

THE Farming World

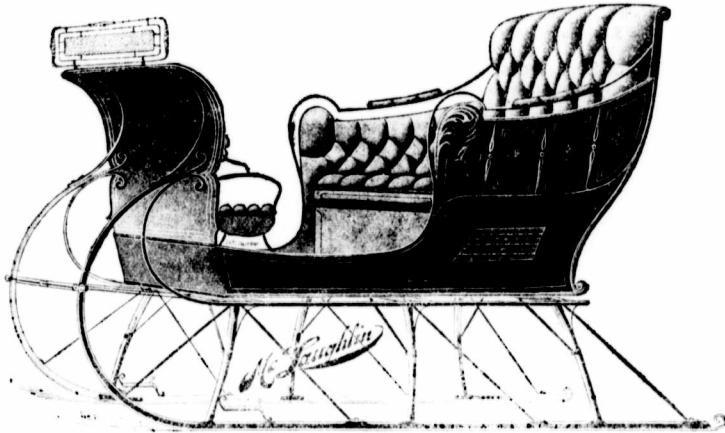
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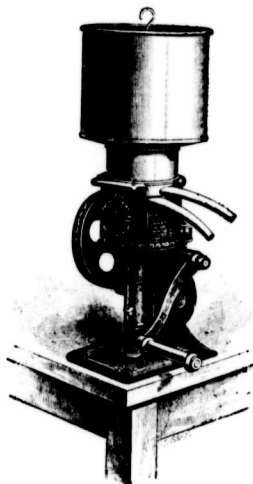
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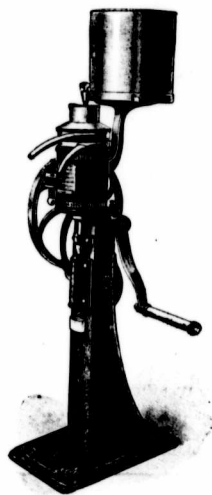


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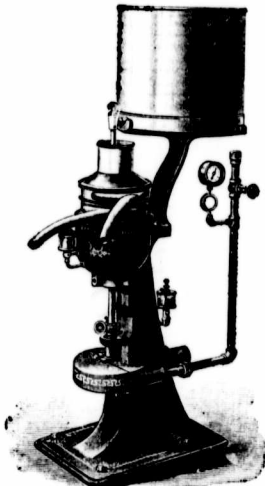


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More than 56,000 De Laval Cream Separators manufactured and sold during the year 1901.

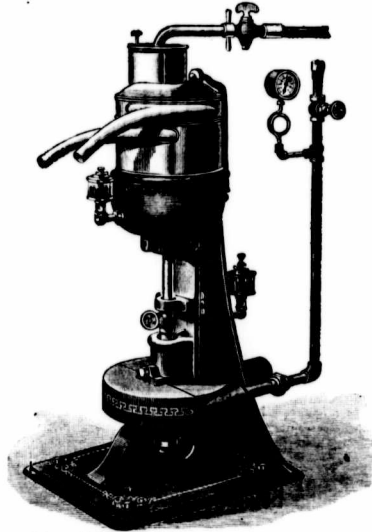
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Since 1879, the very first year of their successful introduction, the De Laval Cream Separators have invariably won the highest honors in every country where Dairying is practiced—Chicago, 1893; Antwerp, 1894; Brussels, 1897; Omaha, 1898; Paris, 1900; Buffalo, 1901.



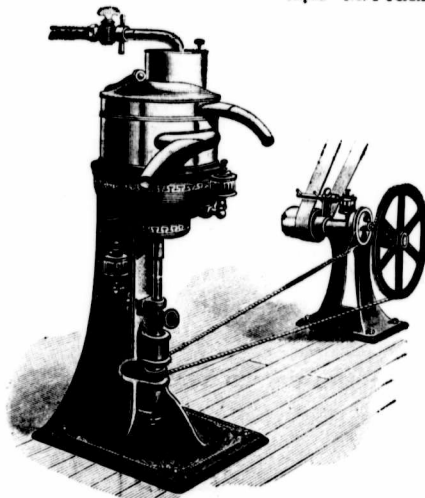
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Guelph, November, 1901.

JAMES MILLS, M.A., President.

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The Farming World

For Farmers and Stockmen

Vol. XIX,

NOVEMBER 26th, 1901.

No. 22

Good Matter Crowded Out

AS announced two weeks ago this is a stockman's number. It was arranged for the purpose of advancing the interests of the Provincial Winter Fairs at Guelph and Amherst. The information it contains regarding these two events will be found of value to every farmer. No one within reasonable distance of these points can afford to miss these shows. The illustrated supplement serves to introduce to our readers the men most interested in an official capacity in promoting this year's show at Guelph. The faces comprising the Institute workers will be recognized by many readers of The Farming World.

The reading matter of this issue will be found of interest and value to every farmer and stockman. Owing to the large demand of our advertising patronage for space in this number several important articles are held over, among them being a symposium on the hog industry contributed to by a number of practical men, an illustrated article dealing with the cause of soft pork by Prof. Shutt, a special article on poultry development in Canada by Prof. Gilbert, and other articles dealing with the winter care of sheep, horses, etc.

The Improvement of the Grade Cattle of Ontario.

Any close observer who has opportunity for travelling over the ordinary highway or by rail in the Province of Ontario must be struck by the great change in the appearance of the young cattle to be seen in the pastures in different parts of the country. There is now almost an entire absence of the dairy crosses which have been so prevalent for a number of years past. It is evident that gradually the farmers and dairymen are changing their methods so far as stock growing is concerned.

Now that the demand for beef is increasing, this evidence of im-

provement is very gratifying. It has often been stated by public men and others that the cattle of this country were deteriorating, and from the beef standpoint this statement was no doubt correct. Some ten or twelve years ago a great depression existed in connection with the production of beef. The price paid for such animals in this country was so low that farmers realized no profit from their production. At the same time, dairy products maintained their prices throughout. The result was that the people all over the country turned their attention to dairying to a greater or less extent. In order to accomplish the best results in this direction, the majority

country is leading to the conclusion that for the majority it is better to have animals capable of producing as good a flow as possible, and which in addition will produce a calf of such quality as will command a fair price in the market for beef.

In order to accomplish this, the trend of public opinion seems to be in favor of the use of the male animal whose breeding indicates adaptability for beef production. The result is seen in the calves and yearlings as suggested in the commencement of this article. It would be a pity to destroy the milking propensities of our dairy herds, but if the course above described can be pursued without such a result,

and if at the same time calves can be produced which may be used in the Northwest and elsewhere for beef production, it will undoubtedly add very materially to the annual returns of the dairy herds of the country.

The ordinary farmer who is not a dairyman would have no scruples about taking this course, and from the results seen, appears already to have entered upon it. The country, I think, is to be congratulated on the fact that this change has been made, which will in the near future multiply the returns received from the live stock industry. J. D.

Thanksgiving

A Prayer

Grant that these autumn days may be our harvest season, that our lives may reap the fruitage of a well-spent year. Let us be happy with the joy of the flaming hillsides, with the glory of the Indian Summer, with the ecstasy of the ripening grain; happy in the harvest of our high hopes, in the garner of sweet memories, in the ripening of true friendships, in the reaping of bounteous blessings of the buoyant spring and brimming summer, happy in the knowledge of some little kindness done, some great good gained, happy in our new strength our surer hope, our wider lives and loftier vision. Let these be our jubilant days, the days of our rejoicing.

believed that they required to change their breed of cattle to those specially adapted to this purpose. In some sections one breed was selected and in others another.

When the results did not seem to justify the selection, the attempt was made to cross these with another dairy breed. The result of this method, as it always must be, was most deplorable. Cattle of all shades of color and without proper form for beef purposes were produced, and besides, no practical result was reached so far as milk production was concerned. In a general way, the dairy breeds must be kept distinct from each other, if they are to serve a useful purpose.

I think the consensus of opinion among the ordinary farmers of the

live stock industry.

Canadian Horses Win.

At the New York Horse Show last week Robert Beith, Bowmanville, Ont., won the Challenge Cup for the best Hackney for Robin Adair, his well known horse. Geo. Pepper, Toronto, won for high jump open to all on Lord Minto. The jump was six feet six inches.

Special attention is directed to the programmes of the Ontario Fruit Growers' Association, the Experimental Union, the Ontario Provincial Winter Fair and the Maritime Winter Fair, published elsewhere in this issue.

Our Western Letter

Wheat Deliveries Increase. Scarcity of Cars. Cattle Shipments. Every Fifth Man a Mac.

Winnipeg, Nov. 18, 1901.

One who has not experienced the weather of late fall or early winter in Manitoba cannot appreciate its beauties from another's description. Whatever the summer may be, wet or dry, favorable or otherwise, there invariably comes at this season a few weeks of the most perfect weather that can be imagined. At present the temperature rises scarcely above the freezing point and at night goes down to ten or fifteen degrees above zero. From sunrise to sunset not a cloud obscures the sky. The atmosphere is as clear and bright as the fairest day in June. For the work that farmers now have in hand such weather cannot be excelled. One seems capable of labor that at other seasons would be impossible.

