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The Farming World

For Farmers and Stockmen

Vol. XVIII

DECEMBER 11th, 1900.

No. 15

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DEAR SIRS .- Please find enclosed the amount of my subscription. I have been a subscriber to THE FARMING WORLD for two years and find it of great benefit to me in my business as a farmer. It is thorough, complete and reliable It is the best printed, ablest edited and most interesting and instructive agricultural paper in Canada.

With best wishes for your success and pros perity. I remain.

Yours truly

W. H. HAVILAND.

Delhi, Ont., Nov. 16, 1900.

Live Stock the Basis of Agriculture



AN the farming that goes on forever-the agriculture that is truly great-have any foundation other than live stock-improved live stock?" This is a quotation from an address before the Illinois Live

Stock Association a few weeks ago. And strange to say, the words were spoken by a lady in the person of Mrs. Virgina C. Meredith, head of the woman's department of the Minnesota School of Agriculture.

What a world of meaning is wrapped up in this short sentence! Let every Canadian farmer ask himself the question contained therein. Can successful agriculture, in a country where the same land is tilled for generation after generation, have any foundation other than live stock? We think not. The history of the most successful agricultural lands to-day proves it. Has not live stock, and the most improved live stock at that, been the foundation of farming in Great Britain? It has been so for a number of years; it is so to-day, and will continue to be so for all time to come. As soon as the English farmer begins to lose his hold upon live stock, just so soon will he begin to recede from the proud position he occupies to-day, that of being the most successful agriculturist the world

In Canada we are merely on the threshold of what improved live stock can and will do for the farmers of this country. Some few of our more progressive farmers have already crossed the threshold, and have advanced a considerable distance beyond the border. Their experience stands as a striking example of what every farmer can accomplish by putting forth the same effort and skill. But where is the average farmer? Still lurking on the threshold, and wondering whether he had better cross over or not. But delay is dangerous. Others are rapidly moving forward. The farmer, in the United States, in the Argentine, in fact in every progressive agricultural country to day, is enquiring for good stock, is paying more attention to good stock, and is every day reaping more and more the benefits to be derived from keeping improved live stock. And so the march of progress goes on, and the Canadian farmer must exert himself to keep a little ahead of the tide.

But why is live stock the basis of greater agriculture? Because it furnishes practically the only means by which a farmer may improve the quality of his land and at the same time realize a good profit while doing so. There is no other branch of farming that will enable the farmer to do this Farming goes on forever, and any adequate consideration of the subject must be broad enough to include vastly more, than the present in all farming operations. From this point of view it can be shown upon both economic and intellectual lines that improved live stock is the basis of successful agriculture. There is no quicker or better way of building up a worn-out farm than intelligent and successful live stock husbandry. Then live stock gives permanence to the fertility and conditions of the land. When the farmer maintains and increases the fertility of his land he carries on the highest type of manfacturing-converting the raw material of the soil into forms suitable for use-he manufactures an endless succession of meat and milk, fleece and fibre, speed and draft cereal and fruit. In this way permanency is assured.

A rotation of crops and the keeping of live stock must go hand in hand. An intelligent rotation brings with it several elements of profit unknown to a system of farming where no rotation is followed. As the speaker referred to above puts it, they are: Minimum expense in equipment; minimum of labor employed; maximum of value in the finished product; minimum of fertility sold in the marketable products; stability of output-a rational equilibrium. This equilibrium means something to do all the year round. That day in agriculture has gone by when a farmer can do business by working half the time. On the stock farm there is tillage in the summer, and the care of the stock in the winter. And so, by employing his energies all the year, the farmer never gets rusty. His means of revenue are greatly increased, and he is building up and raising his land to the highest point of production. By adopting the soiling system the small farmer may become a large operator in live stock husbandry, thereby greatly increasing his profits and enlarging the productive power of his land. Truly live stock—improved live stock—should be, if it is not so already, the foundation of successful agriculture in Canada. Let every farmer take this as his watchword as he enters the new century.

Canada at Chicago

At the great International Live Stock Exposition at Chicago last week, as shown elsewhere in The Farming World's special report, Canadian breeders came in for quite a number of prizes. Honors were won in the cattle, sheep and swine classes, but to Canadian sheep breeders has come the largest number of awards. In fact, they succeeded in capturing the bulk of the prizes in the sheep classes in the face of strong competition. All honor to them. Fuller details regarding the show will appear in next issue.

Poultry Schools Advocated

In The Farming World of Oct. 23 last appeared a letter from R. C. Allan, Cobourg, Oat., advocating the establishment of poultry classes or poultry schools for giving practical instruction in poultry keeping. In this issue Mr. W. R. Graham, B S.A., manager Poultry Department, Ontario Agricultural College, strongly endorses the idea. Mr. Graham points out that there is a great demand at the present time for information along practical poultry lines. Every day letters are received at the college making enquiries as to the course of instruction offered in the regular course, which may be taken as an indication of the success a special course in poultry keeping would have. The instruction given in the regular classes at the college is all right for the purpose for which it is intended, but it does not meet the requirements of the business from the average farmer's point of view, who desires to gain practical knowledge on poultry keeping and that very quickly. There seems to be just as much need for a special course in poultry keeping as for a course in the home dairy. In fact, the two might be combined and made a most useful and profitable course of study for every farmer, his wife or daughters to take up.

A special poultry school is not a new idea. As Mr. Allan pointed out in his letter a school of this kind has been in operation in connection with the Rhode Island Agricultural College for three or four years. The success of this venture has been marked. While, during the first term only ten or twelve pupils attended, during the third year the attendance had so increased as to make it necessary to limit the numbers enrolled. This experiment has demonstrated pretty clearly that there is a demand for instruction of this kind. And where this demand exists provision should be made for supplying it.

In Ontario there is certainly very much need of just such instruction as we have outlined. There are comparatively few farmers who realize to the fullest extent the great value of poultry culture, or who have a sufficient knowledge of the breeding and feeding of poultry to make a success of the business. If a series of short-term courses of, say, two week's duration each were arranged to be given at the Agricultural College, we believe they would be largely attended by farmers from all parts of the province. Why not arrange for a couple of these courses this winter? The experiment is certainly worth trying.

Judging Live Stock

The success of an exhibition of any kind where prizes are awarded depends in no small degree upon the system of judging adopted. This is especially true in live stock-judging, and there is no department of an exhibition, per-

haps, where so much dissatisfaction is found with the judging as in the live stock classes. For this reason it is desirable that only the most improved and uniform methods of judging should be adopted. As we pointed out some time ago, the chief fault to be found with the methods of judging live stock at our larger fairs is its lack of uniformity. This lack of uniformity is noticeable sometimes in the methods adopted by a single individual in judging, and is quite so where different judges judge the same animal at different shows. Every judge has his own ideal of what a typical animal should be, and unless the one individual is employed continuously to do the judging at the different shows there is bound to be a lack of uniformity in methods.

But what is the remedy? On this point there are perhaps many more competent to speak than we are. It does seem reasonable, however, to suppose that some system of judging might be adopted that would tend to overcome this lack of uniformity and place the whole question on a more satisfactory basis. From an educational point of view this should be done. But the question is, how is it to be done? We have previously suggested that some form of score card be used for the guidance of judges in making the awards. To this there is the objection made by some that score card judging is not adaptable to the show ring. Perhaps it may not be if used in its entirety. But could not some modified form of score card, containing the more salient and prominent points, be used to advantage. We believe it could, and that it would do much to remove the dissatisfaction with the methods of judging so common at many of our large fairs to-day. The plan is worth a trial at any rate. Perhaps the Provincial Winter Fair will set the ball rolling.

As to score cards, the following, which is a copy of the one used by the students in judging beef cattle at the Illinois College of Agriculture, may be of interest:

| Scale of Point—Steer. | | - | Points Deficient | | | | |
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| Muzz'e, mouth large; lips thin; nostrils | | | | | | | |
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| Shoulder Vein, full | | | | - 1 | | | |
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| smooth | . | | | - 1 | | | |
| | 3 | ٠., | | | | | |
| Chest, full, deep, wide; girth large; crops full | | | | - 1 | | | |
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| | | ٠., | | | | | |
| Flank, full, even with underline | | ٠., | | | | | |
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| not patchy. | | | | | | | |
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| Total | . 00 | | | 1. | | - | |
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The Late John I. Hobson

Four years ago a gentleman who knew Mr. Hobson intimately said: "He has won his eminence by his energy, his industry and his ability." No truer words were ever spoken. To those who mourn his death to-day and look back over his successful career, they come with added force. Energy, industry, and ability applied to any calling must bring success, but when applied to the vocation of the farmer the reward is greatly increased. And this is the lesson that the younger men on the farm should learn from Mr. Hobson's active and successful life. While he had ability that would have ensured success in any other calling, he chose the farm as his fie'd and sphere of usefulness. And truly he chose well.

Mr. Hobson's formal education was only that of the common school, and this was acquired in a little log school house, which was intact a few years ago,

situated near his old home at Mosboro. But from the day he left school till his death he was always a diligent reader and student. Mr. Hobson always attributed no small share of his success to the fact that he never thought his education completed: that he was always anxious to acquire more information; to find out newer and better methods and to extend his knowledge in every direction that would lead to practical results. Another element that contributed to his success was that he always had a fondness for his calling and an intense desire to excel in it. His special liking was live stock and quite early in life he became one of Canada's most successful Shorthorn breeders.

Mr. Hobson always took a deep interest in the organized efforts made in behalf of our agricultural industry. For many years he was Chairman of the

Advisory Board of the Ontario Agricultural College. He was President of the Dominion Cattle Breeders Association for several years. At the time of his death he was President of the Shorthorn Breeders' Association and the Provincial Winter Fair, which meets in its splendid new quarters at Guelph this week. The fact that the Fair has this new building is due more to Mr. Hobson than anyone else. It will ever remain as a lasting monument to his untiring zeal and interest in Canadian agriculture. His work as an Institute worker will be remembered and profited by by many a farmer in this province. And he was not without honor at home. He took an active part at one time in municipal matters and became warden 'of his native county, Wellington. He was a prominent member of the Guelph Fat Stock Club. He also identified himself with several insurance concerns, and was president of the Guelph Township Mutual Insurance Company, vicepresident of the Wellington Mutual Insurance Company, and at one time president of the Provincial Mutual Underwriters' Association. Last winter he

was elected director of the Industrial Fair, in which institution he always evinced the greatest interest. Mr. Hobson was an ardent Presbyterian and prominently connected with Knox Church, Guelph.

Truly a great and a good man has gone hence. A man whose active life, splendid ability, unflinching integrity, and kindly and generous disposition will live long in the memories of those who were so fortunate as to have been among his acquaintances, and they were not a few. His fine presence and hearty greeting will be greatly missed at the Provincial Winter Fair this week, and none will mourn his loss more than the many breeders and others present who have so often profited by his kindly and generous advice.

We append a few words of appreciation from several gentlemen who knew Mr. Hobson and his

work intimately. For particulars regarding the occasion of his death see The Farming World of November 27th last.



Among the men known to me who are engaged in agricultural pursuits, I have never met one who proved himself a truer friend than the late Mr. Hobson. He was noted everywhere for his kind ness of heart, and his inability to wrong anyone. Few men undertake the public duties which fall to their lot with a more un selfish desire to accom plish good for the general public. In an especial way was he gifted with a public spirit, which seemed always to impel him to render service where otherwise it might not have been expected. For many years he took a deep interest in the work of the Farmers' In stitutes, and in that way

became well known throughout Ontario. He always talked as a practical man who understood his subject, and on that account the results of his experience, and any suggestions he had to give, were always received with favor. During the later years of his life he became more deeply interested in live stock matters, and was one of the few who were always present at any gathering that had for its object the promotion of this branch of our industry. His interest was not a fluctuating one, nor could it in any sense be considered of a personal character, but was manifestly for the well-being of the general community, as shown by all his conduct.

As head of the Department of Agriculture for this province, I did not hesitate to ask him to render service in various ways, and whether any compen sation was connected with the effort or otherwise, I always found him willing to make a ready response. Few men taken from our ranks would be more missed than will our late friend, John I. Hobson, and few places will be more difficult to fill than the ones he has left vacant.—Hon. John Dryden

Most Kindly and Helpful

I knew Mr. Hobson well, and regret extremely his passing away from the sphere in which he was so potent a factor for good. He was not only a thoroughly well-informed and competent live stock man, but the tone of his public utterances and his private career was such as to elevate all who came in contact with him and the subjects with which he dealt. He was the stamp of man whose presence and participation in it had made agriculture more respected. Personally I ever found him to be most kindly and helpful, and I feel that I have lost a friend as well as an efficient helper in that agricultural work which it has been my lot to take part in .- Hon. Sydney Fisher, Dominion Minister of Agriculture

He Died in Harness

I first met Mr. John I. Hobson about nine years ago at a sale which was held at Bow Park. At that time I was impressed with his ability, honesty and singleness of purpose, and ever since that meeting we have been close friends and fellow-workers in the promotion of the various agricultural interests. For two seasons he and I had the privilege of judging the prize farms in the Province of Ontario. This brought as into very close touch, and since then we became associated in the building up and management of the Live Stock Associations which have, in a great measure, made Ontario's Live Stock and Co-operative Associations famous throughout America. I always found him willing and ready to sacrifice his own time and interest for the good of the public. As a farmer and business man I considered Mr. Hobson one of the best I ever met. Though thoroughly business-like, he was never grasping or over-reaching, but always generous and just in all his transactions. He, perhaps, more than any other man deserves credit for the splendid live stock building which has been erected in Guelph. This building will stand as a monument to Mr. Hobson's enterprise, determination and public spirit. Though a determined man, he was always kindly and gentlemanly, even to bitter opponents. In his private life he was all that a husband, father and entertainer should be. His doors were always open to those he thought worthy, irrespective of either wealth or social position. He will be greatly missed, not only in his native city, but also throughout the

He had for many years been a successful Farmers' Institute worker and as a lecturer was one of the most popular in the province. On November the 19th an important committee of live stock men met in the Parliament Buildings, Toronto. He was there as Chairman but had to leave the meeting on account of illness before the work was completed. He returned home, and as is known, died in a few days, never leaving the house again. In fact he should never have left his home, but he was anxious to see some important work carried through in connection with the reduction of railroad rates, so that he may be said to have died in harness. His work for the public was of the most disinterested kind. During all these years he rarely if ever received any compensation for his services and on many occasions even paid his own expenses. There is no doubt that Ontario and Canada at large have suffered a great loss by his death. - F W. Hodson, Dominion Live Stock

Commissioner.

