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THE FARMER'S ADVOCATE
AND HOME MAGAZINE

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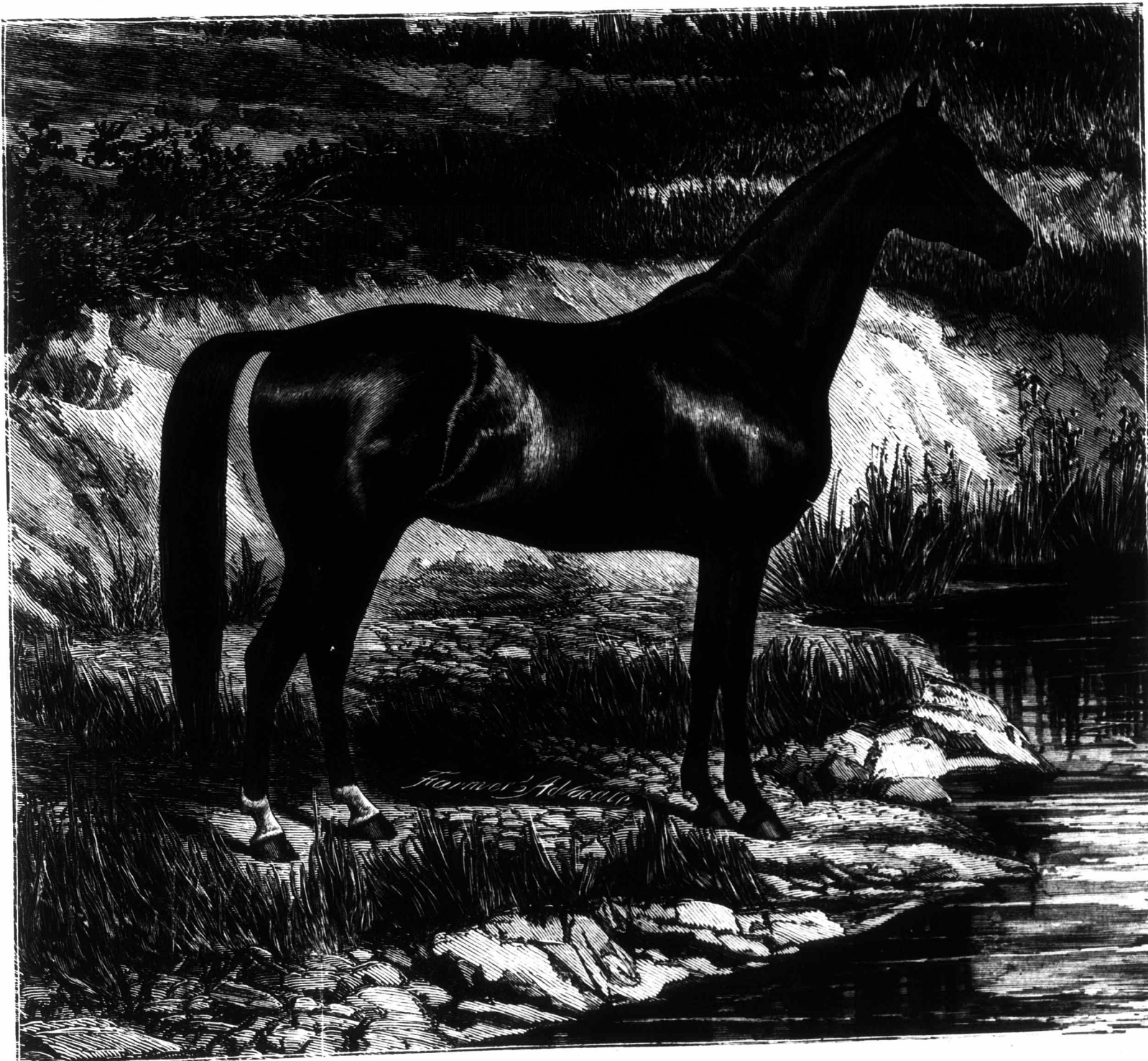
* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE.*

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VOL. XXXI.

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No. 414



THE THOROUGHBRED "MARAUDER,"
 OWNED BY JOSEPH E. SEAGRAM, M.P., WATERLOO, ONT.

EDITORIAL.

Feeding will not convert a scrub into a showing winner or a "plum" for the butcher, but you can stint a well-bred calf into a scrub.

Nothing is more wasteful than allowing animals to remain on short pastures late in the autumn, without extra feeding, and losing much of the flesh they have gained during the summer months.

Miss Eleanor A. Ormerod, F. E. S., has been made an honorary member of the Bath and West and Southern Counties Society, England, in recognition of her services to agriculture in general and that Society in particular.

The British Dairy Farmers' Association is now considering the proposal to visit Canada in 1897, having received invitations from the Western Ontario Dairymen's Association and the Toronto Industrial Fair Association.

Canadian and U. S. creamery butter was quoted in a recent Liverpool report at 72s. to 85s. per cwt., while "finest Danish" stood at 100s. to 105s. We have something yet to do, if not to learn, on this side of the Atlantic, about the butter business.

That well-known investigator of contagious animal disorders, V. A. Moore, V. S., is, we understand, about to sever his connections with the Bureau of Animal Industry, Washington, to take up work in the New York State Veterinary College, Cornell University, Ithica, N. Y.

Prof. C. S. Plumb, Director of Purdue University Experiment Station, Indiana, who was re-elected Secretary of the American Association for the Advancement of Agricultural Science at the recent annual meeting held in Buffalo, writes congratulating the FARMER'S ADVOCATE on the excellence of our report of that important gathering.

The beet sugar industry, on which a series of articles were recently published in the ADVOCATE, continues to receive increasing attention in the United States, and with a \$5,000,000 bonus behind it, it certainly should. The Chino Valley Beet Sugar Company's factory at Chino, Southern California, is now in full operation, and will work up about 80,000 tons of beets this fall—the product of over 7,000 acres—for which farmers are paid \$3.75 to \$4.50 per ton, as to quality, or an average return of about \$40 per acre.

The new Canadian Minister of Trade and Commerce is on the lookout for suggestions as to possible new directions for business. We notice that Mr. J. M. Sinclair, representing the Australian Agricultural Department in Great Britain, writes the Minister of Agriculture as follows: "So far I am well satisfied with the prospects of opening up a new avenue of trade in Glasgow, as I find many of the best merchants anxious to do business in our products. As Glasgow is the best distributing center for the whole of Scotland, I intend devoting special attention to that market, more especially since receiving encouragement from some of the largest firms of that city. Cold stores are being constructed and will be ready in time to receive next season's shipments."

Our readers are familiar with the name of Miss Eleanor A. Ormerod, the distinguished entomologist (of Torrington House, St. Alban's, Eng.), through frequent references in our columns to her invaluable labors in aiding the farmers of Britain and elsewhere to successfully combat their insect foes. Intimately associated with all her work was her elder sister and constant companion, Miss Georgina E. Ormerod, of whose death, on August 19th, we recently received notice. The deceased lady was the daughter of the late George Ormerod, D. C. L., F. R. S., of Sedbury, Gloucestershire, and Tyldesley, Lancashire. Not only was she an accomplished entomologist, but was distinguished as a botanist and in other lines of scientific research. Designing and drawing for the purpose of scientific illustration were among her well-developed gifts. She rendered service of great value in the distribution of serviceable and healthy literature, her private charities being also very large. Deceased was an honorary member of the Bath and West of England Society. What she and her better-known sister have accomplished should be an incentive to many others throughout the world in the pursuit of useful knowledge.

A Great Thoroughbred.

Our first-page illustration in this issue is a life-like representation of the noted Thoroughbred, Marauder, owned by Mr. Joseph E. Seagram, M. P., of Waterloo, Ont., the success of whose race-horses on the turf are well known. Marauder was foaled in 1885; bred by Mr. A. J. Cassatt, Pennsylvania; sire imp. Rayon d'Or, by Flageolet, dam Maudina, by imp. Australian. Marauder won, at four years old, the Brooklyn Cup—1½ miles, beating Hanover, Elkwood, and Eurus. As a five-year-old won a sweepstakes at Saratoga—1¼ miles, beating Ofalece, Costa Rica, and others. His sire cost at one sale nearly \$40,000, and again was sold at auction for \$32,000. His dam's sire, Australian, sired Spendthrift, Fellowcraft, Abdelkader, Maggie B. B., dam of Iroquois (Derby and St. Leger); her dam, Maude, produced Alarm, who once held the mile record.

Showing Facilities -- A Great Opportunity.

It is an easy matter to criticise the efforts of others, easier than to suggest practicable improvements and to put them into execution. Recording as we do the splendid success of the Toronto Industrial Exhibition this year, and recognizing the magnitude and variety of what the Association has accomplished on behalf of live-stock as well as other exhibitors, mere fault-finding is entirely out of order. It would be unjust to indulge in such, but everything human is susceptible of improvement, and we believe that the management conduct the show with that principle in view. In our review of some of the departments, and in the resolutions adopted at the meeting of the Canadian Horse Breeders' Association, attention is called to several points needing attention. One of these is, we think, deserving of special emphasis, particularly as the scope of the Industrial is next year to be expanded and the Toronto show site is likely to be the theatre of a great Dominion Exposition, a national project which has our heartiest endorsement. Breeders and exhibitors of horses, particularly for the past year or so, have found it impossible to show their animals to the best advantage before the public. Facilities for seeing the speeding and other attractions are elaborate, but not so in the other classes, which, we submit, are of paramount importance from an educational and business point of view. This year's arrangements, which possibly were unavoidable under the circumstances, inconvenienced exhibitors more than ever. Standard-bred and roadster horses, for example, were away at the rear of the race-track, where few but the judges could see them, and the small ring was quite inadequate for carriage and roadster horses. A portion of the exhibit was shifted from one part of ring to another, making it almost impossible for owners to keep track of their stock. A larger ring for the showing and judging of these and the draft classes is needed, and a commodious amphitheatre where the public can witness the work in comfort. Hence, more space is imperatively needed for the growing magnitude of the exhibition, and must be secured from some quarter. On the closing day of the show an influential delegation of breeders waited upon the Association Board, submitting their case in the form of a petition signed by some 65 of the leading spirits, backed up by arguments from several of those in attendance. Attention was called to the necessity of making the best possible impression on visitors from other countries, who at an exhibition of a national character are sure to be attracted in large numbers. Under such circumstances, Canada must put its best foot forward as a stock-rearing country and every facility given for displaying our choice horse and other stock to the best advantage. Some aid in that direction will doubtless be looked for from the Government. President Withrow and leading members of the Board received the delegation, expressing their cordial desire to meet the wishes of the important interests represented so far as lay in their power. The live stock exporting industry of Canada now amounts to many millions annually, and our horse exports to Britain have lately been increasing with great rapidity. It will therefore pay us to make this aspect of the Exhibition more conspicuous than ever before. Its live stock, agricultural, and industrial features must be made outstanding in their excellence, attractiveness, and prominence.

The cow stables should be thoroughly cleaned and whitewashed before winter, and the floors, mangers and gutters made tight. Put in a few windows for plenty of light and sunshine, and make the stable snug and warm, so that it will be a comfortable place for the cows to live in.

The Ontario Pioneer Farm.

The Hon. Mr. Dryden, who recently returned to Toronto, from the "Pioneer Farm," in the Wabigoon district, Northwestern Ontario, was highly pleased with the prospects for that country. In an interview, he informed us that the two townships, Van Horne and Wainwright, surveyed last year, are now mostly taken up by settlers, the majority of whom are at work preparing for a crop in 1897. The land, which inclines to clay, has been burnt over and requires very little cultivation to render it productive. Mr. Dryden was surprised to find it so friable after a little working. It never turns up hard and never becomes disagreeably sticky, and when plowed while dry is very flaky and porous. Surface water readily gets away.

Mr. Dryden's attention was first attracted to the country by the luxuriant growth of clovers growing naturally along the line of the Canadian Pacific. It appears that the clover plant comes up and seeds itself year after year, and never seems to suffer from winter-killing. While some of the hands of the "Pioneer Farm" were out exploring they found clover stalks 5½ feet long, bearing perfect seed. Alsike grows perfectly, which indicates that all sorts of crops grown in Eastern Ontario will do well there.

With this year's harvest Mr. Dryden is exceedingly pleased. Fall wheat (Dawson's Golden Chaff) sown on Sept. 5th, and some about two weeks later, yielded a very fine return of grain and straw. The sowing should have been done earlier, but for all that, the crop came through in good form—not a single plant seemed to have winter-killed. Mr. Dryden remarked that it closely resembled a field grown upon his own farm. This autumn seventeen acres have been properly prepared and sown, and a great crop is expected next season. Oats and barley did fairly well this year, as did also turnips and potatoes. These crops will doubtless do much better after a few years' cultivation and some green crop has been plowed in. Although the soil is rich clay, the burning off has left it somewhat destitute of vegetable mold. To remedy this the Minister is instructing the men to seed down with clover as fast as possible to plow down.

Timothy also does remarkably well, as that sown last spring reached near the top of the grain and headed out before harvest. In fact, all crops needed to make the country especially suited to dairying grow in great luxuriance. It is also very good for sheep husbandry, and calves of the eight cows taken up last year, fed this summer on skim milk and grass, are well-grown and quite fat. The grass through the entire season resembled our June pastures.

The "Pioneer Farm" covers 320 acres, all of which is fenced, and is being gradually broken up. No great splurge is being made, as the farm is simply to be used to indicate the capabilities of the soil.

The matter of getting settlers gives Mr. Dryden no cause for alarm; in fact, he advises that people wait a year or two until more accommodation can be afforded. At present there is no hotel nor boarding-house, no seed grain, and, in fact, only what people take in with them. Most of the settlers who came in last spring put up small houses and then returned for their families. This year two more townships have been surveyed, 90 per cent. of which is first-class land. The whole country is free of rock, and only a few stumps and snags are there to cause an interruption. Mr. Dryden was particularly pleased to find a great many small rivulets flowing through the farms.

As regards this year's improvements, the Minister said that the village of "Dryden" has eight or more newly-erected houses and a dozen lots sold. There have been six miles of colonization road built, and the settlers have agreed to build the cross roads.

"It must be understood," remarked the Minister, "that we do not give this land away. We sell it at 50 cents per acre, which I consider better for the country and better for the settlers. We sell only to actual settlers, never allowing speculators to buy tracts, and we prefer to sell smallish farms, in order to have the district thickly settled."

English Crops.

Wheat is reported the crop of England this year, being particularly fine generally; but a great deficiency is reported in barley and oats; hay and grass almost an entire failure; hops lower in average than for four years; beans and peas below average, and not much better than last year; roots being also under average, but potatoes are a good crop. Canada will be able to furnish a supply for some of these deficiencies.

Soil Inoculation.

Few changes go on in organic substances in this scientific age that are not inquired into with a view to the discovering of the specific microbe depended upon for the transformation. It is now known that the practical application of the principle of inoculation of bacterial life to the soil is a profitable line of action. The breeds or species recommended for introduction to the soil are identical with the forms found in connection with the tubercles within the roots of leguminous plants, giving those crops their special value as soil-enrichers.

The British agricultural scientist, Prof. C. M. Aikman, deals with the subject in a recent issue of the *Scottish Farmer*. He refers to the discovery made by Hellriegel and Wilfarth with regard to the presence of nitrogen-fixing bacteria on the root nodules of leguminous plants in 1886. The following year the pot experiments first carried out were made by applying quantities of soil extract to pots containing leguminous crops and noting the influence which such soil extracts had on the growth of the plant and on the development of nodules. It was soon found that all soils are not equally suitable for inoculating leguminous plants in this way, and, moreover, that under exactly the same circumstances some plants grew better than others. The inference to be derived from this was that there existed a variety of nitrogen-fixing bacteria. The difference between the leguminous plants in this respect, however, was found to be considerable. The bacteria useful for peas was also useful for vetches, but not for the various varieties of clover. To Dr. Nobbe, of Saxony, we believe, belongs the credit of applying the discovery to practical farming.

The net results of these experiments amounted to this: that many soils are so poor in nitrogen-fixing bacteria that leguminous crops will not grow upon them in the absence of proper nitrogenous manure, but that when such soils are inoculated with soil extract, or with soil itself from fields which have been proved to be capable of producing luxuriant growth of leguminous crops, satisfactory growth takes place.

The specific cultures are now made on a wholesale scale by the great German firm of Meister, Lucius & Bruning, who have already undertaken the manufacture of the anti-toxic serum for the treatment of diphtheria. Of nitrogen some seventeen different kinds are prepared, so that the cultures specially suited for each of the more commonly grown leguminous crops can be prepared. The special value of this mode of inoculating soils as contrasted with the older one of inoculating with other soil or soil extracts is that it is much more convenient and very much less cumbersome. It avoids the risk, which is not inseparable from the other method, of imparting organisms which may exert a distinctly unfavorable action on plant growth. The mode in which inoculation is effected with nitrogen is either by making a watery solution of the pure culture and then immersing the seed to be sown in it and thus inoculating the seed, or by inoculating in a similar manner fine sand and distributing this over the field and working it into the soil. The cost at present of such an inoculation is only 5s. per acre. Thus from the economic point of view it has much to recommend it.

It is too early yet to pronounce an opinion as to the full import of this latest discovery in agricultural science. So far, however, as can be at present predicted, it seems to be one of the most important advances made for many years. While it is being thoroughly tested experimentally, we counsel all readers of the *ADVOCATE* not to relinquish their faith and practice in the application of old-time fertilizing materials and clover-growing. When the utility of the new method has been demonstrated we may then start manuring our fields with a seeder or a spraying apparatus.

Mons. Leon Joue, special Professor of Agriculture at Reole (Gironde), gives the following new method for combating mildew: Take about 4 lbs. of oak bark, or 22 lbs. of the bark of the pine tree of Landes, and break it up into large pieces, and put it into 11 gals. of water. Boil up the liquid, and leave it for a short time; then add to it the following mixture: 2½ lbs. of sulphate of copper to from 1½ to 2 qts. of water, and well shake it in order to mix perfectly. When it is wanted for use, about another 11 gals. of water should be added.

The South American Demand for Shorthorns.

To the Editor FARMER'S ADVOCATE:

SIR,—I am glad to see you are watching the interests of the stock-breeder, and in one of your late issues called attention to the continued demand of South American breeders for England's best Shorthorn bulls; but the strange freak is that they now are invading foreign countries and carrying off the plums. France has had the benefit of this raid, and the best offerings were none too good, and where such suited price appeared no object. English agricultural papers are full of items of sales, and special note is made of the fact that they will have the very best. Neither age or color stands in the way, for heavy four-year-old show bulls have been purchased, as well as white ones, one of the latter commanding nearly \$1,000, and a light roan made \$5,000. The Shorthorn Society issued export certificates (from June 2nd to July 27th) for South America, 237; for Sweden, 3.

So great has been the demand that one of England's most observant writers bewails the loss of the best young bulls, looking forward to the probability of poor classes at the next season's shows, as well as the direct loss the country sustains in being despoiled of what would in the natural course of events be the leading sires.

I have written before, "Why can't we get a portion of that trade?" We have cattle suitable as far as quality is concerned, the records at the Columbian clearly proving such; moreover, our cattle are raised in a drier climate, much more like their own, and the food is similar—all in our favor. If we can't get a portion of this trade let us know, and for what reason? Commissioners have been appointed to Australia—cannot one be sent to Argentina to inquire into this matter? I leave it with you to agitate this question. Since I first mooted it at the Shorthorn Breeders' meeting many have been found to advocate "doing something," but no feasible scheme has as yet been hatched.

[NOTE.—So far as we are aware, there are no boats loading from any Canadian ports for the Argentine Republic, but steamers run regularly from New York, and some shipments of U. S. bred sheep, at least, have been going forward. One line (the Norton) quotes on cattle a rate of \$50 per head and ten per cent. primage, the shipper to provide fittings, fodder, and attendance, one man being carried free for six head or more. The rate on sheep is \$12 per head and ten per cent. primage. Unless Canadian bulls were allowed to reach New York harbor in bond for shipment, so avoiding the 90-day quarantine, we do not see at present that much can be done in that direction. England doing a large trade both ways with Argentina, the breeders there are much more favorably circumstanced.—EDITOR.]

The Inspection of Australian Exports.

The Bill introduced by the Minister of Agriculture (Victoria) to provide for Government inspection of all live stock, meat, dairy produce, and fruit intended for export does not interfere with the intercolonial trade. Power is taken to appoint Government inspectors and to provide for the establishment of cool stores, where dairy produce and meat will be kept pending inspection and shipment, fruit being examined on the pier before being placed on board the steamer. The Minister is also empowered, with the consent of the Governor-in-Council, to declare certain stores, such as the freezing works at Flinders street, Newport, Geelong, and Portland, to be "cool stores" within the meaning of the Act for the purpose of facilitating inspection and shipment of the meat and dairy produce stored in them. All meat or dairy produce intended for export must pass through a "declared" store, as this course is necessary in order to secure Government supervision. No live stock will be allowed to be shipped abroad until a certificate has been obtained from the Government inspector that the beasts are free from disease. Meat cannot be exported until the inspector has given a certificate that it is sound. The inspector is empowered to reject any unsound butter, cheese or fruit, and to open any cask, keg, box or parcel to take samples. All butter for export has to be forwarded to the cool stores at least four days prior to shipment to enable it to be examined and cooled or frozen. The port of shipment shall be Melbourne and such other ports as the Governor-in-Council may declare from time to time. Provision is made for grading butter according to its quality, into "choice factory," "choice dairy," "second grade," and "milled" or "mixed." Every person who mills or mixes butter is to put a distinctive brand on the boxes, so as to indicate that the butter is mixed. This is to be done before it leaves his premises. The aeration of milk intended for buttermaking is made compulsory, this provision being inserted to give effect to the recommendation of the Perishable Products Committee. All brands and marks are to be registered, and a penalty will be imposed on anyone using a brand which is not registered. The Governor-in-Council is authorized to make regulations to require vessels carrying live stock to provide food, proper accommodation, and water for the animals during the voyage, and to recover penalties from persons exporting in contravention of the Act or obstructing the inspector.

The Outlook for the Ontario Farmer.

[From a Farmers' Institute paper by Thos. Mason.]

After one of the most trying seasons (1895) that Ontario agriculture has ever been subjected to, it is a difficult thing to try to speak of the farming outlook in Ontario in a very optimistic strain. Still, if we will look carefully at our position, study the causes of financial depression and the inevitable revulsion that always follows, as surely as day follows night, it will be seen that we have good cause for hopefulness; that we are almost through the stretch of hard times, and are rapidly nearing the point where better times begin. We have had in the past, periods of great prosperity, due to our fertile soil, healthy climate for man and beast, unequalled water communication, giving cheap transportation before the development of railways; the best cereal land on the North American Continent, giving the largest yield per acre, and the finest quality of wheat, peas, barley, and oats. We have also one of the most hardy, industrious, vigorous, and economical populations on the Continent. Then, too, our freedom from wars and military expenditure has conduced to our prosperity, while we have had the benefit of supplying the waste caused by the wars of other countries. The civil war in the United States, and the construction period following for years after the war, made an immense market for Ontario produce at remunerative prices. The last few years has witnessed a great change. There have been no great wars, while there has been an immense production in the development in the production of cereals in different parts of the world, owing to the opening up of new regions and the cheapening of transportation. Russia, India, the Argentine Republic, Chili, Australia, the United States, and our own Northwest have all wonderfully increased their exports, and it seems that the limit of expansion has not yet been reached. Now, bear in mind these facts. It would seem that, under ordinary conditions, so far as the grain trade is concerned we have reached a permanent lower level of prices. There will be fluctuations, and a great war or a great failure of crops would see a temporary return of old prices and a greater reaction after the cause had been removed.

After a reference to the cattle and cheese trade, Mr. Mason goes on to say: The sheep trade is in a healthy condition, the prospects being brighter than for three years past. The number of sheep on this Continent has been reduced 4,000,000 since the spring of 1893. For some years previous to 1893 we had good prices for sheep and lambs; as a consequence the stocks were increased. In 1893, when the Mills Bill was before Congress, it was proposed to put wool on the free list. The United States is a great wool-importing country, and wool-growers thought that their business would be ruined. There was a panic and a stampede to get out of the business. All through the West flocks were sacrificed at ridiculously low figures, in some cases as low as 50 cents and \$1 per head. When at Chicago in the fall of 1893, going through the Stock Yards, I found the pens crowded with breeding ewes that were being forced on the market at any price. The receipts at the great receiving points in the West—Chicago, Omaha, St. Louis, and Kansas City—for the four years previous to 1893 averaged 2,800,000 annually. In 1893 they increased to 3,800,000, and the movement has continued till the receipts for 1895 are the largest on record—over 4,300,000 head.

In Ontario we are largely following the lead of our American friends, our exports to Great Britain having increased from 5,000 to 10,000 annually to 217,000 in 1895, and these are largely the pick of the young breeding ewes of the country. As a consequence there is sure to be a shortage in sheep and lambs in the near future.

As to the horse trade, I know it requires a good deal of courage to say anything cheerful in regard to it, but I believe that there will be a great scarcity of horses in Ontario before two years are over. According to the returns of the Bureau of Industry in 1892, when the business was comparatively prosperous, we had in Ontario some 688,000 horses, of which number 220,000 were three years and younger, giving an annual production of more than 70,000. In 1894 the numbers were reduced to 674,000, 190,000 of which were young horses. After making careful inquiry in a good many sections of Ontario, I do not believe that we are raising more than 20 per cent. of the number raised in 1892. If that estimate be correct, we are producing about 14,000 horses annually. On the other hand, owing to the low prices of horses and the scarcity of feed, we have had more horses sacrificed, that under ordinary conditions would have given years of useful service on the farm, than ever before in the history of the country. Then, too, we have this year exported to Great Britain some 13,105 head. I do not know the number to the United States, but it is several hundred heads—enough to practically bring the number up to the old figures when the trade was prosperous. I do not wish to advocate that every farmer should go into horse breeding, but I do wish that every farmer would examine these figures carefully and draw his own conclusions. But you may say, "I can go out and buy horses for half what it costs me to raise them." So you can to-day, but if we do not raise any young horses, how will we replace the horses that are being worn out on our farms. I believe that by that time we will find horses dear, and I think that every farmer should take steps to replace his farm teams by the time his old ones are unfit for use.

The Toronto Industrial Exhibition.

Another season has come and gone, bringing many changes in almost every line of life—changes in our governments, in our agricultural conditions, and in ourselves; periods of hopefulness and of depression; and yet with it all, Toronto's great Industrial Exhibition goes on, ever increasing in importance and magnitude. The Exhibition which closed on September 12th has undoubtedly been the most successful ever held in the number and quality of the exhibits and of the attendance. The magnificent situation of the grounds on the lake shore, the lawns, flower plots, trees, and walks give a parklike appearance. The adequate accommodation given to nearly every class of exhibits and the admirable provisions made for the accommodation of the vast throngs of visitors all go to make this by all odds the most successful Exhibition on the American Continent. Such an exhibition is of incalculable benefit to all classes of the community. An intelligent person can scarcely fail to derive a fund of valuable information, and the entertainment provided is sufficiently varied to suit all. Although extra efforts were made to make the opening week more than usually attractive, the weather, which was cold and wet, did not conduce to a large attendance. Monday of the second week, however, opened bright and fine. It was Labor Day and Citizens' Day, and this, added to the fact that Li Hung Chang, the great Chinaman with the yellow jacket, favored the Exhibition for a couple of hours with his august presence, made this day a record-breaker in the annals of the Exhibition, no less than 100,000 people having passed through the gates. The following days were also fine and an immense throng of visitors were present—close on 80,000 on Wednesday, Farmers' Day. The Governor-General and Lady Aberdeen and a galaxy of M. P.'s from Ottawa were among the notable visitors present.

In nearly every department the entries exceeded those of last year, and we are safe in saying that the general average quality was higher. The number of exhibitors was also greater and the prizes, in many classes, more evenly distributed. The live stock was brought in three or four days earlier than usual, and the judging of the various breeds distributed over several days, so that exhibitors showing in different classes had a better opportunity of attending to each class; but we doubt if this would compensate the breeders as a whole for the extra time and cost of feed, etc. The exhibition of fruit was grand, but this and all the other leading departments we refer to in detail elsewhere.

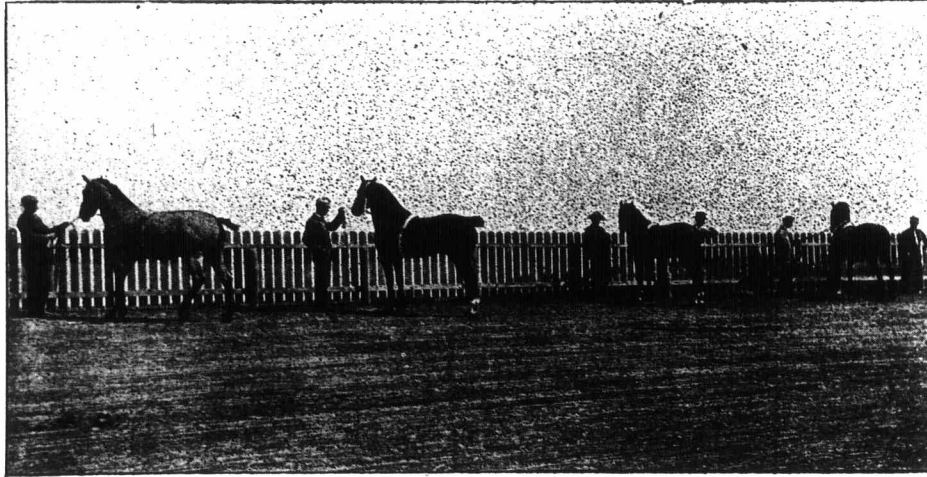
The Good Roads Association introduced a new feature this year in having practical demonstrations of the operations of road graders, rollers, stone crushers, etc.; Mr. Campbell, the Ontario Government Road Instructor, making an address on the necessity for adopting more systematic methods for improving our country roads to an assembled concourse of municipal councillors and others. The tent provided by the Local Government for the convenience of members of Farmers' Institutes, Breeders' Associations, and the Agricultural College seemed well patronized and appreciated. Among the more important gatherings was that at which Hon. Mr. Fisher, the new Dominion Minister of Agriculture, met the breeders to discuss the questions of quarantine, freight rates on stock, etc. The Dominion Government Experimental Farms made an instructive exhibit in the horticultural building, the special feature being the display of fruits from the Experimental Farm in British Columbia. Northwestern Ontario also had a small exhibit of agricultural products and minerals. The Canadian Pacific Railway had a large building on the grounds, and a very extensive display was made of the varied products of the territories contributory to the great transcontinental road: gold, silver, lead, and other minerals from British Columbia; grains, grasses, and vegetables from Alberta, Saskatchewan, Assiniboia, and Manitoba; and minerals from Northwestern Ontario; the whole building being decorated with stuffed animal heads, birds, etc., from Manitoba and the West. A magnificent display of agricultural implements was made, all the leading manufacturers being strongly represented.

HORSES.

THOROUGHBREDS.

The present lack of demand for anything but horses of very good quality in Thoroughbreds showed its effect in this class. It may be said that no inferior individuals were shown. In the mature stallion section nine animals met the judges, most of which bore evidence of having done considerable turf service, in marks of the firing-iron upon their joints and limbs. The decision of the judge, Dr. Hodgson, Seaforth, seemed to have been influenced by this, as he confined the awards to good animals bearing as little as possible of these blemishes. Brown & Gilkinson, Brampton, had out their previous winner, Woodburn, and secured first upon him. He is a sweet horse, very breezy in appearance, and up to considerable weight, while he looks to be able to run a good heat with a little training down. He was sired by King Alphonso and out of Molly Wood. Graham Bros., of Claremont, rarely leave a class in which they exhibit without a trophy, and in this instance they bore away the second award upon Montana, by Doncaster. He is very strong-backed, chestnut, of good size and quality. King Bob, by King Ban, shown by W. J. Thompson, Orkney, is hard to fault for the stud, so full is he of Thoroughbred characteristics. It seemed hard to throw out Courtown, Prohibition, and others, but all could not get prizes.

Mature stallions designed to get hunters and saddle horses are always of the sort the country is better for. Here two Spring Show '96 rivals contested, in Quinn Bros.' noble Wiley Buckles, by London, and Graham Bros.' Goddard, by King Ban, this time reversing the spring decision by placing the Claremont horse in front, with Wiley a good second. The winner, having homed in such favorable quarters, was brought out in excellent form. That he is a great horse was borne out by his securing the sweepstakes prize. The remaining entry was The Poacher, by Boulevard, shown by E. A. Andras, Port Hope, a breezy and handsome animal, hardly up to the weight of the other two. No three-year-olds, and just one two-year-old



A GLIMPSE OF THE HACKNEYS.

was out, in H. E. Simpson's (Toronto) Exitus, by Exile. Yearlings made up a nice quartette, the first and second winners coming from Thorncliffe stables, where the very best can always be found. The first, Scottish Chief, by Admiral, is out of the well-known Thistle, and does his parents justice. Allegretto, by May Duke and out of Andante, is also a promising colt. A son of Dandy Dinmont, from Royal City stables, Guelph, has much to commend him.

The mare or gelding section, four years old and upwards, had half a dozen entries of good quality. A typical saddle gelding, bred at Thorncliffe Farm, was placed at the top. He is a strong, handsome chestnut, known as Harpoon, by The Chicken and out of Thistle. He is now owned by Capt. R. Myles, of Toronto. A breezy bay mare, Galena, by Limestone, shown by N. Dymont, came second in the section. A compact, good mare, Alphonsina, by Raffaello, and shown by H. E. Simpson, Toronto, was third.

A chestnut also led off in the three-year-old fillies. She is Minnie Lightfoot, by Oddfellow or Easterling, and owned by N. Dymont, of Barrie. She is a strong mare, with fine action, and won in good company. Robert Davies contested and secured second with Music, by Autocrat, a rangy brown. A. Frank & Sons, The Grange, came third with Caledon Maid, a capital bay mare that a trifle more size would improve. Mr. Dymont's yearling, Madeline, by Courtown, was alone in the two-year-old section. It would have taken a good one to beat her. Yearlings were strong. Robt. Davies' Bullseye, by Oxlip, was the choice of the judge; Dymont's Flying Bess, by Courtown, came second; and H. E. Simpson's get of Emperor, third.

Mares with foals had out four entries. Robt. Davies' Thistle is accustomed to winning, as she did upon this occasion; her very fine foal by Parisian also taking off the best premium. N. Dymont's Hyala came second, while the second foal by Admiral was from Thorncliffe Farm, out of Andante, who secured the third prize; the third prize foal being that of Hyala and by Courtown. The winning mare of the day was Robt. Davies' yearling, Bullseye.

STANDARD-BRED TROTTERS.

A medium road horse is not worth raising, which fact effected the Standard-bred class in the number and quality of exhibits in a marked degree. The quality of the entries was of a very high order, while the numbers were not up to some former years. Mature stallions were five strong, and mostly of very desirable type. Not only did they show fine breeding, but their size, style and action were of a sort that there should be more of in the country. A newcomer, in Graham Bros.' Vrowsky, was the horse of the class, which was proved by his conformation and performance, as he came direct from his third heat of the afternoon into the contest and won first and sweepstakes award. He did his performance in 2.22 on the half-mile track. He is a powerful, well-made bay, very level-headed, and has excellent bone. A horse that would at once attract the attention and claim the admiration of a horseman was Keswick, by Jay Gould, exhibited by John Sharen, Woodstock. He is a very dark chestnut, and while he has enough size, his beauty, and especially his action, was much admired. He is claimed to hold a low mark, which we can readily believe. Good size characterized all the prizewinners, as D. Dalton's (Delhi) Shadeland Duval, the third prize horse, is a strong, free-going chestnut that inclined to pace.

Three-year-olds had two entries much alike in make-up. They were both very good, and will be among the best wherever they are located. The first winner was Uncle Boy, by Wildbrino, owned by Hugh Smith, Claude. He showed a great capacity for speed by his form and way of going. He is a bit larger than his opponent, Graham Bros.' Gallant Graham, which we understand is several months the younger. This colt is by Kentucky Volunteer and out of Gold Foil.

Three-year-old geldings or fillies had in competition two rather good, well-fitted mares. The first winner, Elfreda, by Wildbrino, was one of the sweetest at the show, having a girth and chest that indicates a great constitution, while her strong quarter and excellent limbs were about faultless. She is owned by O. B. Shepherd, Toronto. The other mare is owned by M. O'Hallern, Deer Park, and is a fair individual.

Two-year-olds had just two contestants, the best being Bonny Scott, by Wiry Jim, and shown by Hugh Smith, Claude. He is a good colt. Thos. Hodgson, V. S., Toronto, had the other number in Pindus, by Wildbrino. Yearlings were fine, and four in number. We were much surprised at the decision of the judges, J. H. Allen, of Picton, and Jacob Errett, Ottawa, in placing the awards in this section. Two our mind the best entry was Hugh Smith's Comely Girl, by Wiry Jim, a noble mare with action away beyond that of any other number in the section. She is large enough, full of quality, and a real trotter. Her place was second, however, being beaten by Edna Briggs, by Wildbrino, shown by G. H. Briggs, Toronto. She is a very sweet brown mare, very well formed, but will never be fast, if present indications are to be relied upon. Geo. Jackson, of Downsville, had in the third prize colt a nice bay, but a little thin for the showing.

Brood mares and foals were not a striking lot. Five entries were out, most of which were thin and plain. Miss Stirling, by Twilight, shown by S. J. Cole, Woodstock, was the best mare, as was also her foal by Keswick. The dam shows age, but is of the correct type. Robert Davies' Prairie Bell 2nd, by Gen. Stanton, is a good mare and won second place. James Childs' Harmoine, by Hermit, was the best-fitted mare in the class, and was generally admired. No second or third prizes were awarded foals, because the worthy ones had not been registered.

Four pretty ones showed in single harness. Robt. Porteous, of Simcoe, did them all with a very handsome black mare, Miss Hinman, by Waser. She afterwards captured the female sweepstakes award. Everything about her is admirable. A fine brown mare, Blue Bells, by Wildbrino, and shown by Geo. Brown, Toronto, is of nice conformation, showing good action, and came second; while a lightish-bodied, stylish bay gelding by Belmont Stanton was awarded the third place.

HACKNEYS.

The exhibit of Hackneys does not get much further ahead from year to year. Strange to say, very little new blood appears, possibly from the fact that no new men seem to take up their breeding. The exhibitors this year were: Messrs. Beith & Co., Bowmanville; Crossley, of Rosseau; Hillhurst Farm, Hillhurst, P. Q.; Graham Bros., Claremont; and G. H. Hastings, Deer Park. None of the classes had what may be termed strong competition, in numbers, although almost every section took considerable looking over before the awards were given. The judging was done by two good men, viz., F. S. Peers, Mount Morris, N. Y., and J. T. Gibson, Denfield.