The first result of the condition of the weather is the rapid increase in wheat deliveries. During the week ended the 14th inst. the inspections amounted to 2,492 cars, of which 2,378 were wheat. This figure bids fair to be exceeded by the present week, and the prospects are for its maintenance up to the close of lake navigation. Exports are limited only by the capacity of the railways to handle them. There are probably 7,500,000 bushels in store along the lines of the C. P. R. and Canadian Northern, waiting for cars and probably 500,000 bushels delivered daily. It will be seen that the receipts are vastly in excess of the shipments. The close of lake navigation is now within measurable distance and with only 30 per cent. of the crop marketed, of which one-half is still in store. The buyers are becoming somewhat cautious. No one wishes to be caught with a stock on hand to be held over winter, or else shipped all rail at an advanced freight rate.

This in turn results in an unprecedented demand for cars. The C. P. R. alone booked orders for 1,890 cars for a single day's loading. This represents only a part of the grain ready for shipment; but it is the part that demanded immediate attention. As long as the elevators have room they will continue to buy. When they have their 30,000 bushels or more, according to their capacity, they must have a train to take it off or turn away the farmer's load. The railways are doing their best to keep up with the rush, but try as they may, it is bound to beat them this year. Consequently we cannot feel any very great surprise when we hear that buying has been suspended at this or that elevator.

The only remedy that proposes

itself is for the farmer to increase his storage capacity. He can then calmly view the rush of his neighbors to market their crop in the fall, and contentedly wait the reopening of navigation in the spring. This plan would further enable him to take advantage of any sudden rise, such as we sometimes see during the winter months, when no one has wheat in readiness for market.

The firm of H. A. Mullins & Co. have concluded their cattle shipments for the year. Their last train load consisting of 300 head (16 cars) from Russell and Pincher Creek went out last week consigned to Liverpool. The year's shipment amounted in all to 10,000 head.

The Manitoba Government Dairy School will open on the 6th of January, 1902. This is the seventh year for this institution, which was established in 1896. The course will as in previous years, consist of the Home Dairy and Professional branches. The former of these occupies the first month, the latter the months of February and March (Feb. 6 to March 29). Tuition is free to all and follows the usual lines of such schools. The staff will consist of the director and lecturer (Mr. C. A. Murray, Provincial Dairy Superintendent), a cheese instructor, butter-making instructor, instructor in milk-testing, and lady instructor in Home Dairy work. Each of these has charge of the various side lines that naturally come in with his work. The Dairy School is excellently equipped and meets the requirements of the Province in every respect.

Fifty thousand Scotchmen, women and children send through the columns of The Farming World their message to the Scotchman who inquired in a recent issue for a small farm near Montreal or Quebec. Come to Manitoba, brother, and you will be as near Montreal as you need to be. Come to the richest soil in the world, whose merits are attested by all who have ever seen it. Instead of paying for your land in pounds you can here buy it for shillings and the rest can be more profitably invested in stock. Instead of paying £10 per acre, you will buy it for £1, of a quality nowhere excelled. The writer has in mind a farm of 240 acres with excellent buildings sold recently for \$3,000 or a trifle over £2 per acre. No such stuff as phosphates, potash, or nitrate is required on Manitoba soils. "Tickle them with the plow and they laugh a harvest." Come to the land where every fifth man is a Mac.

The Experimental Union

The twenty-third annual meeting of the Ontario Experimental Union, which will take place at the Agricultural College, Guelph, on December 9th and 10th, next, promises to be one of unusual interest. The work of the Union has grown enormously in recent years and to-day thousands of farmers are carrying on experiments in grain testing, etc., under the direction of the Union. The number of experimenters for 1901 is as follows: grain crops, 1825; root crops, 222; forage, fodder, silage and hay crops, 146; culinary, etc., 180; fertilizer experiments, 66; miscellaneous experiments, 261; horticulture, 304; poultry, 21, making a grand total of 2959.

For the coming meeting a most interesting program is provided. The meeting opens at 1.30 p. m., Monday, Dec. 9, and the addresses for the afternoon will be: 2 p. m., President's address, T. G. Mason; 2.30, "Results of Co-operative Experiments with Grain and Root Crops," C. A. Zavitz; 3.40, "The Improvement of the Agricultural Exhibitions," F. W. Hodson. Ladies' session begins at 2.15 p. m., Miss Laura Rose presiding officer, 2.30, "The Great Educational Value of Sewing," by Miss Watson, Principal of School of Domestic Science, Hamilton; 3.40, "A Practical Demonstration of the Preparation of Some of the Simpler Foods," by Miss Joy, Principal of Domestic Science Department, Technical School, Toronto.

The Monday evening session will open at 8 p. m., Dr. Mills presiding. At 8.15 Dr. Wiley will give his illustrated lecture on the "Culture of Sugar Beets and the Manufacture of Beet Sugar."

The Tuesday morning session will open at 8.30. At 9.30 W. R. Graham will give a report of experiments with egg preservatives. At 10 a. m. C. A. Zavitz will report on experiments with fodder crops, chemical fertilizers, etc. At 11 J. A. Ruddick will give some hints and suggestions as to needed improvement in the dairy industry.

The Tuesday afternoon session will begin at 1.50 p. m. At 2.15 Prof. Hutt will give a report of experiments with small fruits. At 3 Mr. Zavitz will give a talk on his European trip. At 3.25 a series of ten-minute talks on selected subjects and the meeting will close by an address by Dr. Mills at 4.30. Tuesday evening will be given up to class reunions at the College.

Chickens Sell Well.

The Department of Agriculture at Ottawa has forwarded another lot of specially fattened chickens to Liverpool. This lot was from the various fattening stations and contained 2,592 chickens. Returns have just been received regarding the first shipment sent this season. They were fattened at Bonville, Que., and sold wholesale in Liverpool at 14c per lb. and the net returns were equal to \$1.31 per pair at Montreal.

The Ontario Winter Fair.

The Ontario Provincial Winter Fair needs no special introduction to the readers of *The Farming World*. The energy and push that have characterized its management in recent years have brought this worthy Institution to the attention of every progressive farmer and breeder in Ontario, and made its influence felt in all parts of the Dominion. Of the many educational institutions maintained in this country for the advancement of Agriculture, none fill a more important place than the annual winter fair. And it is only just beginning its career as one of the best educational factors in this country making for better live stock and higher agriculture in its truest form.

The first Provincial Fat Stock Show was held in Toronto in 1883, under the auspices of the Agriculture and Arts Association, and the Toronto Electoral District Agricultural Society. There were 134 entries and the premiums paid amounted to \$1,330. From that date till 1888 shows were held every year, two at Guelph, one at Woodstock, and one at Toronto. The shows at Guelph were held in conjunction with the Guelph Fat Stock Club. In 1888 and 1889 no shows were held. During 1890 and 1891 shows were held at Guelph.

In 1892 the forward movement that has been instrumental in bringing the show up to its present state of usefulness began. This year the show was also held at Guelph, but under new management, the Dominion Sheep and Swine Breeders' Association joining with the Agriculture and Arts Association in the management of the show. The result was a marked success, the number of entries being double that of the previous year. From this time forward the show seemed to have received a new impetus. The show was continued under this joint management during 1893 and 1894 with the exception that the live stock associations each year obtained more controlling interest, which greatly increased the efficiency and interest in the show. In 1895 a grant of \$1,000 was made by the Agricultural and Arts Association for the holding of a Provincial Dairy Show in Eastern Ontario. The Provincial Fat Stock Show of that year was held at Guelph, under the same management, with the exception that the Dairywomen's Association of Western Ontario contributed \$50 towards a dairy test.

The first show under its present management, that of being under the joint control of the Live Stock and Dairy Associations, was held in 1896 at Guelph. This was the most successful Provincial Fat Stock Show yet held in Ontario. The entries reached 611 and the premiums paid amounted to \$3,

491. The advancement made since that date has been rapid and great development has been made along educational lines. And in this lies the real success of the show. More and more educational features have been added and to-day we have an institution excelled by none as an avenue for disseminating useful and practical information to farmers and others as to the breeding, feeding and fitting live stock for market. The live animal, dressed carcass, dressed and live poultry, and dairy tests exhibits, together with the practical talks by practical men are features that make it worth while for every farmer to spend a couple of days at this show.

In 1897 and 1898 the show, owing to a desire to reach new fields, and bring the educational advantages of the show to new people, was held at Brantford. Most successful shows were held at this point, and the great interest taken in it by the people of the district was shown by the largely increased gate receipts. In 1899 the show went to London. It had now grown to such large proportions that larger and better accommodation became a necessity. This could not be had by moving around from place to place, consequently it was decided to locate the show permanently at Guelph, the city agreeing to provide buildings suitable for the purposes of the show.