Could be Relied upon to do Right

Mr. Hobson could always be relied on to do right and deal fairly, whether it was popular or unpopular to do so; and he never neglected the duties of any office or position to which he was appointed - Dr. James Mills, President Ontario Agricultural College

Dairying in the Territories

Prof. Robertson returned to Ottawa last week from an extended trip through Manitoba, the Northwest Territories and British Columbia. He reports that the creameries in the Territories managed by the Dominion Department of Agriculture have had a most successful season. The ou put of butter from the twenty creameries during the summer was 636,915 pounds, being 28 per cent. greater than last year. The value of the butter at these creameries was somewhat higher than the average prices at the creameries in Outario and Quebec. The policy adopted by the Minister of Agriculture to put co-operative dairying on a good basis in the Territories has been an unqualified success. Whereas formerly during the summer season butter at many points in the West was almost unsaleable, the average price during 1899 and 1900 was over 20 cents at the creameries. Three of the creameries in Alberta are being run all winter, and are turning out a ton and a half of butter per week.

The Kootenay district is the chief buyer of food products in the Territories, British Columbia, and Manitoba, and butter, beef, bacon, hams, eggs, condensed milk, and evaporated cream are in large demand. Only the finest quality of products is wanted. Instances are on record where butter and eggs which were not fresh enough for the miners were shipped to Montreal. The Minister of Agriculture has authorized the further extension of the work in the West. An effort will be made to put the egg and poultry business on as good a basis as butter. A large portion of the bacon and hams consumed in the Kooter ay comes from the United States. Expert instructors who have been successful, practical men with cattle, sheep, swine and poultry, will hold meetings in British Columbia and the Territories during the winter. Short courses of instruction in home dairy work will also be given at several

While in the West Prof. Robertson spent some time in arranging for manual training schools to be established at several centres, including Winnipeg, Regina, Calgary, Vancouver, and Victoria. At Winnipeg five instructors will be employed, and 1,000 boys will take the course.

To Stop European Sugar Bounties

There has been much agitation during the past few years in Canada, and more particularly in this province, for a Government bonus to encourage the establishment of beet root sugar factories. So persistent has been this agitation that the Governments of the day are beginning to look upon the proposition in a more favorable light. Bounties on beet root sugar exports have been given in some European countries, such as Germany, Austria and France for some years, and an effort is now being made to have them discontinued. Should such effort prove successful it might be possible to carry on the manufacturing of beet root sugar in this country without a bonus. If these European bounties are removed it will not be possible for manufacturers there to sell sugar on this side of the Atlantic as cheaply as they have been doing.

The following extract from the London Financial Times shows what is being done with a view to having the boun-

ties discontinued:

"According to the Paris Siecle the French Government has decided to sound the other powers interested in the sugar bounties question, with a view to reopening the Brussels Conference on the subject, the object being to arrive at an international arrangement which will satisfy all the parties. We were informed the other day that Germany and Austria had practically agreed to suspend their export bounties if France would fall into line and also modify her arrangements, which the Government was represented as willing to do. The question does not seem to have as yet been discussed in the French Chambers. and we may expect a very lively debate when it does come along as the sugar interest is very strongly represented there. The last conference at Brussels was absolutely abortive, but the conditions have been very much modified since then by the changes in the tariffs of India and the United States. There is, therefore, a better prospect if the conference takes place—which seems likely—that some practical conclusion will be arrived at. The matter is of great interest both to our West Indian colonies and to manufacturers on this side, and it is to be hoped that an end will be put as soon as possible to the present state of suspense, which is very disturbing to the trade."

Oak Lodge Conqueror

This cut represents Oak Lodge Conqueror 2475 and four pigs of his get, which won 1st prize at Toronto Indus-



trial Exhibition, 1900. Bred and owned by Brethour & Saunders, of Burford, Ontario. Oak Lodge Conqueror is without doubt the most noted boar in Canada. His winnings in the shw rings have never been equaled by any single boar. He has been at the head of the herd, winning 1st prize three years in succession at Toronto, and, during the same period, he has won the 1st prize each season as boar and four of his get. Sows and boars of his get have brought more first prizes to the Oak Lodge herd than all the other boars combined that have been in use in this celebrated herd.

With all the winnings that Oak Lodge Conqueror has captured he has never be a overfed. He has been kept in tine breeding condition and his winnings have been purely on quality and merit. He is still being used very freely in the Oak Lodge herd.

Exportation of Dressed Beef

The development of the dressed beef trade is something that concerns every farmer in the country. Efforts have been made several times during the past few years to start the business, but so far without success. A couple of years ago a large abattoir was talked of for Quebec, but its promotors began with the assumption that beef made by raising the calves from the ordinary dairy cows of Quebec would be of sufficiently good quality to meet the needs of this trade—an absolutely wrong basis upon which to build up an industry of this kind. The quality of the cattle to be slaughtered for the export dressed beef trade must be as good as that required in the live cattle trade. Every shipper knows that there is no use in exporting anything but the very best cattle, and the same rule will apply to the dressed beef trade.

However, there are prospects of the dressed beef trade being opened up in this province, where the very best of the cattle in the Dominion are to be had, and if the business can be made to succeed, it can be here. In an address in Welland County last week Premier Ross made an important deliverance on this subject. He is strongly in favor of establishing a large abattoir in Toronto, and spoke as follows:

"Last year we sent 116,000 head of live cattle to Eng-

land. The risk of sending cattle is very great; we believe there is a more excellent way of sending beef to England than that. The people of the United States sent 267 million pounds of dressed beef to the English market. England imported last year six million carcases of mutton, some from Argentina, some from Australia. If Australia can send chilled mutton 8,000 miles, and Argentina as far, crossing the line and sailing through the tropics, surely we can send our dressed meats to the British market. But the question is where to get the capital. The Government propose that if next year the proper capital is found to guarantee the interest at 4 per cent. on \$250,000 to enable capitalists to put that on a proper basis, and if successful in putting dressed beef on the English market, we will add to the value of every head of cattle. That meant that large establishments, like Armour's, of Chicago, would be established. It means the employment of men in stockyards and packing houses; it means to the farmer a steady, sure market for his cattle. Now a farmer sends his cattle to Montreal, and finds that some other man has bought up all the space on the steamers. He has to sell his cattle in Montreal for what he can get. Under this system the meat can be sent to the large packing-house and slaughtered, and landed in Britain in as good condition as it would be landed from the butchers' block in Toronto.'

International Live Stock Exposition

Chicago Stock Yards

This exhibition from the opening day has been a success and has attracted great crowds of visitors to Chicago. In horses it is confined to the draft breeds; in cattle to the beef breeds, and includes sheep and swine. In horses there were none from Canada shown. Graham Bros., of Claremont, made entries but did not exhibit. Mr. Robt. Graham acted as one of the judges. There was a grand display of Clydes passed upon by three Canadian judges, the others being Prof. Craig, now of Ames, Iowa, well-known as a sheep judge, and Prof. Carlyle, of Wisconsi', another graduate of the Ontario Agricultural College. They placed Laminated Steel, by Cedric, first, and Benedict, by Baron's Pride, second. The former is owned by Mr. Alex. Galbraith, of Janesville, Wisconsin, and has been the show horse of the Agricultural College of Wisconsin. The other



Sandringham (imported) Southdown Shearling Ram, bred by II.R.H.

The Prince of Wales. First prize shearling at Ottawa Fair, 1900
The property of Huntlywood Farm, Beaconsfield, Port Claire
P.O., Quebec.

is owned by Mr. Bass—Brookside Farm Co.—Fort Wayne, Indiana. For two-year-olds N. P. Clarke, St. Cloud, Minn., had the winning colt, which proved good enough to

He, too, is by Baron's Pride, the win the Sweepstakes. great Scotch sire. There were a fine lot of Clyde mares shown: fewer shires and a lot of Percherons.

CATTLE.

In Shorthorns there was hardly as many as had been expected. H. Smith, of Hay, Ont., and W. C. Edwards, M.P., of Rockland, were the Canadian exhibitors and may win some prizes, but there is a lot of excellent specimens from various S ates which are hard to beat. In Herefords, H. D. Smith, Compton, Que., was the only exhibitor from Canada. He got fith for his aged bull, Mark Hanna, and sixth and eighth for his younger bulls. Three head in the sale by auction averaged him \$300 each. None of the Canadian Aberdeen-Angus men tried issues with their "doddies." The quality of many of this breed was very high. In Galloways, there was the largest and best exhibit that has been seen together on the continent. Two stables were completely filled with over 150 head of well-finished show The only Canadian exhibitor was D. McCrae, of Guelph, who was awarded two firsts, three seconds and three thirds. He also won fourth for herd of Galloway grades, and won a sweepstake for best ranch calves over all breeds.

SHEEP. In sheep there was a very large exhibit from Canada and the bulk of the awards came over the border. Jno. Campbell, of Woodville, was specially successful, both in the fat classes and in that for Shropshires. D. G. and J. G. Hanmer were also successful with Shropshires. J. H. and E. Patrick made much the largest exhibit of Lincolns, T. G. Gibson, of Denfield, having also a fine lot. These two won all the prizes. R. H. Harding had some very good Dorsets. John Kelly, Shakespeare, had Hampshires and Leicesters. A. J. Watson and Jno. Rawling had Cotswolds and Geo. Gardhouse, Highfield, was an exhibitor of Leicesters. Richard Gibson, Delaware, Ont., also won a number of prizes, both in the fat and breed classes. Altogether the Canadians were much ahead in the sheep classes, though they had no exhibit in either Oxfords or Southdowns.

SWINE.

The only Canada exhibitors were Brethour & Saunders, of Burford, Ont., who showed Large Yorkshires, and won a large number of prizes.

Immense crowds thronged the buildings both day and night, and the exhibition altogether was very successful.

Making and Curing Pork

September 1 of last year we put six nice March pigs in the pen for family use. The pigs had been running in woods, pasture and clover field, and had been given some corn, with plenty of fresh, pure water.

After putting them in the pen we began feeding them all they would eat up clean three times a day, with water

and slops.

October 10 we killed the smallest one, which weighed 225 pounds on foot, and November 14 we killed two more. After using all the meat on ribs and backbones, interspersed with sausage for breakfast, we killed, November 21, the remaining three pigs, or rather hogs, as the last weighed

300 pounds.

In each killing the hogs were shot, stuck, scalded, scraped, hung up and opened before dinner. After dinner they were roughly cut up, the lard was cut out and cooked out of doors in an iron kettle. The heads and legs were nicely cleaned, and placed in a vessel of water The meat was placed on a table in the meathouse to cool out. Next morning the meat was trimmed nicely, which made more lard and sausage meat. All the fat was cut from the lower side of the heads and cooked out with the rest of the lard, and then the legs and heads were cooked until tender in another big kettle out of doors. Heads were used for mincemeat or headcheese, as preferred; legs were eaten at dinner, after dinner meat was salted and placed on tables.

We used the following for curing: To 100 pounds pork, two quarts of coarse salt, two ounces of black pepper, six ounces of sugar, and one half ounce of saltpeter; dissolved saltpeter in one pint of hot water; mixed all in a vessel large enough to lay one ham in, and rubbed each piece thoroughly, particularly where the leg was cut off. Let lay on table three days, then rubbed again with the mixture; packed in box; let lay from twelve to fourteen days; then smoked with hickory chips.

In December we put our meat away for the next sum-We first wrapped it in paper, then placed it in coarse muslin bags, and hung it in a dark closet upstairs that was kept for that purpose. Our sausage meat was ground and mixed as follows: To nine pounds meat, three tablespoons each of black pepper and salt; sage the same, if desired; then the meat was sacked or stuffed and hung up in meathouse, and used while fresh and good .- Swine Breeders' Iournal.

The Reliability of Tuberculin

The Veterinary Committee of the Royal Agricultural Society have issued the following findings as the results of their experiments in testing the reliability of tuberculin:

Touching the question of the reliability of tuberculin as a test for tuberculosis in cattle, the sub-committee believe that the results of their own and other experiments justify

the following statements: (1) With few exceptions, manifest tuberculous disease is discoverable at the post-morten examination of animals in which there is a decided rise of temperature after the in-

jection of tuberculin. (2) As a rule, no such lessons are to be found in those animals in which there is no decided rise of temperature after the injection of the tuberculin, but the exceptions to this rule are more numerous than in the preceding case.

Practically speaking, the exceptions under each of these heads may be regarded as failures or errors in the test, but close examination of the circumstances suggests that some of the exceptions may be explained otherwise than by assuming an inconstancy of action on the part of tuber-

Tuberculin falls short of infallibility, inasmuch as there is in every case a period after infection during which it provokes no reaction, and some of the experiments described in the report indicate that this period may be

longer than has hitherto been supposed.