The manner in which these exhibitors bring out their stock is known to all who have watched an Industrial contest, as being the result of great care in feeding and handling. The stock itself is of

the best English blood, which fact makes their exhibition particularly attractive. What is much needed is a better and definite place of showing, so that the many who desire to witness this attractive display may do so in comfort and to the best advantage. No doubt the bad arrangement this year so much complained of in various horse classes (speeding excepted) will be rectified for the '97 exhibition.

In stallions, with their progeny of four not over two years old, Mr. Crossley had the matter his own way with his great stock horse Fireworks and four handsome youngsters. Messrs. Beith had entered Jubilee Chief, but through not having all the progeny registered he was not allowed to compete. In aged stallions the only new entry was Graham Bros.' Royal Standard, so successfully shown at the last Canadian Horse Show. He was brought out upon this occasion in, if anything, better form than upon his first Canadian contest. His size, which cannot be faulted; his finish, which is well-nigh perfect; and his magnificent way of going, behind as well as in front, can hardly be improved upon. Not only is he graceful, but such speed as he shows! He captured the first award, as did he also the sweepstakes for best stallion and for best Hackney on the ground. In his male sweepstakes contest he had not a great lead over his only opponent, Barthorpe Performer, the Hillhurst winning three-year-old, a high-going, well put up dark chestnut that we would say could strike a three-minute clip without much handling, and that, with his great style of going, makes him a great Hackney. Beith's Banquo and Crossley's Fireworks were in their usual good form. Their heavy stud demands do not appear to detract from their freshness in appearance and action. The noble son of Jubilee Chief took away the second award, and the Rosseau horse third. Hastings' little Black Nobleman is all Hackney, but more of him would be desirable. Three-year-olds had, besides the Hillhurst colt above mentioned, a very sweet horse of Mr. Crossley's, Rosseau Performer, the strawberry-roan that goes so gracefully. He has grown and filled out beyond our expectations, and continually improves in his way of going. Two-year-olds had the dark brown Rosseau Fireball, son of Fireworks, and Danish Duke, from Hillhurst, by Fordham. The Rosseau colt got it by a narrow majority. He is a bit more cobby in his make-up, and goes in a decidedly pleasing manner, as did also the other colt. Yearlings were represented by a colt from each of the Deer Park and Hillhurst farms. The latter, a bay by Hayton Shales, is a promising youngster, and goes well, while the Toronto black colt by Black Nobleman is of fairly cobby style.

Three-year-old fillies had two entries from the Hillhurst and Deer Park studs. The latter, Fannie Bardolph, by Lord Bardolph, a very fine chestnut, put up a pleasing exhibition. She won over Matchless Maid, by Fordham, a well-mannered bay with considerable style. One of the great mares of the show was Jessica, by Jubilee Chief, the winner in every contest she has entered, if we remember rightly. She is a full sister of Banquo, and resembles him very closely in conformation and action. She is a great goer and of good size. The second prize filly was Roan Rosa, by Dundrennan, a tidy mare, with very trappy action, shown by Graham Bros. Hastings' Princess Denmark, by Star of Mepal 2nd, was 3rd. Yearling Lady Shales, from Hillhurst, was the only yearling Hackney mare to which an award was given. A very fine mare from Bowmanville contested, but went a little lame and was thrown out.

In brood mares the judges had a heavy task to decide between three extraordinary matrons—Princess Dagmar, from Hillhurst; Crossley's Lady Bird, and Beith's Lady Aberdeen. These mares are all imported and all regular breeders. A casual glance at them standing, and going as well, would have led one to think that each might have been given 1st, with an equal distribution of the money. It will be remembered that Princess Dagmar won 1st at New York two years ago. She is a great mare, perhaps a little more worn than the others, but she was considered good enough for 1st place, also sweepstakes winner. Crossley's Lady Bird and Beith's Lady Aberdeen would match up well and stand a good chance in pairs of high-steppers. They are brown, very cobby, sweet, and act to perfection. Lady Bird won 2nd. Lady Aberdeen's foal by Banquo won 1st, Princess Dagmar's daughter by Barthorpe Performer 2nd, and Lady Bird's get of Fireworks won 3rd. The foals were a good lot.

Single Hackneys in harness, not more than 153 hands, had a good trio in the noted Althorpe Duchess, Beith's Mona's Queen, and Charwoman, from Hillhurst Farm. They were about as hard to judge as the brood mares, but the awards were given in the mentioned order. Althorpe Duchess also won in single high-steppers not more than 15.3. Pairs of high-steppers were numerous and good, the prizes being mostly taken by dealers.

The Dog-cart and Cob classes were better filled than on previous occasions, which shows that more attention is being paid to this class of city horses.

ROADSTERS.

The Roadster class is always a mixed one in breeding, the entries being sired by Standard-bred trotters, Hackneys, and Thoroughbreds. This is sure to result in a variety of type and way of going. This year, as upon some former occasions, the gets of running sires captured a good portion of

the awards, especially in the younger sections. The judges—Messrs. A. Choate, Port Hope; F. C. Hulton, V. S., Welland; Dr. Aikins, Burnhamthorpe—expressed a preference for the progeny of Thoroughbred sires when desirable size and conformation can be secured along with moderate action. Such horses can seldom be driven faster than ten or eleven miles an hour, but that rate of speed can usually be maintained seven days in the week. The entries this year were not more than one would expect to see, but invariably more than enough very worthy ones could be found to bear away the ribbons.

Stallions four years old and upwards had to be 15½ hands in height in order to qualify. Of these, eight were out to be judged. With the exception of a couple, the section was a good one. The race for first place lay between three horses, any of which could not well have been objected to had they been placed at the top. On their first appearance, Tony Wilkes, by Honest Wilkes, owned by John McBride, Newton Brook, seemed to have the preference. He is almost a perfect pattern, being very uniform, handsome, and an excellent mover. His depth and girth, as well as his length and fullness of quarter, are hard to improve upon. The second day's showing placed him where he stood last year, in second place. The first prize winner was Black Valentine, by Valentine, a horse much like Tony Wilkes in make-up, while his glittering coat could not fail to win one's affections. His action, too, is of the right sort, being graceful and rapid. He won the sweepstakes award. The third award was taken by a particularly breezy bright bay, very sweet and fine, owned by J. D. Smith, Campbell's Cross. He is a son of Gold Leaf, and is known as Gold Dust. To get speedy horses we would depend upon this horse. There were at least two prizes between the third and fourth in the matter of quality.

Three-year-olds were an indifferent lot of four, just two of which were considered in their classes. The best colt, Rialto, by Rio Grande, and owned by H. C. Charlesworth, Bedford Park, is quite a fine sort of chestnut, with very good limbs and action. A good-looking brown son of Hermit, Aurelian, owned by C. W. Brereton, Bethany, took second place. No other awards were made in this section.

Two-year-olds were a fair lot of seven. A very fine chestnut with silver mane and tail, a fair goer, led the list. He was shown by M. Higgins, Toronto. The next colt, Victor, by Lee Christie, a Thoroughbred, and shown by J. B. Cowieson, Queensville, is a little model. He had no trouble in winning wherever shown as a yearling. Glenwood, by Thoroughbred Glendale, seemed a little fine for third place, but he may be a late colt. He is owned by G. T. Asling, Saintfield.

Yearlings were five strong. Most of them were a little plain and thin, but two or three very good ones were among them. The best one, a very good bay, Star, by Altoneer, shown by A. Levack, Toronto, has a promising future with good management. He is nice, and goes well. The next, Wild Flower, by Wildbrino, is a fine little colt; in fact, he is handsome, and moves rapidly, but folds his toe too near the other leg when going to suit us. A Belmont Star colt won third prize.

Geldings or fillies three years old always turn out well at the Industrial, as do always the younger sections. Out of fourteen entries present in the three-year-olds, a very good half dozen could have been selected. A breezy filly, Nelly Sharp, by Henry Sharp, and shown by Robt. Wilson, Brampton, was considered best in the long line. She is nice, but appeared a little tied up in front as compared with some of the others. A mare that one could find very little fault with was Miss Dennison, by Dennison, and owned by W. W. Ward, Utica, was placed second. She should be fast with luck and proper handling. A well-grown and well-fitted gelding, George, by Munro Wilkes, and owned by P. Farrell, Woodstock, appeared to many as good enough for first place, but he got third, and no one seemed to complain. He will make a great roadster. The next three or four were good horses. Two-year-olds were even harder to judge than were the last section. There were twelve out, and nearly all good. Last year's sweepstakes roadster filly was among them, and got only third place on this occasion. She is Bella B, by Graham Bros.' Standard-bred Deacon. Her owner, H. G. Boag, Queensville, has brought her along well since last year. She is a right good one, and moves very smoothly. She was beaten by more rangy mares. The first, an exceedingly sweet chestnut, going just right, by Forest Membrino, is owned by Joseph Piper, Newmarket. A real trotter, with grand conformation, was placed second. She is J. J. & S. Kiscock's (Guthrie) Nelly K, by Hamilton. Her color is black, and her style is just what one would look for. The next three or four were not much behind the prize-winners as young roadsters. A dozen yearlings very hard to judge came into competition. Last year's winner in foals kept her place in this contest, as she deserved. She is J. B. Cowieson's Maid, by Lee Christie, a mare with very desirable size and conformation. Graham Bros.' Princess, by Deacon, a sweet mare with free action, was placed second, and third went to McClurg & Zvitz.

Brood mares were fewer in number than for some years, but the falling off was of the sort we don't want to breed. There were ten mares and foals this year, as against about twice that number in 1895. The best mares were of very desirable

size; in fact, some of the winners might almost have gone into the small carriage class. Graham Bros.' Mayflower, by General Keen, was the successful number, as was she also in the sweepstakes contest. She is very breezy, on grand limbs, and goes with speed and grace. Dent Dalton, of Delhi, showed Daisy Patchen, a graceful mare of a good type. She won second, and was followed by Geo. Jackson's (Cooksville) Victor, and J. B. Cowieson's Maud. Most of the mares had good foals, which made a strong competition and will insure a good lot of yearlings for 1897. Geo. Jackson's Tom, by Woodburn, won first, while Wm. Ewen's (Elora) get of Guelph Boy was placed second, and John McBride's Miss Altoneer, by Altoneer, took third. J. B. Cowieson's sister to the first prize yearling came fourth.

Roadsters in double harness, between 15.2 and 16 hands, were out eight strong. The best ones were good enough to sell for some \$800 to the President of the First National Bank, Little Falls, N. Y. They are well-mated, chestnut, full sisters, by Axland and out of Clara Brown. They were shown by J. C. Dietrich, Galt. The second pair were also chestnut, hardly as well mated as the first pair, but were good individuals and quite speedy. They were shown by F. E. Shaver, Islington, and sired by Toronto Chief and Belmont. The next pair showed a rapid clip. They are browns, much alike, got by Crown Imperial, and shown by J. F. Clark, Brampton.

Pairs 15.2 and under were all good movers. There were six of them, and they were mostly up to good size. Here the '96 Canadian Horse Show first prize winners were placed at the top after a deal of looking over. They were shown by C. A. Burns, Toronto. They, like the second prize pair shown by P. Irving, Woodstock, are long enough. The third prize pair, shown by J. C. Dietrich, Galt, were more compact, good movers, and nice.

Both sizes of single harness section were well filled, the smaller having some twenty entries, containing a large percentage of very good ones. It was after a deal of very careful looking over that seven of the best were drawn out. The larger ones had some fifteen out, also hard to judge.

CARRIAGE HORSES.

Carriage and Coach horses were all thrown together this year, which brought the big, good German Coachers into competition with the finer English horses. Among the younger sections the gets of Thoroughbreds did a deal of the prize-taking. The sections were not very largely filled, but each had a few good ones. They were judged by J. D. O'Neil, V. S., London, and Dr. Strange, Toronto.

Stallions four years old and upwards, 16 hands and over, were out seven strong. Such farm horses as some of them would make!—great strong, well-built, clean-limbed fellows, having action that would shame many representatives of the lighter classes. German Coachers carried off the three best premiums. Kaiser Wilhelm, shown by S. P. Thompson, Woodstock, was considered best in his section and for best male. He is such a breezy, fine fellow, which, together with his uniformity and action, makes him a safe one to breed to warm-blooded Carriage mares. Geo. Cockburn's Ludwig is in grand form this year. He is a big, well-made Coach horse, on short legs, quite a good mover and very handsome. He was placed second, followed by a massive black German shown by J. P. Fisher, Brussels. Joseph Manary, of Goring, was given fourth place on Prince Arthur, an English horse with a good deal to commend him as a sire.

Three-year-olds were shown by W. C. Brown, Meadowvale; Joseph Piper, Newmarket; and Dent Dalton, Delhi. They were a fair lot. The first winner, a chestnut, is quite a good colt. The exhibitors won in the mentioned order.

Two-year-olds and yearlings were not numerous, and of fair quality. In fact, just one two-year-old, a son of Regent, was out.

Geldings and fillies had about half-a-dozen in three-year-olds and two-year-olds, and three in yearlings. The first prize yearling was by Kaiser Wilhelm, and the first yearling by Windham.

Brood mares and foals were a fair lot. Each of the foal prize-winners were by Thoroughbred sires.

Single and double harness sections had a strong competition, most of them bang-tailed and able to show very handsome action.

The best mare any age was Bella Cord, a noble chestnut with white markings, got by General Cleveland by Clear Grit. She was shown by James MacQueen, Elora.

SADDLE HORSES.

were strong in many sections. The sections for Hunters of different sizes contained many magnificent horses, most of which resembled the Thoroughbred in conformation. They were mostly shown by dealers and city gentlemen.

CLYDESDALES.

Judges.—R. Ness, Howick, P. Q.; J. Y. Ormsby, Woodstock; and J. Warrilaw, Owen Sound.

In the ring for aged stallions, seven horses out of nine entries faced the judge; Mr. R. Davies' well-known Prince of Quality having been withdrawn, owing to an unfortunate accident. The center of attraction in this ring were the two grand horses, Grandeur, exhibited by Messrs. Sorby, and The Royal Standard, exhibited by Graham Bros. Grandeur has been so often described that we need not say more than that he was shown in excellent form; while The Royal Standard, who was the sweepstakes winner, as our readers will remember, at the Canadian Horse Show last spring, drew a

full share of attention from all interested in draft horse breeding. He is a horse of beautiful quality, and though perhaps not quite of so massive a type as his opponent, shows plenty of substance, together with clean, flat joints and hard, flinty bone. Perhaps we are justified in saying that never before have two better Clydesdales stood side by side in a Canadian showing, and the judges seemed to fully realize that their work was cut out for them. After a careful examination, however, the red ribbon went to the son of old Darnley, with the Cairnbrogie horse a very close second; third place being taken by a very useful horse (owned by Messrs. Little, of Sandhill, Ont.), Westfield Stamp, a big, powerful horse, by Cairnbrogie Stamp, of a pattern calculated to get good export geldings, although perhaps hardly as nice near the ground as he might be. Fourth went to McQuaker, by McGregor, exhibited by Messrs. Graham; a smaller horse of good quality.

In the class for stallion and four of his colts, Grandeur again scored a win, although pressed hard by Westfield Stamp, two of whose colts were of exceptional merit. Only one three-year stallion was forward: Locksley, bred and exhibited by R. Beith & Co., and got by their old stock horse, Sir Walter.

In the next two classes the Thorncliffe stud furnished the winners, first place in the two-year-olds going to King's Own, by Queen's Own, out of the imported mare, Candour, while his own brother took similar honors in the yearling class. Both are colts of nice quality, King's Own being a specially good mover; the younger colt, however, although not as far forward as a yearling, has, we fancy, a good deal of outcome to him and should make the better horse. Second place in the two-year-old class went to McQueen, another of the get of Queen's Own, shown by Alexander Doherty, with Grandeur 2nd third, a big but rather plain colt out of Grandeur, bred and exhibited by Messrs. I. Devitt & Son, Freeman, Ont. Another get of the same sire, out of a Boydston Boy mare, from the Woodlands stud, was second in the yearlings, while a big bay colt, bred and exhibited by Messrs. Davidson, of Balsam, and sired by Tofty, was placed third; a big strong fellow, but a bit plain about the feet and ankles.

Sweepstakes for the best stallion any age went to Grandeur, adding another to his already long list of trophies.

Three-year-old fillies had only one entry, a dark bay filly, owned by Messrs. Sorby, and sired by Grandeur; while the next two classes, two-year-olds and yearlings, brought out three of each age, the first prize two-year-old being sent forward by Messrs. Davidson: a very nice filly by Westfield Stamp, with a capital top and good hard shanks; a thick, drafty filly by Grandeur taking second, and a daughter of that old-time prize-winner, MacNeillage, shown by Wm. Foster & Sons, Humber, Ont., third. Grandeur's get were again victorious in the yearling class; the Woodlands stud taking first, with a short-legged, blocky filly of Messrs. Davidson's, by Tofty, second.

In the class for brood mares were five entries from Thorncliffe, but the brown mare, Candour, having lost her foal, unfortunately, could not show; otherwise it would have been a clean sweep for this popular stud. As it was they took away first and second ribbons for Bar Belle and Nellie, well-known winners, as a team, in the past; a useful sort of a mare, by Boydston Boy, shown by Messrs. Davidson, and somewhat low in condition, coming in third.

As the prizes for mares went, so did those for the foals; first going to Bar Belle's colt, foaled by Prince of Quality, and a right good one he is, big and full of quality. He shows wonderful character, and was pronounced by excellent judges around the ringside one of the best foals ever shown in Toronto. The second prize mare's foal, by the same sire, we did not fancy nearly so well, although, as he is only a little over two months old, he has not had much chance yet, and may develop into a much better youngster than we think him now; while on the other hand, the third prize winner, by Tofty, had, perhaps, been pushed a little too much ahead. An easy winner in this class for mare with two of her progeny was found in Candour, with her two sons, which were winners respectively in the yearling and two-year-old stallion classes, while the same matron finished up by winning the sweepstakes medal for mare of any age.

Messrs. Graham not having brought their entry, only three teams were forward, and again the Thorncliffe stud was victorious, with a pair of light bays, four and five years old; Hendrie & Co. (Ltd.) coming second with a pair of mares, bred by Wm. Foster & Sons, of a capital good pattern, but showing evidences of hard street work. Messrs. Davidson took third for a big, strong pair of bays.

ENGLISH SHIRE HORSES.

The classes for Shire stallions were not by any means well filled, there being only three aged horses and one three-year-old forward. In the aged class, Pride of Hatfield, the Fonthill stock

horse, carried away the red ribbon; second going to Duke of Blagdon, shown by J. M. Gardhouse, a smooth, compact little horse, bred at the famous Blagdon stud—a good pattern, if a little undersized; while the third went to Geo. Garbutt's old horse, Darnley, an old-time winner, but now almost past his show days. Undoubtedly the best Shire present, however, was the three-year-old colt, Kilburn, imported and exhibited by Berry & Geiger, Hensall, Ont., to whom was awarded the sweepstakes ribbon. In our opinion this is the best Shire we have seen in Canada for a long time; he promises to make a very heavy horse, and, while showing any amount of bone and substance, he is a horse of excellent quality, and all that the most fastidious could ask for about his feet and ankles. He has a good top, and a capital shoulder and arm, but we should have liked to have seen his stifles a little better let down, and perhaps some judges might like a trifle less bend to his hocks. Three-year-old fillies brought out two from Fonthill and one from the Muskoka stud, and to the latter, a blue-roan, by St. Hybold, went the red. This is a very smooth, sweet mare, low down and thick, with excellent feet and pasterns, and handles herself well. Second and third went to a pair of bays by the Carbon horse, Prince Charles; fairly good bodied fillies, but with hardly the right kind of underpinning. Only one two-year-old was present, a bay from Fonthill, by Pride of Hatfield; while out of three yearlings, the first and third were by the same sire. Second went to a filly from the Muskoka stud, of rather a plain sort and in low condition. In brood mares, Morris, Stone & Wellington again scored a win with a brown mare of their own breeding, by Chieftain 2nd, with Mr. Crossley's Queen of Athorpe second, and Sham, by Samson the Great, exhibited by Wm. Fenwick, Stanley Mills, third. As in the Clydes, so here, the foals went as the brood mares did. The Fonthill stud got first on a very good foal by their own horse, decidedly the best foal present; second going to Mr. Crossley for a foal by Bravo 2nd, and third to Wm. Fenwick for a horse colt by Diseworth Blue. Queen of

brought out seven entries, the winner being found in Messrs. Davidson's Kate Hill 3rd, a very nice, sweet filly by Westfield Stamp, with Smithfield Maid, shown by Colin Cameron, Thistleton, by MacNeillage, second; and Corinne, by Queen's Own, from the Cairnbrogie stud, third. The latter has hardly done as well as she might, and was a little low in condition, otherwise she is a very useful, thick filly, with plenty of bone and hair. The Woodlands stud had a winner in yearling fillies in the dark bay Eva, by Grandeur, a good, even filly that should make a capital mare. Amos Agar, Nashville, came in second with Rose, by Castlemore Bob; and Colin Campbell, Thistleton, third, with The Thistle, a full brother to the second prize two-year-old. There were only four brood mares in this class, and of these the Lewie Gordon mare, Kate Hill 2nd, bred by Messrs. Davidson, and exhibited by Wm. Brewster, McIntyre, Ont., of a big, good sort, and, by the look of her foal, a good breeder, stood first. Dolly Newburn, by Lord Derby, captured the blue for Colin Cameron; she is a low-set mare, of a wearing pattern. Hyder & Parkin, Oxford Centre, came in third with Rose Beresford, by Lord Beresford. For foals, Wm. Brewster was first with a horse colt by Tofty, out of Kate Hill 2nd; Colin Cameron second with a filly by MacNeillage, out of Dolly Newburn; and Hyder & Parkin third with a rather nice youngster by Self-Esteem. The medal for the best mare and two of her progeny went to Kate Hill 2nd and her son and daughter—the first prize foal and the first prize two-year-old filly, while she wound up by winning the medal for mare any age. First place for span of draft horses went to Hendrie & Co. (Ltd.) for Thumper and Bouncer, with Geo. Morrison, also of Toronto, second with Sandy and Tom.

GENERAL PURPOSE HORSES.

The advisability of having a class of this description having been frequently mooted some two or three years ago, the directors did away with it, but for some reasons it was this year restored to the prize list. The justice of the objections made to the class in the past was, we think, fully proven this year by the heterogeneous nature of the exhibit. While there were not more than five entries in any class, the prizes were divided up between half-bred Clydes, Coach and Carriage horses, Thoroughbreds, Trotters and Hackneys. Exhibitions are generally supposed to be for two purposes chiefly: to encourage the breeding of the best stock and to act as an object lesson to those who are trying to improve their methods of breeding, but we are very dubious as to the advisability of encouraging the breeding of a class of horses that are not fetching enough money to pay for the cost of raising them, and if any one can learn anything about the best way to breed general purpose horses in a class in which the prizes were divided as follows—to colts sired by imp. Coach horses, 4 prizes; to colts sired by Carriage horses, 2 prizes; to colts sired by Trotting horses, 4 prizes; to colts sired by Thoroughbred horses, 2 prizes; to colts sired by Hackney horses, 2 prizes; to colts sired by imp. Clydesdales, 6 prizes; to colts sired by Canadian Draft horses, 2 prizes—we shall be very much surprised. If the Association is anxious to give a class for horses of the stamp usually used on farms throughout the country, why not call it the Agricultural or Light Draft Horse class? and then we venture to say that a much more even and satisfactory exhibit will be sent forward.

PONIES

were numerous and well brought out, especially the children's turnouts, which caused many an ambitious youth to transgress the tenth commandment.

THE CATTLE.

The cattle-breeders of Canada have shown commendable courage and enterprise in keeping their stock up to a high standard of excellence, in spite of the hard times and of reduced prices available. They seem to fully realize that live stock is the sheet anchor of farming, and that only the best will pay for raising, and especially for showing. The show of cattle at Toronto this year was fully up to the average of past years in numbers and probably above the average in quality. All the breeds were well represented and were brought out in fine condition. The number of entries in the various classes, according to the catalogue, were as follows:—

Shorthorns—123.....	Exhibitors—27
Jerseys—110.....	"—20
Ayrshires—84.....	"—10
Holsteins—71.....	"—8
Galloways—48.....	"—4
Polled Angus—40.....	"—4
Herefords—40.....	"—4
Guernseys—31.....	"—4
Devons—12.....	"—1

SHORTHORNS.

The display in this class was unusually good, and the cattle were brought out in exceedingly fine condition. There was a uniformity of type throughout the whole class, which speaks volumes for the good judgment and skill of the breeders. The smooth, medium-sized, blocky, short-legged sort



THE SHORTHORN SWEEPSTAKE COW COMPETITION.

Althorpe and two colts was the only entry for mare and two of her progeny, while the only team shown was a pair of big, powerful mares by Hero and King of the Castle respectively, shown by J. M. Gardhouse. Best mare of any age brought out the greatest number of entries of any class, but finally the judges tied the ribbon on Mr. Crossley's blue-roan three-year-old. Although not as big as some others, this is a big little mare, very thick and short-legged, and of excellent quality, with good wearing feet, and a nice mover.

HEAVY DRAFT HORSES (CANADIAN-BRED).

The class for aged stallions brought out a ring of good, big, heavy horses, headed by the sweepstakes winner of 1894—the black horse, Samson, bred by J. McMillan & Son, and exhibited by P. Harold, V. S., Tavistock, sired by Ringleader, a very useful-looking horse, of a thick, blocky type, with heavy bone and plenty of feather. Second went to Ira Nattress, Mill Brook, Ont., for another black, by Gen. Arthur, a good thick one also; while D. & R. McGeachy, Coleraine, came in third with Lochiel II., by Lochiel, a wide, low-set, short-legged bay, that by the look of some of his get that are being exhibited is breeding well. There were no three-year-old stallions, and the sweepstakes went to Samson. In the gelding class, Hendrie & Co. (Ltd.) came in first with Douglas—a good pattern for a lorry—bred by Jno. Morrison, Brooklin, and by The McFadden; second going to Wm. Wilson, Oshawa, for a gray by Eastfield Laddie; and third to I. Devitt & Son, Freeman. In the three-year-old class there were three fillies forward, and the winner was found in Graham Bros.' Queen of Atha. This is a grand mare, and was shown in the pink of condition. She has now an unbeaten record, having won first at the Industrial as a foal, yearling, two-year-old, and three-year-old. Good as this filly is, she had a very close competitor in Bell, by Lochiel II., bred and shown by Amos Agar, Nashville, Ont.—a very sweet mare with excellent feet and pasterns; third place going to Hyder & Parkin, Oxford Centre, for a filly rather low in condition. Two-year-old fillies

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THE FARMER'S ADVOCATE & HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

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Condition of Agriculture Considered.

At a largely-attended meeting of Members of Parliament, in the House of Commons, Ottawa, on Sept. 14th, the condition of agriculture in Canada was discussed along with such questions as the live stock quarantine, freight rates, cold storage, etc. The consensus of opinion among stockmen seems now favorable to some modification of quarantine upon an equitable, reciprocal basis, with proper safeguards for shutting out such contagious diseases as hog cholera, etc. The Minister of Agriculture gave assurance that by next session of the House a plan would be elaborated providing a good chain of cold storage from the producer in Canada to the consumer in Europe.

CATTLE—(Continued from page 374).

prevailed. Quality and early maturity, with strong constitution and good feeding propensities, are the watchwords of the Shorthorn breeders of the present day, and they have certainly hewen to the line with good effect. The judges, Messrs. Richard Gibson and W. J. Biggins, as was expected, did their work well, and probably came as near placing the awards right as any other two men would have done. They went for quality, and found it in nearly every instance. The appearance of the herd of the Messrs. Russell, of Richmond Hill, for the first time in public since making their great record at the World's Fair added considerable to the interest in this class, but we missed the fine herd of Mr. Edwards, of Rockland, which made such a fine display last year. Mr. Edwards this year confined his exhibit to a coterie of calves, which did great credit to his breeding stock.

The call for aged bulls brought out only three competitors: the white Lord Stanley, owned by J. & W. Russell, in his five-year-old form; Simmons & Quirie's eight-year-old roan Royal Saxon; and the red four-year-old Strathallen Lad, shown by Alex. Burns, of Rockwood. The white bull still retains the fine handling qualities, long, level quarters, long, deep thighs and full flank which made him so great a favorite as a calf and as a yearling when he won the grand sweepstakes at Chicago, but has failed somewhat in crops and heart-girth, probably from want of exercise. He could not, however, be placed elsewhere but at the top, where he has so often held the standard. There was room for difference of opinion in placing the other two bulls. Royal Saxon is a bull of great scale and character, with a wealth of natural flesh evenly distributed. Strathallen Lad, a low-set, blocky bull, with remarkably good fore end and smooth, thick flesh, though somewhat marred by a short hind quarter and high tail-head, was considered more nearly like the type in favor at present, and was placed second; the big roan falling into line as third. The section for three-year-old bulls was made specially interesting by the presence of two bulls which contended for honors here last year. These were H. & W. Smith's roan Abbotsford and J. & P. Crerar's Barmpton M., which were last year placed in reverse order, though not without criticism. The former is a very deep-bodied, short-legged bull, with good fore end and ribs and level top, but deficient in thighs and twist. The latter has greater size and stronger masculine character, thick flesh and excellent quarters and thighs. Abbotsford was this year placed first, and a roan four-year-old, Nominee, shown by Capt. T. E. Robson, Ilderton, a strait, smooth bull, somewhat light in flesh and wanting in thickness on back, was given second place, the Crerar bull having to take third. There was perhaps more room for criticism of the ruling in this section than in any other in the class, and there were good judges who would have placed the last first. The two-year-old bulls were also a very interesting class, including the winner of the first prize as a yearling and sweepstakes as best bull any age last year, the light roan Moneyfuffel Lad, bred by J. & W. Russell, and shown by James Leask, of Greenbank. Another striking character was the roan Indian Brave, bred by David Birrell, and shown by his present owners, R. & S. Nicholson, who purchased him from Arthur Johnston, in whose hands the son of Indian Chief rose to fame. This bull won second in a strong class last year, though in thin condition, and we predict a bright future for him. He has gone on well, has vastly improved and developed, and, being brought out in fine form, he made it warm for the light roan. He is a bull of fine character and great scale, with a model head, strong back, long, level quarters, deep flanks and thighs, and fine handling quality; but he had an exceptionally strong rival in the Leask bull, with his wonderful crops and fore-ribs, thickly-fleshed back and mossy coat. The judges could not safely place him elsewhere but at the top, and they ratified their own judgment later on by giving him again the sweepstakes for best bull in the class, a decision which we believe met with general favor. John Davidson, of Ashburn, found himself the fortunate owner of the first prize yearling bull in a good class of ten. His red and white Duke, by Scottish Prince, a well-formed bull, well brought out, had a strong competitor in T. Russell & Son's New Year's Gift, a red bull of great promise, with deep fore-ribs and flank, level quarters and rich hair, but not in high condition. He was a strong second and no doubt will be heard from again. Lord Stanley 4th, a roan bred by J. & W. Russell, and shown by John Gier, Grand Valley, was given third place. John Miller, Markham, and James Yule, Elder's Mills, each showed a good one in this ring. The show of bull calves was unusually strong. There were 20 entries, and scarcely an inferior one in the lot. When the five prize-winners were drawn there were at least ten more that were worthy of high commendation. The calf selected by the judges for first place was the roan Banker, bred and shown by W. C. Edwards & Co., Rockland, a son of imp. Knight of St. John and of Bessie of Rockland, the sweepstakes cow at this show last year. He is a calf of rare parts, full in all points and scoring well up to perfection. J. & W. Watt had the second prize calf, Judge Roan, a thrifty, well-formed fellow, with a thick mossy coat of hair and level top and bottom lines. We should expect to see him again among the winners. The third prize went to J. & W. Russell, fourth to J. I. Davidson, and fifth to Capt. Robson. The

competition for sweepstakes brought out the five first prize bulls in the different sections by ages, and it struck us as being as strong a ring as we have seen contending for this distinction in many years. The contest was no doubt between the white bull, Lord Stanley, and the light roan two-year-old, Moneyfuffel Lad, and if the Messrs. Russell had any regrets in seeing their World's Fair winner beaten they must have been gratified to know that it was done by a bull of their own breeding.

The ring of cows over four years old included the roan Centennial Isabella 25th, by Stanley. This was the best two-year-old heifer at the World's Fair. She has kept herself well together, and carries her strong, well-fleshed back as firmly as ever. Her quarters are smooth and her under line level. She was given first place here. J. & P. Crerar had a rare good second in Rosabel, one of the smooth, blocky sort; and Harry Smith, of Exeter, a good third in the roan Vanity, by Village Hero. Three-year-old cows were only five in number, but all were good. The first prize went to J. & W. Russell for Centennial Isabella 30th; second to J. & P. Crerar for Ruby Hill 2nd; and third to A. J. Watson, Castlederg, for Ivyleaf, a new exhibitor, and a very creditable exhibit, well brought out. The two-year-old heifers were a good class, and the first prize heifer was found in J. I. Davidson's rich roan, Village Beauty 7th, by Sittyton Chief, the first prize yearling heifer of last year. Simmons & Quirie had the second prize heifer in Daisy of Strathallen 12th, a heifer of great substance and fine quality; and Harry Smith was again third with the handsome red Gowan. An exceptionally good heifer headed the class of yearlings. She was the red Coral, bred by John Miller, Markham, sired by Aberdeen (imp.), shown by J. & W. Russell, who bought her recently from Arthur Johnston, in whose hands she was fitted for the show this year. She is a heifer of great substance, standing well on strong, straight legs; has wonderful chest, neck veins, and crops; a strong back, level quarters, full twist, and long, full thighs. She was a clear first in her class, and also won the sweepstakes as best female in the show. We have seldom, if ever, seen as strong a show of heifer calves. There were twenty shown, and it was no easy task for the judges to select what they considered the best five. The first prize went by consent to the very perfect Gem of Athelstane, a red, shown by I. Groff, Alma; the second to J. & W. B. Watt's Matchless 18th; third to R. & S. Nicholson; fourth to J. & W. Russell; fifth to John Miller, Markham. The latter, a very promising heifer, might well have been given a higher standing. Many would have placed her second. The call for herds of one bull and four females over one year brought out three excellent lots, the first prize going to J. & W. Russell; second to H. & W. Smith; third to J. & P. Crerar. The prizes for best four calves, bred by exhibitor, were placed as follows: First to J. & W. Watt; second to W. C. Edwards & Co.; third to J. & W. Russell.

HEREFORDS.

The judges in this class were A. Rawlings, Forest, and R. J. MacKie, Oshawa. The exhibitors were: H. D. Smith, Compton, Que.; Alfred Stone, Guelph; Fleming & Co., Weston; and D. M. Wilson, Moe's River, Que. The class was well filled and the quality of the animals well up to the standard. The prizes were considerably distributed, the majority going to Mr. Smith, whose grand two-year-old bull, Amos of Ingleside, a typical Hereford, with strong character and carrying a wealth of flesh evenly distributed, was given first prize and the sweepstakes as best bull in his class. Another very strong number in Mr. Smith's herd is the first prize cow, Lady Tushingham 3rd, a cow of wonderful scale, substance, and smoothness, and a regular breeder withal. Fleming & Co.'s first prize three-year-old bull, Young Pinkham, is an exceedingly good representative of the breed, and Mr. Wilson's Earl Douglas, the second prize bull, shows strong breed character and is smooth and well-formed. Mr. Stone had the first prize yearling bull and second prize bull calf and second prize cow three years old, all of which were creditable to his herd and well brought out. Mr. Smith had the first prize herd and sweepstakes bull and cow.

POLLED ANGUS

were shown by Jas. Bowman, Guelph; W. Stewart & Son, Lucasville; Walter Hall, Washington; and D. M. Wilson, Moe's River, Que. The judges were J. C. Snell and Chas. McNeil. The class was well filled and the cattle were in fine condition. Mr. Hall's first prize aged bull, Lucretius, is a noble specimen of the breed, stylish, smooth-fleshed, well-formed, and full of quality. The same exhibitor had the first prize two-year-old bull, a capital representative of the breed. The second prize went to D. M. Wilson, for Ringold, a straight, well-proportioned animal. Stewart & Son had the first prize yearling bull in Tom of Willow Grove, a right good one. Mr. Bowman won first prize for bull calf with Kyman's Laddie, one of the best young things we have seen for years. The cows were a grand lot, and Mr. Bowman's Kyma 2nd won first place. She is a cow of great scale, smooth, evenly fleshed, and of fine handling qualities. Mr. Hall's second prize cow, though not so large, has fine quality and good form. The first prize for three-year-old cow and for two-year-old heifer also went to Mr. Hall. Mr. Bowman came to the front with yearling heifer, Bowman No. 1, and Mr. Wilson had in his beautiful heifer calf, Lady Laura, a successful candidate for first honors. The herd prizes were dis-

tributed as follows: 1st to Hall, 2nd to Bowman, 3rd to Wilson. The latter was protested, it being claimed that one of the animals shown was not one year old, as required.

GALLOWAYS.

Messrs. Snell and McNeil were the judges in this class. The exhibitors were: Messrs. D. McCrae, Guelph; A. M. & R. Shaw, Brantford; and John Sibbald, Annan.

The cattle were not in high, but fair, condition, and showed careful breeding, strong constitutions and breed type.

Mr. McCrae's grand old bull, Canadian Borderer, won first prize and sweepstakes, and headed the first prize herd. He shows pure Galloway character and long, level quarters and fine style. The same exhibitor had the first prize two-year-old bull. Messrs. Shaw took first prize for bull calves with a very promising youngster; Mr. Sibbald coming in second with his Alpha, which is also a very good one. Mr. McCrae had the first prize bull calf, and Mr. Shaw second. The cows were a uniformly good lot, and Mr. McCrae won first honors, with Maid Marian B.; Mr. Sibbald winning second, with Glencairn 3rd; and Mr. Shaw third, with Rose McErin. Mr. McCrae's two-year-old heifer, Semaramis E., a heifer of very fine quality, with a wealth of silk hair and level back and quarters, won first in her class, and the medal for best female. The herd prizes were divided as follows: McCrae, first; Sibbald, second; Shaw, third.

DEVONS

were shown by only one exhibitor, Mr. W. J. Rudd, of Eden Mills, who has a walkover from year to year. It would be more interesting if there were competition, but no one seems disposed to enter the field, hence Mr. Rudd has to be content to beat himself for want of other contestants.

GRADES.

A very fine collection of grade Shorthorns filled this class. Many of them would have shown creditably in the pure-bred class. The principal exhibitors were: Jas. Leask, Greenbank; Jas. Yule, Elder's Mills; Jas. Oke, Alvinston; Jas. Rennie, Wick; and H. K. Fairbairn, Thedford; and the prizes were pretty evenly distributed.

