there is a good demand but receipts are small, quotations are \$5 to \$15 for No. 1, and \$8 to \$9 for No. 2 in car lots on track. Car lots of baled straw are quoted at \$4 to \$6 per ton. On Toronto farmers' market hay brings \$13 to \$14; sheaf straw \$12, and loose straw \$7.50 per ton.

The apple market on this side keeps firm, though cable quotations were somewhat though cable quotations were somewhat weaker last week. At Montreal good sized lots of choice varieties are selling at \$2.75 to 1013 of choice varieties are seiling at \$2.75 to \$3. Some fancy Famense seiling as high as \$5. Car lots of western seconds have brought \$1.75 to \$2.25 per bbl. Sales of choice varieties are reported at Ontario points at \$2 to \$2.50 fo.b. On Toronto farmers' market angles bring \$1.10 \$2 are bbl. apples bring \$1 to \$2 per bbl.

The cheese season is over as far as the farmer is concerned; still there are quite a few cheese yet to be disposed of, principally in dealers' hands. The *Trade Bulletin* sums up last week's trad; as follows: "The cheese trade appears to have entered the quiet holi-day period, when new business is usually scarce on both sides of the Atlantic, the only scarce on both sides of the Atlantic, the only attempts at making purchases being a few cable offers from English buyers on the basis of 10½c. here for finest Canadian, which it is said were not even answered. On the other hand, we hear that some cable offers have been filled within the past few days at 52s. 6d. and 53s. for finest Canadian. A lot of shout 250 western white is renorted sold at 6d. and 53s. for finest Canadian. A lot of about 250 western white is reported sold at 10%c. and a lot of colored a: III. We quote: Finest western, II to II%c.; finest eastern 10% to 10%c., and undergrades 9% to 10%c.

The butter market continues to rule firm at about ½c. better values than the week previous. 22 to 22½:. have been paid at Mon-

treal for really choice creamery, and sales of seconds have been made at 20½ to 21½C. There are some complaints of winter creamery showing some defects in quality, and it is difficult to secure the amount of choice goods required for the home trade. There was a somewhat quiet feeling in the export trade towards the end of the week. The Australian shipments are much below former estimates, and the English market is said to be bare of choice butter. Choice creamery prints at Toronto are quoted at 22 to 32C, and tubs at 20 to 21C. There is plenty of ordinary dairy butter, but the real choice variety is scarce, and is quoted at 18 to 19C. for prints, and 17 to 18C. for large rolls. On the farmers' market pound rolls bring 20 to 25C. each.

A fairly good trade has been done in Christmas beef. The run of live stock at Toronto cattle market on Friday was light, Toronto cattle market on Friday was light, comprising 279 cattle, 1,140 hogs, 404 sheep and lambs, and to calves. The quality of fat cattle was fair. Trade was fairly good for exporters, but very dull for all classes of butchers' cattle, as most of the dealers had got their Xmas supplies, and there were lew, if any, sales made in butchers' cattle, as most of the dealers had got their Xmas supplies, and there were lew, if any, sales made in butchers' cattle with reached \$4 per cwt. Many drown and complaining of having to sell cattle were level money than they paid in the country.

France Cattle—Choice loads of these was

Export cattle.-Choice loads of these worth from \$4 50 to \$4.75 per cwt. and worth from \$4 \$0 to \$4.75 per cwt. And ones at \$4.25 to \$4.50 per cwt. Hear port bulls sold at \$4 to \$4.50 and light ones at \$3.50 to \$3.75 per cwt. Loads of good butchers' and exporters' mixed sold at \$4.25 to \$4.371/2 per cwt.

6. 34.37.2 per cwt.

Butchers' cattle.—Choice picked lots of
these equal in quality to the best exporters',
weighing 1.000 to 1,100 lbs. each, sold at
\$4.25 to \$4.37½ per cwt., good cattle at
\$3.75 to \$4, medium \$3.30 to \$3.40, and inferior to common a: \$2.40 to \$3 per cwt.

Feeders.—Heavy, well-bred steers from 1.000 to 1,150 lbs. each sold at \$3,60 to \$3,90 and other quality at \$3,40 to \$3,60 per cwt. Short keep steers 1,100 to 1,200 in weight in good condition sold at \$4 to \$4.25 per cwt. Light steers, weighing 800 to 900 lbs., sold at \$3 to \$3.30 per cwt. Feeding bulls for the byres, 1,100 to 1,600 each, sold at \$2.75 to \$3.25 per cwt.

Stockers.—Yearling steers 500 to 600 lbs. each sold at \$2.25 to \$3 and off colors and inferior quality at \$1.75 to \$2 per cwt. Yearling bulls 600 to 900 lbs. each sold at \$2 to \$2.25 per cwt.