Even when full account is taken of these possibilities of error, the sub-committee are of opinion that tuberculin is an agent of great value, far surpassing all other methods of diagnosis, and that, if properly employed, it is calculated to render immense service in dealing with tuberculosis.

Canadian Fruits in England

The efforts to establish a permanent market in this country for Canadian fruit give promise of far more success than hitherto, and in this connection it may be stated that there has just arrived in Liverpool a large shipment of fruits, comprising pears, apples and peaches, from the Dominion, the consignment, which has been conveyed by the "Manchester Commerce," one of the Manchester liners, consisting of no fewer than 2,000 cases. Samples of these delicious fruits can now be seen in the window of the office of the Liverpool Traffic Agency, Canadian Pacific Railway (manager, Mr. J. J. Gilbertson), 9 James street, and a glance at them is calculated to make the mouths of the passers by along that side of James street water. They are certainly fine specimens of fruit, and in point of flavor and all round quality will want a lot of beating by the same kind of fruit grown on our shores. The peaches comprise two varieties, the Elberta and the Crawford, and it may be mentioned that they are grown in the open air at Grimsby, Ontario, where there are miles and miles of orchards and vineyards, and where the climate and soil are both specially

suited for their cultivation. These peaches have an exceptionally beautiful bloom, and for luscious flavor could not be excelled. The pears and apples are likewise of a remarkably mellow, juicy nature, and of good, solid tissue. It is satisfactory to note that these fruits can now be sent into England, and on arrival found to be in a perfectly sound condition. From Grimsby they are shipped to Montreal in refrigerator cars, then placed in refrigerator chambers on the steamships, and brought across to England in a temperature of from 36 to 40 degrees. mechanical refrigerator on the steamers was inaugurated in 1897 by the Hon. Sydney Fisher, Minister of Agriculture. Since then improvements have been made as regards the packing and grading of the fruits, and changes adopted in the temperature of the refrigerators, so that now it is possible to place these fruits on the British market in a saleable condition. The requisite temperature is ensured by the recent introduction on the steamers by the Dominion Government of what are termed thermographs, or selfregistering thermometers, which are placed in the cold storage chambers, and the actual temperature is marked on a chart for every moment the fruit has been in the cham-The difficulties in this direction having been successfully met, there is every indication that Canada will develop a gigantic trade in fresh fruits with this country. The present shipment, it may be added, is consigned to Liverpool, Manchester and Glasgow, and a portion to Belfast .- Liverpool Courier.

Construction of an Ice-House

By Robert Thompson

A few years ago I had the task placed in my hands of constructing an ice-house for the storing of ice to supply the refrigerator fruit cars leaving St. Catharines Station, and in the erection of the same a difficulty was encountered, a difficulty which is increasing over our province, viz., the scarcity of sawdust, and which cost us \$2 per load, delivered. A year ago I had to overhaul my own ice-house, and, after the experience I had had, and from what I could learn from ice-men who have adopted the improved methods of construction, I concluded to build an ice-house for myself on the following plan. It may appear a little expensive, but when I take into consideration the cost of sawdust, and the fact that I had to draw the ice three miles and pay twenty-five cents per load for it, I could not afford to draw the ice home and have it waste to any extent.

I had learned that there were two or three weak points in ice house construction—the first was a poor foundation and lack of drainage; the second, the roof, on which the sun generates such intense heat that the inside of the house is more like an oven than a place for keeping ice. I desired a house that would hold over 40 tons of ice, and built on the following plan. I will give a few general directions for others who are located differently. While little scope is usually given in the selection of a site, there are certain precautions to be taken in order to secure a good bed for ice.

If the site chosen be on a little rise above the adjacent ground level, surface drainage will give no trouble; otherwise provision for it, as well as the water from the melting ice, must be made. For preparation for the foundation of the house, which can be placed on stone or cement walls, or on cedar posts set in the ground two feet at least, excavate at least one foot below sills, and fill with cobble stones or very coarse gravel the whole of the inside between sills, smoothing off the surface with fine gravel or cinders. If the digging shows a clay soil, a drain should be put in to carry off surplus moisture, carrying drain well under the gravel. Scantlings can be bedded in the fine gravel on which to place a floor of cheap lumber, placed one inch apart to permit the water to pass through readily.

It takes on an average from 40 to 45 cubic feet to hold a ton of ice, consequently a building 12 x 16 ft. by 12 ft.

high, would hold about 45 tons of ice well packed. I used 3 x 12 sound pine plank for sills, and for uprights 2-6 scantling 12 ft. long, placed two feet apart, at each corner putting in an extra piece to catch lining on the inside. On the top I spiked 2 x 6 scantling doubled for plates. the outside of house I nailed sheathing of common lumber, on which I tacked a double thickness of building paper, then strips 1-2-12 feet long. Over this a double thickness of building paper, and finished with matched siding. This gives a hollow space of dead air of one inch to prevent he t of the sun penetrating to inside lining, care being used to see that the space is well cut off at top and bottom. On the inside I nailed sheeting, filling the six-inch space with cinders, shavings or sawdust, as is most convenient (I used cindets); over this sheeting I nailed a double thickness of paper, on which was nailed 1/2-inch strips again, and on these sheeting, thus making two hollow spaces of dead air one inch each and one space of six inches filled, six thicknesses of building paper, three of sheathing and one of good siding.

For the roof I used 2 x 4 for rafters, lining the under side and filling between the rafters with dry shavings; under the shingles I placed two thicknesses of building paper, placing a ventilator in the centre of the roof, made so that it can be closed inside if desirable. The door should be made in two halves, and a door in the gable over the plate to put in and take out the ice for two top layers. The gaoles should be built the same as th. walls. If the outside of the building is painted white it will help to keep the building cool. At the time of writing (July 22) there has been no waste of ice around the outer edge. I believe I have secured a good house at the cost of \$65 and my own time in building; as any farmer should be able to do this work himself in slack times.

In filling the house I placed the ice on its edge, placing every alternate layer crossways. Ice will keep better and come out easier packed this way. Opposite the doors I laid short pieces of boards and filled the door space with shavings. When the house was filled I placed two feet of straw over the ice, tramping it well. Marsh hay would answer the purpose better. We are using the hay and straw for our cold storage house, and all of the large ice-houses are using the same. I only know of one or two small houses now using sawdust. I feel satisfied that I can keep my ice through the summer with the loss of only a ton of ice.

Ration for Sow-Nursing Pigs

Sweet skim-milk is useful at every stage of pig feeding. Sows should not receive any very large quantity of milk before farrowing, judging, from our experience with that product here at the station. After farrowing, as the condition of the mother sow becomes natural skimmilk can be liberally fed to the sow, the quantity being somewhat limited at first, but as her young make heavier and heavier demands the allowance can be increased. No other generally available food except buttermilk equals skim-milk for a sow suckling her young or for the young pigs themselves.

Bran is a coarse, chaffy food containing considerable inert matter. In some particulars it resembles ground-up straw, though it is much more nutritious. Now, we would hardly expect a brood sow or any other pig to take any large quantity of straw into their digestive tract even if straw were ground up and contained much nutriment. Where animals are heavily fed, bulky bran is not a suitable feed. Where they are lightly fed, and the digestive tract is not nearly filled with provender, then bran as a part of the ration is highly useful in helping distend the digestive apparatus. We all know that food must have bulk or volume as well as nutriment to be entire satisfactory.

If a brood sow is getting a goodly supply of skimmilk, such food being liquid and easily digested, some bran can be fed with the milk to give it solidity and substance, but it will hardly pay to use bran as the sole solid portion of the ration.

Skim milk is rich in protein, which builds up the muscle; bran is also rich in the same line. Corn meal is rich in carbohydrates, which goes to lay on fat and furnish the heat for the body and is not rich in muscle building protein. Corn meal, therefore, is a complementary food to go along with the skim-milk. Of the two feeds it will be better then to feed corn meal, than bran with skim-milk. better, however, will it be to feed some bran in addition to both the other food substances. A mixture containing two or three pounds of skim milk, one pound of corn meal and not over half a pound of bran should prove most

Oats are intermediate in property between corn and bran and may be used accordingly. For young pigs grind the oats and sieve out the hulls and coarser parts, feeding the waste to cows. On the the meal thus left the pigs will thrive amazingly, especially if such oat meal meal is accompanied by skim milk-W. A. Henry, Wisconsin Agri-

cultural Experiment Station.

CORRESPONDENCE

Honors at Chicago

Editor THE FARMING WORLD

SIR,-We have just finished exhibiting our hogs in the pure bied class, and we have won eleven first premiums, six second premiums and two championship prizes. have to show in the killing test on Thursday and we consider that our prospects are very favorable to win in that class. We have sold nearly all our exhibition herd and expect to sell the entire lot before leaving here.

This is one of the greatest and best shows of its kind that I have ever attended. Canadian exhibitors are going

to give a good account of themselves here.

J. E. Brethour,

Chicago, Dec. 3, 1900.

Only One-half Stocked

Editor THE FARMING WORLD :

This district is not more than one-half stocked yet, and until we get better stock we will not be troubled selling our thoroughbred stock. About establishing sales at fixed places, I believe such sales would be a great benefit to the farmers of Algoma, as a number of people here have got culls in sending for what they supposed to be first class stock; while others got what was right and good. If annual sales were held at fixed places and the right kind of stock offered, we could send a man or attend ourselves. and get stock for what it was worth.

Sowerby, Ont. THOMAS CORDUKES.

Ontario Speakers in the East A Fine Tribute to Hon. John Dryden and F. W. Hodson

Editor THE FARMING WORLD :

I wish to say that we were simply delighted with Hon. John Dryden, your great Minister of Agriculture. No man in these provinces can fail to realize the why and the wherefore of the tremendous agriculture progress of your great Province of Ontario with such a man as John Dryden at its head. Now that we know him, we are surprised at your

progress no longer.

We have also, during this visit, learned to appreciate to the fullest extent the splendid qualities of our live stock commissioner, Mr. Hodson, and what great possibilities lie within our grasp in these provinces through efforts of Mr. We confess, with much regret, our unexplainable prejudice against Mr. Hodson. We did not know the man at all; we know him better now, and in these columps desire to withdraw, with the keenest regret, any unkind words or writings which we have hitherto voiced. Some of the good things which Mr. Hodson has done for

Ontario we now feel sure will be done for us down here, and we heartily believe that the live stock interests of Eastern Canada could not be placed in better hands than in Mr. Hodson's. We also desire to say, further, that we are delighted with Mr. Grisdale, and believe him to be a man peculiarly fitted to the important position he now occupies with such marked ability and practicability. He is a splendid man; and Mr. Raynor! why, he took our people by storm-so practical, so interesting, so full of knowledge. This visit of our Ontario friends will mark an epoch in inter-provincial brotherhood, thanks to Mr. Hodson.

Hermanville, P.E I. J. A. MACDONALD.

Education in Poultry Keeping

EDITOR THE FARMING WORLD

SIR,-I have read with interest the articles in your paper in reference to special education along the lines of poultry There is certainly great need of work of this kind. I am of the opinion that the poultry industry of today is carried on in the most careless manner of any line Apparently the farmers believe that one of agriculture. hen is as good as another, and that their fowls should lay well, rear a large number of chicks each year without any outlay of labor or capital in the way of housing and proper feeding.

Numerous inquiries are received in reference to the instruction given in poultry in the regular college course, also to a limited extent for a special course. The demand for instruction to would-be poultrymen is steadily increasing. The people of Ontario are awakening to the advantages to be gained by keeping more and better poultry. They are seeking for reliable information as to the methods of feeding, breeding, house construction, and general care

and management.

There is no fear of this branch of farming being overdone, as we have an unlimited market in England as well as an increasing home market for the finished article. There is no trouble in receiving ten cents per pound for we'l fattened chickens, the buyer paying all transportation charges. True, the inferior class of poultry is not very profitable, but do we not find the same conditions in all branches? Who is anxious to buy poor beef or strong butter?

Not a few farmers and others are inquiring as to the necessary training before entering the business, and also as to where this can best be obtained. This work could be undertaken at the college, at a small additional expense in the way of a few more buildings and some additional outlays for the purchase of more breeds of poultry such as

geese and turkeys.

The aim should be to give as much practical training as possible in order to illustrate and impress ideas expressed during the lectures. A few expert poultrymen who have made a marked success of some particular branches of the industry might be employed to advantage to give a few

The poultry of the province is in far too many cases inferior in quality, there being a marked lack of breeding as well as of care. We have numerous letters from dealers inquiring where they can secure the "gilt edge" article. Only to-day we had an enquiry for a regular supply of guaranteed new-laid eggs at an advance of five cents above the market prices. The dealer stated that he could find no

one who would supply him.

Undoubtedly this branch of agriculture requires close and careful attention and if it were possible for those who purpose entering the business to attend some school where they could receive full instructions both as to the causes of success and failure, great benefits would be derived. If it could be made possible for those starting in the business to receive the experience of the few who have made a success, the advantage must be great.

A course in poultry culture would train poultrymen to habits of study and observation which would be of immense value in after life. W. R. GRAHAM,

Man. Poultry Department. Ontario Agricultural College, Guelph, Ont.

The Agricultural Gazette

The Official Bulletin of the Dominion Cattle, 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 Mersbership Fees:—Cattle Breeders' \$1; Sheep Breeders', \$1; Swine Breeders', \$2 BENEFITS OF MEMBERSHIP

BENEFITS OF MEMBERSHIP.

Bach member receives a free copy of each publication issued by the Association to which he belongs, desing the year in which he is a member. In the case of the Swine Breeders' Association this includes a copy of member of the Swine Breeders' Association is allowed to register pigs at 500, per head, non-member are charged \$1.00.