DAIRY BREEDS.

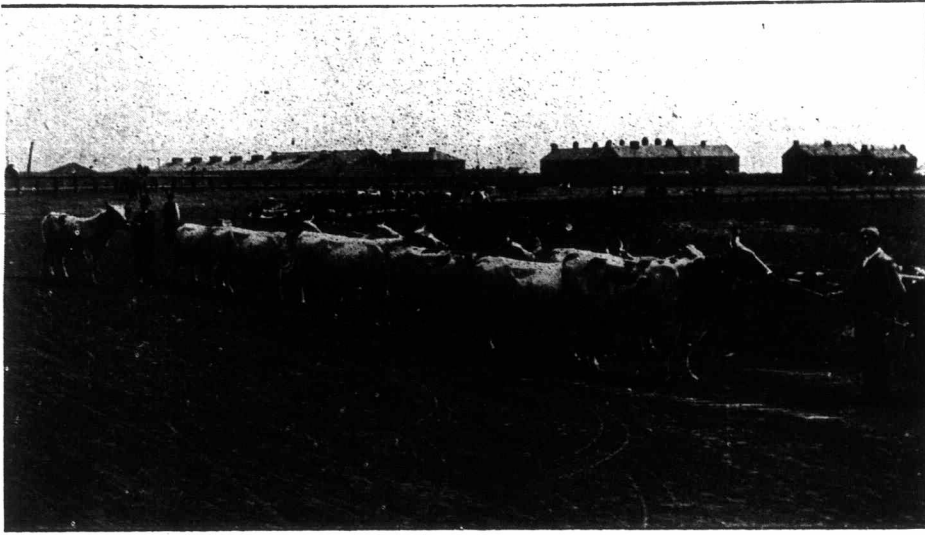
The dairy breeds were largely in evidence at Toronto this year, showing the increasing interest which is being taken in dairying in the old Province of Ontario, which was formerly so largely given up to grain-growing. Circumstances have changed, farmers having wisely adapted themselves to the changed conditions. To the average farmer dairying probably presents the safest field, since he can more readily adopt the means and secure a fair return for his labor with little risk.

AYRSHIRES.

This interesting class was well represented, and though we missed the Quebec herds, which have generally entered the contest here, the show was yet a strong one, most of the leading Ontario herds being represented. The judges were J. H. Douglas, Warkworth, and H. G. Clark, Brampton. In the section for three-year-old bulls there was keen competition. Mr. Steacy's imported Carlyle of Lessnessock, whose record as a winner is an enviable one, found a strong rival this year in Messrs. Thos. Ballantyne & Son's imported Beauty's Style of Auchenbrain, a new claimant for honors and a typical representative of the breed. The judges, after a long conference, agreed to allow Carlyle to hold the belt for another year, but it was a close call, and he will need to look to his laurels if he would continue to retain them. Mr. McCormack's Jock Morton, a bull of very fine breed character and good dairy conformation, was placed third; and Sir Colin, shown by Alex. Hume & Co., was given fourth place. Wm. Stewart & Son, Menie, won first honors in the ring for two-year-old bulls with Highland Chief, a son of imp. White Prince. This is a capital young bull from a dairy standpoint, with fine shoulders, deep flanks, and long, straight quarters. Mr. Ballantyne's Royal Chief 2nd was placed second; and Mr. Steacy's Lord Douglas third. In the yearling section the first prize was given to Mr. McCormack's Bright Star in a ring of exceedingly good young bulls. This bull was at a disadvantage in regard to age, being only a year past in June, some of his competitors being from three to ten months older, but he showed such perfect dairy character and conformation that the judges not only gave him first place in his own section, but later on crowned him king of the class in the competition for the

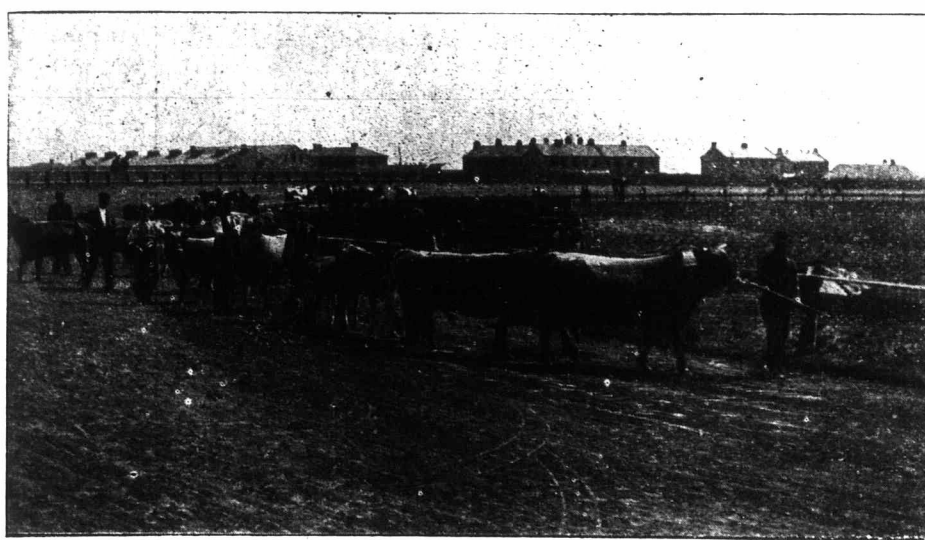
medal as best bull any age, a distinction which places him on the honor roll of the bulls of Bashan. Mr. Hume had a good second in Dominion Lad, bred by Mr. Douglas, and Mr. Stewart third on Gen. Gordon. In a very strong ring of bull calves, W.M. & J.C. Smith, of Fairfield Plains, got to the top with Surprise of Burnside, bred by Mr. Drummond, a son of the famous Nellie Osborne, of World's Fair honors, and got by Reford's imp. Glencairn 3rd. He is a royal good youngster, showing good dairy form and fine handling quality, and ought to make his mark in the future, both as a breeder and a show bull. The second prize went to a very fine calf, Butterfly Duke, bred and shown by A. Terrill, of Wooler, who was also winner of the third prize with Drummond—a good record for a new beginner in so strong a class.

The cows four years old and over were a grand ring, but more than the usual number of good ones were at the disadvantage of not being fresh in milk, which is always a drawback in showing in the



AYRSHIRES OUT FOR THE PARADE.

dairy classes. Among those who showed exceptionally good cows we note Messrs. Hume, McCormack, Ballantyne, Steacy, and Stewart. Ballantyne's imported cow, Daisy 1st of Auchenbrain, was a general favorite with onlookers, though she was far from being fresh, having milked for six months, but she is a typical Ayrshire cow, with fine dairy form and great indications for work at the pail. Her milk veins are phenomenal in size, uncommonly tortuous and outreaching, and it was a surprise to many that she was awarded fourth place. McCormack's Sprightly 3rd, which the judges placed first, is a great cow, but she was in high-class company, and to win in such a ring is no small honor, and her right to the distinction was not undisputed. Mr. Hume's imp. Eva Barcheskie, placed second by the judges, is a cow of fine type and character, with extra good fore-udder, but somewhat wanting in hind udder. Mr. Steacy fell into third place with imp. May Queen of Craighead, but



THE JERSEYS PREPARE TO MARCH PAST.

his cows were not milking and did not show to advantage. The fine cow, imp. White Rose, a sweepstakes winner of other years, and perhaps the best of his cows, was not placed, but Mr. Steacy was more fortunate in the next ring, that for three-year-old cows, where he was placed first with Wylie 2nd of Lessnessock, and fourth with Lily of the Vale 6th. Mr. Ballantyne was given third for Stylish Daisy, and Mr. Stewart scored second with Scotch Lassie Jean. Mr. Ballantyne had the first prize two-year-old heifer in a strong ring with Daisy of Neidpath, a heifer of fine promise. Mr. McCormack had the honor of being placed first in yearling heifers, with Rose Morton. Mr. Stewart scored first in heifer calves over six months, and a new exhibitor, Mr. Wm. Dracup, of Wellman's Corners, won first honors in heifer calves under six months, followed by Mr. Terrill for second and

third. The prizes for best four animals the progeny of one bull were distributed as follows: Stewart & Son, first; Ballantyne, second; McCormack, third; Steacy, fourth. For four calves under one year the awards were in this order: Terrill, Stewart, Hume, McCormack. The herd prizes: Ballantyne, first; Steacy, second; McCormack, third; Hume, fourth.

JERSEYS.

The butter breed made a very large showing, the number of entries being the largest of the dairy breeds and only exceeded by one class in the whole show. The absence of the well-known herd of Mrs. Jones, of Brockville, which has so often figured here, and which has been recently sold, was to a large extent made up for by an increasing number of entries by smaller breeders, and the show in this class was the best, taking all the sections into account, we have seen here for several years. Twenty exhibitors entered over 100 animals, and the prizes were widely distributed. Mr. Cooper, of Pa., made the awards. He did his work expeditiously, and perhaps as satisfactorily on the whole as any one man could do.

In the class for bulls over three years old, Mr. Rolph scored first with "200 Per Cent," a five-year-old son of "100 Per Cent," dam Marjoram. This is a case of breeding the dam to her own son and producing a winner—a strong, thrifty, handsome bull. He had a strong competitor in King of Highfield, a handsome son of the great prize-winning cow, Signal's Rosa May, shown by J. H. Smith & Son, and the strongest claimant for sweepstakes last year against Mrs. Jones' great bull, Lillium's Rieter. The King had to be content with second place this year, but he is young for his class and will try again. The great old prize bull of former days, Mighty Dollar, another son of "100 Per Cent," in his eight-year-old form, strong and well preserved, was placed third.

Two-year-old bulls were a good lot, and first honors went to Geo. Smith & Son, for Rustler of St. Lambert, by Nell's John Bull, a rich young bull which was first in his class here last year. Second prize went to J. M. McKay, V. S., of Elmbank, for Captain of Orchard Grove, a handsome and rich young bull; third to Kaiser Fritz Jr., shown by Mr. Bacon, Orillia, a bull of fine dairy form and good breeding.

Yearling bulls were a fairly good class, and first prize went to J. H. Smith & Son's Star of Highfield, a well-formed and breedy-looking bull. David Duncan, of Don, had in this section a richly-bred young bull from the Hood Farm herd, Costa Rica's Son, by Golden Bow, a richly-colored fellow, with rather long horns and a drooping rump, which rather detracts from his appearance, but his close relationship to Merry Maiden, of World's Fair fame, ought to make him a useful bull to breed from. He was accorded second place.

Bull calves were a very creditable lot, and J. H. Smith & Son came to the front, followed by B. H. Bull & Son, with Ollie Boy of Brampton, by Sir Ollie, and T. G. Rice, St. Catharines, had the third prize calf. Mr. Rolph's "200 Per Cent" won the sweepstakes prize for best bull any age. The females in this class were a decided improvement on those shown last year. This remark applies especially to the heifers.

In the section for cows four years old and upwards, J. H. Smith & Son's Signal's Rosa May, which had won first prize and sweepstakes here three times before, was in fine form, having recently calved, and she put up a fine show of udder, having had a rest for a year. She is one of the best of the breed in any country, and it were well if we had more like her. David Duncan came in for second prize with Sunbeam of St. Lambert, a useful cow, looking like a worker; and Geo. Smith & Son third, with Kit's Fancy of St. Lambert, by Nell's John

Bull. B. H. Bull & Son had the first prize two-year-old heifer in Sunbeam of Brampton, a well-formed heifer, with a well-balanced udder, but rather short teats.

The same exhibitor had the first prize yearling heifer, Jetsam's Molina, a handsome heifer with a well-shaped udder and good promise.

The first prize for heifer calf under one year was also won by Mr. Bull with Tribby of Brampton, by Sir Ollie.

Robert Wright, of Binbrook, won first prize in heifer calves under six months, with a very handsome young thing sired by Massena's Duke.

The prizes for best four animals sired by one bull went to W. Rolph, first; G. Smith & Son, second; J. H. Smith & Son, third; and B. H. Bull & Son, fourth. The awards for best four calves under one year went as follows: J. H. Smith & Son,

first; W. Rolph, second; B. H. Bull, third; D. Duncan, fourth.
The herd prizes were placed in this order: J. H. Smith & Son, first; W. Rolph, second; Geo. Smith & Son, third; B. H. Bull & Son, fourth. The sweepstakes for best female any age went to J. H. Smith & Son's cow, Signal's Rosa May.

GUERNSEYS.

There was a larger representation than usual of the yellow-skinned Guernseys. The exhibitors were: W. H. & C. H. McNish, Lyn; Wm. Butler & Son, Dereham Centre; J. N. Greenshields, Danville; and Alex. Wallace, Verschoyle. The last named exhibitor had the first prize bull over three years, which was also winner of the sweepstakes as best bull in his class. Mr. Butler's imported cow, Iona, arrived on the grounds, from quarantine, just a few minutes too late to compete in her class, but was in time for the sweepstakes competition, and won the medal for best female in the class. She is a very superior specimen of the breed, showing great constitution and a well-formed udder, a feature which is too often found lacking in this very useful breed of dairy cattle.

HOLSTEINS.

Last, but by no means least, we review the black and white representatives of Holland's favorite dairy breed. The exhibit in this class was quite up to the usual standard in numbers and excellence. There were eight exhibitors, seven of whom had entries for the herd prizes, and all of these were on hand. Mr. H. Langworthy, of Edmeston, N. Y., was the single judge. The class for aged bulls was well filled, the first prize going to C. J. Gilroy & Son, for Inka Kathleen's son, a bull of great substance, fine quality, and rare dairy form. The second place was given to G. W. Clemons' Count Mink Mercedes, bred by Smith Bros., Churchville; and third prize went to R. S. Stevenson's Netherland Consul, the sweepstakes bull here last year. A. Hoover, Emery, had the first prize two-year-old bull, Baron Witzzyde, a smooth fellow of fine quality. A. & G. Rice had a good second in Sir Paul de Kol Clothilde. In one-year-old bulls Mr. Clemons came to the front with his imported Sir P. J. Mechthilde, a richly-bred and fine-looking bull. Gilroy & Son had the first prize bull calf in Jennie E. 4th's Sir Pieterje 1039, an extraordinary young bull, full of quality, and with fine dairy form. This calf was later awarded the medal in the sweepstakes contest as best bull any age in the class.

There was a grand display of cows. Eighteen were entered, and sixteen put in an appearance, including such noted prize-winners as Gilroy's Carmen Sylvia, Clemons' Cornelia Tensen, Rice's Eunice Clay and Calamity Jane, and Ellis' Princess Lida and Maud Tensen. The first prize on this occasion went to Carmen Sylvia, the winner of the milking test here last year, a handsome young cow of fine dairy form and carrying an evenly-balanced udder. The grand old matron, Cornelia Tensen, was given second place, and it is a question whether she might not well have been placed at the top, for she is the highest type of a great dairy cow in form, in size and shape of udder, and in milk-vein development. Ellis Bros. had the third and fourth prize cows, in the order named above, and they are high-class cows. Messrs. Rice came to the front in three-year-old cows, with Artis Queen Jewel, followed by Clemons, with Cornelia Artis, by a son of Cornelia Tensen, a grand young cow of great capacity for work. Two-year-old heifers were a strong class, and Clemons scored first with Mandamin's Daisy; Gilroy & Son taking second and third places. Clemons was also to the fore in yearling heifers, with Artis Peer's Poem, followed by G. Gilroy, as in the former section. In heifer calves under a year, Stevenson won first and second honors, Rice third, and Clemons fourth. For heifer calves under six months, Gilroy was first and third, and Clemons second.

The herd competition was an interesting feature of the show. Seven full herds of Holsteins faced the judge, and all were good. They were placed in the following order: Gilroy & Son, first; Clemons, second; Hoover, third; Ellis Bros., fourth. The prizes for four females sired by one bull were placed as follows: Stevenson, first; Rice, second; Ellis Bros., third. The sweepstakes prize for best female was awarded to Mr. Clemons for his first prize yearling heifer, Artis Peer's Poem, a heifer of great promise for usefulness at the pail, and of fine appearance.

SHEEP.

For many years past the Toronto Industrial has been noted for its grand display of sheep, and this year proved no exception to the rule, the number of sheep on exhibition being probably in excess of any previous year, while in several of the breeds the individual excellence was above the average. This Exhibition, together with the sweeping winnings of Canadians at the winter Fat Stock Show at Madison Square Gardens, is proof conclusive that the Canadian sheepmen are masters of their art, and are always found in the front rank.

In entering the building the first to come under our notice was

THE NOBLE COTSWOLDS.

and a grand display there was of them, the individual excellence of several being better than we have seen for several years; a noticeable feature being that all exhibited, with the exception of four or five, were bred and fed by exhibitors. The leading exhibitors in this breed were: Mr. Park, of Burgessville, who was out with ten head, of splen-

did quality and in grand fit. This flock won first for pen (Canadian-bred), and were certainly a credit to their owner, who has persistently pushed to the front. His three-shear ram is a monster in size, still even and smooth, and carries a fleece of excellent quality. He was an easy winner in the aged class, although a grand good sheep owned by Mr. C. T. Garbutt, of Claremont, Ont., came second. The latter gentleman showed sixteen head in all, and a very creditable lot throughout. Heber Rawlings, of Forest, was forward with 25 head. Several of his shearing rams were noticeable for their grand covering and general good type. This flock are remarked for their strong bone and large frames, but were not fitted to their best. Mr. Wm. Thompson, of Uxbridge, was out with six grand sheep, winning first on a typical shearing ram, first on an imported ram lamb with a fleece of excellent quality, but thin in flesh, while his first prize imported shearing ewes are of the type that fills the eye.

Probably never before has the competition been so keen or a larger exhibit forward than was seen in

THE LEICESTER CLASS.

Mr. Jas. S. Smith, of Maple Lodge, was out with a flock of 21 head of No. 1 quality and in most excellent fit. His aged ram was brought out in great form; and although only awarded second place, he is a sheep to attract much attention, and could well be classed as one of the best in this class on exhibition. His aged ewes are a monster pair, and carried off the honors in a hotly-contested ring. His shearing rams were also a first-class lot, one of them securing first in a very strong ring. This flock secured the award in Canadian-bred pen (all of which were bred by the exhibitor), against the indefatigable feeder, Mr. Jno. Kelly, of Shakepeare, who was out, as usual, with a very strong flock consisting of 24 head. Mr. Kelly's flock won the open pen prize. Mr. Wm. Whitelaw, Guelph, was out with fifteen of his choice Border Leicesters, which for quality could be classed as one of the best flocks forward. Several exceptionally fine lambs were exhibited, first going to ram lamb and ewe lambs of this flock, second on open pen. Mr. J. M. Gardhouse, Highfield, Ont., was forward with eleven head of very fair quality, but not highly fitted. These might also be said of Messrs. C. & E. Wood, of Freeman, Ont., who had eleven head out. These represented a good breeding flock, but were mostly field sheep and had received no special fit. A. Easton, Appleby, Ont., was also out with several head.

LINCOLNS.

Two well-known exhibitors, Messrs Gibson & Walker, Denfield, Ont., and Capt. T. E. Robson, Ilderton, were the only competitors in this class, which represents so many points of general utility, such as size, vigor and good feeding qualities, together with their long, lustrous wool of a type which is now so fashionable in the great British wool marts. That good breeding sheep of this sort should be sought after at such high prices is not to be wondered at. Gibson & Walker showed some 30 head in capital form, securing the lion's share of the red ribbons. Capt. Robson's are a right useful sort throughout.

SHROPSHIRE

were more numerous than any other year in the history of the fair, and the quality of the exhibit throughout was better than heretofore, while in the ring the competition was of the keenest in every section. A noticeable feature this year in the Shropshires was their uniformity of type and the scarcity of inferior sheep. Mr. Davies, of Toronto, was forward with some 36 head, the large per cent. of them being field sheep for sale. A good imported shearing and an aged ram headed the flock, but were "not in it" in the ring. Hon. Mr. Cochrane, of Hillhurst, Que., was out with a numerous flock, the majority being sale rams in nice trim and of very good quality; one pen of rams particularly drew our attention as above the average. In adjoining pens, Mr. W. H. Beattie, of Wilton Grove, exhibited eleven of really good quality and nice covering, but a trifle undersized. J. N. Greenshields, Danville, Que., had out a pen of six even, nice-qualified ewes, but hardly up to the requirements in finish for the Industrial. A pair of very large imported rams were also included in this flock, but not up to the standard in quality. Richard Gibson, Delaware, was out with several head. The winning ram lamb last year at New York had not developed as anticipated, and was not there as a shearer. A nice ram lamb was shown, a capital handler, but hardly good enough for a winner. The flock throughout, however, were in good trim, of uniform type and good quality. Jas. Phin, of Hespeler, had out fifteen head, a capital lot, of a true Shropshire type and a credit to the exhibitor; the pens of four shearing ewes and four ewe lambs being especially good; a pair of the latter being acknowledged first over both imported and home-bred, while the two-shear ram came second—a great sheep, but a trifle narrow in the quarter. However, had the writer the placing of the ribbons, he would have placed this sheep first, as the most valuable stock ram, and the first to third place, and Hanmer second on a sheep of capital quality, covering and conformation. The winnings of their offspring would also justify this decision. But the hottest contest came between Messrs. Jno. Campbell, Woodville, Ont., and D. G. Hanmer & Sons, Mt. Vernon. Campbell was forward, as usual, with a well-fitted and strong exhibit. Messrs.

Hanmer were also forward with a very strong flock numbering some 40 head, all Canadian-bred and fitted by themselves. The flock throughout are noticeable for their uniformity of type, good quality, extra covering and fine finish. Campbell led on a choice imported shearing Mansell ram; Messrs. Hanmer coming in second on a highly-finished, thick and stylish ram. On ram lambs, Campbell was a good first and second on imported ones; Hanmer third on a very stocky, thick lamb. On aged ewes some would have reversed the judgment, placing Hanmer's fine pair of ewes first. The prize, however, went to Campbell on a very nice pair of imported ewes. The shearing ewes made an exceedingly strong and handsome exhibit; Campbell winning first, and Hanmer second. Ewe lambs were also a marvelously handsome lot: Phin, first; Campbell, second; Hanmer, third. The exhibit in

SOUTH DOWNS

was also of a high order; the veteran breeder, John Jackson, Abingdon, again taking the lead. On pens, Jackson stood first on Canadian-bred and fitted; R. Shaw & Sons, Glanford, second; on imported pens, T. C. Douglas, Galt, first; A. Telfer & Sons, second. The sheep shown by each of these firms were of excellent quality and well brought out. The

OXFORDS

were a good lot; the individual excellence of many was of the highest order. Messrs. Smith Evans (Gourock) and Peter Arkell were the only competitors. Evans carried first on pen, showing a remarkably good shearing ram and a grand pair of shearing ewes, one of which represented a typical Oxford in every point, while his pen of imported lambs were the admiration of all for their great size and general good quality. This flock comprised some fifteen individuals; Mr. Arkell's numbering twenty-seven, among which were many excellent sheep. The

DORSETS

were more numerous and better brought out than we have seen for several years; J. A. McGillivray, M. P., Uxbridge; Hon. H. M. Cochrane, Danville, Que., and R. H. Harding, Thorndale, being the contestants. McGillivray showed a grand flock of ewes in capital finish; while Mr. Cochrane's flock were noteworthy for their good quality throughout, his shearing ewes and ewe lambs being exceptionally good. R. H. Harding showed fifteen head of nice quality and good conformation, but not in good enough flesh to win very largely. The

MERINOS

were well represented by two flocks, belonging to W. M. & J. C. Smith, Fairfield Plains, and Robert Shaw & Sons, Glanford.

SWINE.

BERKSHIRES.

This favorite old breed came first in the catalogue. There was a remarkably large number of entries—one of the largest we ever remember seeing, and not only were the prize-winners well up to and even over the average, but there was a noticeable absence of culls all through. J. G. Snell, Snelgrove, had a smaller entry than usual, owing to his having sold his young stock out closely, but what he had forward scored well for him. His aged boar, Baron Lee 4th, which has an unbeaten record, could not be denied first place, and if any proof were needed of his right to hold that place it was forthcoming in the fact that 100 per cent. of all the prizes won this year by Berkshires at the Industrial, from yearlings down, were secured by pigs sired by him. Mr. Snell's first prize yearling boar, Fitz Lee, is a pig of wonderful thickness and depth, while his first prize yearling sow, Snell's Highclere 4th, is a grand one, of great evenness and good conformation. His whole exhibit was of splendid quality. Geo. Green, Fairview, had a very good lot of pigs all through. In the yearling class he had a fine, lengthy boar, that won first in the class under twelve months last year, which came second; and the third prize also fell to him for a fine boar imported from Jas. Riley, Thorntown, Ind. His younger boars were also good, while his aged sow that won the blue ticket in the aged class is one of the deepest sows we have seen, and though large, is very smooth. An imported sow of fine quality and good depth won third for him in the class under one year. Thos. Teasdale, Concord, who always has something good, had nine entries, with which he won first for boars under twelve and over six months, first for aged sows, second for sows under twelve months, second in the herd prize, and first for sow and four of her produce. His aged sow is as nearly perfect as possible from snout to tail and is well marked. The younger things shown by Mr. Teasdale were from her, including a splendid young sow under a year, a grand boar under a year, and a capital one under six months. The first named, though only eleven months old, scaled 545 pounds some weeks ago. T. A. Cox, Brantford, had a nice lot of pigs, which were well up in the class, although they did not secure many of the prizes. He was strong in yearling sows, in which class he took third, and his whole exhibit showed good quality. H. J. Davis, Woodstock, had the third prize aged boar—one of Teasdale's breeding and a pig of good stamp. All the rest of his exhibit consisted of pigs under a year old—an even lot of the right sort. P. W. Boynton, Dollar, won second on his aged boar (a good, straight pig) and had some good things

besides. C. T. Garbutt, Claremont, secured the second honors in the young sow class, while R. G. Martin, Marysville, had an aged boar and some nice young things by Baron Lee 4th, out of a dam by Enterprise—a line of breeding that could not fail to produce something good.

YORKSHIRES.

The exhibit of Yorkshires was the best seen for some years. J. E. Brethour, Burford, showed sixteen head, including the well-known sow, Oak Lodge Primrose, who repeated her last year's victory in the aged class. His exhibit was not in as good show trim as last year, but was very uniform, his pigs having good length and great smoothness. He had a very nice yearling boar, two boars under a year which weighed over 400 lbs. apiece, and which took first and second, while the red ribbon for sow and four of her produce went to Oak Lodge Primrose and her offspring. Jos. Featherstone, Streetsville, was very strong this year, having twenty-five entries in this class. The first prize aged boar, Paddy, is a good, lengthy pig, with a nice hind end, and looks like a good sire; while the second prize one, Puritan, has a neat head and body and good hair. In the section for boars under six months all prizes went to Mr. Featherstone for a capital trio. The yearling sow and younger sows were of good type, and the prize for boar and four of his get properly fell to this herd. R. G. Martin, Marysville, is a new exhibitor at the Industrial, but, unlike most newcomers, he got a good share of the prizes with his six entries. He had a particularly lengthy, deep yearling boar and a fine aged sow, which won first in their sections; while a beautiful young sow of his, under six months, which should be heard from again if rightly treated, carried the same honor in her section. The herd prize and two second prizes for sows also fell to him. J. N. Greenshields, Danville, had several entries of good pigs, but they were not well fitted up. Among his lot were a fine aged sow of great length, Kinicroft Mite, which was unnoticed; an aged boar, Maxim, which won third; and a sow under six months, of good quality, which carried second in that section. The winning sow under one year was owned by H. J. Davis, Woodstock. She is very even and deep, has good hams, and is good over the shoulder. This exhibitor had a number of young things showing fine quality and a lengthy aged boar in his string.

TAMWORTHS.

We missed the familiar faces of some of the old-time exhibitors of these bacon pigs this year, but in spite of this there was a good representative turnout of the breed. H. George & Son, Crampton, had a strong exhibit. Their aged boar won second, while their fine yearling boar won its way to first place and also headed their first-prize herd. Their aged sow, which won first, was particularly good, and they had several nice younger things. W. T. Elliott, Hamilton, whose aged boar has never yet been beaten, again won with him, and this exhibit or also had the yellow ticket in the same class with the pig that won first in the yearling class last year. His yearling sow, which carried first, is not large, but is even. A large, well-grown entry under the year carried second and a younger sow first in the following section. J. C. Nichol, Hubrey, had a very smooth lot of young pigs forward. A lengthy, even boar, eighteen months old, secured the blue ticket in the yearling class, and a boar under the year, with good bone, the same honor in the young section. His second prize aged sow and sows under the year were all worthy of mention, and some thought that the second prize young sow should have stood higher. First prize for sow and four of her produce went to Mr. Nichol.

POLAND-CHINAS.

Only two exhibitors of Poland-Chinas had made entries—W. & H. Jones, Mt. Elgin, and W. M. & J. C. Smith, Fairfield Plains. Notwithstanding this, the exhibit made was an exceedingly good one, although somewhat limited in point of numbers. Messrs. Jones had no competition in the aged boar class. There their unbeaten champion boar, Darkness Quality, was an easy first. He was bred by Willis E. Gresham, Kansas; headed the first-prize herd, and with his get was to the fore in that section. He is now three and a half years old and keeps his shape well. Second honors went to a boar from the same herd, with a good body, but somewhat plain in the head. Two lengthy boars of Messrs. Jones' carried second and third in the yearling section. They had a nice lot of young boars under six months, three of which took all the prizes offered. Among their females the most noticeable were their first prize aged sow, first prize yearling sow which won the sweepstakes at Guelph last December, their third prize yearling sow, and their young sows, especially the very young one that won the red ticket in the section for sows under six months. W. M. & J. C. Smith were not far behind in the prize list. They had a smooth, even yearling boar which stood well on his feet and which stood at the head of his class. Their boar under twelve months also won the premier honors. In the section for yearling sows and sows under twelve months they won second and first respectively with two very level, smooth entries. The herd and both prizes in the sections for boar and four of his get and sow and four of her produce went to Messrs. Jones.

CHESTER WHITES.

There were four exhibitors of Chester Whites—H. George & Son, Crampton; Wm. Butler & Son, Dereham Centre; D. DeCourcey, Bornholm; and W. M. & J. C. Smith, Fairfield Plains; the latter having only one entry. Messrs. George had, among other entries, a good aged boar, which won second; a deep boar under twelve months, with good shoulders and hams, which carried premier honors; a fine yearling sow, very thick, with a grand back and plenty of depth, which went to the fore; and two good aged sows, which were placed first and third, positions which many thought should have been reversed. Messrs. Butler's capital aged boar, Prince Alexander (imported from N. G. Alexander, Delavan, Ill.), which was first last year, again took the same place. He has evenness and smoothness in plenty. Another boar imported from Mr. Whinnery, Ill., a level, lengthy animal with a prime back, carried the same honors in the yearling section. Their younger boars were a very even lot, showing lots of quality. Among their aged sows, one of which was placed second, was a beautiful imported one, bred by Mr. Whinnery. Their yearling sow, which was first last year in the younger section, came in third. This firm won first for sow and four of her produce and first for boar and four of his get. D. DeCourcey had twenty head present. He scored third on aged boars, his entry not being specially fitted, as he had unfortunately lost the one he had been fitting for the show. His yearling boar was good enough to win second, and also headed the herd that won second for boar and four of his get. His second prize young boar under six months was a very even one, while his pair of sows under twelve months, one of which won first, were of a good, level type.

ESSEX AND SUFFOLKS.

These two breeds showed together this year, the Suffolks carrying off nearly all the prizes. J. Featherstone, Streetsville, had seventeen Suffolks and fifteen Essex present and won a number of the prizes, including first for boar and four of his get and sow and four of her produce. R. Dorsey, Burnhamthorpe, entered seventeen Suffolks and won several firsts and other prizes. A. Frank & Son, The Grange, won third on aged boars. A. B. Cooper, Islington, and R. F. Duck, Port Credit, had a few Essex forward.

DUROC-JERSEYS.

The competition here lay principally between Tape Bros., Ridgetown, and Wm. Butler & Son, Dereham Centre; H. George & Son, Crampton, having only a few entries, which won a second and a third prize. Tape Bros.' grand aged boar which won first in 1894 again took a similar place here. Their younger boars were very promising. Their aged sows carried off first and second honors, the first named being an especially good one, while her companion was not in such high condition. First for sows under twelve months went to a splendid young thing of their raising. Wm. Butler & Son were very unlucky with the pigs which they had fitted for the show, having lost an aged boar, a yearling boar, a boar under a year, and an aged sow, the latter from milk fever after reaching the grounds. Considering everything, they did very well, winning first and third for yearling boars, first for boars under twelve months, second for aged boars, second for yearling sows, and several third prizes, besides second for herd.

POULTRY.

If the exhibit of poultry at the Toronto Show keeps on improving in the future as it has done in the past, it will not only be the biggest show on the continent of America, but the biggest show on earth, at no great distant date. The various additions made to the building since last exhibition is a great improvement, and most of the exhibits can now be seen to greater advantage than formerly. The number of entries were largely in excess of last year. There were 1,617 fowls, 132 ducks, 370 canaries, 58 rabbits, 440 pigeons, and 23 guinea pigs.

The prize list commences with the Brahmas, and this old favorite breed seems to hold its own well, especially the light, being splendid winter layers and grand mothers. There were nine entries in this class: Messrs. Oldrieve & Wilkinson, Kingston; Glendenning, London; Symington, Hamilton; and John Cole, Hamilton, being the principal prize-takers in this class.

In Cochins we have Messrs. Hare, Whitby, and Bell, Toronto, in Buffs, and Foster, Brampton, and Bell, Toronto, in Partridge; while Messrs. McNeil, London; R. B. Millard, London, and Emrick, Bridgeburg, carried off the honors in Whites. The Cochin is also a valuable fowl for good winter layers.

In Dark Brahmas, Messrs. Thorpe & Scott, London, and Roffey, Doncaster, carried off the ribbons.

Langshans came next with twelve entries. Messrs. Cole, Hamilton; Knight, Guelph, and McCormick, Newmarket, have the best White; and Karn, Guelph; McCormick, Newmarket; Foster, Brampton, and Pearson, Weston, take it in Black.

In Dorkings, that fine old table variety, Messrs.

Bogue, London, and Laurie, Malvern, take first in colored. In Silver-gray, A. Noden, Toronto, is first.

In Wyandottes we have some thirty entries. This breed is growing in public favor very fast, and is a very valuable addition to our breed of fowls. In Silver-laced, Bogue, Strathroy, and Arthur, London, also Meyer, Kossuth; in Golden-laced, Oldrieve & Wilkinson, Kingston; in White, Massie, Port Hope, and Millard, London, were among the prize-takers; in Black, Bogue, Strathroy, and Grimsley, Toronto, secured the honors.

In Plymouth Rocks thirty-seven entries. This as a general purpose fowl holds its own, being a good layer, good table bird, and good mother. In Barred, Messrs. Oldrieve & Wilkinson; Duff & Co., Toronto; E. Dickinson, jr., North Glanford. In Buff, R. H. Essex, Toronto, and R. Oke, London, took the honors; and in White, R. B. Millard, London, and Oldrieve & Wilkinson, Kingston.

Game fowls are now becoming popular, "not for fighting purposes," but for a good all-round fowl. A finer table bird does not exist than the Indian Game when well cooked. The flavor of its flesh is equal to an English pheasant, and those who have tasted that savory morsel know how toothsome it is. Messrs. Main & Barber are the prize-takers in the Black Breasted, and Richardson, Hamilton, Oldrieve & Wilkinson in Indian Game; while in Duckwing and Pyle, Messrs. Barber, Toronto, and Oldrieve & Wilkinson were winners.

In Hamburgs, Messrs. McNeil, Bogue, and Oke, of London, have the bulk of the prizes. This bird is a great favorite with some, laying a great many, not very large, eggs; is hardy, healthy, and easily kept.

In Red Caps and Javas, Messrs. Webber, Guelph; Oke, London; and J. R. Devins & Co., for Javas; and Devins & Co., Emery, for Red Caps.

We now come to the Leghorns, which, judging from the number of entries, must be one of our most popular varieties. There is no doubt it is one of the most prolific egg-producers we have, and if kept in a warm place will lay on continually. It is a non-sitter, and a very healthy, vigorous bird. We have now the Brown, White, Buff, and Rose Comb varieties. In White and Buff alone we have fifty-two entries, and the principal prize-takers are: For White—Laird, Brampton, and Rice, Whitby. In the others—Glendenning, London, and A. G. H. Luxton, Grimsby.

The Black Spanish is next on the list, and is one of our best layers of fine, large white eggs, but is very tender in winter, and, with its large comb, is liable to get frozen unless kept in a very warm place. The prize-takers here are: F. C. Hare, Whitby, and W. H. Read, Kingston.

The Black Minorcas are very similar to the B. Spanish, and must have been bred originally from them. They are a very handsome bird, and lay fine, large white eggs. We have them now both White and Black. The number of entries in this class is: Black, 31; White, 14. The prize-takers here were: In Black—T. A. Duff, Toronto; R. Minto, Galt. And in White—Duff & Fletcher, Toronto.

In Polands, Messrs. McNeil and Bogue, of London, had it nearly all to themselves, and they also carried off the bulk of the prizes. The Poland is more of a fancy fowl than a useful one. At any rate, it will never make a profitable fowl for the farmer. There were entries for breeding pens in almost all the classes, and a fine show in each.

In Turkeys we have nineteen entries in Bronze. The old veteran, Main, has as usual some grand ones, and the prizes are divided between him and Bell, Angus, and Beattie, Wilton Grove. In White, Messrs. Beattie and Smith, Fairfield Plains, share the prizes.

The show of Geese and Ducks was simply immense. One pair of Toulouse geese shown by Bogue, of London, must have weighed forty pounds or over. He and Haycraft, Agincourt, in Toulouse, and Bogue and Main, in Bremen, share the prizes. In Chinese geese, Messrs. Colwell, Paris Station, and Luxton, Hamilton, take the prizes. For ducks—Rouen, Main is to the front again; in Aylebury, Bogue and C. E. Smith. The finest show of Pekin ducks ever seen in Toronto—twenty-nine entries, and all grand specimens. As some of the on-lookers remarked, they were like geese. Messrs. Bogue and Webber, of Guelph, and Colwell, of Paris Station, were the leading prize-takers. In Cayuga ducks, Messrs. Howitt and Bogue, Strathroy, and Hodson, Brooklin, were the prize-takers.

The show of Bantams was excellent, and for this season of the year the greater part of the birds were in excellent plumage. The judges were Messrs. Butterfield, Jarvis, and Smelt, and they did their duty faithfully and well. The genial Superintendent, Mr. C. J. Daniels, of Toronto, had everything in ship-shape order, and gave all the information wanted with a good grace. In recognition of the pre-eminently satisfactory way in which he discharged his duties, the exhibitors presented him with a beautiful silver service (dinner and tea sets), accompanied by an appropriately worded expression of their appreciation. It was certainly the most successful exhibit of poultry they have ever held in Toronto, and the canaries, pheasants, and ornamental fowls were grand. The pigeons also, to the fancier, were something worth going miles to see. Even the rats came in for a share of admiration. Mr. J. E. Meyer, of Kossuth, took first prize for best incubator and brooder, of which there were seven on exhibition.