Last year's show was the first one held in the new building, which was none too large to accommodate the show. This show, which was the most successful of its kind ever held on this continent, was largely attended by farmers and stockmen from all parts of the Province as well as by many from the other Provinces, including the large deputation from the East referred to elsewhere. The lectures, the exhibits and the show throughout maintained the high standard of excellence already ascribed to it. In fact, until last year there was not the proper accommodation for carrying on all departments of the work, and consequently, many new features were added that greatly increased its value, among them being the magnificent poultry display held by the Ontario Poultry Association, which organization last year for the first time joined with the other associations in the management of the show.

The preparations for this year's show, which will take place on December 10-13 next, are such that provide for a more attractive programme of educational features than even last year afforded. Several new features are provided. Prizes will be given for export cattle, which is a move in the right direction. The dressed carcass competition will be continued and it is probable that an expert will

be brought over from Chicago to judge the sheep and cattle carcasses and to lecture upon them. In the poultry department the judges will give object lessons in judging poultry. Instruction will be given on incubators and how to manage them and throughout the show will be carried on along the most practical lines. The outlook is good, entries are coming in rapidly, and every farmer who can conveniently do so, should spend a couple of days at this year's show.

The following summary of statistics of the Provincial Winter Show from its inception in 1883 to the present time will be of interest in tracing the progress of the Show:

Date.	Shows held at.	N. of Entries.	Entry fees.	Amount of premiums paid.	Gate receipts.
1883.	Toronto	134	\$174 25	\$1380 00	\$179 90
1884.	Guelph	141	188 25	1020 00	231 03
1885.	Woodstock	146	183 00	959 00	234 75
1886.	Guelph	136	157 50	697 00	86 13
1887.	Toronto	81	110 00	500 00	188 10
1890.	Guelph	114	160 50	832 00	54 25
1891.	Guelph	81	120 50	325 00	68 75
1892.	Guelph	171	220 50	1453 00	213 25
1893.	Guelph	302	386 25	2083 00	177 45
1894.	Guelph	487	609 25	3320 00	109 85
1895.	Guelph	463	442 25	2628 00	192 75
1896.	Guelph	611	607 75	3491 00	256 90
1897.	Brantford	777	562 00	4150 00	549 85
1898.	Brantford	760	691 75	4878 00	545 85
1899.	London	841	737 25	4158 00	303 10
1900.	Guelph	3019	1782 85	5829 50	1147 70

Note.—In 1898 no entries were received for special prizes as previously. The entries for sweepstakes are not included in the entries given. In addition to the premiums paid in 1898 a d 1900, a number of prizes, consisting of farm implements, were donated. The large entry total in 1900 includes the 2000 entries in the poultry department.

The Maritime Winter Fair.

No public undertaking on agricultural lines hitherto attempted in the Maritime Provinces promises greater results than the proposed Fat Stock Show at Amherst, N. S., on the 17th, 18th and 19th of December. It is attracting widespread attention, and from present indications will not only have a goodly array of exhibits, but will draw large numbers of interested farmers from each of the three Provinces.

The credit for the inauguration of this Winter Fair must be largely given to Mr. F. W. H. Wilson, the Dominion Live Stock Commissioner, to whom also is largely due the Ontario Winter Fair's great success as an educational institution. To impress upon the Maritime stockmen the value of such an exhibition, Mr. Hodson, acting for the Dominion Department of Agriculture, last December invited a large delegation to visit the Fair at Guelph. The visit brought home in a very practical manner the utility of such an exhibition, so that when the Live Stock Commissioner suggested a similar show for the Maritime Provinces, the Provincial Governments expressed their willingness to co-operate with the Dominion Department of Agriculture, and back up the Maritime Stock Breeders' Association in putting on a good educational exhibition.

The officers of the Maritime Stock Breeders' Association, most

of whom visited Guelph last year, have been and are earnestly working for the success of the Exhibition, and the support they are receiving from the people must be gratifying.

The management of the Show is vested in the following Committees:

Honorary Committee. — Hon. Sydney Fisher, Prof. Jas. W. Robertson and Mr. F. W. Hodson, Ottawa; Hon. Geo. H. Murray, Halifax; Hon. L. J. Tweedie, Chatham; Hon. D. Farquharson, Charlottetown; Hon. T. R. Black, Amherst; Hon. L. P. Ferris, White's Cove; Hon. Benj. Rogers, Alberton; His Worship Mayor Dickie, Amherst; Mr. M. D. Pride, Amherst.

General Committee of Management.—E. B. Elderkin, Amherst, Chairman; Col. Campbell, Apohaqui; C. A. Archibald, Truro; F. L. Haszard, Charlottetown; Fred S. Black, Amherst; F. L. Fuller, Truro; W. W. Black, Amherst; Bliss Fawcett, Sackville; M. H. Parlee, Sussex; John F. Frost, Hampton; E. R. Brow, Charlottetown; J. W. Callbeck, St. Augustine Cove; Hon. D. Ferguson, Marshfield; J. R. Starr, Starr's Point; F. W. Hodson, Ottawa; R. Robertson, Nappan; B. A. Chipman, Halifax; Thos. A. Peters, Fredericton and Prof. E. J. McMillan, Charlottetown; W. W. Hubbard, Halifax, Secretary.

Sub-Committee of Management, —W. W. Black, Amherst, Chairman; E. B. Elderkin, Amherst; R. Robertson, Nappan; C. A. Archibald, Truro; Col. H. M. Campbell, Sussex; F. L. Haszard, Charlottetown; B. M. Fawcett, Sackville and W. W. Hubbard, Halifax.

The grants from the different Governments have enabled the management to put up a very attractive prize list, the Dominion Shorthorn Breeders' Association and several corporations and private individuals are supplementing this list.

The aggregate of prizes offered is as follows: Shorthorns \$462, other breeds of cattle \$352, grade cattle \$417, pure bred sheep \$240, grade sheep \$120, sheep carcasses \$24, swine \$120, swine carcasses \$28, dressed poultry \$85.

The Show will open on the 17th of December, the Tuesday following the closing of the Ontario Provincial Show at Guelph. All exhibits must be in place before noon of that day. On the second day the judging will be concluded and the block tests made.

Lectures will be given during the whole term of the Show by some of the most eminent live stock authorities on the continent, and public meetings will be held each evening.

The annual business meeting of the Maritime Stock Breeders' Association will be held on the morning of the 19th. On the afternoon of that day the results of the block test will be made known and lectures given upon this interesting phase of the Show, as well as upon the dressed poultry exhibit.

The citizens of Amherst are taking an active interest in the Show and are providing—equipped, lighted and warmed—a large, new rink for the stock. The Town Hall will be tendered for the holding of meetings.

A goodly number of cattle, sheep and swine are being prepared for the competitions and all signs would indicate that the initial Fat Stock Show of Eastern Canada, will start out with a most creditable display.

R. Robertson, the energetic Manager of the Maritime Experimental Farm, will be Superintendent of the Exhibition and have charge of the building and employes during the Show. W. W. Hubbard, Halifax, N. S., is the Secretary-Treasurer, and to him all correspondence, entries, etc., should be addressed.

would use it only on the most vigorous peach trees. The Japan and egg variety of plums were the only kind that petroleum could be used on with impunity.

Dr. Fletcher, Ottawa, spoke on the same lines as Mr. Fisher, and stated that farmers and fruit-growers suffered great loss because of their lack of knowledge on this subject. Prof. Webster pointed out that they had the same problem to deal with in Ohio. There was great necessity for improved machinery for coping with this pest. Trained men were needed to operate spraying machines. He suggested that competent men go through the country from farm to farm in much the same way as do threshing machines at present.

Hon. Mr. Dryden closed the debate. He was glad to learn that something definite was being obtained in regard to methods of allying and exterminating the San Jose Scale. When the scale first appeared it was a difficult matter to lead the people to see the danger and it was only recently the fruit-growers have been impressed with the gravity of the situation. Efforts have been put forth in the way of educating the people in regard to remedies. Considerable headway had been made in the direction of effective remedies, but he felt that the best remedy of all was self help, and in order to help themselves the people must know how. Fruit-growers should be brought together and the danger of carelessness in connection with the treatment of the San Jose Scale should be impressed upon them. From what he had learned on the subject he was hopeful that before very long the ravages would be checked. "The chief danger I see now," continued Mr. Dryden, "lies with your nurseries. Care should be exercised in the selection of nursery stock. If you plant insect-infected trees in one hundred different places you have as many incrusting centres to combat." Not only did he believe in thoroughly inspecting, but would go further and advise that nursery stock be subjected to a thorough fumigation process by hydrocyanic acid gas.

Mr. Dryden in his address was optimistic throughout, expressing himself as possessing great confidence in the people, and felt sure that once the danger was properly impressed upon them they would rise to the occasion and take proper steps for allaying the progress of the San Jose scale.

At the evening session on Wednesday, Mr. Dryden occupied the chair. An interesting paper was read by Rev. Dr. Fyles, President of the Association on the "Importance of Entomological Studies to the Country at Large." This was followed by an interesting and instructive address on "Nature Studies," by Dr. Fletcher, Entomologist, Central Experimental Farm, Ottawa, who illustrated the subject by a series of stereoptical views.