The member of the Sheep Breeders' Association is allowed to register pigs at 500, per head, while non-mabers are charged \$1.00.

When name and address of each member, and the stock he has for sale, are published once a month. Over Experiments this directory are mailed monthly. Copies are sent to each Agricultural College and active and the United States, also to prominent breeders and probable buyers resident a member of an Association will only be allowed to advertise stock corresponding to the Association to which he belongs; that is, to advertise stock coverage of the Dominion Sheep Breeders' Association, to advertise steep he must be a member of the Dominion Sheep Breeders' Association, and to advertise to the coverage of the Dominion Sheep Breeders' Association, and to advertise the must be a member of the Dominion Swine Breeders' Association.

Baving stock for sale, they are not such that the sale of the Association and to advertise to the sale of the Association and the sale of the Association an

Entries for the Provincial Winter Fair.

The entries for the approaching Winter Fair and Poultry Show are now complete and make up a splendid total far exceeding that of any other previous show. In cattle there are 120 entries, in sheep 347, in swine 399, and in dairy cattle 15, while the live poultry, pigeons and pets run up to the magnificent total Besides these there will of 2042 be a fine display of dressed poultry and eggs, entries for which have been received from many points in the province

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 result of the property of the object of bringing together employers of the property of the prop

Help Wanted.

Experienced man, with no bad habits, who can milk, tend stock and do general farm work, wanted in Michigan, on a small dairy farm. Wages, \$180 to \$200 and board. No. 617. b

Competent, reliable, married man wanted on a farm, one who is capable and willing to undertake the chief work and minor management of same. Yearly engagement and permanent situation to satisfactory party. Good house, garden and fuel furnished and liberal wages paid. Will also let farm on shares. No. 618.

Good situation in Michigan for one accustomed to general farm work, where considerable stock is kept. No.

Situations Wanted

Single man, 30 years of age, used to farming all his life, and an expert ploughman, wants a place as foreman on a farm. Good references given. No. 462.

Wanted, by young, married man, without family, situation as manager, or assistant on a farm. Has no bad habits, and is accustomed to the care and management of live stock and growing of farm crops. No. 459.

Man, experienced with sheep, wants a place to look after sheep. No. 460.

Young man, 23 years old, of good character and habits, who has always lived on a farm, and is used to milking and general farm work, requires a situation. Would go to Manitoba. No. 461.

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

Farmers' Institutes.

Farmers' Institutes.

Under this head the Superintendent of Farmers' Institutes will each week publish matter relating to Institutes will each week publish matter relating to Secretaries and this will include instruction to Secretaries and John States and Louise great and suggestions to Secretaries and Louise and Louise great and Experiment of the Wall also from time ungestions to delegates, etc. He will also from time requires one of the published results of experiments. In this way he hopes to give Institute members some value and the secretary of the secreta

G. C. CREELMAN, Superintendent Farmers' Institutes.

Women's Institutes.

Lady delegates have proved most acceptable to the Institutes and, as one result, the superintendent is being notified almost every day of the formation of new Women's Institutes.

MISS MADDOCK IN DIVISION 7A.

Miss Maddock in Division 7A writes that she has assisted in organizing a Women's Institute in each institute district that she has visited so far. These districts are Halton, Peel, West York and East York. Miss Maddock goes next to West Durham where there is a thriving Women's Institute already doing good work.

MISS ROSE IN DIVISION 7B.

Miss L. Rose in one of her letters states: "I have organized two Women's Institutes, both of which give promise of becoming strong societies. A special meeting of the ladies was called at Uxbridge and sixty met. After presenting the need of such a society as a Women's Institute and the benefits to be derived from one, I took a vote to see their wish regarding the matter, found it favorable, elected officers, made them give their maiden speeches, arranged for the next meeting, gave those present opportunity to join, and everything passed off like a breeze everyone was so cheerful and willing to help. Saturday we had a similar meeting at Fenelon Falls. Over thirty ladies were present and exactly the same enthusiasm prevailed as at Uxbridge."

Great Enthusiasm Shown in Institute Meetings This Year.

Splendid reports are already coming in of the meetings that are being held, from the County of Halton east to Glengarry.

A PROSPEROUS INSTITUTE.

East Northumberland Farmers' Institute promises to have an exceedingly prosperous year. the afternoon meetings, held at Warkworth and Brighton last week, fully one hundred farmers were present in each case. The membership, too, is being built up in a most satisfactory manner, the secretary reporting 136 paid members as a result of one and a half days' work this year, or exactly the same number as were on the roll at the end of last year. The hest feature in connection with the East Northumberland Institute, however, is the freedom shown by

those who attend in asking questions. At Warkworth and Brighton fully half the time was taken up in giving informal answers to informal questions, and in listening to remarks interjected by those having suggestions to offer in regard to subjects under discussion. In the United States objection is made to local men occupying the time at Institute meetings. This objec-tion, in my opinion, is not well founded. Interjections, in the form of questions, or observations such as those made at Brighton and Warkworth, bring out points that would never be brought out in a formal address by visiting delegates. These questions show just exactly what the people present require information on. And quite often that information can best be furnished by some one of the members in attendance. In other cases delegates, with their wider experience, having met people in all parts of the Province, can furnish the information desired. Having had opportunities of observing Institutes under the different systems. I feel quite safe in saying that those meetings which impart the most information are those where the greatest time is given to informal questions and answers, with occasional remarks by those present who have information to give on matters under consideration.

W L S., in Weekly Sun.

A Women's Institute Organized in West Bruce.

The first meeting of the ladies of this district for the purpose of organizing a Women's Institute, was held in the council chamber. Port Elgin, at 2 o'clock on Saturday, November : . Those present were Mrs. D. .IcTavish, North Bruce; Mrs. Stewart, Southampton; Mrs. P. Cummings, Mrs. Jas. Hendry and the Misses Elliott, Saugeen; Mrs John McEwing, Mrs. T. Brigden and Mrs J. H. Wismer, Port Elgin. Mrs. Mc-Tavish, convener, called the meeting to order, and, after reading a circular letter from the Superintendent of Farmers' Institutes, explaining the aims and objects of womens' societies, the appointment of officers was proceeded with. Mrs. McTavish was elected president, Mrs. Cummings vice president, and Mrs. Wismer, secretary. The purposes of this initial meeting having thus been accomplished, the gathering adjourned to meet again in the council chamber at 3 o'clock on Saturday, the 1st day of December, when, among other business transactions, subjects for discussion at future meetings will be arranged. We earnestly request

the presence and co-operation of all ladies interested in house and home.

MRS. WISMER, Secretary.

Good Reports from Divisions 7A, 7B, and 8

No paper in Ontario gives us such full and accurate reports of Institute meetings as does the Weekly Sun. Mr. W. L. Smith, their Agricultural Editor, is everywhere. I quote from his writings quite freely at this time.

The Effect of Good Stabling.

J. S. Woodward, of Lockport, N.Y., one of our Institute speakers of last year, writes a very good article in a recent issue of Hoard's Dairyman, which contains a truth that every feeder of live stock should study closely. It is written especially for dairymen, but the truth is as equally applicable to a beef steer or a growing animal, as it is to a dairy cow. It is as follows:

In a perfect stable with all the conditions just right, about 18 pounds of good mixed hay a day will be used by a 1,000 pound cow to simply exist. If no food is given beyond this, no production of milk can take place except at the expense of the cow's condition. Dr. Lehman made some very instructive experiments as recorded by Prof. Henry in his very excellent work, "Feeds and Feeding," in which a flood of light is thrown on this question of feeding cows. He shows that the same cow that was kept in the pink of condition on 18 pounds of dry matter in hay, ate all the way up to 25 pounds as she was placed in less tavorable conditions. That when turned out for a couple of hours each day, as cows are usually treated, she ate 21 pounds, with no gain of milk production. He then continued to show the cost of milk production in food beyond this point. His experiments were so instructive that I compile and include the following table:

cerned. That when eating the 25 pounds of dry matter, under ordinary conditions, 11 pounds of milk was made at the expense of 2.27 pounds of dry matter for each pound.

But as the ration was increased for each two pounds of dry matter, the increase of milk was about 5.6, and at a gradual reduction in the amount of dry matter, until when eating 32 pounds, it only took 1.16 of dry matter to produce a pound of milk.

The conclusion of the above turns a bright light on one grave mistake often made, that of deficient feeding.

A bright clear headed man will look into this question, and will see that the milk costing the least is produced when the cow is fed an abundant ration, properly balanced. We have often heard farmers remark concerning a neighbor who was a liberal feeder: "Yes, I know he gets lots of milk, but it costs him all it is worth in feed." By the above, it will be seen that it took just about half the food to produce a pound of milk when the cow was fed 32 pounds of dry matter, that it did when she was fed 25 pounds, conditions being the same. Many feed their cows only about enough to maintain life. They get but little milk, and what they get costs high. Feed more liberally and the returns increase at an astonishingly fast rate. Liberal feeding pays. Try it.

Turnips vs. Mangels.

The question whether it is better to feed turnips or mangels seems still to be a live issue at the different Institute meetings that are being held throughout the province.

There should not be any question as to what is the proper thing to do in this matter. The report issued by the Bureau of Industries last week shows that the average yield of mangels in Ontario this season was 453 bushels to the acre, while the average yield of turnips was 379. Taking the average yield of the last eighteen years, mangels

| HOW KEPT. | Dry Matter Eaten. | Protein, | Carbo- hydrates. | Fat. | Nutritive Ratio. | Milk Pro- duced, | Lbs. oi Food for one lb. of Milk. |
|--|--|----------------------------------|---|----------------------------------|---|----------------------|---|
| In warm stable In cold stable In warm stable; out two hours each day. In warm stable; out two hours each day. In warm stable; out two bours each day. In warm stable; out two hours each day. In warm stable; out two hours each day | b. 18 25 21 25 27 29 32 | 1b*. 0.7 0.9 0.9 1.6 2.0 2.5 2.3 | lhs. 8.0 12 7 12 10 11 13 | lbs. 0.1 0.6 0.2 0.3 0.4 0.5 0.8 | 1:11 1:14.7 1:11.6 1:6 7 1:6 1:5.7 | lbs. 11 16.6 22 27.5 | 2.27 1.63 1.32 1.16 |

By this table we see that when eating 25 lbs. dry matter in the cold, no milk resulted, and the same when eating the 18 and 21 lbs. under more favorable conditions, so that in each case, the food eaten was entirely wasted so far as production of milk was con-

have given 439 bushels, while turnips have given 419 bushels. Thus, both this season and in the average eighteen years, mangels are ahead. Moreover, owing to the fact that insect pests have of late been causing such havoc in the

turnip crop, the yield in that line is going behind, while the yield in mangels is going ahead. This is shown by the fact that mangels this year are above the average of the last eighteen years, while turnips are behind the average. It is clear, then, that, acre for acre, mangels will give a greater yield than turnips, and men who have had experience in raising both kinds of roots say that the labor in one case is certainly no greater than in the other. Those who have had experience say, too, that, bushel for bushel, mangels are better for hogs than are turnips, and that they will give equal results, so far as flow is concerned, in the milk pail when fed to dairy cattle. This being so, it seems impossible to understand how it is that men will continue raising turnips for the purpose of feeding to dairy stock, knowing, as they do, that the feeding of such roots has a most injurious effect on the milk produced .-Weekly Sun.

How to Grow Fruit.

THE VARIETIES WHICH WILL PROVE MOST PROFITABLE.

In a county where fruit production is such an important interest as it is in Northumberland, the address by G. C. Caston, of Craighurst, on orchard fruits and how to grow them, naturally formed a leading feature at Northumberland Farmers' Institute meetings held

during the past week.

One of the first questions asked us in connection with this matter, said Mr. Caston, is, "Are you quite sure there's no danger of over-planting?" For my part, I do not think there is. It is only about thirty years since the first peach orchard was planted in Ontario, and when one man put out five acres in peaches he was asked where he was going to find his market. Look at the thousands of acres in peaches now, and still there is demand for all the peaches produced. The same question was asked in regard to grapes, when grape culture first began. But today, although a great part of Niagara district is covered with vineyards, there is demand for all these vineyards produce.

SMALL AREA FOR PRODUCTION-BIG AREA FOR CONSUMPTION.

In the case of peaches, the area of possible production is limited to a few miles from the shores of the great lakes, while we have the width of a continent for a market.

In apples, the area of possible production is greater, but the apple producing districts are small com-

pared to those in which apple consumers live. In Canada the apple growing area is practically confined to the Annapolis Valley in Nova Scotia, the banks of the St. Lawrence in Quebec, and the lower part of this province. True, there are large apple-growing districts to the south of us in the United States, but Americans cannot produce the quality. With the exception of one variety-the Pippin of the Hudson Valley-our apples bring a higher price by two or three shillings per barrel than anything produced in the United States. For what we do produce we have

our local market where the apples are produced; we have the market afforded by the great districts of Muskoka, Parry Sound, and Al-Muskoga, Farry Sound, and Gragoma districts that are rich in timber and minerals, but in which apples, speaking generally, cannot be grown, we have the great territory stretching from Winnipeg to the foothills of the Rockies, a territory capable of maintaining millions of people, but incapable of producing an apple much better than a crab; we have the constantly expanding market in England and Continental Europe And we have the market in the United States. Even to day, despite a duty of 75 cents per barrel, we sell considerable quantities of apples to the United States. When the Americans make up their minds to swap products with us on even terms, and without the intervention of customs officers, it will be better for all concerned. Our Spy is the most popular apple in the United States, and in the great American cities along the Atlantic seaboard there is a possible market of almost unlimited extent for this apple.