THE MILKING TRIAL.

The milking trial for a special prize of \$100, conducted on September 7th and 8th, under direction of Prof. Dean, of the O.A.C., for the cow being the largest producer (products from milk only considered) drew competitors from the Holstein camp alone. One Guernsey entered, but dropped out. The following table shows the result:—

RESULTS OF DAIRY TEST, SEPTEMBER 7 AND 8, 1896.

Rank.	NAME OF COW.	BREED.	OWNER.	MONDAY, SEPTEMBER 7TH.									TUESDAY, SEPTEMBER 8TH.									Total lb. Milk in 2 days.	Total lb. Fat in 2 days.	Total lb. Solids not Fat in 2 days.
				A. M.			NOON.			P. M.			A. M.			NOON.			P. M.					
				Lbs. Milk.	% Fat.	% Solids not Fat.	Lbs. Milk.	% Fat.	% Solids not Fat.	Lbs. Milk.	% Fat.	% Solids not Fat.	Lbs. Milk.	% Fat.	% Solids not Fat.	Lbs. Milk.	% Fat.	% Solids not Fat.	Lbs. Milk.	% Fat.	% Solids not Fat.			
1	Emery Beauty.....	Holstein.	A. Hoover, jr.	24.25	3.	8.72	19.	3.2	8.5	19.	3.2	9.	23.5	2.7	8.6	19.5	3.2	8.55	19.25	3.	8.87	124.5	3.781	14.633
2	Carmen Sylvia.....	"	C. J. Gilroy & Son	20.5	2.2	8.5	17.25	2.6	8.07	15.75	3.	8.2	18.25	2.2	7.97	18.25	3.2	7.9	16.	2.4	7.97	106.	2.743	11.342
3	Lady Akkrun.....	"	G. W. Clemons....	18.25	2.4	9.2	15.	3.3	9.02	13.	2.7	9.1	17.	2.5	9.02	14.	3.6	8.9	11.5	2.8	8.95	88.75	2.535	11.673
4	Princess Lida 4th...	"	Ellis Bros.	19.	1.9	8.3	16.75	2.	8.1	14.50	2.5	8.47	17.75	2.5	8.3	15½	2.8	8.17	15.	2.4	8.22	98.25	2.29	10.404
5	Cornelia Tensen.....	"	G. W. Clemons....	21½	2.	8.12	17.5	2.5	8.	15.5	2.	7.85	19.75	1.8	7.85	16.25	1.9	7.6	15.5	1.8	7.45	105.75	2.117	10.399
6	Worthemall.....	"	G. W. Clemons....	19.75	1.8	8.05	20.25	3.4	7.67	13.75	2.2	7.87	21.75	2.3	7.72	15.50	2.6	7.75	15.5	2.3	7.82	107.	2.624	10.109
7	Kaatje DeBoer.....	"	G. W. Clemons....	18.50	3.	8.5	13.25	3.1	8.4	13.	3.2	8.8	17.	2.8	8.6	13.	3.	8.35	13.	2.7	8.57	87.75	2.599	10.000
8	Aaggie Gem 2nd....	"	A. Hoover, jr.	17.	2.8	8.17	13.25	3.1	7.85	12.5	3.3	8.65	15.75	2.7	8.2	13.50	3.1	8.25	13.25	2.8	8.2	85.25	2.515	9.518

DAIRY DISPLAY.

New quarters were provided for the dairy display this year, located below the grandstand, towards the east end, and though roomy enough, could have been fitted up in much better shape for this important exhibit. In some respects the room was better suited for dairy products than the old building. The temperature was lower and the cheese and butter did not suffer from the heat. The light, however, was bad, making the exhibit rather a gloomy one. This could have been remedied to a great extent by making more windows and enlarging those already there. The whole affair appeared to be a kind of makeshift, improvised at the last moment without consulting the wishes of the dairymen. The worst feature was the location. Heretofore the building was located near the main entrance to the grounds, and was a center of attraction for many. Its location this year was such as to give everyone the idea that the dairy interests had been side-tracked to make room for the bicycle men, who occupied the old dairy quarters. Being away from the general run of the crowd, the numbers visiting it were nothing like what they were other years. The slowness in sales of butter this year, compared with last, was attributed to that cause. Without special directions many would have been unable to find the department. It was very unfavorable also for exhibitors of dairy apparatus who wished to catch the public eye. Better things are promised another year, as the dairy organizations will insist.

In point of number the cheese exhibit was not as large as last year's, though the exhibits covered a wider area. This shortage was largely due to the condition of the season for making in many districts from which exhibition cheese comes. During the first half of August, when most of the cheese for exhibition should be made, we had extremely hot weather, which prevented the makers from getting the right kind of milk for making good cheese.

There were 375 cheeses from the factories, besides some truckles and Stiltons; the former made up of lots from the various Provinces as follows: Ontario, 321; Quebec, 25; Manitoba, 22; and Prince Edward Island, 7; making what might be called a Dominion exhibit. All the prizes went to Ontario makers excepting one, which went to P. E. I. The average quality was better than last year, there not being such a wide range between quality of the poorest and the best. The highest score made was 96, and the lowest 84. Flavor was the weakest point, there being only one or two exhibits that might be said to have anything like a pure flavor. There was a decided improvement in the finish of the cheese on exhibition, which was an encouraging feature, as it shows more careful workmanship on the part of makers. The cheese from Quebec were, on the whole, not so fine as those shown from that Province last year. Last season's exhibit showed good workmanship on the part of the makers, but were lacking in flavor. This year they were not so well made, though there was an improvement in flavor. There was a decided improvement in the cheese from Manitoba over last year's exhibit. The report of the judge last year was that the cheese from that Province was only suited for the local trade. This year's exhibit shows that the makers of the Prairie Province are capable of making a good shipping cheese. One lot from Prince Edward Island carried off a sixth prize in the section in which it competed. The Island cheese were somewhat lacking in that essential quality—good flavor, but

were otherwise commendable. The gold medal given by the Windsor Salt Works was awarded to John Morrison, Newry, Ont., for the best cheese on exhibition.

The exhibit of butter was larger than ever. In fact, the refrigerator space provided was not sufficient to contain all the exhibits, there being enough creamery butter alone to fill it. Temporary refrigerator space had to be provided. There was three times as much creamery butter on exhibition as last year. The judge was surprised to find such an im-

absence of exhibits from a number of dairy supply men who are usually on hand.

APIARY—EXCELLENT AND INSTRUCTIVE, BUT MISPLACED.

The honey and apiary supplies were along with the dairy appliances and products exhibited in a large but out-of-the-way room beneath the east end of the grandstand. It has heretofore occupied a very much more conspicuous and suitable location near the agricultural hall, but in the adjustment for this year's fair the present arrangement was made. To the building there is little objection, except that it might be better lighted; but the most of the complaints made by the exhibitors were on the score of isolation.

It being situated among a number of dining-halls and lunch-rooms, people did not come into contact with it, except through accident or about meal time. The result is that thousands of visitors who no doubt would have enjoyed and profited by an examination of these apiarian products and appliances would go away from the fair without having seen them. We believe, however, that in future the correct estimate of this class of exhibits will appeal itself to the management in such a manner that more desirable quarters will be given them. We fully realize the great difficulty that must accompany the placing of the multitudes of classes of exhibits at an exhibition like the Toronto Industrial has become.

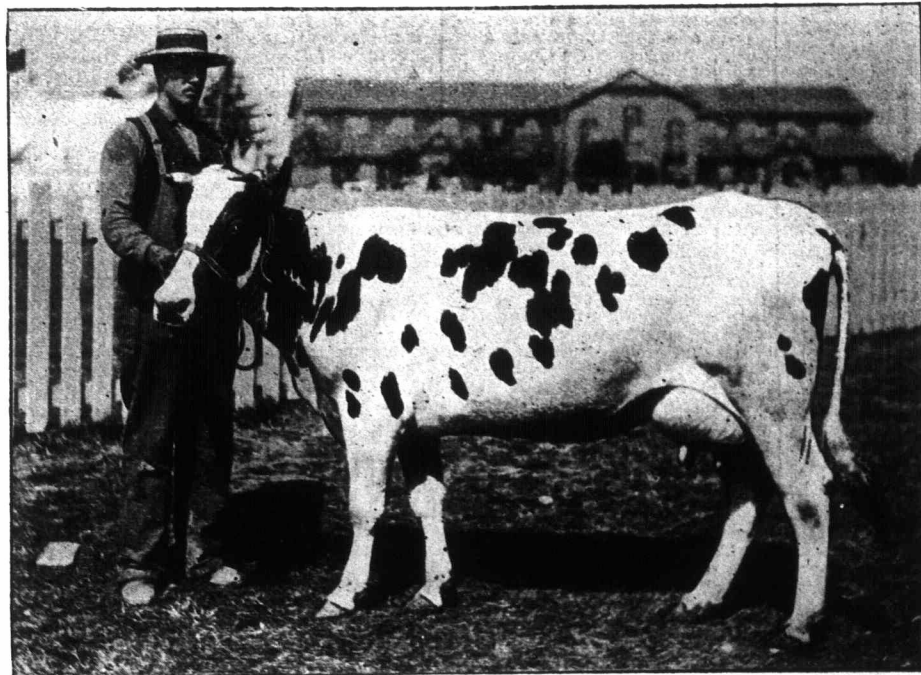
With regard to the honey, the quality was of a very high order and so uniform that judging was exercised under considerable difficulty. The extent of the exhibit was also greater than usual. The following gentlemen were the principal exhibitors: Messrs. Geo. Laing, Milton; J. B. Hall, Woodstock; Wm. Goodyear, Woodstock; H. N. Hughes & Bro., Barrie; Geo. Brown, Drumquin; R. H. Smith, St. Thomas; and The Gould, Shapley & Muir Co., Brantford. A number of other gentlemen exhibited small lots.

The many forms of beeswax were interesting, and of extraordinary quality, most of which was rendered by means of the modern solar apparatus.

The section for best display setting forth beekeeping designed as an educator was well responded to by a few of the exhibitors. The first award was won by The Gould, Shapley & Muir Co., who occupied two large stands in the center of the building. This exhibit was in charge of Mr. R. H. Holtermann, Vice-President of the Ontario Beekeepers' Association. Some of the points illustrated were the natural history of the bee, method of beekeeping, the magnitude of the industry and advance made in it within the last few years. The second award was secured by Mr. R. H. Smith, St. Thomas, who had a very fine display, each article being labelled in a manner to be very instructive. A model bee-yard was shown in miniature, in which the hives were placed in fours, two backing against two. This is of decided advantage in outdoor wintering, for the reason that one outside case answers for the four colonies. This is packed around and over the hives with leaves, etc., while each of the swarms served to keep the others warm. Messrs. Laing and Hughes received the third and fourth awards.

The first prize for the best and most practical new invention for the apiarist never shown before at this exhibition was won by Mr. J. B. Hall, for a section super in two halves, one of which is placed in position upon the hive, when the bees commence working at the end over the center of the hive. When a good start is made by the bees the other half is placed in its position. The bees at once com-

The Toronto Industrial Dairy Test Winner of 1896.



EMERY BEAUTY, NO. 508.

The life-like portrait given above represents the now famous Holstein-Friesian cow, Emery Beauty, that had the honor of winning the Toronto Show dairy test of 1896, details of which we give elsewhere. She is the property of Mr. A. Hoover, jr., Emery, Ont., and was calved March 14th, 1892. She was bred by S. Shunk, jr., Edgeley, Ont.; sire, Baillie 2nd's Artis Clothilde 129; dam, Edgeley Lilly 97. She won second in the three-year-old cows in 1895, and won first in the three-year-old Gananque milk test, 1895. When tested this year she was just three weeks calved and had not reached her full feed capacity.

provement in quality over former years. The highest score for creamery butter was 98, and the lowest 87½. The chief faults were being too highly colored and having too much salt. The display of dairy butter was about the same as last year, with the quality about the same. The highest score was 97, and the lowest 91½. Flavor was the chief point in which it was lacking. Nearly every modern butter package was on exhibition, and creamerymen had a splendid opportunity of judging the advantages of each.

Mr. A. F. MacLaren, M. P., Stratford, Ont., was judge on cheese, and Mr. McGillis, Montreal, judge on butter. J. W. Wheaton, Secretary Western Dairymen's Association, assisted the judge in keeping track of the score for cheese, and Mark Sprague, Secretary Ontario Creameries Association, who was in charge of the creameries exhibit, assisted the butter judge.

The display of dairy machinery was not as large as usual. The principal exhibitors in this line were Richardson & Webster, St. Mary's, who made a fine display of cream separators and butter and cheese factory outfits. The American Cream Separator Co., Bainbridge, N. Y., had on exhibition their cream separator. The Kneeland butter package was exhibited by Whitney Bros., Woodstock. A neat exhibit of their pure dairy salts was made by the Windsor Salt Works, Windsor, Ont. A useful milk and wine bottling machine was shown by James Iredale, Toronto. There was a noticeable

mence work at the end over the brood, and when a good start has been made the position of each half is exchanged, placing the ends of the supers not worked in over the center, when these too are commenced and all the sections are being worked at at once, which hastens the filling and prevents travel-staining by the bees walking over full cells. The joints at the corners of the sections are protected by strips of zinc in a manner to prevent them being soiled by the bees. The second award in this section went to The Goold, Shapley & Muir Co., for a new invention which promises to revolutionize the making of comb foundation. By it the melted wax is run into chilled rollers, which allows the wax to be formed into continuous belts which are run through metal rollers cut to form the foundation. The advantages claimed for the invention are speed in making and an improved quality of product. The third award went to Mr. Chas. Brown, for a handy and cheap package for marketing comb honey in pound sections. It consists of a sheet or wrapper of basswood or elm, obtained at a basket factory. It was shown in sizes suitable for wrapping two, three or more sections. At the end of the parcel a round two-inch hole is cut to show the quality of the contents.

HORTICULTURAL.

Fruit, that "fine flower of commodities," as one old writer puts it, was strongly in evidence at the Toronto Exhibition, and did not a little to contribute to the general success of the fair. It is questionable whether any other class of exhibits calls forth such a generous and universal tribute of admiration. There is a healthy and natural appeal to our best instincts in a fine display of fruit that rarely fails to meet with a ready response. That the interest in the commercial side of horticulture is rapidly spreading was abundantly evident by the innumerable questions put to those in charge of the fruit.

Where everything was so good, it is difficult and dangerous to make distinction. However, in such an exceptionally good apple season as this, it was only natural to look for a correspondingly fine show of apples on the benches, and certainly no disappointment could have been experienced. It was the best showing of apples for years. "King of Tompkins County," the "Northern Spy," "Duchess of Oldenburgh," and many another excellent variety were strongly represented. "Duchess" especially was a fine exhibit. In the pears nearly all classes showed a marked evenness of sample, and were characterized by exceptional cleanness and uniformity of size and color. The judge on pears had no secunec. Grapes, plums, and peaches looked as inviting and attractive as usual. Peaches were not a particularly large exhibit, but the color and size of many of the specimens were wonderfully good.

A fruit exhibit of this size and character, embracing such an immense number of varieties, and representing so many localities and climatic conditions, is a great educative force. The novice can here scrape up a large fund of valuable information; the older hand in the business has unrivalled opportunities for comparing experiences and correcting or confirming past impressions; and the unlearned public can gather up all sorts of profitable hints. And what an undiscerning public it is! The crowd files by, and the skilled horticulturist shakes his head sadly as he listens to the unlimited praise given to the big, showy fruits. It is a public that walks by sight. Little wots it that this huge size and magnificent color were evolved usually at the loss of all delicacy and flavor. An Alexander—a Beitigheimer apple; a Souvenir pear—these extract a profusion of admiring adjectives. The little Swayzie Pomme Grise apple, the dull Sheldon pear, are unnoticed. "Let us hope," said the deacon, as he threw away the core, "that when the Lord pronounced everything that He had made very good, He hadn't yet made the Ben Davis apple." There you have the whole thing. The ignorant and unwary would decide for Ben Davis as against Swayzie Pomme Grise, little knowing that the dull russet coat of the latter contains the secret of a flavor little short of perfection. In this connection we were more than pleased to see the large space occupied by the Ontario Fruit Experiment Stations' exhibits. Here the unwise could be made wise. Several of the experimenters were in charge, and full information as to planting, pruning, selection, and relative value of varieties was cheerfully given. Something, too, like an authoritative pronouncement could be obtained as to the accuracy of the names of varieties, and this is no small thing in itself.

There was an interesting exhibit of fruit from the Central Experimental Farm, containing some noticeably good plates of various Russian apples, and closely adjoining an equally interesting display from the Experimental Farm at Agassiz, B. C. The flavor of this fruit from the far West is better than the Californian but hardly equal to the Ontario fruit. Many of the varieties shown were of the kinds well-tested here. It was, however, a little difficult to identify them, owing to the curious elongation of the fruit. The plums were almost pear-shaped, and the pears were peculiarly lengthened out at the stalk end. This unusual habit appeared to be a common characteristic of the British Columbian fruit.

The new Minister of Agriculture took an appreciative survey of the fruit department. Some of the representative horticulturists had the opportunity of meeting him, and were assured that the Government desired to advance the interests of the fruit-

growers by assisting in providing cold storage facilities in connection with distant markets.

Altogether the fair, from the horticulturists' point of view, was a distinct success. The fruit-growing area is being so steadily extended, and the economic status of the industry is so much higher than it was a few years ago, that a large fruit exhibit of this kind should not only be an attractive feature of the fair generally, but should in no small measure promote the well-being of the whole fruit community, and we think this is the case.

FAIR NOTES.

The receipts this year were \$7,729 in excess of last year.

F. W. Heubach, Manager of the Winnipeg Industrial Exhibition, was in attendance at the Toronto Fair, and was busy looking over every department, gathering ideas for further improving the Winnipeg Industrial.

Mr. Arch. Wilson, of Paris, Ont., was, for a few weeks prior to the Toronto Industrial, engaged at Senator Cochrane's stock farm, P. Q., developing the "Hillhurst" Hackneys, which he brought out in great fit and going splendidly. He will be with them till after the New York horse show.

STOCK.

Horse Breeders' Meeting During the Toronto Fair.

The semi-annual meeting of the Canadian Horse Breeders' Association was held on Sept. 7th, at the Albion Hotel, Toronto, Mr. D. McCrae presiding in the absence of President Robt. Davies; Hy. Wade, Secretary. The annual report showed a balance on hand of \$602. Resolutions were adopted: 1st, that the Toronto Industrial Association be petitioned to have a blacksmith shop on the fair grounds for the convenience of horsemen; 2nd, that the spring horse show be confined to three days instead of four; 3rd, that exhibitors should not be asked to have their stock on the Industrial Exhibition grounds longer than one week; 4th, complaining of want of stable accommodation at the Industrial; 5th, that if possible an amphitheatre be erected by the Industrial Association in order that the public might witness the judging of horses and cattle and that the events should come off on time as advertised. The Executive Committee (consisting of Messrs. Robert Davies, President; Dr. Smith, Vice-President; H. N. Crossley, D. McCrae, H. Cargill, R. Beith, M. P., H. Wade, with the addition of Mr. John Macdonald) was authorized to meet the Hunt Club and interview the Government as to a grant.

Ontario Creameries Association.

The Board of the above organization met at the Rossin House, Toronto, Sept. 8th, President Derbyshire in the chair. House, Sprague, Secretary. It was decided to hold the next annual convention at St. Mary's, on the 13th, 14th and 15th of January, 1897. A committee was appointed to wait upon the Hon. Mr. Fisher, Minister of Agriculture, to lay before him their views as to the best means of assisting the creamerymen in placing the butter upon the British market in the best possible condition. Better refrigerator service on the steamboats is required, and a competent man should be stationed at Montreal to see that the butter was properly loaded, etc., and another in Britain to look after its arrival. He would also compare it with other butters, such as Danish, and report defects and how they might be remedied. In 1895, 100 per cent. more Canadian creamery butter was exported to the British market than the year previous. Up to the present date this year nearly four times greater quantity has been exported than in 1895.

Good Roads Association.

The annual meeting of the Ontario Good Roads Association was held during the Toronto Exhibition, officers being elected as follows: President—Andrew Patullo, M. P. P. Woodstock; First Vice-President—J. F. Beam, Black Creek; Second Vice-President—Robert Jelly, Jellyby; Third Vice-President—J. H. Woolley, Simcoe. Executive Committee—James Sheppard, Queenston; James Beattie, Campbellton; A. Macdougall, Toronto; J. G. Judd, Morton; M. Kennedy, Owen Sound; W. S. Campbell, Brantford; E. Kidd, North Gower; A. W. Campbell, Toronto. Secretary-Treasurer—K. W. McKay, Toronto. At a subsequent Executive meeting, President Patullo introduced the Hon. Mr. Fisher, Minister of Agriculture for the Dominion, who addressed the meeting in reference to road improvements and the value of good roads to the agriculturist. He expressed his pleasure at being present and to see such a large exhibit of roadmaking machinery, and referred to the Quebec Roads Association, which is doing good work. In conclusion, he expressed his entire sympathy with the movement, which will have such assistance as his department may be able to render.

Stock Breeders Meet the Dominion Minister of Agriculture.

A large number of prominent stock breeders and farmers repaired to the Farmers' Institute tent on the Toronto Fair grounds on Tuesday, Sept. 8th, at 10 a. m., for the purpose of meeting and conferring with the Hon. Mr. Fisher, Minister of Agriculture for the Dominion, on various matters of importance to the stock-breeding interests of Canada. The three most important questions discussed were quarantine regulations, railroad rates on live stock, and the recognition of Canadian live stock records by the United States when stock is shipped from this country across the lines. Mr. John I. Hobson, President of the Dominion Cattle Breeders' Association, occupied the chair.

In introducing the Minister, the chairman complimented Hon. John Dryden, who was present, on the success of his efforts on behalf of agriculture in Ontario, which had put millions of dollars in the pockets of the farmers of this Province, and said that he expected that Hon. Mr. Fisher would do proportionately well for the Dominion. He spoke on the questions before the meeting.

Mr. McCrae, Guelph, speaking on quarantine arrangements, gave a short sketch of the causes which had led to their adoption. He thought that there might be a possibility of Canadian cattle being allowed to land in Great Britain without any restrictions if preferential trade were adopted between Britain and her colonies. As regards tuberculosis, he quoted Professors Bang, of Denmark, and Nocard, of France, who asserted that there was only a slight possibility of infection to human beings from eating meat or drinking milk from tuberculous animals unless the udder itself were affected.

A. Johnston, Greenwood, spoke on transportation rates and the overcharge of railroads, and related his interviews with the general freight agents of the two leading Canadian railroads in connection therewith.

Jas. Russell, Richmond Hill, praised the Canadian records, which are as high and higher than those of any other country. J. C. Snell, in speaking on the quarantine, said that the time had come for relaxing it between both the United States and Great Britain. He was in favor, however, of a short quar-

antine on swine from those countries, owing to the prevalence of hog cholera.

R. Gibson, Delaware, argued that as the United States had abolished the quarantine against Mexican cattle they should do the same as regards Canadian stock. The present was a very opportune time, before the term of the present Democratic Government expired.

Mr. G. H. Greig, Secretary of the Live Stock Breeders' Association of Manitoba, stated that in Manitoba the shippers had better railroad rates than here. The quarantine question does not affect Manitoba, but does the Northwest Territories to some extent.

Dr. Smith, President of the Ontario Veterinary College, asserted that pleuro-pneumonia did not exist in Canada, and, apparently, is now stamped out in the States. In an interview lately with Dr. Salmon, of the Veterinary Department of the U. S. Department of Agriculture, that gentleman said that he saw no danger in relaxing the quarantine between Canada and the States. In answer to a question, he said that ninety days in quarantine was none too long a period to allow of the detection of pleuro-pneumonia.

Dr. Mills, President of the Ontario Agricultural College, congratulated the farmers on the appointment of Hon. Mr. Fisher as Minister of Agriculture. He touched on the importation, records, and cold storage questions. In connection with the latter he called attention to the need of cold storage facilities for the fruit trade.

Hon. Mr. Dryden gracefully referred to Mr. Fisher's appointment and assured him that all present were a unit on the questions before the meeting. He believed in importing to keep our cattle up to a high standard. He would have a modification of quarantine. The quarantine and record questions should be presented to the U. S. Government at the same time.

Hon. Mr. Fisher said that he was glad to be present. He thought it a great compliment to be called a practical farmer. He would confer with the Provincial authorities before acting on any of the matters brought before him at the meeting. He thought the abrogation of the quarantine would benefit both sides. He had himself lost sales owing to the high freight charges asked by the railroads. He would try to show the latter that it would be to their interest to reduce their charges. He had studied the tuberculosis question and thought that the tuberculosis scare was greatly exaggerated. By proper precautions the disease can be greatly reduced. His one desire was to work in the interests of the farmers.

Sherbrooke (P. Q.) Show.

BY AN OCCASIONAL CORRESPONDENT.

The twelfth annual exhibition of the Eastern Townships Agricultural Association, which opened on the same day as the Toronto Industrial, proved a great success in spite of the unpromising weather during the first few days. The Sherbrooke show is one of the best-managed exhibitions in Eastern Canada, and not even the unpropitious weather could deter the crowds from passing through the turnstiles.

The exhibit of horses was large. Among those who showed Thoroughbreds were: F. S. Wetherall, Cookshire; Dursault & French, Sherbrooke; and G. F. Terrell, of the same place, and to these went the chief premiums. Carriage and Coach horses were shown by R. Ness, Howick; Wilder Pierce, Martinville; H. R. Page, Sherbrooke; and R. A. Smith, Johnsville. R. Ness got the diploma on his French Coach stallion. The principal winners in the Hackney class were: Senator Cochrane (Hillhurst Farm), who won the sweepstakes on stallions; The Venlo Farm Co., Maplegrove; H. D. Smith, Compton; Dr. Worthington, Sherbrooke; and Wm. Pocock, Hillhurst. The diploma for Roadster mares was captured by Jno. Stalker, Kingsbury. Clydes and Shires showed in the same class.

There Robert Ness was one of the chief winners, his stallion bearing off the sweepstakes from his competitors. H. D. Smith and L. P. McDuffee won several prizes. Among those who exhibited Percherons or Normans were the Cookshire Mill Co. and the East View Stock Farm.

Most of the important prizes for Shorthorns fell to the lot of H. J. Elliott, Danville, who won the diploma for bulls and also for females. W. P. McClay, Compton, was his strongest opponent. As was expected, H. D. Smith, Compton, took the lead in Herefords, securing both the diplomas and the herd prize. D. M. Wilson, Moe's River, however, got some firsts, and Guy Carr, Compton, also got into the prize list. The East View Stock Farm won the herd prize and diploma for Aberdeen-Angus females, and D. M. Wilson, Moe's River, that for bulls as well as other prizes. A few premiums fell to the share of E. B. Pope, East Hatley. There was a fine exhibit of Ayrshires. Among those who got into the prize list were the Isaleigh Grange Farm, Danville; R. Ness, Howick; Wm. Wylie, Howick; R. Robertson, Compton; and Geo. Davidson, Fairfax. Wm. Wylie had the best two-year-old bull, and he was good enough to win the sweepstakes for bulls as well. To this exhibitor went the herd and several firsts and other prizes as well. R. Robertson's aged cow carried off the sweepstakes for females. Several exhibitors of Jerseys were present, most of whom won one or more prizes. To E. P. Ball's aged bull went the first and diploma, C. N. Reade, Cookshire, taking that for females. Other exhibitors were: G. C. Coleman, Way's Mills; C. E. Hanson, Coaticook; F. S. Wetherall, Cookshire; the East View Stock Farm, Cookshire; S. E. Humphrey, Dixville; and C. C. Standish, Stanhope. To the Isaleigh Grange Farm went a large proportion of the first prizes for Guernseys, as well as both the sweepstakes and the herd prize. Hon. Sydney Fisher showed up well and captured some firsts, while the East View Stock Farm won a few premiums. Ogden Sweet, Sutton, was a most successful exhibitor of Holsteins, winning, among other things, the herd prize and sweepstakes for bulls. G. P. Butters, Stanstead, got some red tickets and other prizes. G. Rathbone, Stanstead was another successful exhibitor. Canadian Cattle, or Quebec Jerseys, as they are sometimes called, were shown by Guy Carr, Compton, who won most of the premiums, but A. Goff, Leeds, beat him on aged bulls and also on the diploma for bulls.

The prizes for Leicester sheep mostly went to R. W. Frank, Kingsburg; J. Parnell, Spring Road, taking a few prizes. Shropshires were shown by the Isaleigh Grange Farm, and Southdowns by Guy Carr, F. S. Wetherall, and H. J. Elliott. F. S. Wetherall and the East View Stock Farm took the prizes offered for other pure breeds.

The premiums for Berkshire pigs nearly all went to A. F. Dawes, Lachine; H. C. Bailey, Cookshire getting some of the minor premiums, and Guy Carr, one. The Isaleigh Grange Farm won nearly everything in Yorkshires, while J. H. Taylor, Richmond, did the same in Poland-Chinas, his only opponent being C. J. Wright, Dixville, who won one premium. R. MacLeay was the only exhibitor of Chester Whites.

The poultry exhibit was better, and there were more birds shown than ever before. Several exhibits were present from Montreal and outside places.

The Ewe Flock.

The sheep-breeding season is at hand, varying in time according to the accommodation for the ewes at lambing time. When a comfortable and roomy pen can be made use of, the lambs may well come about the first of April, which places the coupling season from the middle to the last of October. March, or even February, lambs are desirable when a spring-lamb trade is looked forward to, or one wishes to fit for the shows. It must be borne in mind, however, that to keep early lambs going ahead, liberal feeding and careful attention must be given in order to keep up the condition and milk flow of the ewes.

With regard to breeding the flock, Prof. Wrightson has the following to say in his most excellent work, "Sheep—Breeds and Management": "The flock is always composed of ewes of various ages. Much has been said of late years about the advantages of breeding from ewe lambs, but I cannot approve the suggestion. Nature will not be hurried with impunity, and for an animal to undergo the trials of maternity when it has not itself arrived at half its proper size is repugnant to her laws. If ample frames are to be perpetuated, the females should be fairly matured before they are placed in the breeding flock, and this is best accomplished by allowing them to bring their first lamb at two years old. This opinion may be challenged, but upon what ground but that of greed can the alternative be defended? Let any one apply the rule to the case of other animals and he will see that to begin breeding from females at too early an age is inconsistent with common sense. The case of sheep is peculiar in this respect, that there is no choice between lambing at one year and at two years old. [Except with the Dorset.—Ed.]

"With other animals a compromise may be effected in terms of half years, quarters or months, and the different practices of breeders are thus only slightly divergent, but a whole year, or at least nine or ten months, is a long period in the life of a young ewe. I am therefore of the opinion that as we must choose between half a year and a year and a half before mating our young ewes, we had better err on the side of leisure, and I think ewes thus treated will last longer and produce better offspring. We have now universally adopted two years as the best period, and the age is not likely to be further lowered with advantage.

"The case of rams stands upon a different footing altogether. They have not to undergo the protracted trials which with the female extend through the period of gestation and nursing, and, besides, ram lambs may be lightly worked if it is thought desirable, whereas there is no mitigation for the female. The best answer to these criticisms would probably be from the experience of those who think otherwise, but I should even then doubt whether a better result in the long run would not be obtained by those gentlemen who are thus working at high pressure if they adopted a less rapid course of action."

"Pigs in Clover."

"If a poor pig-pasture only is available it is better to leave the pig business alone," writes "Thistle-down" in the *Australasian*. "The practice of allowing them to rove around the farm, or turning them into a paddock along with the horses, cattle or sheep, is not the right way to manage pigs. They do not get justice by that plan, and consequently very often fail to pay for their keep. The pig-paddock should be the best on the farm—a field in which clover or lucern abounds, and where there is plenty of shade and water. These latter can be provided artificially, but where they can be had naturally so much the better. And above all things, do not overstock the pasture. Keep every other animal but pigs out of the run, especially in the spring and autumn, although in winter, when the sows can be temporarily removed to some other quarters, it is well to turn in other stock, so as to feed down what grass the pigs have refused, and generally to sweeten the whole surroundings. When gone about in this way the profit that can be made from grazing pigs is simply wonderful. The old saying, 'pigs in clover,' must have originated from the observation that pigs generally had a good time when it fell to their lot to get all the clover they required. It is a fact that they do thrive uncommonly well on clover, but good fresh grass of any kind almost will suit the purpose, providing a small allowance of grain be given daily."

Cattle Feeding.

To the Editor FARMER'S ADVOCATE:

SIR,—In reply to your enquiry regarding export cattle I stall-fed last winter, I would say, in the first place, in order to make cattle feeding profitable it is necessary to have a liking for the business, to have suitable buildings, the right kind of cattle, and to feed in the right way. I am not going to give you a sermon on the subject, but simply a little of my own experience. Although a young man, I have been accustomed to feeding cattle ever since I could walk, and there is nothing I like so well as being among good cattle. It is useless for a person to undertake any business unless he has a taste for it, especially in these times when money is scarce and competition is so keen. Suitable buildings are necessary for all stock, but especially for feeding beef cattle. My barn is as follows: 74 x 37; stone basement, eight feet high; frame barn above, twelve-foot walls, with large drive-floor so that hay and grain can be driven right into the barn. On the barn floor I have chaff cutter, grain crusher, etc. All fodder is stored in the barn, so that nothing is spoiled by the weather and everything is in the most convenient place for feeding. In the basement are two rows of stalls with a wide passage between. In front of the cattle are water troughs extending full length of stable. I do not say that cattle cannot be fed in any other kind of barn, but more than half the cattle fed in Manitoba are kept in low stables, with sod roofs, little or no light or ventilation. The fodder is stacked outdoors and has to be carried in for every feed, a large part of it being wasted. Frequently they are driven some distance to water, which they get very irregular, often on stormy days none at all. Under such conditions cattle feeding don't pay.

As regards the kind of cattle to feed, I prefer Shorthorn grades. Grade Herefords and Polled Angus are also fine feeders, and half-bred Ayrshires make nice feeders. Holstein steers I do not want; they are no good. One steer will eat as much as two Shorthorns, and then will not give the return. None of the breeds, however, fill the place of the general purpose Shorthorn. I noticed in the November 15th (1895) issue of the FARMER'S ADVOCATE a good practical article from Thos. McMillan on "Breeding and Feeding Beef Cattle." He placed the Shorthorn grade at the head of the list for the British market. Steers for the British market should be of good quality, with soft, mellow skins, broad backs, well-sprung and deep ribs, well filled behind the shoulders, good hams and briskets, short legs, clean-cut head and neck, with nice, well-set horns; and I can find this type in no other breed as readily as in the Shorthorn. Great care should be taken in selecting a suitable bull for breeding cows. Three and a half to four-year-old steers are very fine fellows to put in for feeding, but they won't pay the farmer who raises them. I always put mine in to feed at two and a half years old, and make them from 1,400 to 1,500 lbs. by the 1st of May. Such steers, however, must be kept growing from the time they are calves until sold at two years old. It is well to have the cows calve about the 1st of January; you then can get the chance of selling the butter at 20c. a lb., and your calves by the 1st of June will be well grown and much better than late spring calves can ever be. When the grass is frozen in the fall I have obtained the best results from pasturing on rape; then as soon as it gets cold tie up your feeding cattle at night, giving a little grain night and morning. This will keep the cattle going along nicely and ready to take their regular supply of feed as soon as tied up for good. I start them on cut straw and chaff, moistened, with a little chopped grain mixed with it. I do not feed any hay to speak of until the 1st of April. I feed the cut stuff morning and evening, meal at noon, with oat straw between meals, water twice a day (about nine in the morning and five in the evening) from the troughs in front of mangers. The cattle should be cleaned out and bedded as soon as possible in the morning, so that they may lie quiet and undisturbed soon after feeding. It is important to have good light and ventilation. I have five ventilators, and keep a thermometer hanging in the stable all winter, keeping the temperature as regular as possible. I find No. 2 frosted wheat, with a little barley and oats mixed, the best grain, feeding not more than two quarts to each beast three times a day while feeding the cut feed. About five weeks before shipping I stop the cut feed, giving hay and double the amount of grain. In this way the flesh becomes very solid and firm. Always curvy the cattle once a day, especially during the latter part of the feeding period. Steers such as I have described, fed in this way, should gain 350 lbs. each. Manitou, Man. W. E. BALDWIN.

Dairy Cow Classes at the Guelph Show.

To the Editor FARMER'S ADVOCATE:

SIR,—The impression seems to have got abroad among some stockmen that there will be a class for three-year-olds in the dairy test to be held in connection with the Provincial Fat Stock and Dairy Show at Guelph, December 8th to 10th next. With a view to correcting this wrong impression, I would state that there will be no classes excepting those mentioned in the prize list, which makes one class of all cows over 36 months at the time of the show and another of all cows under 36 months in the different breeds. J. W. WHEATON, Secretary Western Dairywomen's Association.

Some Parasites of the Domesticated Animals.

[From an address to the Farmers' Institute, by Fred. Torrance, B.A., D.V.S., Brandon, Man.]

(Continued from page 352.)

We have now briefly considered a few of the external parasites—those affecting the skin; and we turn to another class, still more numerous and varied, the Entozoa, or parasites of the internal organs. We can only take a glance at a few of these, and had better select those which are of everyday occurrence.

Bots.—These much-maligned parasites are found in the stomach of the horse, and I call them much-maligned for this reason: They are popularly supposed to be at the bottom of every attack of colic, or of sudden death in a horse, which is not manifestly caused by something else, and there is no evidence to prove that they are as injurious or fatal as that. The evidence, in fact, goes to prove the contrary: that the stomach of the horse can tolerate the presence of quite a number of bots without apparent injury to itself or the health of the animal. In making post-mortem examinations of horses, it is the exception not to find in the stomach a certain number of bots, and even when these are quite numerous the animal may not have shown, during life, any symptom of their presence. Some authorities go so far as to say that the presence of bots is beneficial to the horse, having a stimulating effect on the stomach. But, harmless as they may be in small numbers, they are frequently found in vast numbers, over 1,000 having been counted in the stomach of a horse upon one occasion, and there are instances on record where they have caused perforation of the stomach, and death. Bots are most tenacious of life, and almost invariably survive the attempts that are made to dislodge them from the stomach. In fact, it is pretty well admitted that it is impossible to kill the bots while in the stomach of the horse without killing the horse too. Such being the case, it is more important to prevent the horse from being infested than to rely on doubtful remedies. The bot remains in the stomach from one summer until the next, when it lets go its hold of the stomach and allows itself to be carried out with the excreta. It no sooner touches the ground than it hastens to bury itself in the earth or under the manure, and remains motionless for about 30 days, while the wonderful change is going on which is to transform the sluggish, crawling creature into a lively insect. When the time comes the pupa-case splits and the bot fly emerges, ready after a few days to deposit its eggs on the hairy legs of the horses, and thus complete the circle of its existence. Now, when the eggs are laid upon the hairs of the legs, is the time to break the chain of life. The eggs should be clipped off along with the hair, or else by lightly sponging the hair with benzine or coal oil destroy the vitality of the eggs.