NOTE.—This report was crowded out of last week's issue.—Editor.

Ontario Entomologists Meet

The San Jose Scale: Nature Study

The 38th annual meeting of the Ontario Entomological Society took place at London last week. A number of representative agriculturists and entomologists were present, including Hon. John Dryden, Dr. Fyles, Geo. Fisher, Dr. Fletcher, Prof. Webster, Ohio, Prof. Lochhead, W. E. Saunders, John Dearness.

The opening session on Wednesday was devoted to a discussion of the San Jose Scale in Ontario. Inspector Fisher was the first speaker. He stated that he had seen very few newly infested localities during the year. This was encouraging. People were waking up to the dangerous character of the disease and the importance of notifying the Government of its first appearance. In speaking of its first appearance, he said he had eaten peaches borne this year by trees that are

now dead. Pear and plum trees are just as liable to be attacked by the scale as peaches. He preferred for spraying whale oil soap, crude petroleum, or a mixture of the two; 2½ pounds to a gallon of hot water; It must be applied freely and the tree thoroughly saturated. No scale forms on the treated portion of the tree, but it develops where the mixture does not touch. Apples are not injured by crude petroleum diluted with water. Oil is cheaper than soap for a large orchard. The combination of the two is good; 15 per cent. of crude petroleum and water is better than 25 per cent. of crude petroleum with one pound of soap. Fumigation was tried at various times and places with good effect. On 300 trees so treated not a single live scale was found. He preferred crude petroleum for destroying insects, but it cannot be used on all kinds of trees. He

Public Auction Sales

Dates Fixed for Next Year's Sales

The very satisfactory public auction sales held last season, are to be followed this winter by several more. Dates have already been fixed for sales as follows: Ottawa, February 12th; Guelph, February 26th, and Calgary, May 12th. Sales are talked of for one or two other points, but as yet, nothing definite is arranged in regard to them. Arrangements are, however, well under way for the sales for which the dates are fixed. A sub-committee of the Provincial Winter Fair Board was appointed last week to go ahead and make all necessary arrangements for the Ontario sales. It is hoped by beginning thus early to have the sales better advertised and entries made earlier in order that the management may have more time, if need be, to inspect the animals to be offered before leaving home, and thereby secure a better average class of animals to present to the public than were offered last year. It is proposed to offer cattle and swine only at these sales. Sheep sell better in the fall, and none will therefore be offered.

Judging from the interest aroused and the crowds that attended the sales last winter, the coming sales promise well as mediums for disposing of high-class breeding stock at satisfactory prices. Not only this, but they supply a splendid opportunity to parties desirous of procuring good breeding stock and securing animals at their market value. Another advantage to the buyer is that by attending the sale he can inspect animals from different herds and select the one best suited to his own circumstances. The breeding of each animal offered is given in the catalogue, so that all buying can be carried on intelligently and above board.

The general results of last year's sales, everything considered, were very satisfactory. Sales were held at Guelph, Ottawa and Calgary, and four in British Columbia. The Calgary sale was a local one, but very satisfactory for all that. The first sale of this kind was held in British Columbia in September, 1900. This was followed by sales in March, May and October, 1901, in that Province. The animals offered at these sales were mostly from Ontario and comprised dairy Shorthorns, Ayrshires and Jersey cattle and Berkshire, Yorkshire, Tamworth and Chester White swine. These sales were on the main successful and satisfactory prices were obtained for the Ontario animals. All the sales received grants from the Dominion Government, while the local Government of B. C. advanced the money to buy the stock in the East before it was shipped. The management of the Western sales was under the Live Stock Associa-

tions for British Columbia and the Northwest Territories respectively.

Returning to the Ontario sales it may be well to deal with them a little more in detail. At Guelph, last February, 168 cattle and 28 swine were advertised for sale. Of this number 147 cattle and 18 hogs were sold, averaging for males and females as follows:

	No.	Total	Average
Shorthorns	122	\$9,883.00	\$81.00
Herefords	5	402.00	80.40
Galloways	1	72.00	72.00
Polled Angus	5	303.00	60.60
Ayrshires	10	503.00	50.30
Holsteins	4	182.50	45.63
Berkshires	2	10.00	5.00
Tamworths	3	27.00	9.00
Yorkshires	13	305.00	23.46

At Ottawa there were advertised for sale 76 cattle and 28 hogs, of which 67 cattle and 27 hogs were put up and sold, averaging for males and females as follows:

	No.	Amount	Average
Shorthorns	30	\$4,115.00	\$137.17
Herefords	1	100.00	100.00
Ayrshires	32	1,498.00	46.81
Guernseys	1	35.00	35.00
Holsteins	3	109.00	36.33
Berkshires	4	63.00	15.75
Tamworths	6	75.00	12.50
Yorkshires	17	280.00	16.47

Some interesting data are obtained by averaging the prices obtained at Guelph and Ottawa together. They are for males and females as follows:

	No.	Total	Average
Shorthorns	152	\$13,998.00	\$92.09
Herefords	6	502.00	83.67
Galloway (bl.)	1	72.00	72.00
Polled Angus	5	303.00	60.60
Ayrshires	42	2,001.00	47.64
Guernsey (bl)	1	35.00	35.00
Holsteins	7	291.50	41.64
Berkshires	6	73.00	12.17
Tamworths	9	102.00	11.33
Yorkshires	30	585.00	19.50

According to the above the grand total of these two sales was 259 animals sold and receipts totalling \$17,962.50. Of the beef cattle sold fully one-half went outside of the Province. This, in our opinion, was a very good beginning, and we have no doubt that if more care is exercised in the selection, inspection and fitting of animals for the sale ring much better averages will result. It was never intended, nor for that matter expected that public sales of this kind would bring the high averages obtained by some of our well known breeders when their herds are offered at public auction. These sales, if we understand the situation aright, were primarily established more to help the smaller breeder, who has a few animals to sell, but who has not the same opportunities for disposing of his surplus stock to advantage that the larger and better-known breed-

er has. In this they serve a very good purpose, and as the movement develops will broaden out into a wider sphere.

The sales of last year, however, were patronized by a number of large breeders who put up some of their best animals, which sold at very good prices. It was the rather inferior quality of a number of the animals offered in several classes, that brought the general average down, in some cases, to very little more than what good grades would bring. With, as we have already stated, more care as to the inspection of the animals to be offered exercised, a much better average should be obtained at the coming sales.

But this offering of inferior stuff has not been altogether an evil. It taught visitors to the sales, and those who brought animals to be sold, a most valuable lesson as to the kind of animal wanted and for which the most money would be paid. This was an education that no farmer or breeder could help but profit by, and we believe many who brought inferior stock to be sold received such a lesson in live stock judging as will be very helpful to them in the future.

There are many other advantages to be derived from these sales such as bringing buyers from a distance, distributing breeding animals in districts where they are most needed, etc., but we have not the space to deal with these here. Suffice it, that we close by submitting for the consideration of the management of these sales the following:

(1.) The number of animals to be offered at the coming sales should be limited both as to the total offered at each sale and by any one single individual.

(2.) All animals entered for the sale, and especially cattle, should be inspected by some competent person before they are shipped to the sale.

(3.) These sales should be well advertised, not only in all the Provinces in the Dominion, but in the districts of the United States, where good breeding stock is wanted.

(4.) Every effort should be made to secure the very best terms possible from the railways, both for stock and visitors, at these sales. Last year several parties from a distance were prevented from attending both sales on the reduced rate ticket. Some effort should be made to remedy this and arrangements made so that visitors from the West and from the Lower Provinces could attend both sales, on a through reduced rate ticket from the starting point.

A burglar who had entered a minister's house at night was disturbed by the awakening of the occupant of the room he was in. Drawing his knife he said: "If you stir, you are a dead man. I am hunting for money." "Let me get up and strike a light," said the minister, "and I'll hunt with you."

Ontario at the Pan-American

By C. C. James, Deputy Minister of Agriculture

This Province surprised herself as well as our American neighbors when we sent our cheese into the Centennial competition at Philadelphia in 1876. Some of the old scores of 1776 were there and then wiped out and we declared ourselves to the world as competitors for foreign trade. When the great World's Columbian Exposition came on at Chicago in 1893 we were ready again, and entered the lists with our butter and cheese, our grains, grasses and roots, our live stock, our fruits and honey, our manufactures, and also with our raw materials from forest and mine. All things considered, Ontario did well. She more than held her own. The Pan-American seemed to be a bold and over-venture—some project for a city the size of Buffalo—it was even a greater undertaking for that city than was the Exposition of 1893 for Chicago. The spirit of electricity was in the air and our Canadian people did not at first realize the magnitude and importance of the project. There was some delay in bringing the matter to the attention of our Provincial authorities, there were elections here disturbing the quiet of our life, and perhaps there were at first some doubts as to the importance of the Exposition as an advertising opportunity of this Province. Finally it was realized that not again for many years would so great a fair be held on our borders, almost within our own Province. It was consequently late in the year 1900 before definite decision was reached to take part. The plans decided upon were that the Dominion should provide a suitable building for the accommodation of visitors, the Province of Ontario should provide exhibits, and the Dominion and Province divide the expense of sending our live stock.