True, there will be an occasional glut in apples; we have already had a glut in this product. But what farm product is there which has not suffered, at one time or another, from depression caused by

over-supply?

On the other hand, what farm product is there that, acre for acre, has paid as well as the apple? One man from 26 acres in apples made over \$4 000 in one year. What other product would have paid as well? And still the bulk of our orchards are shamefully neglected. Trees in many cases are put in like posts and then left to shift for themselves.

MUST FEED THE ORCHARD.

If we are to get the best results from our orchards we must keep up the fertility. The trees must be supplied with nitrogen, phosphoric acid, and potash. We can supply the nitrogen without keep-

ing an animal on the place. We can do this by plowing clover under. We get humus, decaying vegetable matter, into the soil in the same way. The cheapest form in which we can obtain potash is by using our ordinary hardwood ashes. We allow these to be exported in large quantitles for the benefit of our rivals in the United States, and then buy the same material in the form of commercial fertilizers at the rate of \$28 to \$35 per ton. Ashes even up to 121/2c. per bushel are cheaper than any commercial fertilizer we can buy. The best way to get phosphoric acid is in the form of ground bone. A shortage in wood growth and sickly leaves indicate a lack of nitrogen, a lack that can be made up by plowing in clover.

In planting a great mistake has been made in putting the trees too close together. Fifty trees on an acre will give more fruit and of better quality than 100 will on the same space. You must have space between the trees for air and sunshine, and for this reason trees do better on rolling land than on the

leve

COW MANURE IN AN ORCHARD.

"Would you put cow manure on an orchard?" asked R. J. Cochrane. "The owner of the best orchard between here and Cobourg, Thos. Macklam, says he would not put it on as a gift. He used it on part of his orchard one year and just as far as the manure went leaves of the trees were attacked by a gray grub. He stopped using the manure and the grubs ceased to bother him."

"I never heard of a case of that kind before,"answered Mr.Caston, "and certainly I should not hesitate

to use cow manure."

"Do you think plowing buckwheat under enriches the ground?" asked another.

"No," was the answer. "Buck-wheat adds vegetable matter to the soil, but I have never been able to find any increase in fertility as a result of plowing a crop of this kind under. My plan is to have half my o chard in clover and half in rye alternately. About July I sow fall rye, pasture lambs on it during fall and again in the spring, turn the rye under about June, disc the ground and then sow clover, without any grain crop; I plow this clover under the next June and follow with rye again."

SOWING CLOVER ALONE.

"Have you no difficulty in getting a catch of clover in that way?" asked another.

"No. The presence of the ashes helps to make a catch sure."

"Do you find it difficult to get about under the trees when cultivating at that time?" asked T. D. Sanford.

"No. The fruit has not yet begun to bear heavily on the branches and the trees are well headed up."

"Does not a growing crop of clover or rye in spring take moisture that the trees need?" asked George Carlaw.

Mr. Caston admitted that there

was danger of this.

Just here it might be mentioned that Mr. Powell, of New York, recommends keeping the soil in an orchard constantly stirred until the end of July or beginning of August. This prevents the evapora-tion of moisture while the trees most need that moisture and a cover crop planted in July checks fall growth in the trees and causes the new wood to ripen before winter.

A TRAP FOR LEAVES

"Do you think there is any gain in fertility by ploughing rye un-der?" asked Mr. Sanford again.

"There is no great gain in that way," answered Mr. Caston, "but you do get vegetable mould by that means and a crop of rye in fall forms a capital trap for the leaves from the trees. If you return all the leaf growth to the soil you avoid just that much soil exhanstion

HOE CROPS IN YOUNG ORCHARDS.

"What do you think of corn in an orchard?" asked another.

"It is all right for a young orchard if you return to the soil what the corn takes from it. An orchard needs cultivation and a hoe crop affords the means of giving that cultivation.

'An orchard of Baldwins," said Isaiah Ventress, of Colborne, "had a very heavy crop one year. The fruit on one side of the trees was thinned. Next year there was a crop on the side of the trees that had been thinned, while the side left untouched had none."

"You can," answered Mr. Caston, "prevent the tendency to bearing in alternate years by thinning."

VARIETIES TO PLANT.

"Now, about variety," continued Mr. Caston, "I do not know that we can do any better than by staying with the old standards. Look at the market reports, see what apples are bringing the highest price, and, if suited to your locality, grow these varieties. It is a great mistake to have too many varieties. If I were planting a commercial orchard I do not think I should go beyond Kings, Baldwins, Sples, the Ben Davis and Greening.

"The King is a shy bearer, but that can be remedied by top graft. ing on hardy stock. The Spy will

hardly stand shipping to England, but for the local market and that in the United States it is the most profitable we can raise. The Baldwin will stand transportation better than any of the others and it is said that the sea voyage improves its flavor.

PROFIT EVEN IN EARLY VARIETIES.

"I think it a great mistake to plant too many of the early and tender varieties. Still, with cold storage and improved methods of transportation generally, these may be made profitable. The Snow is perhaps the favorite dessert apple and if we can but get it to market in proper condition it is a profitable fruit. For my part I have made more money out of the Duchess of Oldenburg than any other variety. I get my market up in Algoma and Nipissing, and I find people there just as ready to pay a good price for what they want as are the people of England. Few people realize how great is the demand that is arising in our own northern dis-There is enough water tricts power along the Algoma branch of the C P R. to furnish all the power needed for all Canada. A start has been made in developing this power. The pulp industry at the Sault, with the industries allied with it, has \$60,000 capital behind it. The firm controlling that industry has a pay roll now of \$2,000 per day, and it is expected in ten years that it will have a pay roll of \$10,000. Back of this industry are the Canadian spruce forests that are capable of relieving the world's famine in paper. The men who will be employed in turning these forests into paper are great consumers of apples and the apples they need can be got only in lower Ontario.

WHAT MAY BE GAINED BY GRAFT. ING.

"Grafting is an important element in fruit culture. The Spy is a long time in coming into bearing-13 to 17 years-and it soon begins to fail. By top grafting on Tolman Sweet the Spy can be brought into bearing in half the time and you get the spreading top instead of the upright growth. I do not know any means so well calculated to secure satisfactory returns as by top grafting Spys on Tolman Sweets. know an orchard of eleven acres treated in this way, and it is the most profitable orchard I know of. I have seen Spy grafts literally loaded with fruit five years after

In grafting, it is important that you get scions from a tree that is a good bearer. You will find some trees that are doing nothing, side by side with others that are bearing well. You will find trees which

bear well on one side and hardly at all on the other. This is due to the scion carrying with it the char-acteristic of the tree from which it was taken.

"What do you think of the Peewankee?" asked Wm. Farley.

"It is a good cooker," replied Mr. Caston, "but the apples do not hold on well and blow off with the wind."

FLAVOR AND GRAFTING.

"Can you change the flavor of an apple by top grafting?" asked David Jones.

'I do not think so," answered Mr. Caston, "but I believe you can affect the keeping quality. The King, grown on a Tollman Sweet stock, will keep longer than if grown on its own."

Mr. Cochrane said the Phoenix was an an extra fine apple, and of a beautiful red color.

"Yes," added another. "but if rot once gets into a barrel of that variety of apples, the whole thing will go in two weeks."

"I do not approve of winter and fall pruning," Mr. Caston went on. 'I prefer to prune after growth has started in spring. In pruning, allow for sun and air getting among the branches, and also for a proper distribution of the fruit all over the

WHY NOT CO OPERATIVE SELLING?

"I do not see," said Mr. Caston, as he turned to another phase of the subject, "why there should not be co-operation in apple packing and apple-selling, just as well as in cheese-making and cheeseselling. You have made a success of the latter. Why not make a success of the other as well? There is no great secret in packing. What is required is that the apples shall be picked before they are dead ripe-just as soon as the seeds are black, and the fruit is of full size, and well colored. I do not believe the apple trade will be as successful as it may be made until this system is adopted."

APPLES FOR THE U.S.

Mr. Caston pointed out in his address that we send a large quantity of apples to the United States, notwithstanding the duty of seventy-five cents per barrel imposed upon them. During the fiscal year 1899 our exports to the United States reached 81,204 barrels, upon which the duty amounted to more than \$60 000. When we send this quantity in the face of the duty how much larger a number we should send were the duty remov ed! As. Mr. Caston states, there is a steady demand in American cities for the Northern Spy, which comes to greater perfection in Canada than in any other land.

The Farm Home

The Small Boy's Aspiration.

I'd like to be a minister,
With nothing at all to do
But write a sermon once a week,
And preach an hour or two.
It must be fine to wear good clothes,
'N go out to tea at night,
'N spend the day-time making calls—
The minister's job's all right.

I'd like to be a doctor, too,
'N ride around all day,
'N know that every call I made
The folks had got to pay.
These doctors lead an easy life,
They must have lots of fun;
They rather beat the ministers,
But I guess I won't be one.

I'd rather be the editor, He has the softest snap. Why, all the good things come his way; Say! he's a lucky chap. He has free passes to everywhere, And when there is a war

He tells the generals what to do— I'll be an editor.

Preparing for Christmas.

In a couple of weeks Christmas will be here. This, the greatest festival season of the year, can be enjoyed as well in the country as in the city. What is more pleasant than a sleigh-ride to the old home on a crisp, frosty morning? It whets one's appetite and prepares the way for Christmas turkey and its accompanying delicacies as no other exercise can.

In preparation for this festive time the children should not be neglected. In fact the real enjoyment that comes to the older members of the family on such occasions is taken largely from the pleasures of the children. Therefore in planning for Christmas the pleasures of the children should have first consideration.

Nothing will give children more real pleasure at Christmas time than a Christmas tree. The expense is only a trifle and even if the gifts are not costly or very numerous, the charm of giving and receiving will be much if they are displayed on a Christmas tree.

It would not be necessary to keep this tree as a secret from the little folks. It will give them a large share of amusement to a have a part in the trimming and decorations. If there are a few gifts to be kept a secret let them be put on in the evening after the "wee" ones have gone to bed.

As for decorations they can be bought at very little expense. Bright balls and tinsel in different forms and colors, if applied with taste, will give the tree a cheerful attractive appearance. Little ornaments may be made by cutting small stars, crescents, and other forms from cardboard. Cover

both sides with glue—not the very thin sort—then with rice, cracked wheat, coarse sand, etc. Gild these and you have a supply of bright, pretty ornaments, which cost almost nothing. A bottle of gilding liquid does not cost much. Tissue paper can be made to do very effective service in the way of decoration.

Then tarletan bags filled, some with popcorn, some with sweets, nuts, etc., will give the tree a rich effect. In tact there are so many ways of making a Christmas tree look bright and attractive that it is not necessary to enumerate them here. Every home where there are children or where there are going to be children on Christmas day should have a tree. Begin to prepare now.

Hints by May Manton.

LADIES' PRINCESS GOWN, NO. 3,676.

No other gown takes the place of the well-fitted princess that becomes simple or elaborate as the material is



3676-Princess Gown 32 to 42 in, bust.

simple or costly. The admirable model illustrated is of cashmere in the new rich red known as dahlia, with trimming of black applique and small buttons, but Henrietta in any color, French flannel, challie, and a host of other materials can be substituted.

The fronts are fitted with single darts, hidden beneath the trimming, but curve to give a graceful outline. The back includes both side backs and under-arm gores that fit to a nicety without being over-tight. Below the waist line is an inverted plant that allows of additional fulness in the

skirt and adds greatly to the stylish effect. The sleeves are two seamed in correct style, the lower edges being lengthened, faced and turned back to form slightly flaring cuffs. At the neck is a high collar with turn-over portions attached.

To cut this gown for a woman of medium size 9½ yards of material 21 inches wide, 6½ yards 27 inches wide, or 4¾ yards 44 inches wide, will be required.

The pattern No. 3,676 is cut in sizes for a 32, 34, 36, 38, 40 and 42 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.

Vinegar Pie.

Harvey Sutherland in Ainslee's.

"When one understands how pie is the glad epiphany of the soul's yearning for beauty of living, as it were, the bud tip of a plant groping its way upward between the dull hard clods to sunlight and the air, he understands also how some kinds of pie have a story to tell, a pathetic story for those who can appreciate.

"In the early days of Ohio there was a vinegar pie. A paste was made of flour and water. Enough vinegar was added to give it a pleasant tartness and sugar was stirred in to suit the taste. Then this was used as a filling for the top and bottom crust. Smile, if you can, at this poor effort, but bethink you who it was that made it and where and why. We may set the scene in a log-cabin in the wild woods of the Western Reserve, and people it with settlers from Connecticut, an ambitious husband and his young wife who have left behind them the old folks at home, knowing that they will never look upon their faces more. They have come the long, long journey in their covered wagon to the far west of Ohio, to seek a home in the wilderness. The Indians are but barely gone. The timber wolves still howl at nights, while the young mother hushes her babe to rest. In the twilight bears snuffle at the door sill of the rude cabin. It was a sufficient shelter from the weather, but no rag carpet covered the puncheon floor to soothe the eye with its soft coloring, no pictures hung upon the mud-chinked wall of logs. There was no lack of food to eat. The virgin soil, never before turned by a plowshare, brought forth riotously. Standing at his door, the husband might kill wild turkeys with his rifle. There was game in plenty, deer and squirrels, 'possums, wild ducks, wood pigeons, and once in a long while, a feast of that most highly-prized of all meats, pork. Wild

berries grew ail about, and here and there upsprung a tree planted by Johnny Appleseed, ragged, wild enthusiast that he was, almost a legendary hero in his beneficent resolve to scatter far and wideover the new country the best fruit ever God gave to man. There was plenty to eat, but when at last the store of fruit for winter was exhausted, the soul sickened at the plenty of mere animal food.