Intestinal worms infest all our domesticated animals with greater or less frequency, and are more injurious to horses than to any other stock. Worms are very common in this country, and if it were possible to compute the losses they entail on the horse breeders of this country they would be found to amount to a large sum. Young colts are generally infested with worms, and often when neglected fail in health, become thinner and thinner, and sometimes die from this cause alone. When a fatal result is averted, the loss of condition and the stunting of growth are serious matters to the breeder, and it becomes important to discover (1st) how to prevent horses from becoming infested with worms and (2nd) how to get rid of them when necessary. In order to find a means of preventing horses from becoming infested with worms, the first thing is to discover how this usually occurs. The intestinal worm always originates from an egg laid in the intestine of the host by the preceding worm. This egg is not always hatched out in the intestine in which it was laid. It is frequently passed out with the dung, and may remain dormant for months, awaiting the chance that may convey it to the stomach of its host.

The eggs are produced in vast numbers; an adult worm, it is estimated, will produce a million of them.

These eggs or ova of these parasites are thus widely distributed over the pastures grazed upon by infested horses; they may be washed down by the rains into ponds and shallow wells and be swallowed with the water. Hay cut from sloughs which contain water in the spring is almost sure to contain ova attached to the stalks and leaves of the grasses, and it is the general use of prairie hay and slough water which makes these worms so common in this country.

To prevent horses from becoming infested, then, they should not be allowed to drink from shallow ponds which receive the surface water of the surrounding pasture, but get their drink from wells or running water. The use of cultivated hay instead of prairie hay is also indicated, and on no account should colts be allowed to pick over and eat soiled hay from the manure-pile.

Next, how to get rid of intestinal worms when present. This is not always an easy matter, and it is as well to know that there is no such thing as a certain cure for worms. There are a great number of remedies, each of which has a measure of value, but there is no known drug which can be depended upon in every case to remove the parasites from the system. In selecting a remedy, it is important to consider what particular kind of worms are to be got rid of, as the same treatment

is not appropriate for all alike. The large round-worms usually inhabit the small intestine and sometimes the stomach, and can be best attacked by remedies administered through the mouth, while the small "pinworms," as they are called, infest the large bowel, and can be better treated by injecting the remedy into the bowel than by administering it in the ordinary way. Intestinal worms, then, call for different treatment according to the locality in which they are found. To begin with those infesting the stomach and small intestines: There may be, and often is, more than one variety of worms present in this situation, but the commonest one is the large round-worm, *Ascaris myalocephala*, and as the treatment which will cause its expulsion is equally useful for the other varieties, there will be no use in going into details about them. The *Ascarides*, as these worms are technically called, are sometimes present in enormous numbers in one horse. There is an instance on record where more than 1,800 were found in one horse.

Treatment should begin by dieting the horse for a few days. Give less grain and hay and more bran and soft feed until the bowels are slightly relaxed. Then let the animal fast over night and give in the morning the vermifuge dose, and follow it in a few hours with a dose of oil or aloes to clear it out of the system. The vermifuges employed for the horse are very numerous, and every veterinarian has his favorite remedy. But for those who are not within reach of professional advice I may say that oil of turpentine is generally a good remedy. It should be administered in a little milk while the animal is fasting, and followed by a dose of oil or aloes about two hours later. This course of treatment should be repeated two weeks later, in order to expel any worms that have developed in the meantime, and a course of tonic medicine will be very beneficial in restoring a healthy state of the intestinal canal.

The small pinworms which frequently infest horses give rise to itching at the root of the tail, and the hair is often worn from the tail by the horse's efforts to scratch the itching spot. The part of the intestine inhabited by these parasites is so far removed from the mouth that any remedies administered in that way become so much diluted by the time they reach the worms that they have little or no effect. Injections are more successful. They consist of some vermifuge remedy mixed with a certain quantity of bland fluid, such as milk or soap-suds. The whole quantity should not exceed a quart, or it will not be retained in the bowel, and it should always be warmed to body heat. Among the remedies employed in this way the favorites are decoctions of quassia chips or of tobacco. Turpentine is effectual in this way also, injected with a little warm milk.

In conclusion, let me impress the fact that healthy animals do not offer a favorite home for parasites. It is the animal which is neglected, ill-fed, ungromed, and overworked which is their usual victim. Every stockowner has it in his power to surround his animals with conditions unsuitable for the growth and multiplication of parasites, and it is hardly necessary to point out that it is to his interest to do so.

FARM.

Securing Seed Corn.

The thrifty farmer is often known by his seed corn pile. It is a good sign when we see strung overhead in the back kitchen, the workshop or the driving-barn, long rows or bunches of plump, well-developed ears, some golden, others flinty white, all ready to be shelled for next planting time.

When the lower leaves and silk begin to brown (for the corn must be well matured), a favorite plan, where a small quantity only is required for home use, is to go through the standing rows, breaking off husk and all the best-looking ears into a bushel basket or other receptacle. When a little more than "just enough" is secured (for some ears may have to be thrown out afterwards), the coarse outer husk is next stripped off, and the rest used to form a long braid or bunch. These are strung on stout wires, out of reach of rats, mice, and moisture. *Seed corn must be kept dry.*

Another way in husking from the shock is to throw out in a pile by themselves the finest ears with the husks on; then handle as above.

If the intention is to secure large quantities for sale to dealers or others, the above methods would prove "too slow." In that case cut the corn when properly matured, and put in small-sized shocks so that there will be no risk of heating. When it has stood long enough for the stalks to be well cured, it is then husked in the usual way, all inferior ears being thrown aside for hog-feeding, the best being gathered as husked and put into long, narrow cribs (say a couple of feet wide) so that the air can circulate freely through them, with a sound roof, eaves overhanging far enough to shed off all rain, and raised well off the ground. Inverted tin pans are sometimes set on the posts to prevent the rodents getting in. The cribs should be isolated from other buildings for the latter reason also. If the above hints are properly carried out, there should be no failure in securing seed corn, and more of it will likely be wanted in Canada next season than ever before, at the present rate of increase in the corn area and to fill the numerous silos that are going up.

Humus in Its Relation to Soil Fertility.

Mr. Harry Snyder, B. Sc., Professor of Agricultural Chemistry in the Minnesota University of Agriculture, contributes a worthy article upon humus, which is published in the Year Book of the U. S. Department of Agriculture, from which the following points are taken:—

From the very earliest times farmers have assigned a very high value to humus as a factor of soil fertility, and this belief was strengthened by the observed facts that soils rich in humus were, as a rule, highly productive, and that such materials as animal excrement or barnyard manure, which supplied the soil with an abundance of humus, possessed a marked fertilizing power. Recent experiments have shown, too, that there are sound scientific reasons for ascribing to humus a high value as a factor of soil fertility. The article goes on to show that humus influences the temperature, tilth, permeability, absorptive power, weight, and color of soils, and directly or indirectly controls to a high degree their supply of water, nitrogen, phosphoric acid, and potash.

A virgin soil may show a high state of productivity for a number of years after it is brought under cultivation. Gradually, however, a decline in fertility is observed, which is slight at first, but more marked after a lapse of fifteen or twenty years. This decline in fertility is not so much due to the removal of essential fertilizing elements as the loss of humus, which causes the land to get out of condition mechanically. These statements are borne out by the Professor in citing experiments of various stations.

The loss of humus is an important factor in the decline of fertility; it is indicated by the fact that with methods of farming in which grasses form an important part in the rotation, especially those that leave a large residue of roots and culms, the decline in productive power is much slower than when crops like wheat, cotton or potatoes are continuously grown. Under grass and similar crops the soil humus increases from year to year.

Agriculturally considered, the two most important points regarding the composition of humus are (1) the presence of nitrogen as a constant constituent and (2) the chemical union of the humus with potash, lime, and phosphoric acid, forming humates. Most if not all the changes that organic matter undergoes are the result of the action of microscopic organisms. Humus furnishes a medium peculiarly adapted to the activity of these organisms. The nitrifying organisms feed upon the humus, breaking down its organic nitrogenous constituents and producing nitrates which may be washed out in the drainage or may be lost in the air if not appropriated by growing crops. Bare summer-fallowing has been very beneficial to the succeeding crop by increasing the available nitrogen of the soil, but frequently more nitrogen is rendered available than is necessary for the following crop, and whatever the crop is unable to utilize is lost by leaching or else escapes into the air. The available nitrogen is thus increased, while the total nitrogen is greatly decreased.

Fall plowing, it is claimed, keeps the humus and nitrogen of the soil in better condition than late spring plowing, which turns the available nitrogen down under, while the inert organic nitrogen is brought to the surface.

In old soils the process of nitrification does not go on rapidly enough to furnish available nitrogen to the crop; in a new soil the process is liable to go on too rapidly. Deep plowing and thorough cultivation aid in nitrification, hence the longer a soil is cultivated the deeper and more thorough must be its preparation.

The application of lime and wood ashes aids in the reduction of nitrogen of humus to available forms and prevents the formation of sour mold. Good drainage is also necessary to nitrification in the soil.

The value of humates as plant food has been the subject of extensive investigations, many of which indicate that they are valuable forms of plant food. Besides numerous carefully conducted experiments at various stations, observations in field practice indicate that plants are capable of feeding on humates. The roots of plants, particularly those of grains, will always be found clustering around any decaying vegetable matter that may happen to be present in the soil.

As to the means of increasing the humates of the soil, it is well known that barnyard manure is among the most lasting in effect of any of the fertilizers which can be applied. This is undoubtedly due to the power which the manure has of uniting with the soil potash, phosphoric acid, etc., to produce humates. The plowing in of clover and other green manures, as well as laying the land down to grass for a time, adds materially to the store of humus and thus increases its producing power, not only chemically but by profoundly modifying the physical properties of the soil. This latter influence is most marked in relation to the water content as well as the temperature. Prof. Snyder closes with the following summary:—

1. The decline in the crop-producing power of many soils is due to a loss of the partially decomposed animal and vegetable matters known as humus.

2. The humus of the soil is decreased by the continuous cultivation of grain, cotton, potatoes, or any crop with which the land is kept constantly under the plow without the addition of any humus-forming materials.

3. The loss of humus involves a loss of nitrogen, which is one of the elements composing humus. The loss of nitrogen from the soil is not always due simply to the nitrogen removed by the crop, but is frequently caused by waste of the humus by improper methods and systems of cultivation.

4. The humus of the soil is increased by the use of well-prepared farm manures, green manures, and by a systematic rotation of crops in which grasses, or, preferably, clover, form an important part.

5. The loss of humus from the soil results in decreasing its power of storing up and properly supplying crops with water. Soils with a liberal amount of humus are capable of more effectively withstanding drought than similar soils with less humus. In arid regions the loss of humus from the soil is more serious than in the regions of continuous summer rains.

6. In sandy soils the loss of humus is most severely felt. In poorly drained soils, where there is a deficiency of lime, potash, and other similar materials, the humus may form sour mold, but this can usually be corrected by a dressing of lime, marl, or wood ashes.

7. Humus-forming materials, like the decaying animal and vegetable matters in farm manures, have the power of combining with the potash and phosphoric acid of the soil to form humates which are readily assimilated by plants when acted upon by the proper soil organism. These humates thus increase to a marked extent the available plant food of the soil.

8. Farm manures and other humus-forming materials are not only valuable for the elements of fertility which they contain, but also for the power of making the inert material of the soil more available to plants.

9. In soils where there is a good stock of reserve materials it is cheaper to cultivate fertility through the agency of humus than it is to purchase it in the form of commercial fertilizers.

A Hint for Hard Times.

"A STITCH IN TIME," ETC.

Many indifferent farmers have come to the conclusion in the last few years that agriculture cannot be profitably followed; at the same time have made no extra effort to economize, except, perhaps, in ways that are not commendable, such as allowing buildings, fences, vehicles or implements to go to wreck when a little timely attention would have kept them in fairly good condition. It is not necessary to mention that the times are not flourishing, but every individual has a deal to do with the prosperity of his own business. The writer has seen a farmer this very harvest who had neglected to have his old binder overhauled before harvest, and when his grain was dead ripe had to wait until the services of some neighbor who had finished cutting his own grain could be obtained. Such improvidence as this is seen very often upon farms whose owners consider themselves intelligent business men. Some men in such a predicament would have gone and bought a new machine, but that course would have been of doubtful wisdom, because, perhaps, a new casting or other part worth a couple of dollars would have put the machine in good running order. An old binder or mower is often condemned because of a worn-out knife which a little careful scrutiny would have detected. The thing is to have machinery working well, but at as little expense as possible.

No doubt many farmers do not get more than half the service they are entitled to receive from their farm implements and machinery. Very often the largest item of loss comes from exposure to the weather when not in use; but the lesser losses from neglect in oiling, tightening nuts, putting on washers, sharpening knives or putting on new ones, are large in a great many cases, and are indeed appalling in the aggregate if their cost could be computed. There is a tendency in the time of a rushing season to let things go, thinking that to get the present job done is all that need be attended to.

It is a profitable practice whenever possible to mend a thing showing signs of weakness before it breaks, which can often be done with wagon and buggy wheels and the like, as well as harness and many other contrivances that cost money and must be kept in use. Much repairing can be done at home without expense, but when a mechanic's tools and skill are needed it is economical to have him do the job. To sum up: Keep rigs and implements always housed, in "shipshape," clean, well oiled and painted.

If every farmer would study his business in every way possible, economize where wisdom prompts—which would never direct a man in doing without a good agricultural paper, nor in starving his body, nor that of any person or animal upon his farm—there would be less discontentment, and bills coming in that cannot be met, than is now found upon many farms.

A case was reported from Kent, Eng., lately, where five inmates of one home were prostrated with sudden illness, caused by using milk which had been dosed by the milkman with boracic acid as a preservative. Cleanliness and proper temperature, so far as the latter can be maintained, are the best preservatives.

Saving Corn Fodder.

Whether corn fodder has been grown properly or otherwise, all that can be done now is to save it properly. In early sections much of the crop will be cut, but very little is yet removed from the field, except that put into silos.

In the great corn-growing States, the value of the stalks is largely lost sight of, but Canadians waste little of the stover, except through carelessness in saving. One method of handling the field corn crop is to pick off the cobs as soon as the inner husks become white or yellow. The stalks can then be cut and bound into fair-sized bundles and stacked up to cure in large shocks. If the crop is cut before the ears are removed, it may well stand in the shocks until ready for the crib, when the stalks will be ready to be hauled to the barn or stack. Some prefer hauling to the barn before husking, but that involves extra handling in removing the cobs and in storing the fodder. It is all well enough to have a few loads in the barn to husk on rainy days, but the bulk of it is better done in the field.

Either stacks from which the ears have not been removed or corn fodder piled in large quantities in the barn deteriorate very rapidly through heating and otherwise. As fast as the corn is husked, bind it in convenient-sized bundles for handling with a fork. Binder twine answers well for this purpose, as by it the bundles can be made as large as desired. Some use bands of oat straw. The stalks when properly cured will keep well stood on end in the barn or stacked in round or square stacks of small diameter. To commence a stack, throw down a few poles or rails to make a stack bottom eight or ten feet square, set a pole up in the center twelve or fourteen feet high to build around, and begin in the middle and get it four feet high by the time the first layer of butts is laid at the outside. Keep the middle full so that the bundles will slope well, the butts being at least four feet lower than the tops. Carry the sides of the stack up straight until it is ten feet high, and then gradually narrow; round top out like a shock, tying the top closely to the pole set in the center. These stacks should be conveniently located so that they can be hauled into the barn as they are needed to feed.

With strictly fodder corn the manner of cutting varies with different persons and in different localities. Few methods have been found better than hand cutting. It is well to allow it to wilt a day or more before tying; then tie with the tough leaves, small stalks or binder twine. Round shocks of twelve bundles are about right, as they stand well and do not mold. Long shocks built against poles resting on cross stakes are conveniently put up and usually stand and cure well if carefully built. Two rows on a side, stood almost straight up, and well bound around with binder twine, is a plan liked by many. After standing for a month in good weather, it is then ready for the barn or stack, as recommended for the fodder of the ear corn. There is more danger of molding with fodder corn than stover, as it usually contains more sap. For this reason the stack should be of even less diameter than is necessary with the stover. A good mode of procedure in building a stack, having the 15-foot center pole inserted two and a half in the ground and the bottom made of short rails, well raised in the center, is as follows: The stacker stands close to the pole, with his left arm around it to hold himself on, and lays the corn bunches, butts away from the pole and tops reaching past the pole on the side next himself, two feet or more, according to the length of the corn. Thus he continues going round and round until he is ten, twelve or more feet high, when the last four or five bunches are placed with their tops up the pole and firmly tied, when the stack is finished. As the stacks settle the sides alone drop, so that they are absolutely waterproof, if care has been exercised in fitting the sheaves and keeping the stack firm against the pole. This method keeps the corn moist without mold and with little waste from mice.

Pumpkins for Cows and Hogs.

The farmer who has been provident enough to grow pumpkins among his corn or in patches adjacent to the barn has a valuable adjunct to his other fall feed, especially in Eastern Ontario, where pastures dried up very early. They can be profitably fed to hogs as well as cows. When one has a feed-boiler and a little rough wood, pumpkins can be boiled along with peas or barley with very little fuel. One good firing-up will render the whole mass of finely-divided pumpkins into a fit state to be mashed up along with ground barley or other grain. Such food is extremely palatable, and when mixed twelve hours before feed will be in fine form to enter the animal economy to excellent advantage.

For cows, one or two good-sized pumpkins fed once or twice daily will increase the milk yield and prevent a loss of flesh. Whether one has pumpkins or not, it will never do to allow the cows to drop in their condition and milk flow. A little of the corn that had been intended for winter will give better returns fed at such a time than if held till the housing season.

A Scottish exchange reports that two men were lately sentenced by the Wolverhampton Stipendiary to three months' imprisonment, with hard labor, for plucking fowls while yet alive.

Rye Hay.

To the Editor FARMER'S ADVOCATE:

SIR,—In many sections of Canada this year the hay crop was poor. This, following a year such as the last one, in which both timothy and clover were cut down by a May frost in the greater part of the Western Ontario peninsula, has made many farmers look to other plants for winter forage. Of course, corn is our great grass, and, whether used in the form of silage or dried in the stalk and cut as may be needed, makes the best and cheapest winter stock feed. Next to it comes winter rye, cut green and cured as hay. While rye hay is not as good as timothy, yet it gives an abundance of good, palatable food. It may be sown any time from the middle of August till the last of October. In the latter case, only when the late fall is favorable may good results be expected. It may be sown the same way as fall wheat, in which case it does well as a nurse crop for grass seed, but good results are obtained by sowing on a stubble field without any preparation. It is now usual to seed down every white crop sown in the spring with clover. If the catch be good the clover may be left for a crop next year, but the past two seasons have not yielded very good catches of clover, and on these it is a good plan to sow the rye. If the ground be hard, it is well to wait till after a good rain has mellowed the surface, and sow in drills with the seeder from a bushel and a half to two bushels per acre. Thick seeding gives a finer straw and is preferred if the crop is for hay or for pasture. Sometimes the field has been harrowed before seeding, sometimes harrowed after; rolling has also been tried. This year the rye was sown without either of these aids; merely sown on the stubble, and the catch is good. It is not yet too late to try this in fields where the catch of grass and clover, or clover alone, is poor. A good mixture of clover with the rye very much improves the hay for cattle feed. If the growth be rank in the fall, it should be pastured by sheep or young cattle. The mixture of rye and clover makes excellent early spring pasture where the soil is dry, and does not readily become "poached" by the trampling of the stock. This, followed by rape sown in June, cleans a field and gives a lot of summer feed. If left for hay, the best results have been obtained from mowing when the rye had flowered and the clover blossomed. Cut with the mower and treated like hay, it gave excellent forage. Cut with the binder and stooked, it took a long time to dry, and the sheaves weathered more than was desirable. Having tried both ways, cutting with the mower and handling like hay is preferred. The sheaves run through the cutting-box and mixed with cut corn make good feed. To those who have not tried this plan of sowing rye on a stubble field the results will probably be a surprise. Rye hay is a valuable addition to our list of forage crops. D. McCRAE, Guelph, Canada.

A Big Silo.

It is said that the largest silo on earth has been built on the McGeach estate, Jefferson Co., Wis., under the management of Mr. Elijah Harvey. It is round, 62 feet in diameter, and 80 feet from bottom to top of cupola, or from bottom to top of plate, 40 feet; the lower nine feet being below ground, which was constructed of stone, also the floor, both cement-plastered. The upper portion is of lumber, tar paper, coal tar, etc. It took 72 cords of stone, 62,000 feet of lumber, and a big wagon load of nails to build it, and a writer in the *Prairie Farmer* puts the cost at some \$2,400, the capacity being estimated at 3,228 tons; enough to feed 350 cows 50 pounds a day for a whole year. We would say that another "big thing" about this silo was the big mistake it was to build one of that capacity instead of a number of smaller ones.

POULTRY.

Cull the Young Flocks.

In every hatch of chickens the average production of males and females is about equal. The result of this law of nature is that at this season of the year the yards are crowded with young roosters whose sole occupation is to eat food and worry and tease the pullets. This constant worrying prevents the growth and well-doing of the pullets, and should be prevented. Cull out the young roosters and as soon as ever they are fit for broilers or roasters let them be killed. They will pay better then, even if the price be low, than at any other period. As they grow older they become more restless, quarrelsome, and a greater nuisance to the pullets, and neither thrive nor fatten so well themselves nor permit the pullets to do so. When culling out the roosters, cull out also all the small, undersized pullets and put them to themselves and push them for the market or home table. In this way the pullets to be kept for layers will be a select lot of fine, healthy birds. These are likely to make the best and earliest layers, and will produce the finest and earliest chickens. It is possible by practising such a system of culling and selection, and by mating with roosters of new blood, also selected for like good points, to materially increase the size and good qualities of the whole flock. The influence of selection is just as great amongst poultry as amongst other live stock.—*The Southern Planter.*

DAIRY.

A Long Distance Test.

Under direction of the Government, samples of butter were shipped from Victoria to England and back in order to thoroughly test their keeping qualities. It speaks volumes for the perfection to which the Antipodes have attained in the matter of making, packing, and shipping facilities when all the samples were found, after their 24,000-mile trip, to be in splendid condition. The striking qualities of one lot were its dryness and absence of salt, it being treated with only two pounds of salt and three-quarters per cent. preservitas to the one hundred pounds of butter. In another sample four pounds of salt was used and one-half per cent. preservitas. The Government expert at the final test felt prepared to pit the samples against any other butter in the world at that age.

Good Buttermaking in Victoria.

Mr. W. Roberts, a buttermaker of repute in Victoria, judging from the number of prizes he has captured all over that colony, in describing his method, first emphasizes the necessity of perfect cleanliness in milking (dry hands) and in everything with which the milk, cream and butter come in contact.

As soon as the cream comes from the separator, he says, it should be cooled by putting the vessel containing the cream in cold water and leaving it there until perfectly cold. Second, never put warm cream in the same vessel as the cooled cream; never mix the cream until it has also been cooled. Third, never churn the cream until it has ripened for about three days. Before beginning to churn rinse the churn first with boiling water and afterwards with cold water. To every 10 gallons of cream, the temperature of which should be from 58° to 62°, add two teaspoonfuls of saltpetre and six teaspoonfuls of sugar dissolved in boiling water, and put into the churn when cool. The churn should be turned gently and regularly, as too much speed causes a lot of gas and makes the cream frothy, which will make soft and inferior butter. Some dairymen approve of stopping the churn when the butter is about the size of a pin's head, but he thinks that this is a mistake, as a lot of the cream which gathers around the churn is lost, and if it be washed, of which he does not approve, this cream must all be washed away with the water. The butter should be about the size of marbles before the churn is stopped.

The butter should then be put in the butter-worker and worked until all the buttermilk is taken out. The buttermaker should not be afraid to work the butter until it is free from buttermilk. He prefers dry-working to water-washing the butter, being confident that he can make butter by the dry process that will keep as well as any butter that has been washed, and he advises dairymen who wash their butter to give the dry process a trial. He has made butter by the dry process for the last 20 years, and always found it to be of good keeping quality. If there is any buttermilk in the butter, it will not only be of bad keeping quality, but of loose consistency and bad appearance. After the buttermilk has all been taken out, the butter should be weighed, and about two pounds of salt and twelve ounces of preservitas added to every hundred pounds of butter for export; a quarter of an ounce to every pound of butter for market.

"Sixteen to One."

This is what we want—sixteen good grade cows to one thoroughbred bull, and when we get them we will be in a way to make at least a little money in the dairy. It is hard lines, no one denies that, but it even is worse for others. There are more people in the cities who are suffering than there are in the country, and while that does not help us any, still it ought to keep us from grumbling so much. And, by the way, what good does grumbling do? It does not make the cow give any more milk, while an armful of extra green feed very probably would. Good times may come, and they may not. And the wisest thing for us to do is to adjust ourselves to these circumstances, and do the best we can.

I have no patience with the man who says the present hard lot of the farmer is due to his extravagant way of living. I never could see the reason why the farmer was not entitled to just as many of the pleasures of this life as the lawyer. But be this as it may, it is a condition that confronts us, not a theory, and that condition is one of unprecedented low prices. We cannot say how long these prices will continue, therefore it seems the best thing for us to do is to adjust ourselves to these circumstances, and get along as best we can. We may talk all the politics we want, so long as we do not let politics interfere with our work; but if in the meanwhile we keep on hoping for good times, and make no provision for the present bad times, we stand a good chance of having more trouble than we have now.

There are men who now at this present time are making a living from their dairies, and if one man can do this why cannot we? But the man who is making anything from his cows these times has no cow on his place that is not paying her board, and a little profit; the milkman does not go down

to the stable with his bucket only partly clean; the cream is not kept in any sort of condition and churned when convenient; but from the beginning to the end of his dairy work there is the most careful and painstaking oversight of the smallest detail. And it is by such work, and only by such work, that there can be any money made in dairying at the present time.—P. B. C., in *National Stockman*.

Cheese Branding Bill.

The Bill providing for the branding of Canadian cheese, introduced by Mr. McLennan, M. P., of Glengarry, has passed its second reading in the House of Commons, which virtually means that it becomes law, unless interfered with by the Senate. By it no person shall sell, offer, expose or have in his possession for sale cheese of any factory in Canada manufacturing for export unless the word "Canada" and the day and month of manufacture and the registered number of the factory are "branded, marked or stamped" both on the cheese and on the box before leaving the factory, in letters not less than $\frac{3}{8}$ of an inch high and $\frac{1}{4}$ of an inch wide. The registered number must be obtained from the Dairy Commissioner at Ottawa, to whom particulars as to name, location, owner of factory, etc., are to be sent, as per schedule provided. The penalty for violation of this Act is a fine of not more than \$20 nor less than \$5 for every such cheese "sold," etc., with costs, or in default, not more than three months in jail. This law is to come in force on January 1st next.

Form of Agreement.

From the Secretary, Mr. J. W. Wheaton, London, Ont., we have received a copy of an extended blank "form of agreement" for use between cheese companies and cheesemakers, recommended by the Dairymen's Association of Western Ontario. It is printed in good plain type, with blanks left for names, etc., and copies of it may be had by applying to the Secretary. It should prove very useful both to factory-owners or companies and makers, especially when the time for making next year's arrangements comes around. There are clauses providing for testing milk by the Babcock test and payment by the butter-fat percentage, if so desired. We note with pleasure, also, a clause whereby "the party of the first part" agrees to keep drains, etc., in proper working order, and the "party of the second part" undertakes to thoroughly wash out the whey tank at least once per week. Despite all that has been said on these two points, we have noticed some decidedly rank odors again this season arising from whey tanks and open drains from factories that were in a most offensive condition.

APIARY.

Removing Honey from the Hives.

The honey-gathering season is about over, and the final taking of honey out of the hives will shortly be in order. This, to the novice, is a more important operation than some may think, and it may be done either in a manner to keep perfect order amongst the bees or to thoroughly demoralize them. If done in a clumsy and unwise manner, the bees become vindictive and thievish, and if they once commence the latter they are like other thieves—they prefer that to honest work. All who have section crates to take off, and do not wish to go to the expense of the bee-escapes to fit on the top of the bars in each hive, it is advisable just to get pieces of calico cut to the size of the top of the hives and introduce these under the crates containing the sections, after having first dipped the calico in water having a little carbolic acid mixed with it. Wring out the water, and having first given a puff of smoke all around the bottom of the section of supers to subdue the bees, let one operator raise the section crate and another quietly draw the calico across the top of the bars and then put back crate; and, of course, if one or more of the now well-known conical perforated bee-escapes are fixed on the upper part of the cover, the bees will all clear out of the supers in a few hours, and the crate can then be removed without the slightest further disturbance of the bees, or without in any way raising their anger or jealousy. This is a great point gained, as in the further overhauling of the frames in the brood-chamber that ought to be gone through you commence the work under more favorable conditions than if the bees had been made angry previously; but before commencing this work it is a good plan to clear off all the supers first.

Regarding the amount of honey to be left in, it is well to take out every bar of good honey in every hive, and then put back bars with empty comb as far as in stock, making up the number to seven bars with full sheets of foundation. Feeders may then be put on, and give the bees syrup or buckwheat honey; or frames of buckwheat honey may replace those removed, to enable them to fill up at once. It is impossible to say how much is to be given, as the amount differs with each hive, but every colony should start the winter with not less than 25 pounds of stores, and if the amount of brood will admit of it, 30 pounds.

Keep the floor of the henhouse clean, spray the roosts and walls with kerosene emulsion or lime water, and there will be no vermin. The chickens can be removed, the doors and windows closed, and sulphur burned inside the henhouse. The fumes will kill all the pests.

Preparing Honey for Market.

This subject cannot be harped upon too much. We have not forgotten some of the unsightly sights that we saw last year in some of the honey commission-houses in the line of honey supposed to have been put up for a respectable market.

In these times of closest competition, it behooves every one to put up honey in as neat and attractive a manner as possible. When it comes to receptacles for extracted honey or shipping-cases for comb honey, only the very best must be used. It will not pay to try to save a few cents in this and run the risk of losing dollars when your honey reaches the market. The trade in various cities or localities often varies in its requirements as to style and size of package. Hence, it will be wise to first learn just what is demanded, and then comply therewith as nearly as possible. If your dealer's customers want comb honey in 24-lb. single-tier shipping-cases, see to it that they are accommodated. Some people are whimsical, and yet if they are willing to pay for being so, no one need object.

Another thing—and it has been spoken of so often—whatever you do, be sure to clean every section of honey of every particle of bee-glue, scraping them thoroughly, if necessary, in order to attain the object. A little time spent in this will not be lost. Also, grade your comb honey when putting it into shipping-cases; and let the sections next to the glass front be fair samples of those further back. Some dealers object to the producer's post-office address being on each case or section, but we think none will care if only the name appears. We believe it would be a good idea for every beekeeper to put his name upon every section of nice honey that leaves his apiary. This can be done easily and rapidly with a rubber stamp. Then the consumer can call for more of Mr. So-and-So's honey, and a demand will thus be created.

Other ideas will no doubt suggest themselves to every wide-awake producer of honey who reads this. As in most other things, it will pay well to use brains in the preparation of honey for the market.—*Am. Bee Journal*.

QUESTIONS AND ANSWERS.

[In order to make this department as useful as possible, parties enclosing stamped envelopes will receive answers by mail, in cases where early replies appear to us advisable; all enquiries, when of general interest, will be published in next succeeding issue, if received at this office in sufficient time. Enquirers must in all cases attach their name and address in full, though not necessarily for publication.]

Veterinary.

QUITTOR—HOOF DISEASE.

J. W. MINTHORN, Montana, U. S.:—"I have a Norman mare lame since last spring. Her mate stepped on her off fore foot, which did not at first cause much damage. After a time it swelled up around the coronet; I turned her out to pasture, expecting her to get well. I kept poulticing the part for a week, but as it did not make any improvement, I called in a veterinary surgeon, who left some white powder to be dissolved in water to wash the foot, but he did not say what was the matter. She goes on three legs yet and tries to step on it a little; the sore keeps running. Please let me know, through the next number of the *ADVOCATE*, what is best to do for her?"

[The term "quitter" is applied to any suppurating wound on the coronet above the hoof. It may proceed from a corn, bruise, pricks from a nail in shoeing, or, as in this case, from a tread. Draft horses are more liable to this disease from tread of another horse than light harness horses. It first appears as a conical swelling or tumor of slow growth, painful in character and obstinate to heal. This is due to the fact that horn structure is of a low organized character; the pus or matter is liable to be confined, and in its efforts to escape forms sinuses or pipes in various directions.

Treatment.—This depends so much upon the skill of the attendant that it is difficult to advise with any degree of certainty. First of all it is necessary to find the direction of the sinuses by means of a probe; afterwards inject into the cavities a strong solution of carbolic acid, one part to four of glycerine; apply some ointment of carbolic acid to the outside until improvement takes place. Some of these cases are quite incurable.

DR. WM. MOLE, M. R. C. V. S., Toronto.]

INFLAMMATION OF THE OMASUM OR THIRD STOMACH.

DAVID RANSOM, Stormont, Ont.:—"I would like to ask your opinion as to the cause of death of three of my cows. Feed being short, I began feeding, about the 1st of August, sweet corn. I cut enough to feed twice, and turn out to pasture during the day. They drink from the St. Lawrence, and there is no stagnant water about. One cow died about August 26th; she gave about her usual quantity of milk in the evening, and I found her dead next morning, and buried her without making any examination. On Tuesday of this week (Sept. 1st) I lost another; symptoms the same as the first. They were fed at night, and I started to milk her, when she leaned against the side of the stall, and I then let her out and she died soon after. On Wednesday morning I noticed another had fallen off her milk, and she seemed anxious to go to pasture, and I let her go; I found her dead at noon. On opening her, found all apparently well until we came to the paunch (third stomach), and found the covering of the inside dark brown; it peeled off like wet paper where the corners were turned down.

The lining seemed drawn apart, and would slip off in your fingers. Some of the small bowels contained blood; they were dark purple color in both cows. All three died of the same cause, as all the symptoms, so far as we could see, were alike. I am anxious to know the cause or what might lead to it. Your answer will greatly oblige."

[You have very well described the symptoms of this disease, and it is known under a variety of names. We prefer "plenalvia," but it is known as dry murrain, maw-bound or fardel-bound. It is caused by the impaction of food in the stomach or food which is coarse and indigestible or fed in such a way as will, after a time, produce this condition. It very often appears towards the end of protracted seasons of drouth; therefore corn that is of a dry, fibrous nature will cause this complaint; hence arises the name "wood evil." In fact, it may be taken as a rule that any food which does not contain nutriment in proportion to its bulk is almost sure to bring on the disease.

Symptoms.—As you have not described all that were present (you might probably not have taken note of them), we will. Ruminant was irregular ("she did not chew her cud regularly"), the dung smelt bad and did not look well-digested, was black and glazed in appearance. In acute cases there is an unsteady gait, she reels, falls to the ground and cannot be made to rise again; this delirious condition is succeeded by coma or stupor and death. We have seen as many as six deaths in a large herd from eating old fog grass—that is, grass that has lain all the winter until spring—and from that cause is known as fog sickness. Upon a post-mortem the omasum will be found full of dry, hard masses of food lying between the leaves, more nearly resembling linseed cake than anything else, which will break between the fingers.

The treatment that you have adopted of changing the food to bran mash, cut turnips, boiled flax seed, etc., is to be recommended. Do not give linseed oil, as we are of the opinion that it is answerable for the death of many a good animal, unless given in small and repeated doses. Give the following: Epsom salts, 12 ounces; aloes powder, 2 ounces; ginger, $\frac{1}{2}$ ounce; in large quantities of linseed gruel. We deem it right to say that so various are the symptoms and so dependent upon the particular cause of irritation, that no general outline can be given of disease of this organ.

DR. WM. MOLE, V. S.]

BOG SPAVIN.

SUBSCRIBER, Ontario Co., Ont.:—"Could you inform me, through the *FARMER'S ADVOCATE*, what to do for a 'bog swelling' on a colt's hock joint; it came on last winter. Is there any means of shrinking it without blistering? Can it be taken off successfully? What would you do for it?"

[This is an enlarged condition of the bursa of the true hock joint, and generally arises from over-exertion. There is a truss manufactured to reduce them which is often very successful without blistering; an absorbent lotion is also to be recommended. We would prefer a long period of rest, with a blister repeatedly applied.

DR. WM. MOLE, V. S.]

POSSIBLY ACTINOMYCOSIS.

SUBSCRIBER, Port Elgin:—"Will you please advise me with regard to my year-old heifer? She has large lumps coming between her hind legs, about the size of two fists, which look like warts. I have two other yearlings which have small lumps about the neck. What is the trouble, and will you please advise as to treatment?"

[From the very brief description it is almost impossible to say what can be the cause of the lumps. It is very unusual for warts to appear in animals so young, and it is about the age that actinomycosis first appears. Obtain the advice of a qualified veterinary surgeon.

DR. WM. MOLE, V. S.]

Miscellaneous.

PANICUM GLABRUM.

M. H. HARRISON, Huron Co., Ont.:—"I enclose you specimen of plant which I found in a newly-seeded field. I think it must have been in grass seed. Can you tell me, through the *FARMER'S ADVOCATE*, what it is, and oblige?"

[This grass is an annual digitate panicum (*Panicum glabrum*), which in cultivated soil may become a weed. It is sometimes called crab grass, but in Ontario is much rarer than the common crab (or finger) grass, which it greatly resembles. The latter, owing to its habit of rooting at the joints, is much more troublesome.

JOHN DEARNESS, I. P. S.]

SICK FOWLS.

WILLIAM EDGE, Minford:—"I have about 35 or 40 hens. About every month one or two of them die. Their combs and ears turn a dirty yellow; they seem quite stupid for a day or two, and then die. I feed them principally on wheat, with milk and water. Please give me cause, and cure?"

[It is difficult to locate the cause of the disease affecting your fowls. You do not give particulars enough. Discoloration of comb always appears with any sickness. If your hens are fat and lazy, I would advise you to stop feeding milk and only feed what wheat they can eat up quickly at night. Give them plenty of sharp grit and clean spring water, and make them hunt around for the bulk of their food.]

RED TURNIP-BEETLE.