The beautiful city, the fairyland of electricity, grew up and is now fading away, the eight millions of visitors have come and gone, and now we are able to sit down and sum up the results.

As to the effects upon the great crowds of visitors, only time, of course, can tell, but the comments dropped by Americans and the opinions brought back by Canadians have been of the most complimentary nature and thousands upon thousands have learned for the first time that Ontario is not a region of snow and ice but that it is a land where the hills abound in iron and copper and nickel, where the trees grow large, where the apple, the plum, the grape and the peach flourish, and where live stock come to perfection—a land of fruit and flowers, of milk and honey. A few words now as to what we did in the way of securing awards.

HONEY.—Ontario gained a gold medal. This exhibit was got together by the Beekeepers' Association, and the president, Mr. John Newton of Thamesford, was in charge.

FRUIT.—We were awarded 20 gold medals, 33 silver medals, 38 bronze medals and 89 honorable mentions. It was not to be expected that we would beat New York State, but we out-distanced every other state of the Union, Oregon, Washington and Illinois coming next to us with 12 gold medals each. We were behind New York State in the extent of our exhibit, but as to quality the judges admitted that we stood first and gave us a gold medal for "general display of fruits of superior excellence." We received a gold medal also for our native wines. Only three silver medals were awarded for installation. California got two and Ontario one. Perhaps we ought to mention that three gold medals were awarded to Ontario in connection with our cold storage apples, one of which was for fruit of 1900 placed on the tables on Aug. 17th, 1901, of which 97 per cent. was sound. Twelve of the gold medals came to the Department of Agriculture as representing the Province, and 8 to individual exhibitors—Brennan & Son of Grimsby, W. H. Dempsey of Trenton, W. M. Orr & Son of Fruitland, Albert Pay of St. Catharines, A. Railton of Fonthill, F. J. Stewart of Homer, James Titterington of St. Catharines, and L. Woolverton of Grimsby.

The Province is greatly indebted to Mr. W. H. Bunting of St. Catharines, the superintendent in charge, and his two assistants, Mr. Robt. Thompson and Mr. J. J. Collins.

FORESTRY.—This exhibit was got together by Mr. Thomas Southworth, Clerk of Forestry, and the awards were as follows: A silver medal to the Province for general exhibit of forest products and silver medals to the Columbia Handle & Lumber Co. of London, and the Soo Pulp and Paper Co. for their dry pulp. There were three bronze medals in addition, also seven honorable mentions.

FLOWERS.—The flower exhibits were sent forward by individual exhibitors and our leading Provincial firms did well. J. H. Dunlop of Toronto got a gold medal for his tender roses and H. H. Groff a gold medal for gladiolus. In addition there were two silver medals, three bronze and one honorable mention.

ARCHEOLOGY.—The Department of Education made a very interesting exhibit under the direction of Mr. David Boyle and received a silver medal.

FINE ARTS.—In oil paintings four gold medals were awarded to

Canada, to W. B. Bruce of Hamilton, Wm. Brymen of Montreal, Robert Harris of Montreal, and Homer Watson of Toronto. There were also six silver medals, six bronze medals and twelve honorable mentions.

THE DAIRY.—In the dairy herd competition lasting the six months Canada took a very prominent part. There were ten herds, of which five came from this country, Ontario and Quebec. Our cows held their own. Some doubt exists as to one of the awards. On the whole we may say that honors were about evenly divided.

As to the dairy products, the general conclusion is that in export cheese Ontario stood first. In butter we came second to two of the States. To Ontario was awarded the only gold medal in connection with the cheese competition. Our export cheese was excellent. In butter we can still make some improvement. Perhaps this is a valuable lesson for us to learn.

LIVE STOCK.—As stated above the Dominion and Provincial Departments of Agriculture joined forces in sending our live stock to the contest. Some very good stock came from Quebec, New Brunswick and Manitoba, but the bulk was from Ontario. The reports have been published several times of the prizes won by Canadian animals and a comparison made with the prizes won by United States animals in the classes in which we competed. It is unnecessary to repeat these figures here, especially as they will shortly reappear in corrected and detailed form in the report of the efficient Dominion Live Stock Commissioner to the Exposition, Mr. E. B. Elderkin. It may be well to give here, however, a summary of the sweepstakes won by Canada and the U. S. in the classes in which we competed. There were of course some classes in which we did not enter.

	Other	All	
	Ont. Provinces	Canada	U. S.
Cattle ..	6	5	11
Sheep ..	6	1	7
Swine ..	4	—	4
Horses ..	3	—	3
Total ..	19	6	25

The awards as to poultry and pet stock are not yet available in complete form. The approximate results were as follows: Ontario entered 1,000 birds and won \$1,100 in prizes. U. S. entered 1,900 birds and won \$1,200 in prizes. Three silver cups came to Ontario.

MINERALS.—The mineral collection attracted the attention of the many visitors. The fine presentation of the exhibits brought a gold medal to the Province. A gold medal was also awarded to the Mica Boiler Covering Co. for their exhibit, the award being made in a practical test. Seven silver medals, five bronze medals and six honorable mentions also came to individual exhibitors in this department. This exhibit was

in charge of Mr. F. B. Speller, acting under instructions from Mr. T. W. Gibson, Director of the Ontario Bureau of Mines.

MISCELLANEOUS.—The Central Experimental Farm, Ottawa, received a gold medal for its collective exhibit, so also did the Government of Manitoba for an exhibit of grains and grasses. James Argue of Elgin, Man., and T. Howard were awarded gold medals for wheat and oats. The only gold medal not enumerated above went to John Labatt of London, Ont., for ale and stout. The Western Dairymen's Association received a silver medal for dairy products, the Manitoba Government a silver medal for flour and the Shuttleworth & Harris Co. of Brantford a silver medal for pickles.

COST.—The amount of money voted for the Ontario exhibits was only \$18,000. This will probably be slightly exceeded. After the vote was taken additions were made to the exhibits not at first counted on, for instance dairy products and honey. Our Provincial exhibits were more extensive than at Chicago, with one exception, we did not send Ontario grains and roots to Buffalo.

The general conclusion will be, I think, that Ontario has received a very large amount of first-class advertising for the money expended, and that we came through the Exposition in a manner that should be pleasing and satisfactory and that has given us a better standing among our competitors on this continent.

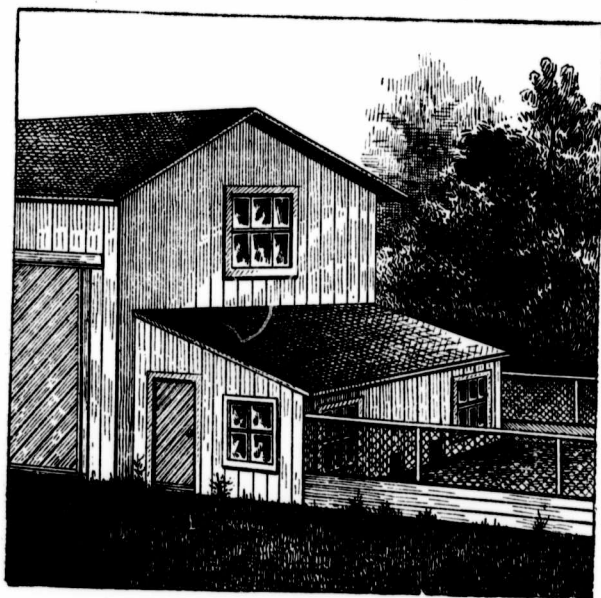


Fig. 3.—A Lean-to Poultry House.

Poultry Houses on the Farm

Farmers Bulletin, No. 141, U. S. Department of Agriculture, is devoted to poultry raising on the farm. The following, with the illustrations on poultry houses is taken from this bulletin and will be found of value to poultry raisers:

It is very desirable that poultry should be provided with a house somewhat separated from the other farm buildings, but near enough to the barnyard so that they can spend a part of their time in scratching for and gathering up the many seeds and grains which otherwise would not be utilized. On farms where no poultry house is provided the hens are compelled to seek roosting places wherever they can find them—sometimes in fruit trees, sometimes on feed racks, sometimes on the farm machinery, or even the wagons and carriages.

The result is not only untidiness, but fruit, feed, implements, and wagons are soiled and injured by the droppings, and sometimes vermin swarm in the roosting places to such a degree that the hens are voted a nuisance rather than a desirable part of the farm stock. If these vermin-infested places are near the horse stable, the mites may attack the horses, causing itching and a mangy condition of the skin, the origin of which is not always suspected.

PREFERABLE CONDITIONS.