"'I woosh't 'twas so't we could hev pie luck them we use to git back hum,'

sighs the husband.

"'Land sakes! Uriah Kinney! I ain't got one mortal thing I could make a pie aout o',' retorts the wife.

make a pie aout o', retorts the wife.

"No, I s'pose not. I ain't a faultin'
ye, I was unly sayin' I woosht 'twas
so't we could hev a pie luck them we
used to git back hum. "Twould kind
o' seem more luck livin'."

"Then the wife falls to biting the end of her forefinger. She plans; she meditates On, woman of a thousand wonderful inventions! Something has got to give when thy brain throws its weight against a problem. Result in this instance, a vinegar pie.

"'Gosh, Polly! This is lickin' good!' exclaims the husband, wiping mouth with one hand while he holds out the other for a third piece of pie. (Crockery was scarce in these days.) Then he spreads the news.

"'Bydarn!' says he to the next man he meets, 'my Polly Ann med a pie f' me day b'fore yistiddy was the all-firedest best pie I ever et.'

"'Sho!' doubts the man that hears him. 'Can't I git nup pie this time o'

ye'r. Frut's all gin aout.'

"" By darn she med it anyhow," and he smacks his lips. 'Smartest woman I ever see. Med it aout o' vinegar, she did. Tell yeou. Tetched the spot, it did.'

Cooking by the Clock.

There are some excellent rules for the young housekeeper to cook her Thanksgiving dinner by. Mrs. Rorer is so thorough and practical that you can depend upon her teaching as given in the Ladies' Home Journal. But we haven't all of us thermometers in our oven doors as she has. We should have them, though, if we were getting a new stove. Fish may be baked continuously at 300 degrees for one hour. Underdone fish is unsightly, unpalatable and unwholesome.

Game, such as woodcock, snipe and pheasants, requires continuously 400 degrees for thirty minutes. Partridges split down the back, 400 degrees for thirty minutes. Prairie chickens, 400 degrees for forty-five minutes.

A haunch of venison requires 400 degrees at first; then cooled to 300 degrees; almost constant basting and roasting for two hours. Run in a skewer and if the blood follows the skewer out, and at the same time the meat is tender and rare, it is done.

An eight-pound turkey with stuffing should go into the oven at 400 degrees for half an hour; then cool the oven to 280 degrees and roast for two hours longer. Without stuffing it will require less time. The oven must be hot at first (400 degrees) for half an hour; then roast the unstuffed turkey for an hour and a half at 280 degrees, basting every fifteen minutes.

A four-pound chicken, if stuffed, will bake at 400 degrees in half an hour; at 280 degrees it will require two wars. The same sized chicken unstuffed will require the first half hour in a hot oven; then the oven cooled to 280 degrees for an hour.

A tame duck stuffed with potato, placed in the oven at 360 degrees, will require an hour to brown. It should be basted every ten minutes. The oven may then be cooled to 230 degrees and the cooking continued for two hours.

The Perfect Woman.

The dimensions of a perfect woman are these: Five feet 5 inches in height; weight 128 pounds. From tip to tip of each middle finger just five feet five inches, the same as her height. The length of her hand should be one tenth of her height; her foot oneseventh and the diameter of her chest one fifth. From her thighs to the ground she should measure just the same as from her thighs to the top of her head. The knee should come exactly midway between the thigh and the heel. The distance from the elbow to the middle finger should be the same as from the elbow to the middle of the chest. From the top of the head to the chin should be just the length of the foot, and the same distance from the chin to the armpits. A woman of this height should measure 24 inches around the waist, 34 about the bust, if measured under the arms, and 43 if measured over them. The upper should measure 13 inches and the wrist 6 inches. The call of the leg should measure 141/2 inches, thigh 25 and the ankle 8.

Beans Peas, and Other Legumes as Food.

The U.S. Department of Agriculture has just issued a bulletin on this subject the concluding paragraph of which reads thus : "The green or immature pea and bean are among our most valuable green vegetables and fully deserve the place they now hold on our bill of fare. The value of the dried pea, bean, and lentil is such that one or more representatives are found in every country as a staple food, and they have been thus used from the earliest times. They are especially rich in protein, the nitrogenous con stituent which forms the chief nutrient of meat, and are thus fitted to take the place of part of the meat in any dietary. Since in comparison with their value their price is low, they must be considered among vegetable

foods as the next in importance to bread. As compared with cereals, the legumes are (1) less completely digested if eaten in considerable quantities; (2) it is improbable that they can be made into any form of palatable bread, and (3) their flavor is less generally liked, and on that account will not be made a regular daily food, except by people who are forced to it by necessity. In view of their low cost and high nutritive value, however, they may probably be used to a greater extent than at present.

"Care in the preparation of legumes is very important, both as regards their digestibility and their flavor."

Fun on the Farm and Elsewhere.

"Look here!" exclaimed the stranger, as he stumbled into his twentieth puddle; "I thought you said you knew where all the bad places were on this road?" "Well," replied the native who had volunteered to guide him through the darkness, "we're a findin' 'em, ain't we?"—Philadelphia Record.

"Don't you know that you will have more money to spend if you succeed in establishing the social system I advocate?" "Don't want no more money to spend," answered Farmer Corntossel, coolly. "I've paid off the mortgages an' kin raise all I want to eat. What I'm gatherin' in now is money to put in the bank."—Washington Star.

Some cows in the United S:ates have made remarkable performances with their udders, beels and horns, but they will all have to take a back seat before this up-to-date bovine mentioned by a Canadian paper: "Seven years ago a farmer hung his waistcoat in his farm-yard, leaving his gold watch in the pocket. It was promptly devoured by a hungry calf. Recently the animal was slaughtered, and the watch was found between the lungs. The process of respiration had kept it wound up, and it had only lost four minutes."

—Exchange.

A Belding man wondered what it was made him rise so early the other morning until an investigation disclosed the fact that a cup of buttermilk he had drunk the night before was in reality the yeast his wife had set to make bread with in the morning.

A smarty went into a Lapeer meat market the other day and asked the proprietor for a yard of pork. The man of meats was equal to the occasion, however, and without a word handed out the three feet (pig's feet).

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The Farming World

▲ PAPER FOR FARMERS AND STOCKMEN.

Managing Director, . D. T. McAinsh Editor, . . J W. Wheaton

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THE FARMING WORLD,

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TORONTO

Eastern Dairymen to Meet at Smith's Falls.

The next annual convention of the Dairymen's Association of Eastern Ontario will be held at Smith's Falls, Ont., on January 9, 10 and 11, 1901. Everything points to one of the most successful conventions ever held under the auspices of the association.

The following are among the chief speakers expected to be present: Hon. Sydney Fisher, Hon. John Dryden, Dr. Mills, ex-Gov. Hoard, Wisconsin; Prof. Robertson, Prof. Dean, J. A. Ruddick, Dr. Connell and others.

Western Dairymen to Meet at London.

The next annual convention of the Dairymen's Association of Western Ontario will be held in the Opera House, London, Ont., on January 15-18 next. In connection with, and at the same time as the convention, there will be held a winter dairy exhibit in the City Hall. Over \$300 will be given in prizes for cheese and butter. It is intended also that there will be an exhibit of cheese factory and creamery appliances.

A splendid programme is being prepared. Among the leading speakers will be the Hon. John Dryden, Prof. Robertson, Prof. Dean, Dr. Connell, J. A. Ruddick, John Gould, the well-known Ohio dairyman; C. P. Goodrich, president of the Wisconsin Dairymen's Association; F. A. Converse, superintendent Dairy Department Pan-

American Exposition; D. Derbyshire, president Eastern Darrymen's Association; Miss Laura Rose, Dairy School, Guelph; G. G. Publow, Kingston Dairy School, and Prof. Bryce, of the Provincial Board of Health. In addition, a number of papers and addresses will be given by practical cheese and butter-makers in Western Ontario and the directors of the association.

All the speakers are well-known to Ontario dairymen, excepting perhaps Mr. Converse and Mr. Goodrich. The latter is a most successful farmer and dairyman, and has a reputation as a speaker of the Gov. Hoard type. The majority of the sessions will be devoted to practical addresses and discussions on cheese and butter-making, but at least two sessions will be given up to the farmers' and patrons' special interests. On Thursday evening the meeting will be of the nature of a public reception in the exhibition hall for makers and their friends.

Ontario Fruit Growers.

The Ontario Fruit Growers' Association will meet at Brantford, Ont., on December 19 and 20. Mr. S. A. Willard, Geneva, N.Y.; Prof. H. E. Vandeman, ex-United States Pomologist; Dr. Saunders, Hon. John Dryden, and others, are expected to address the meeting. Programmes may be had from the secretary, Mr. L. Wolverton, Grimsby, Ont.

Nova Scotia Fruit Show.

It has been decided to hold a fruit show in connection with the coming meeting of the Nova Scotia Fruit Growers' Association to be held at Wolfville, N.S., on January 28 to 30, 1901. A special list of prizes has been prepared consisting chiefly of standard books on horticulture and allied branches of farming. Mr. R. W. Starr, Wolfville, N.S., is secretary of the committee.

November Live Stock Importations.

Dr. McEachran, Chief Inspector of Quarantine, sends us the following list of live stock importations during November at the port of Quebec:

Cattle—38 Shorthorns, imported by W. D. Flatt, Hamilton, Ont., consisting of 2 bulls, 11 cows and heifers and 25 calves; 9 Shorthorns, imported by W. C. Edwards & Co., Rockland, Ont., consisting of 2 cows and heifers and 7 calves, 3 Shorthorns, imported by W. R. Nelson, Kansas City, Mo., and 12 Swiss cattle, imported by F. A. Pott & Son, Philadelphia, Pa.

Sheep—34 Shropshire sheep, imported by W. S. Hawkshaw, Glanworth, Ont., consisting of 3 rams and 31 ewes; 13 Shropshires, imported by J. N. Greenshields, Danville, Que.,

consisting of 1 ram and 12 ewes; 30 Lincolns, imported by J. H. Patrick, Ilderton, Ont., all ewes, and 3 Leicester ewes, imported by A. W. Smith, Maple Lodge, Ont.

All these importations arrived in good condition, and no deaths are reported during the mouth. All of the sheep importations were discharged on Nov. 24.

Industrial Fair.

Dates Fixed for the Next Show.

At a meeting of the Industrial Fair Board last week the treasurer presented the financial report of this year's exhibition, showing a net profit of \$6,573 in addition to \$2,800 spent on repairs to buildings to meet emergencies. There was some discussion as to the dates for holding the next exhibition, several of the directors being in favor of a later date as it would suit the needs of breeders and fruit-growers better. The dates selected, however, were August 26 to Sept. 7, and if a Dominion exhibition is held the time will be extended to one month. A letter of condolence to the family of the late John I. Hobson was reported by the president as having been sent. With the surplus of \$6,573 from last exhibition the association has now \$16,573 on hand.

Central Canada Exhibition.

The annual statement of the Central Canada Exhibition Association for 1900 shows a deficit of \$4,180. Considering the bad weather which prevailed during the Ottawa Fair this is not a bad showing. Owing to the agricultural implement manulacturers having declined to exhibit, the association decided to make an effort to induce farmers to bring their farm implements to the next show. It will offer prizes for implements that have been is use for two years and over, regard being had to the care taken of them and the best management.

Maritime Breeders Meet.

The annual meeting of the Maritime Breeders' Association, held at Charlottetown, P.E.I., on Nov. 28 and 29, was a most enthusiastic one. There was a large attendance of breed ers from the Island, Nova Scotia and New Brunswick. Matters of vital importance to the breeders and farmers down by the sea were discussed. Those present had the pleasure of listening to stirring addresses on live topics by the Hon. John Dryden, F. W. Hodson, Live Stock Commissioner, J. H. Grisdale, Agriculturist Central Experimental Farm, Ottawa, and T. G. Raynor, Rose Hall, Ont., and some prominent local speakers. Mr. Dryden's address was devoted chiefly to a

presentation of the work accomplished by organized effort on the part of the breeders in Ontario in improving the life stock of the Province. Mr. Hodson's address dealt with the bacon trade, more particularly along the lines as published by him in THE FARMING WORLD about a year ago He also discussed the prospects for live stock development in the West, and what was being accomplished in the way of enlarging the trade in the provinces of the Dominion. We have arranged for a fuller report of the gathering which will appear later.

Beekeepers Meet.

The 21st annual Convention of the Ontario Beekeepers' Association took place at Niagara Falls on Wednesday and Thursday of last week. There was a large and representative gathering of beekeepers from Ontario and the United States. The President in his opening address referred to the honey exhibit at the Paris Exposition made by the Dominion Government, to which the Association assisted very liberally, and which had been very successful. The advisability of making an exhibit of Canadian honey at the Pan-American next year was also discussed, and later it was decided to make the exhibit.

A. paper read by R. H. Smith, St. Thomas, Ont., " Moving Bees to Fall Pasturage," caused considerable discussion, the general opinion being that it is beneficial to move, as sometimes a good deal of honey is secured as there may be buckwheat, goldenrod, etc., growing a few miles from where a good yield of clover, basswood. etc., can be secured in summer. Other papers, such as "Wintering Bees in and out of Doors," by Mr. Sibbald; " Production of the Extracted Honey." by Alex. Dickson;" "Queens," by M. B. Holmes: "Abuse of Bee Literature," by W. J. Craig; "The Little Neglects that Effect the Profits of the Apiary," by W. Z. Hutchison, Flint, Mich., and an address, with stereoptican views by E. R. Root, Medina, Ohio, were most interesting and instructive. Mr. Fixture, of the Central Experimental Farm, Ottawa, gave an account of experiments conducted last winter in bee keeping, and Dr. Fletcher gave an instructive address on the value of bees in their work and fertilization of blossoms.