Calves .-- These have been in fair supply at

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Buffalo, choice to extra bringing \$7.25 to \$7.50 per cwt. At Toronto market calves \$7.50 per cwt. At Toron bring from \$3 to \$10 each.

Milch cows. - These are worth from \$30 to \$55 each.

Sheep and Lambs

Prices were easy for sheep at \$2.75 to \$3 for ewes and \$2 to \$2.50 per cwt. for bucks. Spring lambs sold at from \$2.50 to \$1.50 each and \$3.50 to \$4.50 for the cwt. At Buffalo on Friday Canada lambs sold on a basis of \$5.30

As we intimated last week, hogs have taken a drop in price. Quotations on Toronto market on Friday were \$5.87½ for select bacon hogs and \$5.50 per cwt. for light and thick fats. Unculled car loot sold at \$5.60 to \$5.70 per cwt. The Montreal market is reported firm at \$6 to \$6.25 for light bacon hogs and \$5.75 to \$5.85 for heavier grades. The Trade Bulletin's London cable of Deember 20 re Canadian bacon reads thus: "The quieter feeling cabled by me last week has become more pronounced, and, owing to larger offerings of the home article, prices of Canadian bacon have declined 2s." As we intimated last week, hogs have taken Canadian bacon have declined 2s."
The Wm. Davies Co., Toronto, will pay \$6
per cwt. for select bacon hogs this week.
On Toronto farmers' market dressed hogs

are quoted at \$7.25 to \$7 50 per cwt. for best

Horses

There is nothing doing in horses and busitill after the holidays. A carload was shipped from Grand's Repository last week. There are no special sales this week except a sale of carriages, e.c., which takes place on Friday.

Books and Bulletins Received.

The Standard Poland China Record, published by the Standard Poland China Record Association, of Maryville, Mo. Volume xiv,

American Shropshire Sheep Record, Vol. 41, containing pedigrees Nos. 111414 to 126-899, published by the American Shropshire Registry Association, and edited and compiled by Mortimer Severing, LaFayette, Indiana. Price to non-members, \$2.50.

American Shorthorn Herd Book, Vol. 45, containing preligrees of animals calved before October 31, 1899. Published by the American Shorthorn Breeders' Association. J. H. Pickerell, secretary, Springfield, Ill.

Report for 1899 of Angus Mackay, Supt. Experimental Farm at Indian Head, N.W.T.

Experimental Farm at Indian Head, N.W.I.

"The Teaching of Agriculture in our Public Schools," by C. C. James, M.A., Denuty Minister of Agriculture for Ontario. Published by the Ontario Department of Agriculture. In addition to two addresses by Mr. James, the bulletin contains information relating to agricultural instruction in England, Wales. Scotland and Ireland, besides the Wales, Scotland and Ireland, besides the regulations governing the study of agriculture and nature in the various provinces of the Dominion.

Ethel, aged five, was learning to sew, and one day, after vainly trying to make the preliminary preparation with a needle and thread, she asked:

"Mamma, don't they call the hole

in the needle an eye?"
"Yes, dear," was the reply.

"Well," continued the little miss, " I'll bet this old needle is cross eyed."

Kansas Man (visiting in the East)-We have lots of near neighbors, now. Friend-Why, I thought your nearest neighbor was twenty miles away.

Yes; but we've had a cyclone since then .- Harlem Life.

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An invaluable book by Thomas Shaw, Professor of Animal Husbandry at the University of Minnesota, and known to every Canadian farmer. This book is recognized as by far the most original and comprehensive on the subject of which it treats. Publishers'

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This great work by Thomas Shaw, Professor in the University of Minnesota, is a recognized authority concerning the origin and history of all pedigree breeds of cattle, sheep, and swine now found in America, and deals with the subject in a manner at once brief, comprehensive and in regular sequence. Upwards of 400 pages, nearly 60 full-page plates, published at \$1.50.

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FORAGE CROPS

Invaluable book by Thomas Shaw. It has a practical ring about it from beginning to end that begets confidence in the reader as to the value of its contents. It is illustrated, substantially bound in cloth, and consists of about 300 pages. Publishers' price

Will be sent free to any present subscriber sending two new yearly subscriptions at \$1 each, or to any present subscriber, not in arrears, for 75c.

SUCCESSFUL FARMING

The fact that this book is written by Mr. William Rennie, Sr., late Farm Superintendent of the Ontario Agricultural College, is recommendation enough to many. Mr. Rennie always treats his subjects in a practical and useful manner. This is a book that should be in every farmer's library. Publishers' price is \$1.50.

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This is a most valuable and practical book for home use on the farm. It is written by Eveleen Harrison an experienced trained nurse and in language that makes it easily comprehended by everyone. It brings to the farmer's wife information that will be of greatest value to her in time of need. An important chapter is devoted to preparations for a surgical operation at home and some hints as to the after care of the patient.

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