Poultry houses need not be elaborate in their fittings or expensive in construction. There are certain conditions, however, which should be insisted upon in all cases. In the first place, the house should be located upon soil which is well



Fig. 2.—Implement House Transformed into a Poultry House.

drained and dry. A gravelly knoll is best, but, failing this, the site should be raised by the use of the plow and scraper until there is a gentle slope in all directions sufficient to prevent any standing water even at the wettest times. A few inches of sand or gravel on the surface will be very useful in preventing the formation of mud. If the house is sheltered from the north and northwest winds by a group of evergreens, this will be a decided advantage in the colder parts of the country.

UNUSED BUILDINGS.

Sometimes there is already a small building on the farm which has been used for implements or animals and which is no longer required for these purposes. Such a building may be easily fitted for poultry by cutting a small door in one side and placing roosts and nests in the interior. (Fig. 2.)

INEXPENSIVE STRUCTURES.

In case there is no building suitable for remodeling into a poultry house, an inexpensive lean-to may be built (fig. 3), or a new building constructed. A house for this purpose should be planned with a view to simplicity, economy, and convenience, while supplying the conditions proper for successful poultry keeping.

One of the simplest forms of poultry house is shown in fig. 4, and ground plan of the same in fig. 5. A scratching shed may be attached to the side of the house, as in figs. 6 and 7, which, if desired, may be inclosed in front with poultry wire, so as to keep the birds confined.



Fig. 12.—Scratching Room Under Poultry House.

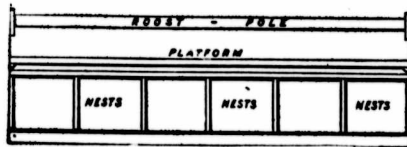


Fig. 9.—Sectional View of Platform and Roosts.

FITTINGS

Roosts.—The details of construction of roosts are seen in fig. 8. The important points are a nearly flat or slightly rounded surface on the upper side and as few cracks and crevices as possible in which vermin may hide. The roosts may be made of 2 by 3 inch scantling and should be so put in that they can easily be removed at any time for cleaning and disinfection. A platform is often placed under the roosts to catch the droppings and the nests are placed under this platform. In a house, such as fig. 9, the manure platform may be dispensed with and the nest boxes placed along the front or sides of the building.

Nests.—The simplest form of nest is a box placed under the floor of the poultry house. With heavy fowls, which are apt to break their eggs in fighting away other hens that try to enter their nests when they are laying and thus acquire the habit of egg-eating, a more concealed or dark nest may be necessary.

Floor.—One of the most troublesome parts of a poultry house to



Fig. 6.—Poultry House with Scratching Shed.

make satisfactory is the floor. Many use earth floors, but these are often damp, especially in cool weather, and then induce rheumatism, colds, roup, digestive disorders, and various other diseases. Some have put in cement floors, but have found these cold and also more or less damp. Probably a good cement floor, laid on broken stone and covered with a few inches of earth, would be satisfactory, if not too expensive. A board floor, six or eight inches above the earth, with good ventilation under it, is dry but too cold, except in the South. A double flooring, laid tightly with building paper between, or a good single flooring covered with a few inches of dry earth, is probably the best. In all cases of board floors there should be sufficient space beneath for ventilation and to guard against the lodgment of rats.

Good Plans.—A good style of poultry house, with scratching room under it, is shown in fig. 12. In case more than one flock is to be kept, the plan shown in figs. 13 and 14 have been found satisfactory and may be multiplied to any extent by adding to the ends. With such houses there may be fenced

runs at the back or front, or on both sides, so that the birds may be kept confined.

SPACE TO BE ALLOWED.

The amount of space to be allowed for each bird depends upon the size of the birds, whether a shed is attached to the house or whether the fowls have a free run of the open fields. For birds in confinement there should be from 6 to 15 square feet for each adult bird in case there is no shed attached to the house; and with a shed this space may be reduced about one-half. The yards should be large enough to allow exercise in the open air, and to furnish more grass than the birds will eat. This will vary from 60 to 150 square feet per adult bird. The open shed facing the south, where the birds can be induced to hunt for their food and take exercise in all seasons of the year, and where they can enjoy the pleasure of scratching and dusting themselves in the sunshine, even during the winter months, is of great assistance in maintaining the health and productiveness of the flock. The roosting space allowed should be 6 to 8 inches for the smaller breeds, 8 to 10 inches for the medium breeds, and 10 to 12 inches for the larger breeds.

VENTILATION.

Poultry houses should be well ventilated, but so arranged that drafts of air will not strike the birds. Windows and doors should be provided in such locations that the sun may shine into the building a considerable part of the day. Sunshine is required both to keep the houses dry and to destroy various forms of infection.

Keep the Poultry Warm.

TARRED FELT PAPER AS A MATERIAL FOR LINING POULTRY HOUSES.

The business of poultry raising in Canada has now become such an important industry that any improvement in the construction of poultry houses, which will have the effect of increasing the production of eggs and fowls by even a small percentage is worth the careful consideration of those engaged in the above mentioned industry.

In Canada the chief production of eggs takes place during spring, summer and early fall, while high-water prices prevail during the winter months. This state of affairs would appear to be entirely due to climatic conditions and not to any fixed law of nature which would prevent the hens from laying during the months intervening between October and April of each

year. If the above theory is correct, it is reasonable to suppose that if Canadian poultry raisers could protect their fowls from extreme cold, dampness, and vermin during the winter months, the production of eggs would be very largely increased.

The chief objections to heating poultry houses with stoves or furnaces are: First, the extra expense, and second, the danger of breeding vermin on the fowls while they are in doors so much during the winter months.

A cheap and practical solution of the above difficulty would therefore consist in the improved construction of our poultry buildings. In tarred felt paper we have not only the most economical, but also, the very best material in existence for lining and roofing all kinds of poultry buildings. Tarred felt paper is not only impervious to all winds and dampness, but it will actually keep out more cold than a solid brick wall. The coal tar with which the felt paper is saturated, contains quite a large percentage of carbolic acid, one of the best known and most valuable of disinfectants, and owing to the manner in which it is mixed with the coal tar and incorporated into the felt paper, it will never lose its strength or usefulness. In order to obtain the best results the heaviest quality of tarred felt paper should be used, not only for lining the walls and covering the roofs, but also, for putting under the floors of all poultry buildings. If this plan of construction is followed, a

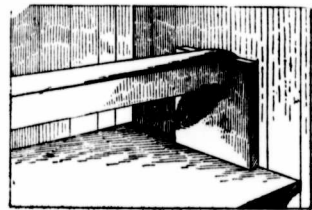


Fig. 8.—Construction of Roosts.

healthy and comparatively mild and even temperature will be maintained within the buildings and no vermin of any description will disturb the fowls.

Heavy tarred felt paper can be obtained from almost any hardware merchant at a price of about five cents per square yard. Parties interested should bear in mind that "tarred felt paper" and not "tarred building paper" should be used in the construction of poultry buildings as the latter is not sufficiently saturated with coal tar to make it suitable for the above mentioned purpose.

N. L. P.

"What a wonderful painter Rubens was!" remarked Mr. Jones at the art gallery.

"Yes," assented Mrs. Jones; "it is said of him that he could change a laughing face into a sad one by a single stroke."

"Why," spoke up little Johnnie, in disgust, "my schoolmaster can do that!"—Tit-Bits.

Poultry and Eggs.

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

BROWN LEGHORNS. forty choice cockerels and a few May pullets. Grand birds, early and prolific laying strain, pullets lay at five months. While prolific laying is foremost in breeding standard qualifications not discarded, as this strain won at Pan-American. Correspondence solicited. Eggs in season. John B. Pettit, Fruitland, Ont.

FORTY MAMMOTH bronze turkeys for sale, of good quality and size, have a fine comb at head of flock bred from Imp. Leo; and also some fine hens, have one that won 1st prize three years in succession, and at West Durham and Darlington Fall Fair I won 1st and 3rd on turkeys. Chicks now will crate safe and ensure safe delivery for \$2.50 for toms and \$2.00 for hens. Samuel Snowden, Box 303, Bowmanville.

BARRED AND WHITE Plymouth Rocks, Silver-laced and White Wyandottes, selected matings from noted breeders in the United States and Canada, including A. C. Hawkins, Lancaster, Mass. J. W. Newman, Engleside Farm, Brockville, Ont.

BUFF WHITE and Golden Wyandottes. The people's favorites; splendid breeders; ask for prices. A. W. Graham, Nurseryman and Fruit Grower, St. Thomas, Ont.

FOR SALE—Single Comb Leghorn Cockerels; splendid birds; cheap, if taken soon. H. D. Norton, Alliston, Ont.

BRONZE TURKEYS.—My stock has won first and second premiums at the largest shows in England, Ireland, United States, and Canada. My stock pleases customers, as I have sent out 300 turkeys and only four were dissatisfied. Choice stock now for sale. W. I. Bell, Angus, Ont.