The official reports showed the Association to be in a satisfactory condition. The Inspector of Apiaries' report showed that foul brood was decidedly on the decrease. The affiliated societies are making progress in the right direction. The next Convention will be held at Woodstock, Ont.

The following are the officers for 1901: President, Mr. John Newton, Thamesford; vice-presidents, Messrs. J. D. Evans, of Islington, James Armstrong, of Cheapside. Directors-District No 1, W J. Brown, Chard; No. 2, J. K. Darling, Almonte; No. 3, M. B. Holmes, Athens; No. 4, C. W.

Post, Trenton; No. 5, J. W. Sparling, Bowmanville; No. 6, J. D. Evans, Islington; No. 7, A. Pickett, Nassagaweya; No. 8, James Armstrong, Cheapside; No. 9. John Newton, Thamesford; No. 10, W. F. A. Gemmell, Stratford; No. 11 W. A. Chrysler, Chatham; No. 12, Samuel Wood Nottawa; Ontario Agricultural College, Prof. Harrison. Auditors, R. H. Smith, St. Thomas; J. B. Hall, Woodstock. Inspector of apiaries, Wm. Mc-Evoy, Woodbury; assistant inspector of apiaries, F. A. Gemmell, Stratford; representative to Industrial Exhibition, Toronto, A. Pickett, Nassagaweya; representative to Western Fair, London, J. F. Miller, London; representative to Canada Central Exhibition, Ottawa, J. K. Darling, Almonte.

Homes Wanted.

The Secretary of the Children's Aid Society, Toronto, writes us as follows

May we again ask you to help us in our search for foster homes for some of our little wards by inserting the following descriptions:

One to Three Months—"Olive S." "Norah F." and "Harold M." fair complexion, fair hair and blue eyes; "Cecil C." fair complex-

in, brown hair and brown eyes.

Four to Eight Months—"Gladys D."

"Isabella P." "Edna P." "Everett C."

"Wm. S." "John B." "Wm. K" and "Alex. All have fair complexion, fair hair and blue eyes.

Ten to Fourteen Months - "John E."
"Ernest W." "Fred B." and "Reg. F." complexion, brown hair and blue eyes "Patrick S." fair complexion, fair hair and blue eyes; "Roy B." fair complexion, brown

hair, brown eyes,
One Year—"George M. K."—Colored, a

nne boy.

Two to Three Years—"Albert I." "Geo.
W.S." "Geo. S." "Alfred B." "Andrew L."
and "Edward P." All fair complexion, fair
hair and blue eyes, "Fred B." fair comhair and blue eyes. "Fred B." fair com-plexion, fair hair and black eyes. Eleven Years—"Albert S." "Harry J." fair complexion, brown hair and brown eyes.

All letters should be addressed to the "Children's Aid Society," 33 Confederation Life Building, Toronto.

What a Boy Can Do With Poultry.

Poultry-keeping is splendidly adapted for the young people on the farm. If the poultry branch of the farm were given in charge of some bright, active boy it might lead to better returns and

Taking Up

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Cheese and Butter

Makers of these articles, in many instances, do not pay the necessary attention to the quality of the sait is done not make the pay th

"RICE'S OF DAIRY SALT

at the various exhibitions is conclusive proof that these

R. & J. RANSFORD.

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LL PIANOS AND ORGANS

The materials used are the best.

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more profit than is the case nowadays in many a poultry yard. Hon. Sydney Conger, in an address to the exhibitors at the Illinois State Poultry Show recently, gave the following description of a successful poultry boy:

"Thirty years or more ago I knew a poor farmer boy, who saved up three sittings of eggs from the common farmyard fowls-fowls consisting mostly of little, measley, al!-colored three and four-pound hens-eggs small and most any color and shape. The farmer boy traded his three sittings of eggs to a neighbor for one sitting of large eggs of towls that were nearly all white, with black on necks and tails, and the hens were twice as large and the eggs almost one-third larger than the ones he traded. This was the farmer boy's start in improved poultry. The following year he worked at cutting wood during the winter months and got enough money to buy him a sitting of eggs and a trio of Cochins, the total cost being \$5. His first chicken house consisted of an old discarded rail cornpen; cracks stuffed with straw and corn fodder stacked against it on all His second chicken-house was made from big store boxes, with one 8x10 pane of glass in the door for a window. His third house was made from old lumber that a sawmill owner gave him for hauling logs to his mill.

"His first exhibition was at his county fair, where they at that time gave as high as 50 cents a trio for prizes, and the total sum of money did not exceed \$10 on all classes. The total number of fowls at the fair did not exceed fifty head, and the poultryhouse consisted of a few planks for a roof, at the side of one of the build-

"To-day we find at fairs a large house with permanent coops, and an annex to the building, and premiums offered of \$10 each for the popular varieties--a total of several hundred specimens each year. And this farmer boy is president of that fair to-daythe best country or district fair in the United States, all of which and more he owes to the poultry business.

'This boy has pushed the poultry business until he now has 24 poultry houses, some costing as high as \$500, and from selling his first chicken for \$1 he has been able to sell single specimens for \$150 and pens for \$500. Eggs, in the beginning, he sold for 50 cents per sitting; later on for \$6. Sales the first year on eggs and poultry amounted to only \$7; a few years later they reached as high as \$15,324 in a single year. He has exhibited at more big shows, fairs and world's fairs and won more premiums on fine poultry than any other man in the world."

The Dairy Breeds of Cattle.

Professor Woll, of the Wisconsin Experiment Station, in a communica-tion to the Breeders' Gazette, gives the following as the order of excellence of dairy breeds based on herd records published by American experiment stations :

As to the total annual production of milk: First, Holstein-Friesians; second, Shorthorns; third, Ayrshires; fourth, Jerseys; fifth, natives; sixth, American Holderness; seventh, Guern seys and Devons.

As to total annual production of butter fat: First, Jerseys and Short-horns; second, Guernseys; third, Holstein-Friesians and Ayrshires fourth, natives; fifth, Devons, and sixth, American Holderness.

As to cost of food per year: First, Guernseys; second, Shorthorns; third, American Holderness; fourth, Jerseys; fifth, Ayrshires; sixth, Holstein

As to cost of food required to produce 100 pounds of milk : First, Shorthorns; second, Guernseys and Ayrshires; third, Holstein - Friesians; fourth, American Holderness, and fifth, Jerseys.

As to cost of food required to produce one pound of fat : First, Guernseys; second, Shorthorns; third, Jerseys; fourth, Ayrshires; fifth, Holstein-Friesians, and sixth, American Holderness.

It is a significant fact that different breeds lead in the above enumeration of order of excellence as to production of milk and fat, total food cost, or cost of food required for the production of a unit of milk or fat. It bears out the statement that no breed has a monopoly of all good points. The Holstein-Friesians lead when the total product of milk is considered; the Jerseys share the honor of first rank as producers of butter fat with the Shorthorns; the Guernseys show the lowest total cost of food per year, and the lowest cost of food per pound of butter fat produced, while the Shorthorns are ahead in food economy per unit of milk produced. These results are in accordance with popular belief as regards the standing of Holstein and Jerseys as milk and butter fat producers, respectively, and as regards the Guernseys as economical producers; and they also corroborate the the results of earlier tests that have furnished material for comparison of dairy breeds.

Hodge-I've got a suit of clothes for every day in the week. Podge (suspiciously)-I never see

you wear any but the one you have on now

Hodge (cheerfully)—That's the suit. Town Topics.

Mr. James Clark Bramp on, Ont.

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THURSDAY, DECEMBER 20, 1900

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een continued.

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PURE-BRED STOCK

NOTES AND NEWS FROM THE BREEDERS

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

Horses

It is announced that Mr John C. Cookman, of Dublin, Ireland, purposes establishing in the neighborhood of Fredericton, N.B., a stock farm for the purpose of raising and breeding first-class saddle and carriage horses and thoroughbred racers. His idea is to form a company, and he has applied to the local government for a bonus. The establishment of such a farm would greatly improve the horses of New Brunswick, but it is doubtful whether this would be the total control of the whether this would be a proper institution to

Cattle

At the "Big Five" combination sale of Herefords, held at Kansas City, Nov. 21 and 22, good healthy prices were paid, and yet many real bargains were secured. The top prices on females was \$350, and on bulls \$300; 74 females averaged \$183.50 each; 28 bulls \$159 each, and the 102 head \$176.81

A large shipment of Shorthorn cattle has just been sent from London to the Maharajah of Nepaul in British India. The order was given through Gen. Wylie, the British Indian Commissioner, and called for twelve head, all of the best strains. Six, a bull and five heif-ers, were taken from the Mains of Sanghar herd, four from Newmore and four from Messrs. Cran & Cruickshank, Keith. The bull is an extra good one, sired by Ringleader. Thus does the lordly "red, white and roan" extend his dominion.

Mr. T. D. McCallum, late manager of Isa MI. 1. D. stecanom, has retired, and the business is now being conducted in the name of the owner, Mr. J. N. Greenshields. A fine importation of Shropshires has been made importation of Shropshires has been made recently. These were specially selected by Messrs. Alfred Mansell & Co., Shrewsbury, England.

Mr. Wm. Willis, Newmarket, writes: My Jerseys are doing very nicely. The calves from Count of Pine Ridge (our stock bull), grandson of Miller & Sibley's great Adelaide, are showing lots of quality and indications of good dairy stock. I have seven very nice beifers from him this summer. I have two very fine young bulls fit for service to sell. both from prize-winning cows. I would sell very reasonably, as I need the room.

8heep

W. S. Hawkshaw, Glanworth, Ont., has made a choice importation of Shropshires this fall, consisting of ewes and some prize-winning ram lambs for his own flock. In addition to these he bought 30 head of Lincoln ewes for John T. Gibson, Denfield, and other Can-adian breeders, and some Leicester ewes for A. W. Smith, Maple Lodge, Ont., together with 13 very choice Shropshires for J. N. Greenshields, of Montreal.

Messrs. F. Birdsall & Son, Birdsall, Ont., writes to the American Sheep Breeder as

"This part of Ontario is well adapted to sheep raising, but comparatively few sheep are kept on account of the dog nuisance. We have to shut our sheep in close pens, or high walled yards in winter, to keep the dogs high walled yards in winter, to keep the dogs out. Last winter we had several pure-bred Oxford ewes worried, to the loss of their lambs by being chased by curs. No dog tax here. We cannot persuade our town council to adopt one. There are not enough pure-bred lambs of any one breed to induce buyers to come into our community, and consequently we have to sell to middlemen. All Oxford ram lambs were sold last fall. Sheep centrally look well, and as constraints were generally look well, and as pea-straw

mostly well saved, and hay abundant, sheep should be strong and in good shape for drop-ping their lambs next spring. Roots (I mean should be strong and in good shape for dropping their lambs next spring. Roots (I mean turnips) have not kept well for the past two years, and we depend largely on ensilage, which, I believe, is a good substitute for turnips, and not so cold a food. We fed a lot of it last year, and thought the sheep milked well on it. We fed the young lambs with it, and oat chop mixed, and they grew well."

Mr. John Campbell, Fairview, Ont., has sold a very choice Shropshire ram lamb, sired by a ram, imported last year, to Prof. Mumford, of the Michigan Agricultural College. Mr. Campbell exhibited 20 head at Chicago last week.

J. H. Jull & Son, Mt. Vernon, Ont., have made a number of sales this season, the majority of them to American breeders at high prices. At present they have orders for three show sets for 1901 and several single ones.

Willis, Mr. Wm. Willis, Newmarket, Ont., writes: "I have recently sold, to save inbreeding, our celebrated stock ram, Megoris. He was one of the finest stock sheep in Canada. Mr. Wilson, of Indiana, has come three years in succession to buy show sheep of his breeding, and has said he could find nothing better anywhere. I am using one of his sons, a big, strong lamb, from a daughter of a Royal winner, with quality quite equal to of a Koyal winner, with quality quite equal to his sire. We also sold a ram lamb from Megoris to A. J. Watson to head a flock in Fennsylvania, and another last week to Mr. N. Haines, of King."

Tom Kinney, said to be the largest owner of sheep in the United States, three weeks ago made a sale of 90,000 ewes and 36,000 lambs. He was compelled to reduce his holdings on account of shortage of feed on the range, and by the prospects of heavy losses the coming winter.

Messrs. Alfred Mansell & Co. have de-spatched from Liverpool, on account of Mr. G. H. Hunn, of Michigan, twenty-three highclass Shropshires, comprising four ram lambs class Shropshires, comprising four ram lambs and ten ewe lambs, bred by the executors of the late Mr. W. Neveti, sired by Rare Branc', Montford Jumbo, winner S. and W.M., by Downton King; Buttar's Tubilee, winner Manchester R.A.S.E., by Bonaparte; Newport's First, winner S. and W.M., bred by Mr. A. E. Mansell, by the 120 guinea "Royal" winner Phenomenon, 8080; and Corrie Varkie, bred by Mr. Buttar, by the late Mr. T. Mannell's Lord Patriot. Messrs. Evans supplied a valuable shearling ram in a Evans supplied a valuable shearling ram in a son of Star of Morning, bred by Mr. A. E. Mansell, by Dream Star, dam by Corston Artist. The remainder consisted of eight choice shearling ewes from Mr. A. E. Mansell, all in lamb to high-class sires.