A. K. ROBERTSON, Souris, Man.:—"Would like to know the name of, and remedy or preventive for, the insects which are attacking my turnips, a couple of which I enclose herewith? They have been destroying my turnips for several years past. Please answer in next issue of the FARMER'S ADVOCATE."

The beetle enclosed is the red turnip-beetle, fully described by Dr. Fletcher, Experimental Farm Report for 1892. The description and remedy there given is as follows: "A showy scarlet beetle, with three black stripes down its back, a black patch on the collar, and black legs; two-thirds the size of the Colorado potato-beetle, but narrower in outline; eating the leaves (both as larva and perfect beetle) of turnips, radishes, and cabbages."

"Remedy.—As soon as the beetles appear upon turnips or radishes, the foliage should be sprinkled with Paris green and water, one lb. to 100 gallons. From the fact that the eggs are laid in largest numbers on land where a crop has been attacked, of course a similar crop should not be grown there the following season."

Dr. Fletcher recommends the following as the best treatment at this time of the year: "Dust the turnips with Paris green and finely sifted wood ashes in the proportion of one pound of the poison to 40 or 50 of the diluent."

THRESHING VERSUS CUTTING OATS AND PEAS.

W. H. W., Huron Co., Ont.:—"1. Is it more profitable for a man on a small farm, with a good deal of time on his hands in winter, to cut his oats and peas with the straw-cutter and feed all together, or to thresh the grain with the machine and have it ground? 2. Will cattle and horses do as well on the former as on the latter?"

[1. This is a subject upon which there has been considerable thinking and experimenting during the last few years. It is very difficult to give an answer that all men, even if equally situated, could successfully follow. No doubt there are times when the expense of threshing and grinding can be avoided. We refer especially to oats harvested decidedly upon the green side, so that the straw will resemble hay to a good extent; but when the crop has ripened, we question whether the feeding of either oats or peas simply run through a cutting-box is not too haphazard to warrant such a plan. In the first place, it would be very difficult to determine the amount of grain being fed, and this should be known, especially with idle horses, to avoid waste and harm. Again, anything like a uniform mixture could not be expected from day to day, because the peas especially, and to some extent the oats, would work to the bottom of the heap. It appears quite evident that unless the feed were cut each day, and fed in the most careful manner, there would be too much uncertainty and waste with such a practice.

When the grain is threshed and ground, one knows exactly what he is feeding, and in order to save the expense of machine threshing, the spare time might be profitably employed handling the flail, especially with the oats, while the peas could be tramped out with the horses. When the straw is to be fed, a little grain left in the straw would not be objectionable. 2. With regard to the second question, it might be said that the stock would do equally well in either case, provided the mixture was of the same consistency and fed with the same regularity. The above would be our plan, but we would be pleased to hear from practical men who have anything to say upon the subject. If there is any plan of saving expense, we are always eager to learn it, because, to a large extent, the money saved materially swells the amount made.]

VETERINARY.

Colic in Horses.

At this season of the year, when farm horses are commencing to be fed new oats quite liberally, especially as they are low in price, there are sure to be occasional attacks of colic. There are two distinct kinds of colic—spasmodic and flatulent. To the inexperienced the symptoms are the same, save with the exception of bloating in the latter. An overfeed of new oats, ground barley, or a copious draught of cold water while the animal is warm, will frequently induce the derangement. When first taken, the animal grows uneasy and sweat rolls off him in beads. He lies down, and, indeed, often drops heavily, when there is danger of rupturing the stomach. To avoid this he should be deeply bedded with straw or stayed with continually, and prevented from dropping, if possible. The patient rolls and looks back at his flanks and kicks his belly. Attacks soon pass off, to return with greater violence if not checked.

For this spasmodic sort of colic, chloral hydrate (one ounce doses in a half-pint of water), together with an application of thin mustard to the belly, will usually bring relief. Another most excellent remedy is sulphuric ether and laudanum, each two ounces, in a pint of raw linseed oil.

For flatulent colic, which is accompanied with bloating, baking soda in from three to four ounce doses will usually give relief. Carbonate of ammonia in half-ounce doses is also good to neutralize the gases, which is the proper thing to do. Much can be done in the way of relief by giving warm canisters, per rectum, of soap-suds, in five or six quart quantities, followed with an ounce of turpen-

tine and eight ounces of flax-seed oil. The object of injections is to facilitate the escape of wind, which will at once afford relief. Prevention is the best cure, and this can be best accomplished by exercising wisdom in feeding and watering. After an attack the horse should be sparingly fed for some time upon bran mash, with a small quantity of linseed meal added.

LIVE STOCK MARKETS.

Toronto Markets.

Export Cattle.—Private cables from London, Eng., say that the sales of Canadian cattle were fair, but the general complaint among the dealers here is that there are no good cattle fit for export, though plenty of the poorer sorts. The consequence is trade dull and prices weakened; price, \$3.50 to \$3.81; one load \$4, top price. The principal operator was Mr. Eakins. Ten carloads were purchased, about \$3.50 to \$4; lack of space is now the complaint of the exporters. One carload of cattle, 1,300 lbs. average, \$3.60 per cwt.; six cattle, 1,400 lbs. average, \$4; one carload of cattle, 1,200 lbs. average, \$3.80; one carload of cattle, 1,340 lbs. average, \$3.70 per cwt. As is generally the case during the fair week, the cattle market is quiet. There were one or two bunches of stall-fed cattle on the boards; all sold readily at the top figure.

Butchers' Cattle.—Very fair butchers' cattle sold all the way from 1 1/2c. up to 3c. per lb. For local trade, best butchers' cattle sold for 3c., in one or two cases a trifle over, but the average price, 2 1/2c. to 2 3/4c. per lb. Receipts to-day: 55 loads of cattle, 1,300 sheep, 1,000 hogs, and 20 calves.

Bulls.—Bulls for export are in fair request, at from 3c. to 3 1/2c. per lb.; about 14 on offer. Dealers are willing to pay even a fraction more, if they can get bulls of the right quality.

Calves.—About 100 head of calves shipped out for the Buffalo market by Mr. Sharpmiller. No change; choice veals fetch \$5 per head. A few wanted for export at this figure; good ones bring from \$2 to \$5 per head.

Sheep.—Shipping sheep are worth from 3c. to 3 1/2c. per lb.; only the very best wanted. Butchers' sheep are dull at from \$2.50 to \$3 per head. Offerings were more liberal and the market was somewhat dull; the ruling figures were from 3c. to 3 1/2c. per lb. Mr. Dun was shipping 500 for the Old Country market.

Lambs were on slow sale; Capt. Verral was the chief operator. Mr. Kinnear sold 200 for Buffalo; prices ruled at from \$2.25 to \$3 per head. One bunch of 75-lb. lambs sold for \$2.40. Some lambs that might have sold a day or two ago for \$3.50 each sold for \$2.75 to-day, and were booked for Buffalo.

Milk Cows.—Good milk cows wanted; prices ranged from \$25 to \$35 per head. A few wanted for export at this figure; good ones bring from \$25 to \$35 per head. Trade moderate; 30 head on offer. Sales were slow; too many common cows are coming forward.

Hogs were in poor supply; best of cars, \$4.15 per cwt.; large porkers, thick fat, \$3.25 to \$3.75. Stores are not wanted and cannot be sold if they are sent in. Heavy fat hogs are quoted at 3 1/2c. per lb.; sows, 3c.; and stags, 2c. per lb. Prominently posted is the following notice: "No store hogs will be bought or sold on this market for feeding purposes." This is to prevent spread of disease. Bulls not wanted either. Prospects are not good for next week, and are only steady.

Hides and Skins.—The supply is just equal to the demand; the market steady and prices are relatively higher in Canada and the United States. Local dealers are paying 5 1/2c. and selling cured at 6c., but prices have a downward tendency.

Some heavy articles, higher to-day; 50c. for fresh slaughtered and 55c. for pelts. Dealers are making no efforts to sell, but they are not buying much.

Wool.—There is a very limited demand from home mills; only a few sorting-up orders received. A large quantity of foreign wool, amounting to 5,000 bales, has been reshipped to England from three mills.

Butter.—Receipts have been more liberal for the last week; quality better. Creamery is worth 18c. to 19c.; dairy rolls, 20c.

Eggs.—Rather small, 17c. per doz.; liberal supplies.

Grain Market.—Wheat and coarse grains are dull and prices easier.

Apple Crop.—Much interest is being taken in the apple export business, owing to the abundance of this season's crop and the larger value that there is for export. A great deal has been sold at 50c. per barrel. It is said that some orchards that produced last year only 200 barrels will this year yield 1,000 to 1,200 barrels. The necessity of shipping only good hard apples is being impressed on the trade.

Sept. 11th.

The Canadian Egg Trade.

According to the Canadian Gazette, Canadian eggs, like Canadian bacon, are gradually winning their way into the English markets. The principal demand is for fresh and pickled eggs, refrigerator stock not being wanted at all. The exports of fresh eggs have begun rather earlier than usual this year, as the demand for these selections into Great Britain is over. When the flush of the foreign market is over, a more profitable market for Canadian fresh-laid August eggs, which are considered the best of the year. This season, however, 2,350 cases have already been shipped from Montreal, against only 78 cases for the corresponding period last year. Liverpool is the chief market for Canadian eggs; for of the above ship ments, 1,682 cases went to the S.S. Peruvian, to Glasgow, and ten cases to Bristol. A small lot of ten cases went to Antwerp. Some heavy articles have been made with English firms for November-December delivery of pickled eggs, at prices ranging from 6s. 3d. to 6s. 9d. per long hundred of ten dozen.

Toronto Horse Market.

Trade for the last two weeks has been quiet, but prospects are good for the resumption of export shipment. Three English buyers are now searching for exports. This would seem to indicate a prospect of better markets at an early date. The recent sales of horseflesh at the Old Country markets prove that if only the right sort of horse is put before them they need not seek buyers. Dr. D. McEachran's consignment realized 30 guineas average. Dr. Notman, of Queen street, sold off the whole of his stock of harness horses and carriage. He is removing to Dayton, Ohio, U.S.A.

British Apple Markets.

Woodall & Co. report that 21,871 barrels of apples arrived at Liverpool this week, against 2,567 last season. Only 5,300 of these barrels were Canadian, of which the most recently landed showed a decided improvement in quality and condition. Sound fruit sold as follows: Gravenstein, 11s. 3d. to 15s. 10d.; Sound fruit, 9s. to 12s. 3d.; Culvert, 8s. to 12s.; Jennet, 6d. per barrel; Blush, 9s. to 12s. 3d.; Cabachaw, 12s. to 13s. White & Co. report the arrivals on the London market still small, but the demand has improved, as the English supplies are falling off. The bulk of the Kent and Berkshire fruit will have been on the market next week, which means a splendid opening for good fruit for the remainder of the season. Liverpool, Sept. 12.

The British Markets.

These markets show considerable fluctuation in prices, up to-day and down again to-morrow. The shipments have been very heavy and continuous, but with the expected lighter runs for the next couple of weeks, the probabilities are that the markets will firm up considerably. Best States cattle are selling at from 11c. to 11 1/2c. per lb. this week (a trifle better than last week), and Canadians, 10c. to 10 1/2c. per lb. These quotations are for dressed beef, sinking the offal. Sheep farmer, 1c. to 1 1/2c. per lb.

The Montreal Markets.

Since last writing heavier shipments of cattle have been offered on each market, occasioned in the first place by a train load of Manitoba cattle which were thrown on the market owing to the scarcity of space. The poor quality of these cattle also helped in keeping them longer unsold than would otherwise have been the case. They were a little better than what are commonly called butcher cattle and not good enough for shipping. This train load on the market ran the receipts up to 800, followed on each following market by runs of about 600 head. As may be expected in the face of these heavy receipts, drovers stood to lose considerable money, and they did. One lot of twenty head, costing \$20 per head in the country, sold for just \$14 each. That was last Thursday, since which no improvement has been experienced.

Export Cattle.—A few very choice exporters sold up to the 1, but the larger number taken for export ranged from 3 1/2c. to 3 3/4c. per pound, butchers' stock from 2 1/2c. to 3 1/2c. for fair to best. A clearance has not been effected for over three weeks.

Sheep and Lambs.—The demand for sheep for export accounts of an up-and-down nature, one day very good and the next very poor, or none at all. This is of course due entirely to the amount of space obtainable by shippers. On last Monday's market the highest price paid was 3c. per pound, a decline of 1/2c. to 1c. per pound from the previous prices paid; this was maintained to-day. Butchers' sheep range from \$2.50 to \$3.25 each as to quality. Lambs on the whole meet with very good markets, selling freely at from 3c. to 3 1/2c. per pound, and even as high as the 1/2 in some instances. What few calves are offered generally make from \$2 to \$5, now and again one of a better quality making an advance on this figure.

Live Hogs.—The offerings of hogs just about equal the demand, about the only difference in price being the difference in quality. Nice light hogs on Monday made up to \$4.15 per cwt.; heavy, fat and mixed lots ranging from \$3.75 to \$3.90 per cwt.

Shipments of Live Stock.—The shipments of stock for the month of August were the heaviest of any previous month this season, the entire gain of a little over 2,000 head of this season to date over last season being made in this month, the following showing a list of shipments for the month of August, compared with the same period for the past four seasons:—

Table with 4 columns: Year, Cattle, Sheep, Horses. Rows for 1896, 1895, 1894, 1893, 1892.

Also total for the four months ending August, with comparative figures for the past four seasons:—

Table with 4 columns: Year, Cattle, Sheep, Horses. Rows for 1896, 1895, 1894, 1893, 1892.

The shipments for the week ending Friday last show a decline of over 1,000, compared with the previous week, which were as follows:—

Table with 4 columns: Total for week, Last week, Cattle, Sheep, Horses.

The shipments for the next two weeks will also be light. The first shipment of the season by way of Boston will go through this week. They are being shipped by Messrs. Gordon & Ironsides, on the S.S. Peruvian, to Glasgow, and are to be followed by others, the space being engaged.

Hides and Skins.—The expected decline mentioned in our last report has materialized, beef hides coming down to 5c. for No. 1, heavy and light; No. 2, 4c.; No. 3, 3c. Calf and lamb skins steady, the latter 40c. each, and the former 6c. for No. 1 and 4c. for No. 2.

Chatty Stock Letter from Chicago.

(BY OUR SPECIAL CORRESPONDENT.)

Top prices for different grades of live stock, with comparisons:—

Table with 5 columns: CATTLE, Present, Two weeks ago, 1895, 1894. Rows for 1500 lbs. up, 1350 @ 1400, 1200 @ 1350, 1050 @ 1200, 900 @ 1050, Stks. and F., Fat cows, Canners, Bulls, Calves, Texas steers, Texas C. & B., Western steers, Western cows & heifers, Hogs, Mixed, Heavy, Light, Pigs, Sheep, Natives, Western, Lambs.

The choice fat cattle have lately sold at the highest prices of the year, and the good native heaves are undoubtedly selling relatively higher than anything else on the list of agricultural products. The demand for good export cattle is quite strong. Prices across the water are relatively high, while prices here are comparatively low and ocean rates moderate. Last week Morris shipped the largest consignment that ever left this country, and other exporters also did an extensive business. The amount of refrigerator beef sent to Europe is also on the increase, and it is due to the splendid outlet that the cattle market has improved so much during the past two or three weeks. The best States cattle were in fair supply in English markets lately, and sold at 11 1/2 to 11 cents per pound, estimated dead weight, against 12c. a year ago. The quality of the native corn-fed cattle coming to market at present is not good. Choice, ripe, fat heaves promise to be short for some time to come. Northern and Western Montana men expect to stop shipping rangers by about October 1st, which is much earlier than usual. The Eastern Montana range men are just now busy burning fireguards to protect the heavy growth of grass for winter feed, and they will resume active shipping operations later. So far this season there have been over 140 less shipments of Western range cattle than last year. Chicago was the only market on the list which showed a gain in cattle for the year to date. She gained 139,000 during that time, while Kansas City lost 21,592, St. Louis 4,083, and Omaha 7,790. With such a strong demand for young cattle to consume the extra abundance of feed, it is no wonder that good feeding steers are selling at what seem like high prices. Western markets are sending vast numbers of young stock and feeding cattle to the country, which shows that farmers have faith in the future. They complain of low prices for fat cattle, but heaves at present prices are relatively dear.

The low prices for pork products have caused quite a broadening of the demand, and it is thought the consumption of meats of all kinds will largely increase from now on. The quality of the hogs coming just at present is not any too good. Large numbers of brood sows which owners have not kept long enough after weaning their pigs to get fat enough are among the offerings. The theory is that farmers are rushing theirs in to get ready cash, and also to avoid the chance of having to sell heavier hogs for less money later on. The pro-

portion of lean light-weight hogs, suitable for making breakfast bacon, is very small, and they continue to command a premium of about 50c. per 100 pounds over big hogs.

The sheep market lately has been pretty badly demoralized, and prices for both sheep and lambs have suffered severely. Supplies of Western grass sheep and lambs have been very excessive.

The hide market is higher and quite active. It is unusual for prices to advance at this season of the year. Prices are nowhere near as high as a year ago, but the leather trust was in action then and the market was unduly stimulated by wild speculative buying, which later resulted in disaster.

GARDEN AND ORCHARD.

Apple Packing.

"Apple Grower" writes:—"I see by the Sept. 1st issue of the FARMER'S ADVOCATE, that Mr. J. R. Shuttleworth, in his 'Suggestions for Apple Shippers,' advises packing in barrels immediately on picking from the tree. I have always understood that fruit so packed would sweat in the barrels, thus increasing the chances of decay. Would it be advisable to bore three or four small holes in the bottoms of the barrels for ventilation? I would like to hear further from Mr. S. on these points."

In reply, Mr. Shuttleworth writes us:—"In reply to your correspondent, I will be pleased to give you my experience, which is that apples packed as they are picked keep much longer, retain the bloom, and altogether have a brighter and fresher appearance. I find that apples put on the ground deteriorate in appearance, keeping quality, and flavor, and the longer they are kept on the ground the more they depreciate in value. A change of temperature will make any apple 'sweat.' It is an exploded idea to pile apples on the ground, and originated with apple-buyers, as it is the only way they can handle the crop, it being impossible for them to have the packers at every orchard when they are picking; consequently the grower is told to put them on the ground so they can sweat, and they will be around in a few days, and by the time they get around the farmer does the sweating. I claim the grower is just as intelligent a man as the ordinary apple-packer, and when the buyer raises so many objections to the grower packing his own apples there must be something in it that the buyer is going to lose. It is only a matter of time when the grower will pack and ship his apples, and if they ship direct to good responsible firms, who merit their confidence, the fruit will be handled to the grower's satisfaction. There is no necessity whatever for boring holes in the bottoms of the barrels. As pointed out in your last issue, too great care can not be exercised this season in picking from the trees, sorting and packing."

Raspberry Vines Dying--Best Soil.

Wm. B. Roe, Kent Co., Ont.:—"What is the most suitable soil for raspberries? My raspberry leaves shrivel up in the spring and the plants die in a short time. What is the cause, and cure?"

Mr. Ellis F. Augustine, Lambton Co., with whom fruit culture is a specialty, writes as follows on the above subject:—

The trouble with the raspberry plants whose leaves shrivel up in spring, followed by the death of the plants, is due to one of three causes: a wet, sour soil; the cane borer; or the fungous disease called anthracnose.

As nothing is stated as to the character of the soil, and no particular symptoms of disease described, it is difficult to determine which of these is the true cause, but the shriveling of the leaves in spring points toward the cane borer as the most probable one. This is a small winged insect which deposits a number of eggs in the pith of the cane by means of small punctures made through the outer wood for a space of two or three inches, usually on the lateral branches of the cane. These are frequently broken off by the wind at these punctures, but if not they wither and die above this point in early spring. The only known remedy is to carefully examine the canes and cut off below these punctures and burn all branches attacked.

If the raspberry canes are indented with small white pits, surrounded with a bluish circle, then the trouble is anthracnose. The remedy—or, rather, preventive—is to spray in early spring, before the buds burst, with a solution of two pounds copper sulphate and fifty gallons water, and two or three times, at intervals before the fruit forms, with Bordeaux mixture, composed of five pounds copper sulphate, four pounds lime and fifty gallons water.

The most suitable soil for raspberries is a rich sandy loam, but they can be successfully grown upon any land that is thoroughly drained, well fertilized, and given frequent and shallow cultivation.

Forestry and Forest Culture.

BY THOS. CONANT.

"There is no other land like thee,
No dearer shore;
Thou art the shelter of the free;
The home, the port of liberty
Thou hast been, and shalt ever be
Till time is o'er.
Ere I forget to think upon
My land, shall neither curse the son
She bore!"

It is taken for granted that Canadians love our land. Words would be only a mark of verbosity

to ask Canadians, for a moment, to regard our land beyond and above all others. So far granted, the object of this article is to try to urge fellow Canadians to make our country more attractive and more valuable. In a former article, I spoke of the benefits of tree planting in the older portions of Ontario, and in this article I am going to endeavor to convey to you the knowledge I have gained from tree planting about my home in Ontario County. You must kindly allow me, too, to be so egotistical as to say that I submit that my words should have some weight, because I have done more at tree planting than any other person in Canada.

The *Hard Maple* we will begin with, because it is perhaps the most natural tree to our country. It must not be dug up for planting until the frosts of the spring have entirely stopped, for you know quite as well as I, if you will once stop to think about it, that it will bleed, or its sap will run, if you cut it, just as long as it freezes nights. Then I set them close together, not farther than six feet apart, first having the ground plowed and manured. And I mulch the whole ground so heavily with strawy manure or leaves that the weeds are kept down and the ground is moist all summer long. By such treatment the trees will live. There is no particular use of keeping them pruned, for they will prune themselves. In sixteen years after setting out, one may make maple sugar from these maples. It's a beauty, you know, and it's always clean and valuable. It's the most valuable cordwood to-day we have, and the wagon axles are made of it, as well as furniture. At six feet apart you will have 1,200 per acre, and if only three-fourths of them live, at the expiration of forty years the remaining 900 trees will be worth far more money than any one of us could make by the same outlay in the time. Mulching is the secret to make them live.

Shell-Bark Hickory are so very valuable that I suppose I shall not be credited when I try to tell the exact truth about them. Some black squirrels found their way along a crooked worm or Virginia fence from one woods of my father's to another's woods for hickorynuts. These beautiful creatures, in their passage, dropped many hickorynuts among the stone piles in the fence corners, or perhaps buried them. Hickories sprang up from the seed, and in twenty-five years were about seven inches in diameter. One day a maker of axe handles came along, and offered \$5 per tree for the lot. To-day our axe, pick and hammer handles are made of second-growth hickory, as well as hubs. So you see, reader, it's value is too great for belief almost. To grow these I do just the same as with the maples, nor would I cultivate the ground between the trees at all, only mulch it heavily. The great trouble is to obtain these trees. Big ones I would not set out. Those not more than six feet high are big enough, and I am sorry to say our Ontario nurserymen do not grow them. So far as I know, they are only grown for sale in quantities in Wisconsin.

White Ash has become one of our most valuable of woods. A few years ago I was connected with a large manufactory of hoes, forks, etc., in the town of Oshawa, and we used to make our hoe and fork handles of white ash; in fact, no other timber seemed to meet the conditions at all. About thirty-five years ago they got the white ash here, but twenty-eight years ago they sent to the shores of Lake Erie for it, and brought it down by shiploads. So eager were they for it that they kept a man the year around to buy up the white ash logs. To-day the firm cannot get white ash on Lake Erie's shore, but must send away to the State of Indiana for it. When you know that a fork handle costs 25 cents at the least, you will not want more words from me to let you know the value of a white ash grove. In its cultivation I would not work the land after planting. Somehow the maple and hickory and ash do not do as well with cultivation, only mulching enriched lands.

The *Black Ash* is one of our swiftest growers, like the white ash. Hickory does not grow so rapidly, but it makes it up fully in the great price which it brings. Only get the land rich before you plant, and you are bound to succeed. No one in Canada as yet has planted this tree by the thousands. One man in Tennessee set out a grove of twelve acres to 12,000 black ash trees sixteen years ago, and to-day the grove is worth from \$7,000 to \$8,000. What our cousin in Tennessee has done, reader, you and I can do, and I for one will try and do it. Remember the fact that the investment depends on no kind of commercial prosperity or depressions. Stocks may boom, or they may go out of sight. The trees will still be there, and will yearly be growing into money. The timber will be bought and paid for. Even if we do not get the money, our children will, and it will benefit our glorious land as well as enrich our children. To-day money loans current at 5 per cent., and it's going to go lower by far. The signs of the times tell us so, and just as sure as sunshine it's bound to come. Black ash trees will pay 20 per cent. without any brain-worry or care. Only pay the taxes and keep all cattle out from them. Fence them in well, and let them alone. As yet I am not aware that any one grows these trees for sale, so one must get seedlings from the forest.

Basswood, or *linden*, as they term it in Europe, is one of our very swiftest growers, but for

myself I do not like it. It is true its blow gives the very finest quality of honey, and some will choose to grow it for that alone, while its lumber is used by our carriagemakers and pays very well, but not nearly so well as maple or white ash, nor a tite as well as hickory. And yet I say, if I had a stony, broken piece of land, where the plow could not work, I would plant it to basswood and mulch it heavy and deep with leaves or straw, and fence all stock out from it.

Beech, Birch, and Ironwood I have tried to plant, but too many of them die to make any progress, and I certainly most emphatically say I would not pay any attention to them.

Black Walnut I have cultivated in various ways, and I will tell you each way and how they best succeed. A grove of 1,000 trees about five feet high I set out ten feet apart, on ground well manured. For some reason my tenant on this farm did not cultivate the land at all, because he did not want the trouble of working among trees so close together. This grove has made great growth, and so have the weeds; and I confess it does look a little slatternly, and yet the trees grow, and of this group I did not lose more than five in the hundred trees. Another group of 1,000 trees were hoed well last year in corn and potatoes. They nearly all lived. This year the rich ground was too tempting for the tenant, and before I was aware of it he sowed barley among them. The consequence was that he got an extra crop of barley, but he killed about 250 of my walnut trees. Next year we will remedy the error by putting in a hoe crop, and thereafter a hoe crop or no crop at all. Three other groves of 2,000 and 1,000 trees each have been hoed in corn crops for several years. As in the case of the ground not cultivated at all, only five in the hundred of these trees died, and those among the large ones, while the smaller ones came along nicely. Last winter during the great ice storm these trees were bent flat to the ground, but it did not hurt them at all. And I say that the walnut seems to be more like an apple tree, and with cultivation does best. At ten feet apart, 430 trees will be upon an acre; and in a former article I spoke of the value of walnut lumber to-day, and will not repeat the words. But there is another great and immediate value which has been entirely overlooked, and that is this: Suppose, for instance, I wanted to sell the land upon which these walnut trees are. Now, the 430 trees upon each acre, at 25c. per tree, will be \$108 say, and with planting, let us make the amount, to be quite safe, \$120. Let it be announced that a grove of black walnut trees, so many years old, with 350 trees say, alive and growing upon an acre, are for sale, and let me assure you, reader, capitalists, manufacturers and speculators will bid for the acre of walnut three or four times their cost at a jump.

Again I use the argument that *no brain-worry is necessary to make money out of these trees. No matter what stocks may do or not do, and walnut lumber may go out of fashion because it's not to be got, but when it is to be got they will buy it and it will sell for big money.*

Only four years ago I saw three walnut shade trees on a gentleman's lawn, each about 40 feet high and ten inches in diameter, sell for \$80 cash per tree, and the buyer took them away himself and paid the money before he cut them.

Red Cedar and White Cedar I grow anywhere on our lands, and I put them close together like ash, or about 1,200 trees per acre. While the red cedar is comparatively a slow grower, the white cedar is a fast grower. Red cedar to-day is so dear as to be almost prohibitive. White cedar telephone poles are worth about \$4 each here.

At 1,200 per acre, you can get a glimpse of its value to make your lips water, reader. There is no mistake about it. Our cedar will always sell. It is shipped into New York and Pennsylvania, and used for fence posts, and they saw it up into scantlings 3 x 4 inches, so precious is it.

Reader, I have some tens of thousands of these growing, and I consider they are among my very best investments, both red and white cedar.

Oak I must speak of, for you know its worth—5 cents a foot nowadays. Yes, it's a slow grower, and since the paying side of forestry must be presented to Ontario farmers, I will not spend much time upon it, and yet it will pay if you will only do it, but the ones before spoken of will pay so much more quickly that I will not pursue it.

Let us then make our land more valuable, more attractive to the eye, it's rainfall more sure by planting trees.

In Belgium, Germany, and France, one who would cut a tree must plant another. Our land is so far ahead of these countries in its natural richness and beauty that they are not in the comparison, and yet you see how they value trees. And I say there is no land of like extent to Ontario, that has so little waste land, where the commonwealth is so great, and where the laws of God and man are so well observed.

"Our young wild land, the free, the proud!
Uncrested by power, unawed by fear,
Her knee to none but God is bow'd,
For Nature teaches freedom here.
From gloom and snow to light and flowers
Expands this heritage of ours:
Life, with its myriad hopes, pursuits,
Spreads sails, rears roofs, and gathers fruits.
But pass two fleeting centuries back,
This land, a torpid giant, slept,
Wrapp'd in a mantle thick and black,
That o'er its mighty frame had crept.
Since, stars and angels sang, as earth
Shot from its Maker into birth."



"WHERE THE TREASURE IS."

In the year 1871, and long before and after, a manufacturing jeweller, in a large way of business, kept shop in St. Paul's churchyard, on the right-hand side as you go westward. The common kind of work was done at Birmingham; the better and more valuable jewelry was the product of skilled hands employed in a small workshop in Clerkenwell. The private clientele of the house was small, but the business transacted with "the trade" was probably as large as any in London. Only one commercial traveller was engaged, a Jewish gentleman, a man of exemplary character and charming manners; a linguist, a musician, a judge of pictures, a painter an amateur, and a finished expert in precious stones. He had been seventeen years in this same service, and his employer's trust in him was absolute. He drew a liberal commission, kept his own little family in solid comfort at his Brixton home, was a pillar of his synagogue, a pearl among commercial travellers, and deservedly respected. I never saw this gentleman, but I can draw his portrait, and before I close this story I will tell you why. He had large dark eyes, which shone out of a sort of velvety dull softness, as a black-heart cherry shines when dew or rain is on it. He had a well-shaped aquiline nose and an olive skin. His lips were shapely, but redder and fuller than is common with men of Western type. He wore his hair cut short, and his beard was trimmed Vandyke fashion. The notable thing about him was that hair, eyebrows, and beard were of a deep ruddy auburn, a color handsome in itself, but a little startling and bizarre in a man of his complexion.

In the year 1870, while the sergeant and I, unwitting of this gentleman's existence, were hanging on the skirts of the Russian forgers, the commercial traveller had submitted a scheme to his employer. He had employed his taste and leisure in the preparation of a number of designs for brooches, bracelets, rings, tiaras, necklets, and pendants, and he had designed and drawn with beautiful delicacy a case in which to display them. He estimated the cost of the preparation of this tray at about £20,000, and his proposal was that the real tray to be manufactured from his designs should be kept in the showcase at St. Paul's churchyard, while he should carry around with him a tray of paste and pinchbeck in illustration of the style and color.

Both trays were made. The real thing went in the showcase, and the bogus article went on tour. The real tray was paragraphed in the London and provincial newspapers, hundreds of fashionable people went to see it, orders came in briskly, the new designs became a fashion, and the clever little Hebrew gentleman made so good a thing of his liberal commission that he was more than paid for all his trouble. His employer was, of course, eminently satisfied on his own account, but by and by disaster crept upon him.

The traveller made four journeys a year, covering the three kingdoms on each expedition. He had started on the third round since the completion of the two trays, when the jeweller, by a chance examination of his treasure, discovered that he was in possession of the imitation, and that his servant had by some queer blunder walked off with the real thing. To an unlearned eye the mimic jewels were exactly like the real, but an expert was not to be deceived for an instant. The two trays had been set for comparison side by side outside the showcase, and the traveller had made an accidental exchange. It was a little surprising, but it excited no suspicion. The jeweller sent a special messenger down to Brixton with a note of explanation, and the special messenger came back to say that the gentleman had gone to Birmingham. A telegram was sent to Birmingham, and the jeweller went to his home in the suburbs quite contented and at ease. But when no answer came from Birmingham—when telegraphic inquiry elicited the fact that the traveller had not been to his customary hotel—when further inquiry proved that he had not been heard of at Manchester, Liverpool, Edinburgh, Glasgow—when, after four or five days, his wife, for the first time since her marriage, was ignorant of his whereabouts—then things began to grow uncomfortable, and suspicion began to peer. Not at all in the direction of the dapper little Jewish gentleman. He was above suspicion, as the wife of Caesar should have been. Seventeen years of unstained fidelity were not to be rewarded so. But it became clear that some mischief had befallen him—there are hundreds of people in the world who would do murder for the fiftieth part of such a booty as he carried. His employer went mournfully to the police and offered a reward for the missing man's discovery. He was angry at the mere idea that one whom he had trusted so entirely, and whose faithfulness had stood the test so long, had at last deceived and robbed him. The honest heart would have not commerce with that fancy. No! The poor fellow had fallen ill, had tumbled into some aberration of the mind, of which the changing of the trays was the earliest sign; had been robbed, drugged, spirited away, murdered.

The police accepted this view of the case with courteous incredulity, and planned and labored on their own lines. They networked the country through the telegraph; they woke up every port in Great Britain, and had every passenger list examined; they haunted wayside stations, and shadowed the great termini; they sent the news tingling to every country in Europe and to the United States. Every pawnbroker in Great Britain, every mont de piété in France, every dealer in precious stones and precious metals everywhere had warning.

Then, as his own lucky star orbained the sergeant was sent to London on professional affairs. He called at Scotland Yard to pay a visit of respect to an old provincial superior of his own; partly because a little civility is never

wasted, partly because he liked the gentleman in question, and partly because "out of sight is out of mind with many people." The late provincial superior was affable to the extent of a glass of whiskey and a cigar; and at their parting he confided to the sergeant's charge a packet of handbills, which set forth a portrait of the missing gentleman, a full description of his person, and an inventory of the lost jewels. The sergeant kept one of these for his private reading, packed the rest in his handbag, and having finished his business by noon on the day following, strolled down to Euston Station in time for the two-o'clock train.

On the way he encountered an old friend, with whom he had a glass of whiskey. At the station he encountered another old friend—one of the detectives on constant duty there—and with him he had another glass of whiskey. The day was warm and heavy, the sergeant had been seeing "life" in the capital at the expense of his nightly rest, and ensconcing himself in one corner of a second-class smoking-compartment five minutes before the train's departure he fell asleep. At Chalk Farm he was dimly aware that somebody got into the carriage, and then he slept again. He was half way to Rugby before he awoke. His fellow-passenger was seated in the opposite corner at the far end of the compartment, and the sergeant surveyed him uninterestedly through scarce-opened eyelids. It was a Jewish gentleman of a neat and dapper aspect, with coal-black hair, eyebrows and moustache, and cheeks and chin clean shaven. He smoked a cigar and read a railway novel, but every now and then he seemed to awake to a sudden interest in a hatbox which was bestowed in the right-luggage netting overhead, and at such moments he would screw himself around and look upward, as if he feared to find it spirited away.

"Now," said the sergeant in telling me the story, "it's a curious thing, but this is what set me a-thinking. I hadn't thought of the words for the best part of fifteen years, but when that chap had looked at that hatbox maybe a dozen times, they came into my head as plain as if a person had spoken 'em in my ear. 'Where the treasure is, there will the heart be also.' And 'What have you got there, my friend?' I said to myself, 'I wonder.'" By-and-by the sergeant had something else to wonder at. The Jewish gentleman drew off a well fitting glove of tan-colored dog-skin, and began to finger his cheeks and chin with a delicate carefulness. His face took a cast of anxiety, and he drew from his breast pocket a small morocco case which contained a comb and a mirror. He combed his moustache and scrutinized it with extraordinary care. He combed the hair on his forehead and temples and scrutinized that with extraordinary care. Then he combed his thick black eyebrows, and peered at them into the mirror as closely as if he had been examining them through a microscope. Next he examined his chin minutely and seemed dissatisfied. Once or twice he looked at the sergeant, who lay with his legs stretched out, and the merest hair's-breadth slit of watchful eye quite veiled by the eye-ash. And, occupied earnestly as he was in these singular details, the dapper Jewish gentleman never forgot the hatbox for much more than half a minute at a time.

"Where the treasure is," said the sergeant, with his heart beating like a hammer at his ribs, for he had begun to think what an uncommonly close shave a dark-haired gentleman like that must have taken, to be sure, to have no sign at all of a beard on cheek and chin. "For a man as is naturally black," said the observant sergeant, "gets blue with close shaving, don't you notice, sir? And this chap wasn't a bit bluer on the chin than he was on the bridge of his nose. Dyed his hair—he had!"

It occurred to the sergeant to wake up and light a pipe, and assume a brisk interest in the landscape. It occurred to him further to cross to the other end of the compartment for a better view of the landscape on that side. He ventured to remark that it was a pretty country, and that the young wheat was looking well. Then he sauntered back to his own corner, and made believe to doze again—with his heart beating more and more like a hammer at his ribs, until he wondered that the other man didn't seem to hear it. For at that nearer view he had seen what he had fully expected to see—an auburn rime on cheek and chin, namely, and a touch of auburn at the roots of the carefully-pericilled eyelashes. And all the while he was thinking, so he told me: "What a stroke of luck! Oh! What a stroke of luck! And here's my step at last!" And yet he had no authority to act, and to arrest a man on such a mere suspicion, and without authority, was a dangerous sort of thing to do. The sergeant was mightily tumbled up and down in his mind and knew not what to do.

They came to Rugby, and the gentleman got out and ordered a glass of milk and soda at the refreshment bar. Before it was served he bolted back to the train and secured his hatbox. "Now, is he going to slip off here?" asked the sergeant within doors, "and if he is, what's my game?" The gentleman went back to the carriage, however, in due season, and the sergeant followed. At Birmingham they both alighted, and the gentleman went to the Queen's Hotel. He chartered a bedroom there, and carried his hatbox upstairs with his own hands, a porter following with a portmanteau. In half an hour he came down again, passed into Stevenson Square and on into New Street.

The sergeant took his courage in both hands and went to the manager. A Jewish gentleman with a black moustache had taken such and such a number?

"Yes."

"That," said the sergeant producing his handbill, "is the man."

The manager stared, and then laughed. No, he knew that man. He was a red-headed fellow with a red beard and moustache.

"Shaved and dyed," said the sergeant.

"Begad!" said the manager. "I believe you're right."

"You know me?" says the sergeant.

"Yes," says the manager, naming him.

"Very well. I take all the responsibility of this move. That man has the stolen jewels in his hatbox. Let me into his room and we'll soon see."