MAMMOTH BRONZE Turkeys and Toulouse Geese. For Sale—Forty head of turkeys and thirty Toulouse geese, bred from the greatest prize winning strains in America. On our first exhibit at the great Toronto Industrial Exposition, Sept., 1901, we won on Bronze turkeys first and second Cockerel, and first and second Pullet. No old birds exhibited, they were in moult. Satisfaction guaranteed and correspondence cheerfully answered. Please enclose stamp for reply. Jas. Ford & Sons, Drumquin, Ont. P.S.—All turkeys bred from a grand imported tom.

MAN WANTED.

WANTED a good reliable man to represent **THE FARMING WORLD**. One with a horse and rig preferred. A good income guaranteed to the right man. References required. A chance for farmers' sons during the winter months.

Address at once:

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The Stereoscopic business is not only a very lucrative, but also a very pleasant one, inasmuch, that the views please and interest a customer the moment they are shown.

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The Sugar Beet World

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

Edited by JAMES FOWLER

Beetlets.

Those farmers who say that beet culture is not profitable are the ones who neglected to take the necessary care, for the prices paid by the factories are remunerative.

The remunerative results from any crop depends largely upon the manner of cultivation. It is particularly so with sugar beets.

Beets should be treated as a garden plant, and the seed bed in which they are planted should be as well attended to as a garden plot.

A beet field must be free from weeds at all times, and the best and cheapest way to keep it clean is to "take time by the forelock" and cultivate it before the weeds start.

An acre is further good for \$15 of tops and \$10 of pulp for stock feed. Sheep and cows eat the beet tops in the field and fertilize the soil.

The preparation for the seed bed depends greatly on the nature of the soil, but it must be by all means firm and compact, for in this state it will retain the moisture better and the seed will germinate quicker, but especially will this prove of great benefit if the land is plowed but a short time before seeding.

The depth of the plowing is very important, and ought in no case to be less than ten inches, but fourteen is better in order that the roots may penetrate to the greatest depth, for on the length of the root depends tonnage.

In farming districts where sugar factories are located, lands have doubled and tripled; mortgages are paid and farmers happy.

The beet sugar industry is primarily an agricultural industry, and that the farmers have a greater interest in its success than any other class of our population.

The direct returns to the farmer from growing beets are greater than from almost any other crop, without counting the great value of the by-products of sugar manufacture, which are returned to him, chief among which is the beet pulp, which is being recognized more and more as an exceedingly valuable stock feed.

Then there are the indirect advantages, chief among which is the fact that beet sugar culture leads to intensive and scientific farming, and emancipates the farmer from the accidents of climatic conditions and changes, which, under the present system, where farmers confine themselves largely to one or two crops, make them the victims of speculation in the great markets of the world.

Hear Dr. Wiley on Sugar Beets.

Every one interested in the development of the sugar beet industry should make an effort to hear Dr. Wiley's lecture before the Experimental Union on "The Culture of Sugar Beets and the Manufacture of Beet Sugar." This lecture will be given at the Ontario Agricultural College, Guelph, on the evening of December 9th. Dr. Wiley is the chief chemist of the U. S. Department of Agriculture and has made a thorough study of the sugar beet industry. He is a recognized authority on the subject, having spent some years in Europe studying the subject. His lecture is profusely illustrated and is most entertaining and valuable. The cheap rates to Guelph to the Provincial Winter Fair should enable a great many farmers and others interested to take advantage of this lecture as well as the other meetings of the Union.

Sugar Beets Grow Well.

The results of the experiments in sugar beet cultivation, conducted by the Government at thirteen different points of the Province during the past season, is now made public by the Department of Agriculture. They are of a particularly satisfactory character, and show a considerable gain in the quality of the beets, as compared with the three experiments last year. During the season just closed Prof. Shuttleworth, chemist at the Agricultural College, was in direct charge of the experiments. Through himself and his assistants the farmers who grew beets were visited and instructed regarding planting and thinning, and afterwards as to cultivation. Hon. Mr. Dryden says that the result of this year's experiments were very satisfactory.

The result of Prof. Shuttleworth's analysis of the products from the various localities, which is published below, shows that the beets grown in the Peterboro' plots yielded the largest percentage of sugar, being no less than 17.3, while Port Perry came next with 16.6 per cent. Peterboro, also led in percentage of purity, reaching 90.6, with Port Perry again second with 89.3 per cent. In average yield per acre Whitby heads the list with 22 tons 83 pounds, and Alvinston, Lambton County, second, with 21 tons 876 pounds. At each point the experiments were undertaken by several farmers, ranging from 18 to 28 in number.

In the experiments of last year the following was announced as the result of the last analysis of the season at the various experimental points:

	Per cent. Sugar	Purity.
Aylmer	13.9	86.8
Welland	14.4	84.9
Newmarket	15.	84.1

The Government bulletin describing those experiments estimated the cost per acre of a sugar-beet crop, up to the time they were placed in pits in the fall, and not including hauling, at \$26, including seed, cultivation, etc. Under the act passed by the Legislature last session the farmer will be paid \$4 a ton for all sugar beets delivered during the first year in which the bounty will operate. On that basis his gross income at Whitby would be above \$88, from which the cost, when subtracted, would leave in the neighborhood of \$60 clear to the acre. The lowest average yield reported in the experiments was at Cayuga, fourteen tons 1,665 pounds to the acre. Even on that yield the profit would be above \$30 to the acre. Furthermore, according to the Act, during the second and third years of the bounty the factories must pay 33 1-3 cents per ton for every 1 per cent. of sugar which the beets contain. On this basis the Peterboro' experimenters would receive \$5.76 per ton and the Berlin farmers, whose average of sugar was the lowest this year, would receive \$4.67 per ton, instead of \$4, which would increase the profits very materially.

The following are the results of the various experiments:

	Per cent. Sugar.	Purity.	Yield per acre.	Tons.	Lbs.
Alvinston	15.19	86.1	21	876	
Belleville	15.7	88.8	16	1,725	
Clinton	14.8	86.7	16	662	
Cayuga	16.2	88.2	14	1,665	
Dunnville	15.13	88.15	15	523	
Lindsay	16.4	83.7	15	131	
London	15.6	88.1	17	59	
Mt. Forest	15.6	86.7	19	500	
Port Perry	16.6	89.3	15	156	
Peterboro'	17.3	90.6	16	180	
Walkerton	15.4	88.0	18	1,701	
Whitby	15.8	89.1	22	83	
Berlin	14.6	85.8	18	1,398	

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Will contract to build complete beet sugar plants, including all machinery and buildings; also furnish the necessary technical and skilled help to operate them.

Guelph.

The Board of Trade held a special meeting on the 12th inst., to consider the report from their delegates to Michigan to investigate the beet sugar industry. The reports were lengthy, full of detail and interesting to all present, so much so as to create a great deal of enthusiasm. Mr. James Laidlaw's report briefly stated is:

That the establishment of "beet sugar factories" in Bay City, Saginaw and Caro, these being the points visited, has made a wonderful effect in the growth and prosperity of these centres in which they are located, by giving employment to a large number of men in carrying on the work of the factories during their season of operation. By the payment to the farmers of large sums of money for sugar beets grown under contract, it has lifted them from a condition of semi-starvation to one of comfort and plenty; it has increased the value of their lands at least 100 per cent.; it has given profitable employment during the summer to a large number of men, women and children in the sugar beet fields, in their cleaning and cultivating; it has, by the large amount of money paid to the farmers for beets, improved the general business of the cities in which they are located, and lifted them from the state of depression, into which they had fallen, by reason of the decadence of the lumber industries, of which they had formerly been great centres.

Mr. J. A. McCrea, another of the delegates, reported upon the process of manufacture and the profit to the farmer. In answer to the question, "Does it pay the farmer?" says:

In answer to this question I find that it costs all the way from \$20 to \$30 to produce the beets, and I copied from the pay roll of the Caro factory the following items:

Acreage.	Gross Receipts.
3 Acres	\$ 123 00
2 Acres	154 00
12 Acres	770 00
1 Acre	89 19
5 Acres	517 00
5 Acres	599 00
4 Acres	368 00
20 Acres	1,065 00
3 Acres	279 00
2 Acres	190 00
1 Acre	76 00
1 Acre	86 00
4 Acres	315 00
3 Acres	115 00
5 Acres	386 00
5 Acres	404 00
4 Acres	436 00
6 Acres	409 00
1 Acre	82 00
1 1/2 Acres	113 00
7 Acres	525 00
10 Acres	690 00
15 Acres	1,168 00
23 Acres	1,312 00
16 Acres	1,131 00
93 Acres	6,190 77
25 Acres	1,076 00
20 Acres	1,065 00

4 Acres	359 00
14 Acres	828 00
12 Acres	993 00
2 Acres	186 00

A proposition for the establishment of a sugar beet factory was laid before the Board and a Committee was appointed to further the enterprise.

What it Means.

Few people understand what a 600-ton sugar factory means to a community.