Messrs. Jame: Ford & Sen, Drumquin, Ont., write: The following is a testimonial from one of our customers at Ennotville: "Stock to hand all right. They are just as you said, "spleadid." You will be pleased to hear they won two firsts. You will hear troop as a single where we have a superson to be sent they won two firsts. You will hear troop as a single where we have a superson to a single where we have a superson to be sent the superson the said where we have a superson to be superson to be superson to superson the superson to be superson from us again when we want good stock.

from us again when we want good stock. This is one of the many we are constantly receiving. I wish to state that my flock of turkeys this year is superior to any we have ever had, both in numbers raised and quality. We have to thank The FARMING WORLD for the large trade which we enjoy.



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The only scientific sound conductors. Invisible, comfortable, efficient. They fit in the ear. Doctors recommend them. Thousands testify to their efficiency.

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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

Market Review and Forecast

Office of THE FARMINGWORLD, Confederation Life Building, Toronto, Dec. 10, 1900.

Trade continues to maintain a healthy character in wholesale lines and the outlook character in wholesale lines and the outlook is very promising for the spring trade. Things will be somewhat quiet till after the holidays. The year just closing has been a very satisfactory one from a business point of view. Reports from all parts of the Dominion bear out this view. Payments have been good, a most conclusive evidence of good times. Money keeps firm owing to the various and increasing calls therefore. There is a good demand for call loans, and 5 per cent is the ruling rate. Commercial paper is discounted at 6 to 7 per cent. according to the name and nature of the account.

The wheat market keeps quiet though there was a little more active buying later in the week. The export demand has been light. Prices are about 5 cens. higher than a year ago, and with ample supplies in sight, there does not appear to be any likelihood of a movement upward. The only source from a movement upward. The only source from which it would seem an advance can come just now is the elevator ring at Chicago. If this clique saw fit to advance prices it could do so. The visible supply of wheat in the United States and Canada is 62,179,000 bushels as compared with 55 778 000 bushels as compared with 55 778 000 bushels. business as compared with \$5,77.0.000 dushets at this time a year ago, an increase of 6,401,000 bushels. The world's supply in sight is 88.099,000 bushels as against 79,218,000 bushels a year ago an increase of 8,81,000 bushels. The chief demands at present is for bushels. The chief demands at present is for bushels. the better grades of spring wheat. The demand is largely to cover requirements which in the past have been supplied by the Northwest spring wheat mills flour product, but this year owing to more or less, "mixing" of "hard" winter wheat, etc., forces a demand for the actual grain to obtain in all spring wheat flour product.

wheat nour product.

There has ben some business in red and white winter wheats at Ontario points at 64, 64 % and 65c. middle freights. The market white winter wheats at Ontario points at 04, 64% and 65c, middle freights. The market here has ruled quiet at 63%c, for red and white middle freight goose wheat at 60c, north and west and spring at 66c, east. On Toronto farmers' market red and white bring 6.11 to 66c points 66 forth. and grosse 67½ to 68c., spring fife 67½c. and goose wheat 61½c. per bushel.

Oats and Barley

Canadian oats are in demand in Great Britain where the Government has been buy-ing freely. A good export demand is report-ed on this side with quotation at 26½ to 27c. fo.b. at Ontario points. The market 27c. f.o.b. at Ontario points. The market here rules at 26\frac{1}{2}c. ior No. I white east and 25\frac{1}{2} to 26c. for No. 2 west. On farmers' mar-

et oats bring 30c. to 30½c. per bushel. There is said to be a little European demand for barley. Prices here are steady at 37c. to 40c. as to quality and point of ship-ment. On Toronto tarmers' market, barley brings 41 to 47c. per bushel.

Peas and Corn

The market for peas is firm and about 2c. higher at 60 to 60½c. f.o.b. at Ontario points. Here the market keeps steady at 62c. east, 61c. middle freights, and 60c. north and On farmers' market they bring 61 1/2 c.

per bushel.

The corn market is quiet, American mixed being quoted at 45 to 462, at Montreal and 45c. Toronto.

Bran and Shorts

Ontario bran in bulk is quoted at Montreal at \$14.50 to \$15, and shorts at \$16.50 to \$17. City mills here sell bran at \$13.50, and shorts at \$15 f.o.b. Toronto. Outside quotations are \$13 to \$14 for shorts, and \$12.50 for bran middle freights.

Eggs and Poultry.

The price of eggs keeps up. At Montreal under light receipts prices are firm and 1c, higher at 18 to 19c. for fresh gathered stock

in large lots. New laid eggs are very scarce here and are in keen demand at 20 to 22c. in a wholesale way. Fresh held stock sell at 17 to 19c. in case lots. On Toronto farmers' market new-laid bring 23 to 255., and ordin-ary 17 to 19c. per dezen. Strictly fresh boil-ing eggs bring 35 to 40c. per doz. Large quantities of Canadian dressed poul-

try are now on the way to Great Britain. If these arrive in proper shape and are of good quality they should bring good profits. Shippers have been paying 61 to 734c. per lb. for turkeys, but only the highest priced and best turkeys, but only the nighest priced and best birds are sent forward, the balance being retained for the home trade. The Montreal market has been quieter owing to increased supplies. Quotations there are 8½ to 10c. for nice fresh killed turkeys, 6½ to 7½c. for chick-ng at 16 1/26, for once- and 7 10 8c. per lb. nice resh killed turkeys, by to 79c. for cnices, 5 to 65c, for geese, and 7 to 8c. per lb. for ducks. These figures are for best quality. Choice stock is in good demand here. Turkeys are firm at 7½ to 8½c., and geese 5 to 6c. per lb. Ducks are quoted at 45 to 70c., and chickens at 25 to re pair in a wholeand chickens at 25 to 500 per pair in a whole-sale way. On Toronto farmers' market turkeys bring 8 to 9c., and geese 5 to 6c. per lb.; and chickens 40 to 6oc., and ducks 40 to 75c. per pair. Live ducks bring 35 to 65c. per

The market is steady. Sales in car lots of Ontario potatoes are reported at Montreal at 40 to 45c. per bag. There are lots of potatoes in the province to be marketed, and dealers report that they can buy from farmers at 20c. per bag. Quotations here are 30c. for car lots on track. On farmers' market potatoes bring 30 to 40c. per bag.

Hay and Straw

A good business continues in the export hay rade at country points east. There is trouble in getting sufficient cars for shipping. Prices range from \$7 25 to \$8.50 for No. 2 at Quebec points f.o.b. Farmers east have begun to deliver more freely. Montreal quotations are \$8.50 to \$10 for No. 2, and \$10 50 to \$11 for 55.50 to \$10 for No. 2, and \$10 \$0 to \$11 tor No. 1 in car lots on track. Prices are steady here at \$10 to \$10.25 for No. 1, and \$8 50 to \$9 for No. 2 in car lots on track. On Toronto farmers' market hay bring \$13 to \$14.50; sheaf straw \$11.50 to \$12 and loose straw \$6

The English apple market is firmer and ad-The English apple market is firmer and advancing. Cable quotations are several shiplings over a week ago, with a good demand for sound fruit. Chicago buyers have been buying Ontario apples for shipment west. At Montreal sales have been made of round lots at \$1.50 to \$2.50 as to quality with a firm marker. On Turonto farmers' market apples On Toronto farmers' market apples bring all the way from 75c. to \$2 per barrel as to quality.

Cheese

The English cheese market keeps quiet and this causes a quiet feeling on this side; though as stocks there are not large holders are not as stocks there are not targe notders are not pushing sales. There is some enquiry for late cheese, but as it is pretty well sold up now not much business is doing. Some dealers who bought Septembers at high prices are get-ting somewhat anxious. There seems to be not demand for this availity at 11 live. who bought septemoers at night prices are get-ting somewhat anxious. There seems to be no demand for this quality at 11 to 11½ c, which dealers are asking, though it will likely be obtainable later on, when the cheaper qual-ity is disposed of. There is a difference of opinion as to the quantity of stocks on hand on this side. Some claim that they up from Some claim that they run from 325,000 to 350,000 boxes while others put them at considerably less than 300,000 boxes. Montreal quotations are 11 to 11 1/4c. for finest Septembers, 10½ to 10½ c. for finest eastern and 9½ to 10½ c. for under grades. Most of the local markets have closed down for the season. Prices are 91/2 to 10c. for November.

Butter

The creamery butter market is more active. There is an improvement in the English mar-ket and at New York extra choice creamery

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has advanced 1 to 13/2c. in the week to 26 to 26/3c. An improved feeling is reported at Montreal, sales of choice creamery being reported at 21 to 21½c. and lower grades at 20 to 20½c. There is quite a scarcity of really choice creamery and buyers will pay the prices when they can get suitable quality. Creamery keeps steady here at 22 to 23c. for prints and 20 to 21c. for tubs and boxes. Shipments of dairy butter are larger and trade more active. Prices keep fairly steady at 18 to 19½c, for pound rolls and 17 to 18½c, for large rolls. These figures are for choice quallarge rolls. These figures are for choice quality. On Toronto farmers' market pound rolls bring 20 to 25c. each.

Cattle

The cattle markets have ruled fairly steady with dealers clearing the way for the Christ-mas trade. The mild weather and the large influx of poultry have depressed the local markets somewhat. The receipts at Toronto influx of poultry have depressed the local markets somewhat. The receipts at Toranto cattle market on Friday were 782 cattle, 2,715, hogs, 672 sheep and lambs and a tew calves. The quality of fat cattle was not so good as might be expected at this season. Too many lightweights, common butchers' cattle are being offered. Prices remained steady at Thorsday's quotation.

Export Cattle.—Choice lots of these are worth \$4.40 to \$460 and light ones at \$4 to \$4.25 per cwt. Heavy export bulls sold \$5.10 bulls ones at \$4.10 cmt. Also per cwt. and light ones at \$4.10 cmt.

at \$4 to \$4.25 per cwt. and light ones at \$3.12½ to \$3.35 per cwt. Loads of good, butchers' and exporters' mixed sold at \$3.90

to \$4.10 per cwt.

But hers' Cattle. - Choice picked lots of these, equal in quality to the best exporters', weighing 1,000 to 1,100 each, sold at \$4.50 to \$4.65; good cattle at \$3.90 to \$4.35; medium \$3.50 to \$3.65 and inferior to com-

mon at \$2.40 to \$3 per cwt.

Feeders,—Heavy, well-bred steers, weighing 1,000 to 1,150 each sold as \$3.60 to \$3. and poorer quality of the same weight at 60, and poorer quality of the same weight a \$3,40 to \$3 60 per cwt. Short keep sieers, 1,100 to 1,200 each in good condition sold at \$4 to \$4.15 per cwt., and light steers, 800 to cool bis. each at \$3:to \$1.25 per cwt. 900 lbs. each, at \$3 to \$3.25 per cwt. 900 lbs. each, at \$3 to \$3,25 per cwt. Feeting bulls, for the byres, 1,100 to 1,600 each, sold at \$3 to \$3,25 per cwt.

Stockers.—Yealing steers, 500 to 700 lbs. each, suitable for the Buffalo trade, sold at

\$2.25 to \$3 per cwt., and other quality at \$1.75 to \$2 per cwt. Yearling bulls, 600 to \$1.75 to \$2 per cwt. each, sold at \$2 to \$2.25 per cwt

Milch Cows .- Twelve milch cows and springers sold at \$30 to \$50 each.

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Calves .- Choice to extra calves were quoted at Buffalo on Friday at \$7.50 to \$7.75, and good to choice at \$7 to \$7.75 per cwt.

Sheep and Lambs.

Canada lambs sold at Buffalo on Friday at \$5.35 to \$5.65 per cwt. At Toronto market 55.35 to \$5.9 per cwt. At Toron infance the same day prices were steady at \$3 to \$3.25 per cwt. for ewes, and \$2.50 to \$2.75 for bucks. Spring lambs sold at from \$2.50 to \$3.50 each, and \$3.50 to \$4 per cwt.

Hogs.

The market keeps on advancing. bacon hogs, 160 to 200 lbs, each, sild on Friday at \$6 per cwt., and thick and light fats at \$5.75 per cwt. Unculled car lots sold Friday at \$6 per cwt., and thick and light tast at \$5.75 per cwt. Unculled car lots sold at \$5.85 to \$5.90 per cwt. Montreal quotations are \$6 to \$6.25 per cwt. for bacon hogs. The Trade Bulletin's London cable of Dec. 6, re Canadian bacon, reads thus: "The market is firmer, and 3s. higher under a brisk demand. No, 1 Canadian is quoted at \$8s. to 60s. The Wm. Davies' Co., Toronto, will pay \$6 per cwt, for select bacon hogs this

Dressed hogs are also on the move upward. Montreal quotations are \$7.25 to \$7.62\frac{1}{2} per cwt. in car lots. On Toronto farmers' market dressed hogs of good quality bring \$7.40 to \$7.75 per cwt.

There is some little inquiry for general pur-There is some little inquiry for general purpose and heavy horses, but as a rule trade is quiet. At Hendrie's sale of thoroughbreds held at Grand's on Wednesday last low practice were the rule, from \$50 to \$100 being the ruling figures. The highest price was \$155, got for Term Day, a brown gelding, fealed 1896, a beautiful jumper, well broken and well mannered. If the thoroughbred is all that is claimed for him as a horse suitable for that is claimed for him as a horse suitable for breeding army remounts, this sale offered a splendid opportunity to farmers to get breeding stock. The report that the British Government had placed an order for 50,000 horses in America is untrue. No such order has been placed, nor not likely to be for some



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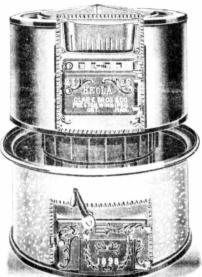
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