"It was a common lock to the hatbox," said the sergeant, concluding his story in great excitement. "I begged

a hairpin from a chambermaid—one o' them thick, strong hairpins—and the trick was done in a minute. There was the violet-velvet lining of the jewel-case all tore out loose, and rolled into a bundle, and inside it was the whole £20,000 worth. And while we was a-staring at each other like a pair of stuck pigs, back comes his nibs, sees me a-kneeling over the open hatbox, wipes out a revolver and knocks a hole clear through two sides of my new silk hat and ruins it. Twelve-and six it cost me, and brand new out of Hyam's shop only the week afore. The manager knocks his arm up, and the next shot goes into the ceiling. It was nip and tuck then for a minute, but we got him down, and I had 'em on his wrists in a jiffy. Seven years he got at the Old Bailey, and pretty cheap at that. Five hundred pounds reward is a good deal to a poor man like me, but a London chance is more, and that slice o' luck brought both. That's his nibs' portrait, that there big colored photograph over the mantelshelf. His missis sold up the little house at Brixton, and I bought that at the sale for a reminder of him."—*Chambers' Journal.*

MINNIE MAY'S DEPARTMENT.

MY DEAR NIBES,—

Coming home very late one night—or, perhaps, I had better say very early in the morning—our shortest way was across a large park, bright and attractive-looking in the daytime, but dark and uninviting at three a. m. We were discussing the loneliness of our route, and were rather startled by seeing a long, shadowy figure creeping in front of us with a celerity that suggested some object in view. Hastening our steps, we discovered it was a man dragging himself warily along the grass, constantly looking from side to side as if on the alert for something or someone. My companion called out in an authoritative tone of voice, "What are you doing here at this time of night?" whereupon he stood up directly in our path—a queer-looking figure clad in a pea-jacket and rubber top-boots reaching above his knees. "Gathering mushrooms," he disappeared for a moment and returned with a half-bushel basket almost full of what in that obscure light looked like anything but mushrooms, though they certainly possessed the delicious aroma which pertains solely to that fungus. He offered us some, saying "they were the most delicious of the species, the *Caprinus comatus*, or maned mushroom, called by some the shaggy-maned mushroom." We examined one carefully. It was soft white spotted with brown, shaped like an umbrella, the inside of which was delicate pink. This, he said, speedily turns black and dissolves into an inky substance, leaving only the bare stalk.

Before leaving our mushroom friend we made him promise to call at the house the following day, telling him we would be glad to become regular customers if we liked the specimens he had given us. I was more than astonished when he made his appearance the following afternoon. Could this charming old gentleman be the shabby mushroom-hunter of the night before? Yet so he proved to be! A man of leisure and of ample means, the quest of mushrooms was a pleasure with him which he carried to a passion—as great a delight as fishing is to the skilled angler or hunting to a keen sportsman. It was a pleasure to listen to such an entertaining companion. He said he had seen bushels of mushrooms trodden under foot by the rough and ignorant in that favorite haunt of his, had seen men cut them down with their canes and throw them aside, had seen patches of them destroyed by lawn mowers while the men swore at their machines being clogged by the food they were destroying. In France they know better—there they have studied the subject and made it pay; here, through the folly of those who will not learn, hundreds of tons of good food go to waste every year, each pound of which has as much nutriment as a pound of beefsteak. The warm, damp nights of September are most favorable to its growth, but they may be found at intervals till late in November.

Dr. Thomas Taylor, Secretary of Agriculture at Washington, has given much time to the study of mushrooms, and has published the results of his investigations in four pamphlets, in which he gives full information of their value as food products. He treats of all known species of edible and poisonous mushrooms, gives directions for their identification and mode of cooking. Great quantities of this food product go to waste in the woods and fields each year through ignorance of its value. The growing of mushrooms is a profitable industry in England and is largely engaged in in the United States. It should be encouraged in Canada, and no better way can be proposed than to furnish the public with information such as the Secretary of Agriculture at Washington prepared for his department. MINNIE MAY.

The young man was prematurely gray, and was not a little proud of it.

"Looks quite poetic, don't you think?" he could not forbear asking of the young woman he was calling on.

"It does remind me of a certain poem, I must admit," said she.

"And what poem is that?"

"When the frost is on the punkin."

And his hair went on whitening at a more rapid rate than ever.

Wassailing Apple Trees.

Apple culture is receiving a good deal more attention in England than formerly. The orchards had been a good deal neglected and many lost altogether through carelessness and abuse. The failure of other branches of agricultural produce to pay has directed increased attention to the orchards, especially in the Southwest, as a means of bringing something to the hard-hit pocket of the British farmer. In old times no country gentleman's house and no farmstead was thought complete without a flourishing orchard, and curious old customs have hung around them, as around most other institutions of long-standing in the Old Land. Baring-Gould, an authority in country traditional lore, printed in 1893, in the pages of *Good Lands*, an old song on the apple tree, once common over the whole West of England, but when he wrote only lingering in the memories of a few of the oldest inhabitants. Its quaint old rhymes are worth calling to mind at the present time, when we are reviewing with satisfaction a fine crop of the good old standby.

An orchard fair, to please,
And pleasure for your mind, sir,
You'd have—then plant of trees
The goodliest you can find, sir.
In bark they must be clean,
And finely grown in root, sir;
Well trimmed in head, I ween,
And sturdy in the shoot, sir.
O the jovial days when the apple trees do bear!
We'll drink and be merry all the gladsome year.

The pretty trees you plant
Attention now will need, sir,
That nothing they may want,
Which to mention I proceed, sir.

You must not grudge a
fence
'Gainst cattle, tho't
be trouble;
They will repay the
expense
In measure over dou-
ble.
O the jovial days when the
apple trees do bear!
We'll drink and be merry all
the gladsome year.

To give a man great
joy,
And see his orchard
thrive, sir,
A skillful hand employ
To use the pruning
knife, sir—
To lop each wayward
limb
That seemeth to of-
fend, sir;
Nor fall at fall to trim
Untill the tree's life
end, sir.

O the jovial days when the
apple trees do bear!
We'll drink and be merry all
the gladsome year.

All in the month of
May
The trees are clothed
in bloom, sir;
As posies, bright and
gay,
Both morning, noon,
and night, sir.
'Tis pleasant to the
sight;
'Tis sweet unto the
smell, sir;
And if there be no
blight,
The fruit will set and
swell, sir.

O the jovial days when the
apple trees do bear!
We'll drink and be merry all
the gladsome year.

The summer oversped,
October drawing on,
sir;
The apples, gold and
red,

Are glowing in the sun, sir.
As the season doth advance
Your apples for to gather,
I bid you catch the chance
To pick them in fine weather.
O the jovial days when the apple trees do bear!
We'll drink and be merry all the gladsome year.

When to a pummy ground,
You squeeze out all the juice, sir,
Then fill a cask well bound
And set it by for use, sir.
O bid the cider flow
In plowing and in sowing—
The healthiest drink I know
In reaping and in mowing.
O the jovial days when the apple trees do bear!
We'll drink and be merry all the gladsome year.

Our illustration, taken from an old print, shows an ancient custom that still lingered in Devonshire thirty years ago, though it is difficult to find any traces of it now, it having followed the fate of many antique memories that have lapsed in the last quarter of the century. The farmer proceeded to the orchard with his men, bearing a large can or milk pail full of hot cider, with roasted apples hissing in it. They then encircled one of the finest trees and chanted a wassail of quaint doggerel rhymes. It varied in different localities. One common form was as follows:

Here's to thee,
Old apple tree!
Whence thou may'st bud
And whence thou may'st blow
And whence thou may'st bear
Apples enou.
Hats full! Caps full!
Bushels, bushels, sacks full!
And my pockets full, too!
Hurra! Hurra!

This rude ditty having been sung or chanted three times, the men's horns were filled and they drank success to the next crop, some of the cider being thrown over the tree. Sometimes the party would go around with guns, and several blank charges would be fired amongst the branches. These old rites were supposed to ensure good harvests.

THE QUIET HOUR.

He Leadeth Me.

In pastures green! Not always; sometimes He
Who knoweth best, in kindness leadeth me
In weary ways, where heavy shadows be—

Out of the sunshine warm and soft and bright,
Out of the sunshine into darkest night:
I oft would faint with sorrow and affright—

Only for this—I know He holds my hand.
So whether in the green or desert land,
I trust, although I may not understand.

And by the still waters? No, not always so:
Oftimes the heavy tempests round me blow,
And o'er my soul the waves and billows go.

But when the storms beat loudest, and I cry
Aloud for help, the Master standeth by,
And whispers to my soul, "Lo, it is I."

Above the tempest wild I hear Him say,
"Beyond this darkness lies the perfect day,
In every path of thine I lead the way."

So, whether on the hill-tops high and fair
I dwell, or in the sunless valley where
The shadows lie—what matter? He is there.

ly expected. Clad in patience, one walks in an invisible armor, against which temptations to repine and murmur fall harmless. Be patient, too, with yourself. You are full of faults, and your life abounds with mistakes and blunders. Do not lash yourself sore with self-debasement. There is always a better way before you. Rouse up your manhood and patiently seek that better way and walk in it. Remember, some confidence in yourself is always needful to your success. But, above all, be patient with God. Does it seem irreverent counsel? And yet you know that even against God you have cried out in your impatience. Your garden did not bloom in season—the results of your enterprise and painstaking did not come as you expected, or bear fruit in abundance, and in your heart you say, "God will never reward me according to my works. He has flowers for others, and fruits even for the ungodly, but me He passes by. When shall my turn come?" Be patient. He has one time and you have another. His time is always the best. Your time is when you desire; His time is when you can best use. He sees your day of real want; you see only the hour of capricious wishes. For Him and for you there is abundance of time. His years shall not fail, nor will yours. Therefore be patient.

No virtue has been more highly extolled by the Holy Spirit than that of patience. It gives strength to the weakest; it makes the strongest stronger. It prevents us from rushing headlong into danger and disaster. It gives us time to recover our balance and act wisely. God hears and God knows. He loves us, and no good thing that we need will be ever withheld from us. But His wisdom is broader and deeper than ours; and when the right

time comes our patient waiting shall be crowned with blessing. Impatience is always weakness. It robs us of the power to act wisely and rightly, and leaves us stranded, weak and helpless. We read of the patience of hope; but impatience is a thief which steals away our hope, and in its place puts doubt. Be patient then, for there is nothing more sure than the rewards of patience.

"Largely Thou givest, gracious Lord,
Largely Thy gifts should be restored;
Freely Thou givest, and Thy word
Is—'Freely give':
He only who forgets to hoard
Has learned to live."

A little boy was making his first visit in the country at his grandfather's. He was very much interested in the Jersey cows, and the first milkling at which he attended was watched with astonishment. The continuous stream of milk aroused his curiosity, until he suddenly burst forth with, "Say, grandpa, where do you turn it on?"

Two Men's Views.

Old Farmer Grump, with thrifty care,
Had safely stored away
For winter use his apple crop,
Enough to last till May.

"We'll not begin," said Farmer Grump,
"To eat 'em yet awhile;
They've got to last the winter through,
There's none too big a pile."

And so they lay 'neath lock and key
Till the ripest showed decay;
"Begin on 'em," then the farmer said,
"Begin on 'em right a way."

"We'll kinder sort 'em out," said he,
"And use for sass the worst,
And everyone who goes for 'em
Must take the specked ones first."

And so they used the specked ones first,
As Farmer Grump had said;
But tho' they ate some every day,
The specked ones kept ahead.

And they not only ate them first,
But all the winter through,
If that's their way, I've naught to say,
And naught, I'm sure, have you.

Now, Farmer Hearty also had
A well-filled apple bin,
But as he stored them in he said,
"Now listen, we'll begin"

"To eat the best of 'em right off,
And keep on so each day,
For some of 'em will not keep long,
Though some will last till May."

And so his household, one and all,
Enjoyed the fruit while sound;
And eating still the ripest first,
Had some when May came round.

And more than this: where'er the pathway leads,
He gives me no helpless, broken reed,
But His own hand, sufficient for my need,

So where He leads me I can safely go:
And in the blest hereafter I shall know
Why in His wisdom He leadeth me so.

Be Patient.

We hold patience to be among the greatest of virtues. Friends are neither omniscient nor omnipotent. They cannot see your heart, and may misunderstand you. They cannot know what is best for you, and may select what is worst. Their arms are short, and they may not be able to reach what you ask. Patience is your refuge. Endure, and in enduring, conquer them; and if not them, then at least yourself. So be patient with your friends. Be patient also with your pains and cares. We know it is easy to say and hard to do. Nevertheless, be patient. These things are killed by enduring them, and made strong to bite and sting by feeding them with your frets and fears. There is no pain or care that can last long. None of them shall enter the city of God. A little while and you shall leave behind you the whole troup of troubles, and forget in your first sweet hours of rest that such things were on the earth. Be patient with your deferred hopes. The heart is sick, no doubt, but sick hearts must take the tonic of patience. All that is worth hoping for will come to the Christian. The hope itself is put in peril by the impatience that weakens and prostrates your strength. Here also you have no better resource than patience. You will reach next year just as soon by taking it quietly; the end of your preparation for life's work will come of itself. The end of all your labors is not far beyond, and need not be sighed for or impatient-

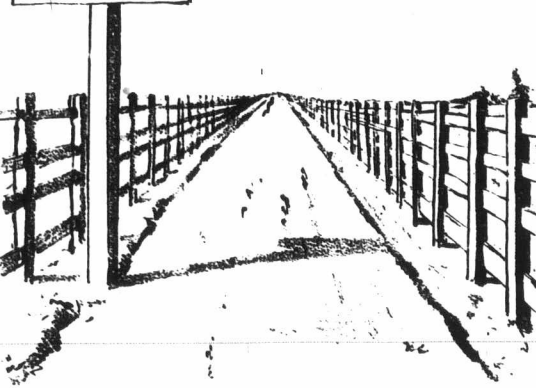


WASSAILING APPLE TREES.

THE CHILDREN'S CORNER.

A "Proverb Hunt" will now begin this column. A prize is offered for correct solutions of the first three pictures. Only children of subscribers may compete, and competitors must be under sixteen years of age.

MILES TO ANY TOWN



HIDDEN PROVERB—No. 23.

The correct answers for the last group of proverbs have been sent in, as usual, by John Sheehan and G. B. Rothwell. As J. Sheehan's letter was the first one opened, the prize is awarded to him.

Soldiers Two.

It's a brave little band that I command Each evening after tea, And of each recruit, with his tinselled suit, I'm as proud as I can be.

But during the day when I'm away, I have heard it said, There's a mutinous mutter if, besides butter, Sugar's not put on their bread.

But not another word of things I have heard Concerning their mischievous pranks, It suffices for me they're as good as can be.

When "company's" dismissed and each velvet cheek kissed, They toddle away to bed, Where in sleep's soothing arms, free from alarms, Soon nestles each warrior's head.

The Anxious Leaf.

Once upon a time, a little leaf was heard to sigh and cry, as leaves often do when a gentle wind is about. And the twig said, "What is the matter, little leaf?" And the leaf said, "The wind just told me that one day it would pull me off and throw me down to die on the ground!"

And when the bright days of autumn came, the little leaf saw all the leaves around becoming very beautiful. Some were yellow, and some scarlet, and some striped with both colors. Then it asked the tree what it meant. And the tree said, "All these leaves are getting ready to fly away, and they have put on these beautiful colors because of joy."

Were I the Sun.

I'd always shine on holidays, Were I the sun; On sleepy heads I'd never gaze, But focus all my morning rays

I would not melt a sledding snow, Were I the sun; Nor spoil the ice where skaters go, Nor help those useless weeds to grow,

I'd warm the swimming-pool just right, Were I the sun; On schooldays I would hide my light, The "Twenty-fourth" I'd give you bright,

I would not heed such paltry toys, Were I the sun; Such work as grown-up men employ; But I would favor solid joys,— In short, I'd run the world for boys,

Mater Doloroso.

Because of one small low-laid head all crowned With golden hair, For evermore all fair young brows to me I kiss them reverently. Alas I know The pain I bear.

Because of dear, but close-shut holy eyes Of heaven's own blue, All little eyes do fill my own with tears— Whatever their hue; And motherly I gaze their innocent Clear depth into.

Because of little pallid lips, which once My name did call, No childish voice in vain appeal upon My ear doth fall; I count it all my joy their joys to share And sorrows small.

Because of little dimpled hands Which folded lie, All little hands henceforth to me do have A pleading cry; I clasp them as they were small wandering birds Lured home to fly.

Because of little death-cold feet, for earth's Rough roads unmeet, I'd journey leagues to save from sin or harm Such little feet, And count the lowliest service done for them So sacred—sweet! —M. E. Paul.

Healthful Hobbies.

Whatever may be said against hobbies, there is nothing more wholesome for man, woman or child than an enthusiastic interest in something outside of the regular life-work. It has often been proved that turning from the not over-congenial routine of the day to some chosen avocation gives true rest and enjoyment.

Rocking the Baby.

I hear her rocking the baby Each day when the twilight comes, And I know there's a world of blessing and love In the "baby bye" she hums.

I hear her rocking the baby, Slower and slower now, And I know she is leaving her good-night kiss On its eyes and cheeks and brow.

I list to the rocking, rocking, In the room just next to mine, And breathe a tear in silence At a mother's broken shrine.

A Rash Man.

"Yes," said Fagg, "Dr. Pillroller is a brave man, no doubt; but he carries his bravery too far. He is foolhardy, sir; never saw so rash a man. Called him to see Mrs. F. to-day, and he actually asked her to let him see her tongue. Fact, sir. I would not have believed any living man would have had the courage to meet that tongue of hers."

UNCLE TOM'S DEPARTMENT.

Puzzles.

All matter for this department should be addressed to Ada Armand, Pakenham, Ont.

1—CALENDAR.

Calendar grid showing days 1 through 30 in a 5x6 grid.

- Across—1. A rich goblet for State occasions. (Obs.) 2. A pack saddle used in the American military service and among Spanish-Americans. 3. Religious formula (India).

2—CHARADE.

We all FIRST new thoughts to our mind, To see if we can't a puzzle find; If we would take a lesson from my SECOND, Perhaps the puzzle could not be reckoned.

3—TRANSPOSITION.

The hungry ocean roared, Like lion for his prey; Its tossing ONE gleamed white, And dashed aloft the spray.

A swimmer, young and bold, 'Gainst angry billows bore; (No sailor TWO was he) In safety reached the shore.

Around his fainting form, A cable strong is tied; Across the boiling surf, It reached a vessel's side.

He brings deliverance, A helpless crew to save; His THREE shall eye be praised, The valiant and the brave.

An anxious father clasped His son upon the shore. "The Lord of hosts be praised," And each heart murmured "FOUR." CHARLIE S. EDWARDS.

4—ANAGRAM.

Does anyone know where Lily Day is? Has anyone seen her of late? She's clever and bright, you'll know her at sight; Your answer I patiently wait.

If you should happen Miss Lily to see, And a boon on us all would confer, Oh! then be so kind the lass to remind That her uncle is looking for her.

And also remember, AS TO LILY you speak, That a TOTAL she promised to be; And bid her return to puzzling again, For the sake of old Uncle T. CHARLIE S. EDWARDS.

5—SQUARE WORD.

My FIRST is a nuisance, who lives on the road; My SECOND pertains to a king; My THIRD is quite spry, and often bestowed On monkeys and persons who spring; My FOURTH is an island set far in the sea; My FIFTH is to beg, like my FIRST it may be. CHARLIE S. EDWARDS.

Answers to August 15th Puzzles.

- 1—Swage. 2— Suppose a neighbor should desire To light a candle at your fire, Would it deprive your flame of light Because another profits by't? 3— Wrong. 4— We can always make home happy If the right course we begin; It will make the small room brighter If we let the sunlight in.

SOLVERS OF AUGUST 15TH PUZZLES.

Charlie S. Edwards, Chris. McKenzie, Clara Robinson, J. S. Crerar.

Baked Hams.

It is frequently asked why some hams taste so much better than others. This would not be the case if they were baked, and not boiled until all the sweetness was extracted, which is generally done in the majority of cases where they are found tasteless and discolored.

Make a stiff paste of flour and water, with which completely cover the ham. Then place it in a bakepan containing a little water, with which it must be occasionally basted. It will require about four or five hours to bake a ham of medium size in a moderate oven. The cook must of course use her judgment by testing it occasionally with a fork.

Fence-Rail Philosophy.

Good morning, neighbor Jones. Anything gone wrong? You look as dismal as a tombstone. What! Your two oldest boys run off?

That is a calamity, neighbor Jones, and I'm sorry for you, sorry for them, and sorry for those traits of human nature that make such misfortunes possible. Am I not surprised, do you say? Well, yes; I am surprised. I am surprised they didn't run away long ago, and I see that you are very much surprised that I should take such a view of the case. But now let me explain, and I'll do it in my plain, blunt way, for I'm no hand at smoothing down rugged facts. Your boys left home because they were starved! Yes; fire up and get mad about it if you want to! Take that hand-spike and knock me down if you feel that it will relieve you; but that won't make the facts any less facts. I will admit that you gave your boys sufficient food for their stomachs, enough clothing for their bodies, and comfortable beds to lie in. You did the same for your hogs and your cattle. But, neighbor Jones, you never stopped to consider that your boys were rational beings with higher wants than the brutes exhibit, and so I say that in the highest and noblest sense they were starved, and they ran away to satisfy those mental cravings which stood no chance of being satisfied at home. Poor fellows, how I have pitied them! From morning till night, week to week, and month to month, throughout the year, they knew nothing but work, work, work. You provided them with no books; you took no papers for them. Not even a poor picture adorns the walls of your house. You afforded your boys no pleasures, unless it was to go to the fair once a year, and possibly allow them one visit to the circus. You permitted no social gatherings at your house, and Christmas, New Year's, Thanks-

giving Day and birthday anniversaries were no different to other days. So I say your poor boys were starved, were ill-treated, and were denied the comforts of life to which they were entitled. Yes, yes, I know; you wanted to bring up your children with the notion hammered into their minds that life is a very serious affair, and that the principal object in living and working is to save money. It is well enough to be frugal and industrious, but this can be carried to extremes like any other good thing. What is the use of money, anyway, but for the comforts and enjoyments you can buy with it? And when is a better time for enjoyment than in youth? Of course you tell your boys that all the wealth you are hoarding will eventually go to them; but that is poor comfort. One dollar now will buy them more real enjoyment than fifty will twenty years from now.

Now, neighbor Jones, you are not a bad man at heart. So far as honesty goes, you stand well in the community. You pay your bills, and you neither rob nor cheat your neighbors; but your constant grind, grind, grind, has worn away your better nature, and has substituted an artificial one. How shall you change your life now, do you ask? Easy enough. You are a man of strong resolution and prompt action. Just resolve to make the most of the present. Never mind the future. Turn your attention awhile from your fields and your cattle to your home and your family. Put carpets on your floor where they are needed, paper your walls and adorn them with pictures. Get a book-case and fill it with choice works. Subscribe for several good papers. Get your daughters an organ, and invite the boys and the girls of the neighborhood to come in and enjoy themselves. Give your boys a reasonable allowance of spending-money, and don't ask them to render an account of every nickel. Give them an interest in the farm. Buy improved farm machinery, and let them use it. Give them land and stock, and let it be sacredly theirs. Let them feel that their home is a republic, not a monarchy.

Do all these things, and if at the end of the year you don't come to me and say that it has been the happiest twelve months you have had in many a year, why I'll agree to eat this mallet to the last splinter!

Too late now, do you say, because the boys have left you? Not too fast. Would you agree to reform your life in the manner I have pointed out if the boys could be brought home? You would. Very well, then; you are a man of strict integrity. Your word is as good as your bond. You have entered into a solemn contract, and I shall see that you live up to it. About the boys—well, you needn't worry about them. They are over at my house having a good time with my youngsters. You see, last night, while meditating over things in general, who should come along but your two boys with bundles in hand, leaving their old home behind them. Well, I couldn't see them go out into the world without giving them a little advice. So I talked to them awhile in my plain, blunt way, and the end of it was, they agreed to stop at my house for a day or so and give the matter a little thought. Good fellows, those boys are, and they'll make splendid men; but they couldn't stand it to be treated like cattle, and who can blame them.

Why, certainly, neighbor Jones, I'll shake hands with you, and I honor those tears that are streaming down your cheeks, for they show that your better nature is coming to the surface. Now let me suggest that next Sunday when you go to class-meeting just omit that confession that you are a miserable, unworthy sinner—everybody knows that—don't implore the Throne of Grace to purify your heart and make you a new man, but just tell the Lord you have taken that contract off His hands, and intend to try to build up a little heaven on earth, and I tell you that when you come to join in the singing you will see as you never saw before, the sublimity of the sentiment in that beautiful melody, "Nearer My God to Thee!"
J. W. WARR.

Live Stock Judges.

The following are the names of the judges on live stock at the Toronto show omitted from our report in another column:—

Sheep judges.—Cotswolds—Thos. Teasdale, Concord, and V. Fitch, Oriel. Leicesters and Lincolns—Jas. Brooks, Whalen, and R. G. Garbutt, Belleville. Shropshires—S. H. Todd, Wakeman, Ohio; A. Brown, Picton. Oxfords, Hampshires, and Suffolks—R. J. Hine, Dutton, and John Harcourt, St. Anne. South-downs—Hy. Arkell, Teeswater, and John Miller, Markham. Merinos and Dorsets—Geo. P. Everest, Mt. Vernon, and John Jackson, Abingdon.

Swine judges.—Berkshires and Poland-Chinas—Jos. Main, Milton, and A. Johnston, Greenwood. Yorkshires and Chester Whites—G. B. Hood, Guelph, and J. M. Hurley, Belleville. Tamworths, Essex, Suffolks, and Duroc-Jerseys—D. G. Hanmer, Mount Vernon, and Geo. Green, Fairview.

GOSSIP.

The attention of our readers is directed to the announcement elsewhere of the annual sale of pure-bred live stock, on Wednesday, Oct. 14th, at the Ontario Agricultural College, Guelph. For catalogues, apply to Wm. Rennie, Farm Superintendent.

D. H. Ketcheson, Menie, Ont.:—"Although the pasture is poor on account of the drought, my sheep are doing well, and the Jerseys are in good shape for fall fairs. Woodflower 2nd dropped a very fine heifer calf last month, which is doing well."

NOTICES.

A new freezing company has recently begun operations at North Geelong, Australia, having an order for 10,000 carcasses of frozen mutton from London, Eng., to start with.

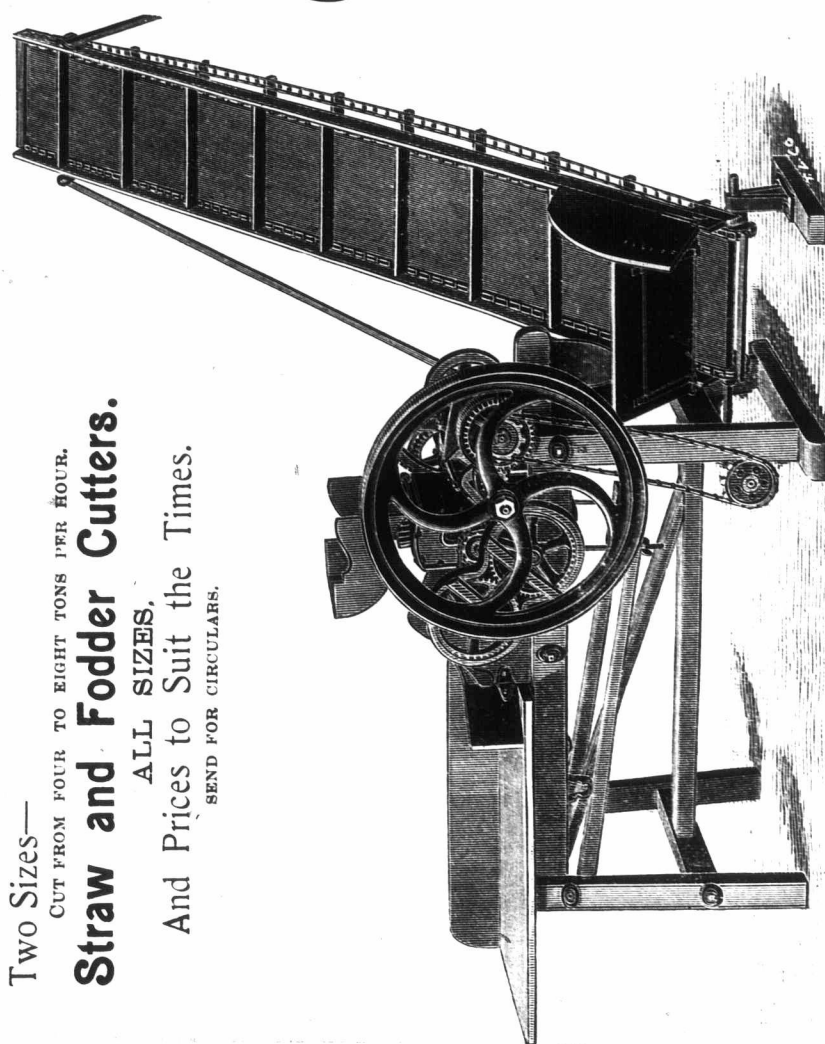
During the season beginning early in April and ending on July 11th there were exported from Jersey, of potatoes, 64,583 tons, the price ranging from £32 per ton at the start, for those grown in glass houses, down to £2 14s. 2d. at the close; total receipts, £435,192, against £339,989 in 1895.

Every year draining becomes a more essential part of successful farming. Proper tools for doing the work are therefore more important. In this connection the announcement of Mr. R. G. Scott, Perth, Ont., in our Sept. 1st issue, page 368, regarding the Larimer Ditching Plow, is of special interest. Write him for particulars.

The offices of The Colliery Engineer Company, proprietors of "The Colliery Engineer and Metal Miner," "Home Study," and The International Correspondence School, in the Coal Exchange Building, Scranton, Pa., whose advertisement appears elsewhere, were partially destroyed by fire on Sunday morning, August 30th. Fortunately, their printing plant was in another building, and they had reserves of all instruction and question papers, drawing plates, and other supplies and stationery used in the schools in still another building, so that the business was not seriously interfered with. New offices, more convenient and commodious than the old ones, were secured and will be occupied until the completion of their own new buildings, now being erected on Wyoming Avenue.

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By order of the Minister of Agriculture, the Eighteenth Annual Sale of Surplus Stock, the property of the Ontario Government, will be held at the

Ontario Agricultural College, Guelph,

Wednesday, October 14th, 1896.

A number of young animals, representing several breeds of Cattle, Sheep, Swine, and Poultry, will be sold by Public Auction. The poultry will be sold first, commencing at one o'clock sharp.

For Catalogues, apply to Wm. RENNIE, Farm Superintendent.
18-b-om JAMES MILLS, President.

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Sydenham Herd of **Ayrshires**

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Owing to the ill-health of the proprietor, he has determined to dispose of this famous herd without reserve, also all his stock and implements. For particulars write

Thomas Guy,

—om SYDENHAM FARM, OSHTAWA, ONT.

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7-y-om **WHITESIDE BROS., INNERKIP, ONT.**

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PLACE.	DATE.
Itenfrew, Ont.	Sept. 17th and 18th.
Ottawa, Ont.	Sept. 17th to 26th.
Peterborough, Ont.	Sept. 21st to 23rd.
Goderich, Ont.	Sept. 22nd to 24th.
Truro, N. S. (Eastern Division)	Sept. 21st to 25th.
Strathroy, Ont.	Sept. 23rd to 25th.
Woodstock, Ont.	Sept. 24th and 25th.
Iona (Southwold & Dunwich)	Sept. 25th.
Whitby, Ont.	Sept. 28th to 30th.
Tilsonburg, Ont.	Sept. 29th and 30th.
Chatham, Ont.	Sept. 29th to Oct. 1st.
Markham, Ont.	Sept. 30th to Oct. 2nd.
Stratford, Ont.	Oct. 1st and 2nd.
Walkerton, Ont.	Oct. 1st to 3rd.
Paris, Ont.	Oct. 6th and 7th.
St. Thomas, Ont.	Oct. 6th to 8th.
Orillia (E. Simcoe), Ont.	Sept. 23rd and 24th.
New Westminster, B. C.	Oct. 6th to 10th.
Yarmouth, N. S. (Western Division)	Sept. 30 Oct. 1 and 2.

Premiums! Premiums!

A CHANCE AT THE FAIRS!

To any of our subscribers furnishing the required number of names we will send per mail or express, as most convenient, the following premiums, charges prepaid on all except Animals:

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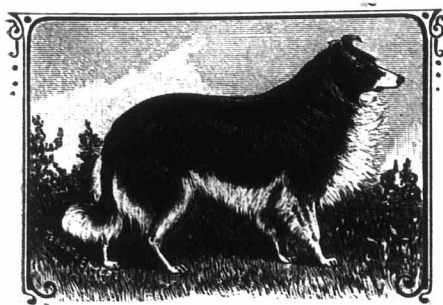
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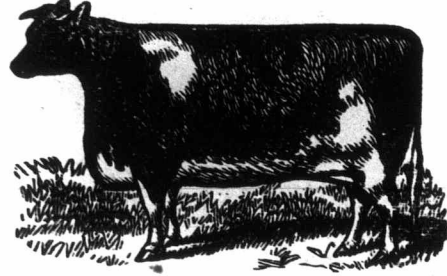


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We are breeding registered BERKSHIRES of the best English strains. Short-horns or Berkshires shipped to order. Send for our 1895 catalogue.

GREENWOOD P. O. AND TELEGRAPH OFFICE, Claremont Stn. C.P.R. or Pickering Stn. G.T.R. Parties met on shortest notice at either station. 5-1-y-om

THOS. ALLIN & BROS.

LAKE VIEW FARM, OSHAWA, ONT.,

Breeders of CLYDES-DALES, SHORTHORNS, and SHROPSHIRE. Have 3 young bulls for sale, one 2 years old, and two yearling bulls sired by imp. Cruick-shank bulls. 4-2-y-om

HAWTHORN HERD OF DEEP MILKING SHORTHORNS.

FOR SALE—Several Heifers, got by the Golden Drop bull, Golden Nugget = 17548, by imported General Booth, and from A1 dairy cows. WILLIAM GRAINGER & SON, 13-y-om, Londonboro, Ont.

THE GRAND VALLEY STOCK FARM

G. & W. GIER, Props., Grand Valley, Ont., Breeders of Short-horns and Imp. Yorkshires. We offer for sale young bulls, cows and heifers of choice breeding and good quality at very low prices; also choice young Yorkshires of both sex. 13-y-0

Shorthorns, Shropshires, and Berkshires.

Six young Bulls from 10 to 14 months old; 25 Shropshire Ewes, one, two and three years old, due to lamb in March; 15 ram and 20 ewe lambs. Twenty Berkshire Sows, from 5 to 12 months old, several of them due to farrow in March, April, and May. The above choice stock are all registered, and FOR SALE at GREAT BARGAINS. 15-y-om W.C. Pettit, Freeman P.O., Burlington Stn., G.T.R.

CARGILL HERD OF SHORTHORNS.

Six young Bulls, and as many heifers as you want, all bred in the purple. Come and see them or write. H. CARGILL & SON, Cargill Stn. & P.O. Station on the farm. 11-y-om

For Sale—SCOTCH SHORTHORNS of both sexes; also a few BERKSHIRE Sows six months old. A few very choice young rams for sale at low prices. No. 1 breeding and fine quality. Stock guaranteed to be as described. St. Bolton, C. P. R.; Palgrave, G. T. R. 22-2-y-0

A. J. WATSON, CASTLEBERG, ONT.

(ASHTON FRONTVIEW FARM), breeder of choice SCOTCH SHORTHORNS. Young stock of either sex, and choicest breeding, for sale at reasonable prices. Correspondence solicited. Bolton Station, C. P. R. 22-2-y-0

Geo. Downey & Bro., CASTLEBERG, ONT.,

breeders of SHORTHORN CATTLE and COTSWOLD SHEEP. A few very choice young rams for sale at low prices. No. 1 breeding and fine quality. Stock guaranteed to be as described. St. Bolton, C. P. R.; Palgrave, G. T. R. 22-2-y-0

F. BONNYCASTLE & SONS,

CAMPBELLFORD, ONT.,

Breeders of Shorthorn Cattle, Cotswold Sheep; an extra lot of ram lambs, ewe lambs, and breeding ewes, also a very fine shearing ram. Cows, heifers, and heifer calves for sale. 12-2-y-0



Ingleside Herefords.

UP-TO-DATE HERD OF CANADA!

Bull Calves OF THE RIGHT SORT For Sale.

H. D. Smith, INGLESIDE FARM, Compton, Que. 17-y-om

"Gem Holstein Herd."

NAP! \$75.00 CASH

Sir Archibald Mascot, No. 353, C.H.F. H. B., 4 years old 8th of October, 1895; was never sick a day; is very active, and a splendid stock getter, and is in every respect a first quality bull. We have used him as our stock bull with the very best results. Only part with him to change breeding. He was a prize winner three years in succession at Toronto Industrial Exhibition.

HILLIS BROTHERS, BEDFORD PARK P.O., ONT. Shipping Station, Toronto. 7-y-om

A. HOOVER & SON, EMERY, ONT., BREEDERS OF

Holstein-Friesians of the choicest blood type; selections from our herd won the herd prize at Toronto Industrial and Montreal in 1895. Herd now headed by the two-year-old Baron Witzde, who has never yet been beaten in the show rings of Canada. Stock for sale. Prices right. 10-2-y-om

HOLSTEINS!

None but the best are kept at BROCKHOLME FARM, ANCASTER, ONT. Write me for prices if you want first-class stock at moderate figures. Holsteins in the advanced registry. Yorkshires all recorded. 12-y-om R. S. STEVENSON, Prop.

MAPLE HILL HOLSTEIN-FRIESIANS.

FOR SALE—Yearling Bull, Sir Aaggie Barrington; fine dairy form, good color, and in good condition. His grandam, imp. Katie DeBoer, is now making, in my herd, from 2 1/2 to 3 lbs. of butter per day, at 12 years old. The bull resembles her very much in form and markings. Price, \$40.00. 11-y-om G. W. CLEMENS, St. George, Ont.

HOLSTEINS!

WE now offer young stock that have won prizes, and calves from our show herd, from one month to one year old, whose dams have large records—any age or sex—FOR SALE, at very low prices to quick buyers. Also some Poland-China Pigs, 1 and 6 months old; same quality (the best).

A. & G. RICE, Brookbank Stock Farms, CURRIE'S CROSSING, Oxford Co., Ont. 18-y-om

D.H. KETCHESON

MENTIE, - ONTARIO, BREEDER OF CHOICE

A. J. C. C. JERSEYS (St. Lambert and St. Helier strains) and

REG. SHROPSHIRE. A few fine shearing rams and ewes for sale at prices to suit the times. 12-2-y-om

Jersey Sale!

The entire herd of A. J. C. C. H. R. Lee Farm Jerseys. Forty head of reg. bulls, cows, heifers, and calves; same number of high grade cows and heifers. Excellent chance to start a herd cheap, as they must be sold within the next 90 days. Come and see, or write E. PHELPS BALL, Lee Farm, Rock Island, P. Q. 17-y-0

JOHN PULFER, BRAMPTON, ONT.,

Breeder of choice reg. and high-grade Jerseys of fine quality. Also TAMWORTH SWINE. Young stock always for sale at prices that should sell them. 12-2-y-0

GLEN ROUGE JERSEYS.

WILLIAM ROLPH, Markham, Ont., offers twelve Jersey Bulls and Heifers (pure St. Lamberts), out of tested cows. Grand individuals. Prices right. 21-y-om

LAST CHANCE

To obtain a young JERSEY BULL from the famous Belvedere herd. As my whole herd now goes to Prince Edward Island, I have reserved for my customers

Six Splendid Young Bulls

Four months to eighteen months old. Sure prize-winners. Reasonable prices to immediate buyers. These are the best I have ever offered.

MRS. E. M. JONES, Box 324, BROCKVILLE, Ont., CAN.

JERSEYS FOR SALE

At the head of the herd is the grand young St. Lambert bull, Nabob, son of Nell's John Bull. Stock of both sexes and different ages, and of choice breeding, now on hand. JONATHAN CARPENTER, WINONA, ONT. 12-2-y-om

WILLOW GROVE HERD OF JERSEYS.

Sweepstake herd of 1894. Stock from imp. bulls and imp. and home-bred dams of St. Lambert, St. Helier, and Signal strains. Young of splendid individuality always for sale; also Plymouth Fowls. Eggs, \$1.00 per setting. Highfield St., G. T. R. 6-2-y-om J. H. SMITH & SON.

GUERNSEYS

This is the Dairy breed for ordinary farmers. Large, vigorous and hardy, giving plenty of rich milk. Several fine young bulls for sale at very reasonable prices. A few heifers can be spared. Address: SYDNEY FISHER, Alva Farm, Knowlton, P. Q. 17-y-0

James Cottingham,

RIVERSIDE FARM, Ormstown, Que.,

Breeder of Ayrshire cattle. Herd is headed by the prize-winning bull, White Prince of St. Anne's—6408—, Choicely bred stock for sale at all times, including some very choice young bulls and heifers. 4-2-y-0

OAK POINT STOCK FARM

Ayrshires FOR SALE.

I have now for sale a choice lot of young bulls and heifers of fine quality, and bred from the best milking strains. Particulars on application. J. B. CARRUIERS, Kingston, Ont. 17-y-0

J. YULL & SONS,

MEADOWSIDE FARM, CARLETON PLACE, ONT.

Choice Ayrshires of deepest milking strain. Largest and oldest herd in Canada; headed by Leonard Meadowside, winner of 1st prize at Chicago, Ottawa, and Gananoque. Fine Shropshire Sheep, and a choice lot of young Berkshire Pigs for sale. Visitors met at Queen's Hotel, Carleton Place. Give us a call before buying elsewhere. 20-y-0

Maple Cliff HERD OF Ayrshires

Are noted for their successful show-yard career. Choice quality and heavy milking families. A few exceptionally choice young animals of both sex now for sale. Prices in keeping with the times. For particulars address ROBERT ROBERTSON, Prop., 16-2-y-om COMITON, QUE.

Ayrshires!

PURE-BRED, of different ages, and both sex. No inferior animals. Write for particulars. A. McCallum & Son, Spruce Hill Dairy Farm, DANVILLE, QUE. 22-y-0

AYRSHIRES - AND - YORKSHIRES.

The largest herd in the Province of Quebec; selected from deep milking strains. Also choice Yorkshires. Orders booked for young pigs. W. F. & J. A. STEPHEN, Trout River, Que. 22-y-0



HAVE NOW 3 Young Ayrshire Bulls,

ON HAND 1, 2 and 3 years old, respectively; all prize-winners; the 3-year-old having won 1st at leading exhibitions. Write: 19-y-om MESSRS. ROBERTSON & NESS, Howick, Que.

GLENGARY STOCK FARM.

My herd comprises the best strains procurable. Am now offering young bulls and heifers descended from the importation of the late Thos. Brown. PRICES RIGHT. JNO. A. McDONALD, JR., Williamstown, Ont. 4-2-y-

Thos. Drysdale,

Allan's Corners P. O., Quebec, Breeder of high-class Ayrshires, headed by Lord Sterling, winner at Montreal in '95. Extra choice young bulls and heifers for sale. Farm 1 1/2 miles from Bryson's St., G. T. R. 4-2-y-0

AYRSHIRES FOR SALE.

Several good yearling bulls by Earl of Percy and Prince Leopold, also cows and heifers. My spring calves will be by the noted bulls White Prince, Sir Colin, and Earl of Percy. Prices right. 4-2-y-0 Wellman's Corners, Hoard's St.

Prize-Winning AYRSHIRES FOR SALE.

I have at present one of the largest and best herds in Ontario, which has been very successful in the prize ring. They are deep milkers and of a large size. Bulls, cows and heifers for sale always on hand. F. W. TAYLOR, Wellman's Corners, Hoard's St. 4-2-y-0

JAS. McCORMICK & SON,

ROCKTON, ONT. 20-2-y-0

SEPTEMBER LIST.

Shropshire Ram Lambs

THE BEST I EVER HAD.

If you want a show or a breeding ram don't fail to see them at

TORONTO and LONDON FAIRS.

Shropshire Ewes in lamb at tempting prices.

SHETLAND PONY—a dandy. YORKSHIRE SWINE—boars and sows. LITTLE COLLIE PUPS, sire a good worker.

RICHARD GIBSON,

DELAWARE, ONT.

C. & E. WOOD,

Freeman, - Ont.,

Breeders of high-class

LEICESTER SHEEP

Choice ewes and rams and ewe lambs for sale at very low prices, considering quality. Write us for prices and particulars. 18-y-0

OXFORD DOWN SHEEP.

A FINE LOT OF YOUNG YEARLING RAMS AND EWES. PRICES REASONABLE. INSPECTION INVITED. 6-2-y-om

HERBERT WRIGHT, Box 47, Cuelph, Ontario.

SMITH EVANS, Gourock, Ont.

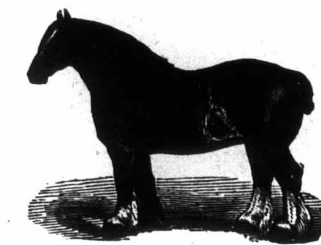
Breeder and importer of registered Oxford-Down Sheep. Selections from some of the best flocks in England. Stock for sale at reasonable prices. Inspection invited. 6-1-y-0

Henry Arkell,

ARKELL P. O., ONT.

Pioneer importer and breeder of registered Oxford-Down sheep. Won many honors at World's Fair. Animals of all ages and sexes for sale reasonable at all times. 9-y-om

THORNCLIFFE STOCK FARM!



I have on hand the best young Clydesdale Horses and Mares on this continent. Bred from the well-known sires, Prince of Wales, Darnley, Macgregor, Energy, Lord Montrose, The Ruler, Carruchan Stamp, Knight Errant and other celebrities. My stock in the above lines were very successful at all the large shows last year. Call and examine our stock before purchasing elsewhere. Terms reasonable.

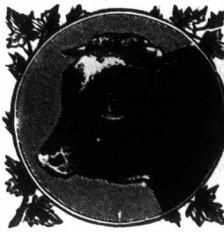
SHROPSHIRE.

Orders can now be booked for Shearling Rams, Ram Lambs and Ewes, sired by the celebrated prize-winning English ram, Bar None. Also Rams and Ewes of this year's importation.



SHORTHORNS!

CHOICE YOUNG HEIFERS and BULLS by the celebrated Cruickshank bulls NORTHERN LIGHT —AND— VICE CONSUL.



ROBERT DAVIES, Proprietor. P. O., Toronto.

HILL HOME SHROPSHIRE

We have for sale shearling rams of exceptional quality and covering, sired by Tinker, a winner at New York and London and now heading our exhibition flock of '96, and an imp. Parker ram. Can also furnish grand show pens, right. Lambs from this flock won all special offers at Toronto, London, New York, Guelph, and ten county fairs in 1895. Parties wishing stock of extra quality should visit this flock before purchasing elsewhere.

14-L-o D. G. Hanmer & Sons, Mt. Vernon, Ont.

REGISTERED SHROPSHIRE RAMS

(wholesale or retail) at less than half price. T. C. PATERSON, Postmaster, Toronto. 17-b-om

R. HONEY,

Warkworth, Ont., Northumberland Co., BREEDER OF

Reg. Holsteins, Large White Yorkshires, and Cotswold Sheep. Choice young Yorkshires for sale at prices to suit the times. Orders booked for choice Cotswold ram lambs. 12-2-y-o

IMP. LARGE WHITE YORKSHIRES FOR SALE.—I am now prepared to supply young pigs of this noted breed at hard-times prices. Orders booked for young pigs due Oct. 1st. Write me for prices and particulars. Mention "Advocate." 18-2-y-o WM. TEASDALE, Dollar, Ont.

Specialty of Improved Yorkshire Swine



A grand opportunity to purchase first-class stock to produce bacon hogs which bring the highest price in the market. Stock of different ages at moderate prices. Examine this herd at the exhibitions. J. E. BRETHOUR, 3-y-om Burford, Ont.

IMPROVED LARGE YORKSHIRES

FOR SALE—of the best type and breeding. Young boars fit for service and sows fit to breed. Can furnish young pigs of all sizes and ages, and No. 1 quality. Can supply pairs not akin. 18-2-y-o E. DOOL, Hartington, Ont.

FOR good healthy BERKSHIRES and YORKSHIRES two months old, boars ready for service, and sows in pig of good quality, write H. J. DAVIS, Box 290, Woodstock, Ont.

Breeder of LARGE ENGLISH BERKSHIRE and IMP. WHITE YORKSHIRE SWINE, SHORT-HORN CATTLE, and SHROPSHIRE SHEEP. 8-y-om

Breeders of Berkshires and Chester White Swine. We have for sale young stock of either sex, and any age, at prices to suit the times. Correspondence solicited. 8-2-yo

H. GREGG & SONS,

SALFORD, ONTARIO.

Breeders of Berkshires and Chester White Swine. We have for sale young stock of either sex, and any age, at prices to suit the times. Correspondence solicited. 8-2-yo

ROSE HILL FARM.

JAMES DORRANCE, Salford, Ont.

REGISTERED : BERKSHIRES

Of the most approved type. Choice young stock always for sale. Write at once and secure a bargain. 18-2-y-om

LARGE ENGLISH BERKSHIRES.

My herd won 246 prizes, 10 diplomas, 5 medals; also Prince of Wales prize, and sweepstakes over all breeds since 1888 at the leading fairs in the Dominion. Choice stock of all ages for sale. Pairs supplied not akin. GEO. GREEN, Fairview P. O., Ont. Stratford Station and Telegraph Office.

W. C. EDWARDS AND COMPANY, IMPORTERS AND BREEDERS

Laurentian Stock and Dairy Farm, NORTH NATION MILLS, P. Q.

Pine Grove Stock Farm, ROCKLAND, ONT.

Ayrshires, Jerseys, Shropshires, Berkshires. Shropshires and Scotch Shorthorns. The imported Cruickshank bulls Knight of St. John and Scottish Sportsman are at the head of this herd of Imported and Home-bred Cows and Heifers of the most approved Scotch families. 7-1-y JOS. W. BARNETT, Manager.

JOHN H. DOUGLAS, Warkworth, Ontario,

Importer and Breeder of High-Class Ayrshires.

My stock is of the most approved type, and of uniform, fashionable color. Choice imported and home-bred stock of grand individuality, including Violet of Park (imp.)—2820—, Alice of Hatton (imp.)—Queen May—2009—, Fairy Queen, Peach Blossom—2816—, and Isabel—2817—; also a few choice calves, and our grand stock bull, Dominion Chief—1214—. I also offer a couple of good yearling heifers (of the milking type), Heather Bloom and Snowflake, Vol. XII. Prices right. Correspondence solicited. 12-2-y-om ST. NORWICH, C. P. R. CAMPBELLFORD, G. T. R.

ISALEIGH GRANGE STOCK FARM,

DANVILLE, QUEBEC.

A CHOICE assortment of the following pure-bred stock always on hand: Ayrshire and Guernsey Cattle of the choicest breeding and most fashionable type and color. High-class Improved Large Yorkshires of all ages, "Sanders Spencer stock." Shropshires of the finest quality. Our breeding stock has been selected, at great cost, from the choicest herds and flocks of both England and Canada, and have been very successful winners in all leading show rings. Young stock supplied, either individually or in car lots, at the lowest prices. Prompt attention given to all correspondence. 9-y-om J. N. GREENSHIELDS, Proprietor. T. D. M'CALLUM, Manager, Danville, Que.

Mount Vernon Dairy Stock Farm.

FOR SALE:—A fine four-year-old Holstein Bull, Artis Aaggie Prince, No. 17, C.H.F.H.B., the sire of many prize-winners at Toronto, Montreal, Ottawa, and Gananogue, in 1895. Sire, Prairie Aaggie Prince, one of the best bulls ever imported to Canada; \$800.00 was refused for him. Dam, Artis Kassie, gave 49 lbs. 2 ozs. of milk in one day as a two-year-old, and gave over 70 lbs. milk in one day on ordinary feed on the Model Farm, Guelph. Also a lot of fine Tamworth Pigs for sale, ready to breed and of the very best quality. Address—W. C. QUICKFALL, GLENALLAN, ONT. 2-2-y-o

Dorset Horn Sheep

AND CHESTER WHITE SWINE SPECIALTY AT MAPLE VIEW FARM, THORNDALE, ONT. STOCK FOR SALE AT HARD-TIMES PRICES. R. H. HARDING, 17-g-om Prod.

CLOVERLAND STOCK FARM.

DUNDAS HERD OF CHESTER WHITES and LARGE ENGLISH BERKSHIRES. Our Berkshires are all bred direct from imported stock, and we ship nothing but first-class animals. We also make a specialty in Chester Whites, and furnish a good pig at prices as low as the lowest. Parties desiring to secure stock would do well to write or call and see me in person. Five miles C. P. R. station. IRA CHRISTIE & SON, Winchester, Ont. 16-2-y-o

IMP. CHESTER WHITE and TAMWORTH SWINE.

Having won the sweepstakes for the best boar and two sows at Toronto Exhibition of 1895, we are booking orders for spring pigs from imp. stock in pairs not akin. Stock for exhibition purposes a specialty. Pedigrees furnished. Reduced rates by express. Drop a card for prices before buying elsewhere. M. GEORGE & SONS, Crampton, Ont., Middlesex County. 17-y-om Dereham Centre, Ont.

E.D. GEORGE

PUTNAM, ONT. Importer and Breeder of Ohio Improved Chester White Swine. The largest and oldest established registered herd in Canada. I make this breed a specialty, and furnish a good pig at a fair price. Write for prices. 14-2-y-om

SPRINGRIDGE STOCK FARM

WILLIAM J. DUCK, Morpeth, Ont., Imp. and Breeder of POLAND-CHINA SWINE. Imported Blackmoore at head of herd. Nothing but first class stock ship ped. 10-2-y-om

GOSSIP.

Another shipment of good Clydesdales, headed by the three-year-old stallion, Prince Eureka (9972), has been made from Scotland to South Africa, by Mr. Walter S. Park, Hatton, Bishopton.

The death of a noted trotting horse, Bayard Wilkes, 2,121, by Alcantara, dam Barcelona, is reported from Roadville, Mass. He had injured himself badly during the night, and was killed on the advice of a veterinarian.

The Prince of Wales Thoroughbred, Persimmon (winner of this year's Derby), which appeared as our first-page illustration in August 15th issue, on September 9th achieved another victory for his royal owner, winning the St. Leger.

Out of eight samples of Victorian butter recently examined by the government analyst in West Australia, five were found adulterated, the substance used being coconut oil, palm-nut oil, vegetable oil, and animal fat. The adulteration varied from 13 to 17.2 per cent.

A new organization has just been formed in Ireland, called "The Irish Horse-breeding Association," the object of which is stated to be "to ascertain the best mode of maintaining the high character of Irish horses as hunters, harness horses, roadsters, polo ponies, and military remounts." Several excellent societies have previously been at work, having very much the same purpose in view.

At the great Sydney, New South Wales, ram sales 258 sheep realized £3,685 3s. 6d., an average of £14 5s. 6d. each. The celebrated five-year-old Merino ram, President, bred by Mr. Jas. Gibson, of Bellane, was knocked down to Messrs. C. E. Grub and E. D. Lawrence, of Tasmania, for no less a sum than 1,600 guineas, amid loud cheering. The price was a record for Australia, the next highest price having been paid in 1890 for Matchless, while in the same year 700 gs. was paid for Prince Hero. Other prices were 350 gs., 345 gs., 150 gs., and 100 gs.

This year an interesting breed competition for cattle giving the best return in milk and butter for food consumed was held under the auspices of the Agricultural Society of France, at St. Brieuc, in Brittany. The competition was open to breeds of the North of France, the Channel Islands, pure-bred Shorthorns, and Shorthorn-French crosses, and each competitor was required to enter three animals of the same breed, but without restriction as to age or time of calving. As a result the first and third prizes fell to the Jerseys, the Breton breed being second, the Cotes-du-Nord fourth, but closely followed by Shorthorn-Norman crosses.

Messrs. A. & W. Montgomery have sold six Clydesdale stallions for exportation from Scotland to South America. These are the well known prize horses, The MacHugh, The MacMartin, Scotch Earl, Onward, The Mackenzie, and Potentate. Mr. Walter S. Park, Hatton, Bishopton, has sold for exportation to South America the well-bred three-year-old colt, Royal Airies, which travelled in Dunblane district this year. He was bred by Mr. Fred. Drumflower, and is got by Mains of Airies, out of a Drumflower Farmer mare. Lords A. & L. Cecil, Orchardmains, Kent, have sold the big horse, Lord Cranbrook, for exportation to Buenos Ayres. He was got by Crown of Royalty, out of Lady of Avenel. The above firm also purchased recently three more horses for Col. Robert Holloway, the well-known Western States breeder, viz., Prince Attractive, Prince Pleading, and Fickle Fortune's Princess (illy), all by old Cedric.

BOOK TABLE.

A CARNIVAL NUMBER. That enterprising British Columbia Journal, "The Province," of Victoria, has distinguished itself by the issue of a special carnival number in connection with the great carnival regatta held at Vancouver. Besides a useful map of the lower mainland district of B. C., it contains nine beautiful engravings on special paper, showing Vancouver and Burrard Inlet, several of the finest buildings, and a number of attractive scenes. The reading matter, too, is in keeping with the illustrations.

FORESTRY REPORT.

In our meditative moments we realize in a sense the extent to which our country has and will suffer on account of the ruthless deforestation which has taken place, and still to a greater or less extent continues. We were greatly gratified to find, through its annual report, the interest being taken in forestry and arboriculture by the Ontario Department of Crown Lands. Their 1895 report, sent out by Mr. Thos. Southworth, Clerk of Forestry, ably deals with the forestry problem in the Crown forests and in the older portions of the Province: forestry on the farm; varieties of trees to plant; how to procure them; uses of forest products; the planting and management of woods; and other kindred branches of the subject. The report is well prepared, and contains information that citizens of our country should know. Furthermore, Mr. Southworth has presented a valuable array of useful facts in well-condensed and exceedingly readable style.

PROF. LINTNER'S REPORT.

From the New York State University, Albany, we have received a copy of the tenth annual report, respecting injurious and other insects, of J. A. Lintner, Ph. D., State Entomologist. Special mention is made of the notable visit of "the seventeen-years locust" in the Hudson River Valley last year. Many additions and great improvements have been made to the entomological collection. We are pleased to note that the study of this particular subject is receiving increasing attention in the State schools. Collections are being placed in the Normal schools so that teachers in training may be properly equipped for their subsequent work. Prof. Lintner estimates that with present scientific knowledge and the means at command in N. Y. State, the depredation of insects injurious to farmers and fruit-growers could be reduced one half. The present report is well illustrated, and a fitting continuation of those previously issued by Prof. Lintner; nor does it include the results of all the studies and observations made during the year, and a more extended report is promised later.

English Shropshire Sales.

A number of very important ram sales have recently taken place in various parts of the English midlands. The annual draft from the famous Harrington Hall flock of Mr. A. E. Mansell came under the hammer of Messrs. A. Mansell & Co., of Shrewsbury. For most of the rams offered an exceptionally brisk demand was experienced, and the result was that in several instances prices ran well into the three figures. The ram, Phenomenon 8680, was run up to 120 gs., at which figure he was secured by Messrs. A. Tanner and S. Minton. A ram by Montford Dreamer, winner first prize as a lamb, and winner in pen of five shearing rams at Leicester, went to Mr. R. P. Cooper, at 155 gs. Ram, winner as a lamb, and in pen of winning rams at Leicester, R. A. S. E., 53 gs. Mr. J. E. Farmer. One of the first prize pen of five at Leicester, and Shropshire and West Midland show, made 51 gs., his purchaser being Major Lambert, Beauparc, Ram by Montford Dreamer, winner third prize Leicester, R. A. S. E., etc., went at 165 gs. to Mr. R. P. Cooper. Many of the others sold at prices ranging from 20 to 40 guineas. Of the ewes, pens 1 and 2 went to Mr. Lythall, at 7 gs. and 5 gs.; pens 3 and 4, to Major Lambert (Ireland), 6 1/2 gs. and 4 1/2 gs.; others 3 1/2 gs., 3 1/2 gs., 3 gs., etc. The general averages were as follows:—43 rams let and sold, £299 3s. 8d.; 50 ewes, £4 1s. The usual draft sale from Messrs. Evans's celebrated flock at Sherlowe also came off. The top price of the sale, 46 gs., was paid by Lord Falmouth for one of the shearlings. The others sold at figures ranging from 8 to 30 gs., the average being £13 14s. The ewes sold from 2 to 6 gs.

On the occasion of Mr. T. Minton's annual sale, the top price realized was 90 gs., paid by Mr. Bowen Jones for one of the shearlings. The others sold from 5 to 40 gs., the average being within a fraction of £16. For the ewes an average of £3 10s. was realized.

GOSSIP.

A disease supposed to be Texas fever is reported among cattle at Wilton Junction, Ia., near the stock-yards.

Queensland recently lost by death one of its oldest and best-known breeders and farmers, Mr. J. D. McAnsh. He had been interested chiefly in Shorthorn and Devon cattle and Merino sheep.

South America is making rapid strides in the matter of stock-breeding. Mr. R. S. Ewart, of Buenos Ayres, has recently sailed from Scotland with a well-selected consignment of half a dozen Clydesdale stallions of fashionable breeding.

Damage to Australian flocks of sheep from stray dogs is reported to be on the increase, one of the most valuable pure-bred flocks near Adelaide recently being ravaged. Foxes are also troublesome, their depredations being also on the increase.

Clydesdale horse-hiring is said to be unusually brisk in Scotland this season. In the middle of August more good horses were placed for next season than in the corresponding month for a long time. Alike in the North and in the South this activity prevails. It is remarked that rates are considerably reduced.

The annual show of the Australian Sheep Breeders' Association this year promises to be a great success. The entries number 237 Merinos, as against 208 last year, and the long-wools number 65, as against 53 last year. The most important feature in this year's show is the presence of Tasmanian competitors in the Merino classes.

The board of cattle commissioners of Vermont, assisted by Dr. Edward Moore, of Albany, N. Y., have examined eighty Jersey cows belonging to Moulton Bros., Green Mountain Stock Farm, Randolph. Over 75 per cent. of the animals tested were found tuberculous, and eight were killed, verifying the test. The remainder of the herd is yet to be inspected.

MR. W. G. PETTIT'S SHORTHORNS, SHROPSHIRE, AND BERKSHIRES.

A representative of the FARMER'S ADVOCATE again had the pleasure recently of calling on Mr. Pettit, of Freeman, Ont., and a stroll over the well-regulated farm, which is situated in one of the finest parts of the Province, and amongst the herd of high-bred Shorthorns, and the large flock of fine Shropshires luxuriating in fields of rape nearly to their backs, is a pleasant experience to a lover of fancy-bred stock and nature in its refreshing peacefulness.

The Shorthorns were found in good form; the cows, a strong, handsome lot of the useful type, doing duty at the pail. A number of fine two-year-old heifers were in the pens; a uniform, thick-fleshed, thrifty lot, and the making of fine young bulls, from calves to two years old; these and the young heifers being sired by Grand Fashion = 15404 =, bred by Arthur Johnston, of Greenwood, Ont., and sired by (imp.) Hospedar. A grand young fifteen months old bull, Indian Statesman = 2381 =, by the renowned stock bull, Indian Chief, was recently purchased from Arthur Johnston, of Greenwood, and is now installed at the head of the herd. He is of the famous old Duchesne family on the dam's side, and gives every promise of maturing into an exceptionally fine stock bull, and in many ways the counterpart of his sire. He is a very thick, deep-fleshed fellow, with grand quality, and a rich, mellow handler, and a bull with all that should develop as he at present indicates, would make a strong fight for leading showing honors.

The Shropshires are in capital trim, and number in all some one hundred head, with a grand two-shear ram, bred by Messrs. Hammer, of Mt. Vernon, a strong, healthy lot, of good quality. The shearing ewes and rams, of which there are some thirty or forty head, are an even lot, in good condition, and should be quick sellers. Mr. Pettit has just purchased a very fine shearing ram of extra breeding and choice quality from Mr. James Phin, of Hespeler, Ont.

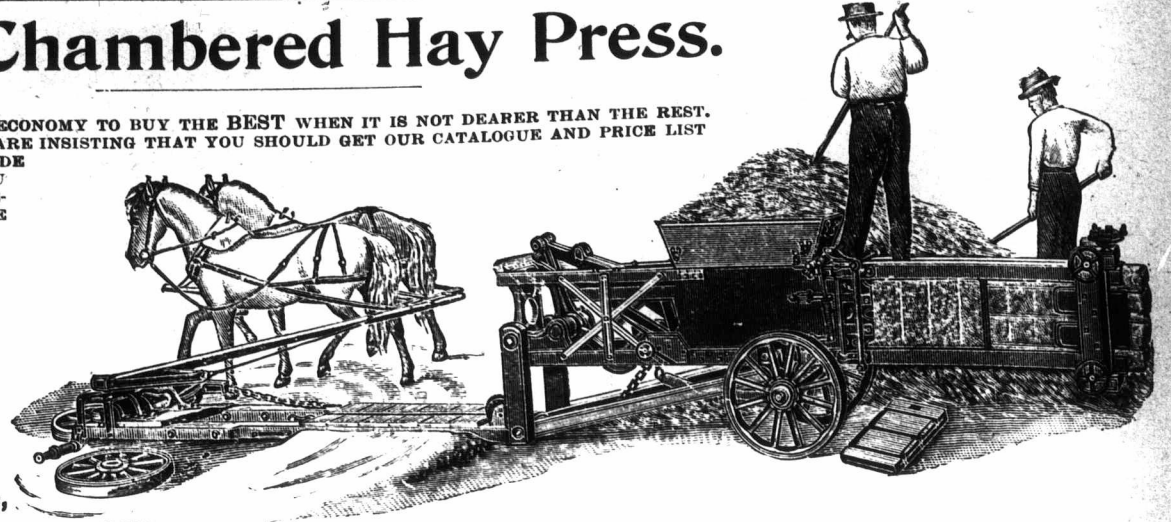
The Berkshires are headed by the yearling boar, Norman = 3936 =, by Lord Ross = 3072 =, a son of the great boar, Enterprise. They are of the lengthy, thick-fleshed type, which should recommend them to intending purchasers.

Mr. Pettit is prepared to supply the trade at prices in keeping with the times and within the reach of all.

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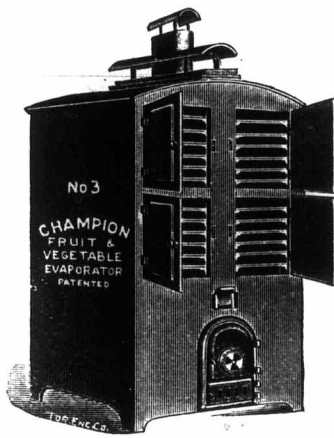
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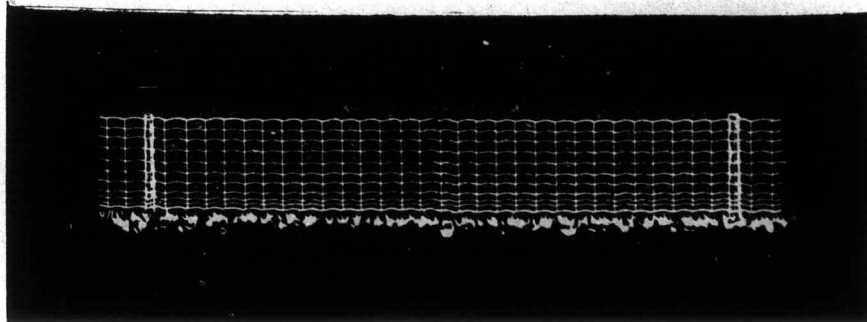
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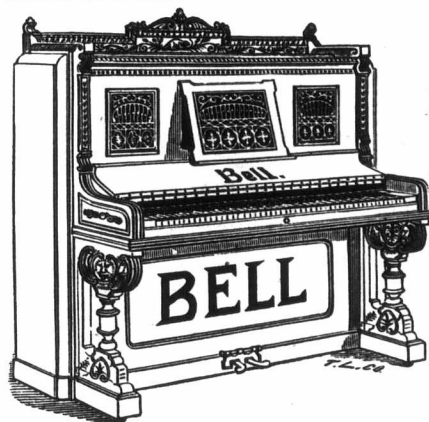


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Situated in one of the most fertile sections of the County of Oxford, Ont., and midway between the towns of Ingersoll and Tilsonburg, is the stock farm of the above gentlemen. The farm, which adjoins the Village of Dereham Centre, comprises over two hundred acres of choice farming land. The breeding of high-class stock has been a specialty with Messrs. Butler & Son the past few years, Chester White and Duroc-Jersey swine being the lines adopted until more recently, when a small herd of imported Guernsey cattle have been installed at the farm from the herd of Elliott-Warren, Winston, North Carolina, U. S. But the breeding of pure-bred stock is not the only special feature of this establishment. Dairying on quite an extensive scale is also carried on, some forty or more milking cows being kept, besides young stock; and the most modern appliances are in use for the manufacture of butter. The large barns—125x42 and 150x40—afford ample room for storing fodder, while the well-fitted basement stables will accommodate seventy-five or eighty head of cattle and a number of horses and other stock. The buildings are well-equipped with modern machinery necessary on an extensive stock farm. In the creamery everything was clean and fresh, and all the utensils in use necessary for the production of a high-class article. The skim milk is forced by steam through iron pipes to the piggery, and at the pens a large steam boiler is convenient for use, if necessary, for the cooking of food and the heating of water. A windmill supplies water to all the buildings.

The Guernseys—A choice young herd is now installed at the farm, and no doubt they will be handled to the best advantage and with the same success as the swine. The imported cow, Irma 342, is an exceptionally large, well-formed cow, weighing some 1,300 lbs., carrying a magnificent large udder, and an exceedingly heavy milker, having a record of 70 lbs. of milk per day, making 3 lbs. of butter. The imp. two-year-old heifer, Fancy of Ledgfield 332, promises to mature a grand cow. A young son of hers by Promrose, Mr. Warren's grand stock bull, is a beauty, and will probably be heard from in the show rings. Florist's Rosina 7919, and Sofrona of Elm Grove 8276, are very promising heifers and richly bred. Dandy of Oxford (bred by J. A. Nilesstown, Ont.), assisted by King of Oxford 4003, a two-year-old of grand quality and conformation, heads the dairy stock. The former was a winner of 1st as a yearling and two-year-old at all leading fairs, while the latter has to his credit nine firsts at the best exhibitions, having never been beaten.

Chester Whites.—Among the Chesters, of which there is a large and choice stock, we noticed the imported sow Laura B. 5498, bred by Mr. Wilton Winery, Salem, Ohio, a sow of capital quality and grand conformation, and a winner of first premium at the Ohio State Fair in 1894 and 1895. Annie Laurie—105—has bred a wonderfully successful breeder, and is a grand sow in fit, and a winner of first money at all fairs last year. A splendid imp. sow under one year is under fit, with a couple of handsome home-bred sows of same age, for this season, and also a very choice under-six-months sow, bred by Mr. Winery, along with several other very choice animals.

A grand quartette, consisting of two boars and two sows under one year, will be shown out of the above sow, Annie Laurie, whose granddam was the grand sweepstakes sow wherever shown in 1894. At the head of the Chester herd is imported Prince Alexander, bred by N. G. Alexander, Delevan, Ill. The above boar will be assisted by a choice yearling (Combination's Choice); he promises to mature into a very large, smooth boar of good quality; he has a well-formed head, a good ear, capital back and hams, and all the requisite points of a typical Chester.

Durocs.—Among the Durocs we were particularly pleased with the sows, Red Bird—55—(who has been such a successful show sow as well as a breeder of prize-winning stock) and her daughters, Daisy 109 and Daisy D.—56—; these two and another daughter are winners of first and one second at Guelph Fat Stock Show, and three firsts at the Industrial. A number of fine young pigs of all ages were noted, and no doubt they will sustain their record as winners again. A grand two-year-old boar heads the herd, bred by Mr. Morton, Ohio, and a first winner at Toronto last year. There is also a fine yearling in use in the herd, bred by Peter Lamarsh, Wheatley, Ont.

Poultry.—A fine new hennery and yards has been erected this summer, and it is intended to make poultry one of the leading features of the farm. The special line kept will be the Blue Andalusians, but other breeds, of course, will also be kept. Selections of the different stock may be seen at Toronto and other fairs.

OAK POINT STOCK FARM.

This farm is beautifully situated on Lake Ontario, about 3 1/2 miles from Kingston; consisting of 200 acres, the property of Mr. J. B. Carruthers. The soil is a splendid clay loam, well adapted to stock-raising and grain-growing. In evidence of the quality of the soil, threshing was just finished the day of our visit, the oat crop turning out over seventy bushels to the acre. About four years ago Mr. Carruthers commenced the breeding of Ayrshire cattle, and selected six of his choice out of the herd of the late David Nichols; to these he has added two cows out of Mr. Wm. Stewart's herd, and one imported cow and two heifers from Messrs. D. Morton & Sons. The herd has increased to thirty head, and he is now prepared to fill orders for some very choice young animals. He finds very ready demand for all the milk he can possibly spare in the City of Kingston. The stock bull, Farmer's Boy, has been principally used; he was bred at the Menie stock farm, and was the first prize bull at Toronto in 1892. The stock bulls this season are: Lochiel, a son of McNeill, and Lord Rosebury, by White Prince 2nd, imported. He has also a very promising young bull sired by Dundonald, out of Primrose, imported. At the time of our visit Mr. Carruthers had a gang of builders at work erecting a circular silo, 20 feet in diameter by 30 feet high.

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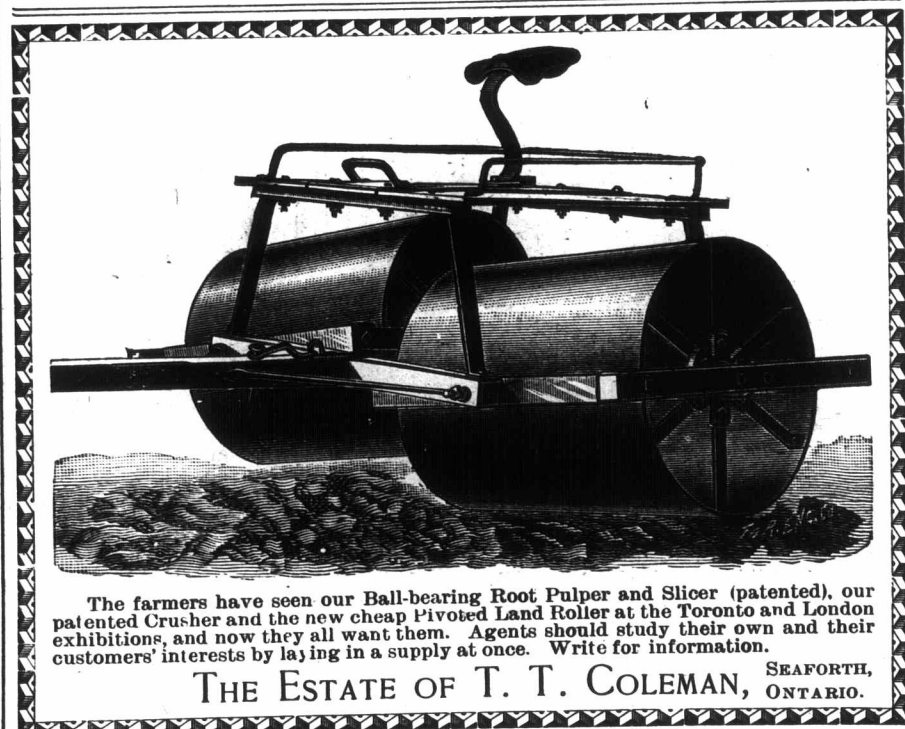
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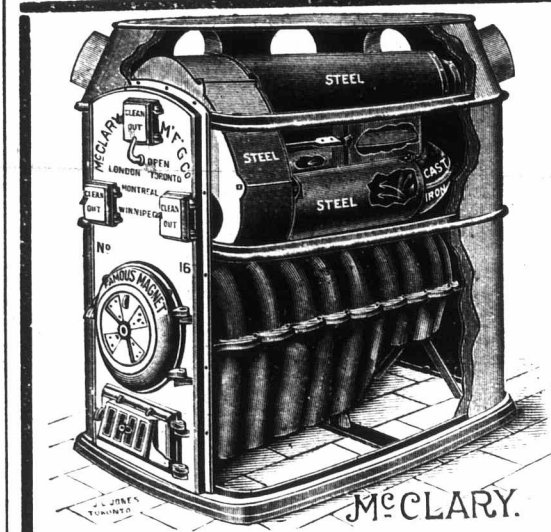
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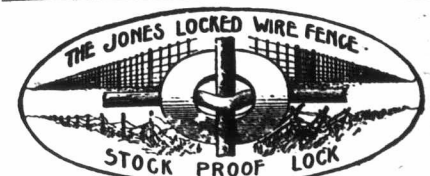
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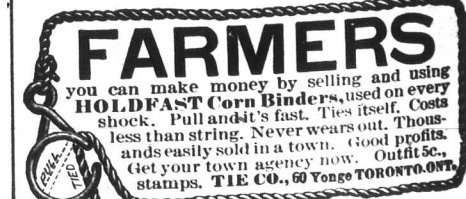
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