It means the expenditure of \$600,000 in the erection of a plant; the annual expenditure of \$25,000 for machinery and repairs; the payment of \$50,000 to railroads each season for freights; the yearly manufacture of 12,000,000 pounds of granulated sugar; the production of by-products which will winter 6,000 head of cattle; fostering the dairy industry; putting into local circulation \$600,000 each year; good returns on \$600,000 invested capital; the employment of 350 men at the factory during four months of the year; the employment of the factory hands and 1,000 more men and boys during six other months in raising beets; the use of every work team within a radius of twenty miles of the factory; an opportunity for every man and boy within the same radius to find work at good wages; better roads throughout the country; the yearly consumption of 24,-

000 tons of coal, 6,000 tons of limestone and 8,000 tons of coke; the local manufacture 5,000 barrels per year; the payment of \$300,000 to farmers each year for beets; the cultivation of the best paying crop a farmer can raise; improving the methods of agriculture; advancing the price of available farm property from ten to twenty dollars per acre; trebling the rental value of such property; erecting better farm buildings; paying mortgages; increasing bank deposits; giving to the entire country the buoyancy of hope, the pleasure of success, the assurance of prosperity.—Beet Sugar Gazette.

Wise Handling of Clay Soils.

Prof. L. H. Bailey, in his recent book, "Principles of Vegetable Gardening," says: "Many people spend more time and muscle on wet land than are required. The one important item is timeliness. When the soil is betwixt wet and dry, it breaks as it turns from the plow. Turn it up loose and open. Then let it lie for a few hours or a day. As the clods begin to dry work roughly with a strong harrow. Do not try to work it down fine. As the lumps begin to dry after the next rain, hit them with the boot. If they break and crumble, work the land again, this time with a lighter harrow. A few timely workings when the soil is just right will accomplish more than thrice the labor at other

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times. Many people make the mistake of tilling their clay lands until they become too fine. Then the rain packs and cements them, and the trouble begins all over again. Because sandy and loamy soils are best when fine and mealy, people think clay must be; but clay is not sand. The addition of humus enables one to make a clay soil mealy."

Benefits the Laboring Classes

The Michigan Bureau of Labor has this to say in regard to the industry:

"The construction of these sugar plants has given, and is still giving, employment to a vast amount of labor, those employed being from the highest skilled mechanics, commanding large wages, to the ordinary laborer, whose daily wage averages about \$1.60. Aside from the army of laborers employed in constructing these plants, the factories give employment to a large operating force, and at wages averaging over \$2.00 per day. Some of the highest skilled work is required, commanding large annual salaries, although the operating season of the factories averages only about four months. The operating force this year will aggregate about 2,400 persons, an average of about 185 for each factory.

"There is another class of labor which receives great benefits from the industry; that is the help employed by the growers in the beet fields. During the season of weeding and thinning the beets, and again at the harvesting all the surplus help of the vicinity is required. This item alone carries thousands of dollars into families of a class where it is most highly appreciated providing the necessities of life and often furnishing luxuries not otherwise obtainable."

With all this there is no neglect of the special work of the institution. At present the interesting subject of how to dispose of the pulp of the beets is being investigated. Last year A. W. Wright of Alma allowed 50 steers to be fed under proper direction, 30 on the pulp and 20 in the ordinary way. The results shown are most interesting and in favor of the beets. Pulp from the Lansing factory is to be used this year for feeding the stock at the college.

As is well known, beet seed is imported from Germany. The college is carefully developing American seed and some interesting results have been obtained from Michigan seed.

Another attractive experiment is the sowing of beets in the autumn. This, however, has not been tried long enough to give any definite results. Information of these things is all published in the bulletins that are issued, often illustrated with photographs that sometimes speak more plainly than the text, as, for instance, in showing the evils of transplanting beets.

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3. The united force of both wheels is always used in doing the work in either capacity.
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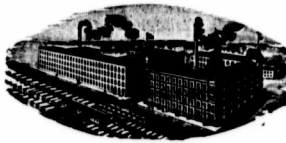
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ALWAYS MENTION THE FARMING WORLD WHEN WRITING ADVERTISERS.

Some of the Leaders in Agriculture.

Grouped with those immediately connected with the management of the winter fair are portraits of several of the leaders in agriculture in Canada. The Hon. Sydney Fisher, who will address the public meeting in connection with the show, has, since becoming Minister of Agriculture at Ottawa, taken a personal and direct interest in the winter fair, and in all matters affecting the live stock industry of the Dominion. If we mistake not, he has been present and taken part in every show during the past five years, no small matter for one who has so many calls upon his time and energy.

Another agricultural leader who should perhaps have been classed among the men who make the show is the Hon. John Dryden, Minister of Agriculture for Ontario. Mr. Dryden's interest in the show has always been direct and personal. If it were not so, there would probably be no show. He controls the sinews of war, the money for prizes, etc. But he has given liberally in this direction, especially of late years since the show has developed the many educational features which it now possesses. And not a few of these features have been adopted at Mr. Dryden's suggestion. Indeed the permanent location of the show and the erection of buildings suitable to the needs of this growing institution were brought about largely through his initiative.

The readers of The Farming World are familiar with the work of Prof. J. W. Robertson, who will



Hon. Sydney Fisher, Minister of Agriculture for the Dominion.

address some of the gatherings at the winter fair. Though he has not, like many of the others we have named, been directly associated with active live stock work in Can-

ada, his wide and varied duties as Agricultural and Dairy Commissioner have enabled him to render important services to this important industry. His energetic labors in developing the markets for Canadian food products in Great Britain have in no small degree been of service to the live stock trade of the Dominion.

The Deputy-Minister of Agriculture for Ontario, Mr. C. C. James, whose portrait we are very pleased to have in this issue, is also well enough known not to need any extended reference. There is no one we know of outside of those directly connected with live stock work better informed as to its possibilities and importance to the country than Mr. James. He is a staunch friend and supporter of the Provincial Winter Fair, and in fact of every institution that is making for higher and better agriculture in Ontario.

Dr. James Mills, the able, energetic and genial president of the Ontario Agricultural College, is a familiar figure in Canadian agriculture. For years the winter fair has had in him a wise counsellor and an energetic supporter. He has aided it in every way in his power both personally and through the College, and this year is foremost among the citizens of Guelph in making arrangements to house and entertain the visitors expected at this year's show. The College under his direction has always shown the keenest interest in live stock matters, and the fact that a special course in live stock judging will be conducted this winter is a sure sign



Hon. John Dryden, Minister of Agriculture, for Ontario.



Prof. J. W. Robertson, Agricultural and Dairy
Commissioner, Ottawa.



Dr. James Mills, President Ontario
Agricultural College.

that this interest is not waning but growing.

◆◆◆◆◆
The Experimentalists.

As the annual meeting of the Ontario Experimental Union takes place at Guelph during the winter fair week, it is quite in keeping

that some attention should be given to it in this issue. The portrait we present of Mr. C. A. Zavitz, the secretary and experimentalist at the College, is a very good one. Mr. Zavitz has managed the Union since its inception with very great skill and energy, as is shown in the flourishing and progressive organization of the present day. The president this year is Mr. T. H.

Mason, Stratfordville, Ont., whose portrait appears among the Institute workers. We made an effort to secure a photograph of Mr. Wiley, who is to give an illustrated lecture on sugar beet culture at the Union for this issue, but it, like several others, did not arrive in time. The programme of the Union meeting appears elsewhere in this issue.



C. A. Zavitz, Secretary Ontario Ex-
perimental Union.



C. C. Jarres, Deputy Minister of Agriculture, Ontario.

The Men who Make the Show.

It has been our aim in preparing this special portrait number to present to the readers of *The Farming World* as many of the officers and members of the Provincial Winter Fair Committee as space would permit. Though there are one or two prominent in this work whose photographs we would like to have had, but they did not arrive in time, yet we are pleased indeed to be able to present so many of the breeders, dairymen and poultrymen upon whom rest the responsibility of this year's show. They are nearly all tried men who have spent years of service in promoting the live stock industry of this Province and of the Dominion. We expected also to have had portraits of a few of the men associated with the Maritime Winter Fair to be held this year for the first time, but were unable to secure the photographs in time. We will, however, try and use them later.

We have not space to give even a short sketch of these men. But they are all known to those who have followed the development of the live stock industry in this country in recent years at all closely. A



A. W. Smith, President Provincial Winter Fair.

short reference to the president may, however, not be out of place. No one stands higher in the esteem and respect of his fellow breeders than A. W. Smith. He stepped into the breach last year, upon the death of the late president, John I. Hobson, and has well and faithfully performed the responsible duties connected with that office. Mr. Smith's ability and practical knowledge have been recognized by

other important organizations, both in this country and the United States. He is at the present time president of the Dominion Sheep Breeders' Association, president of the American Leicester Breeders' Association, vice-president of the Dominion Shorthorn Association, and general director of the Dominion Cattle Breeders' Association.

The vice-president of the Provincial Winter Fair is F. W. Hodson, who as Dominion Live Stock Commissioner is well and favorably known from one end of the Dominion to the other. To him, perhaps, more than any other individual is due the success of the fair and the many educational features that have been developed in connection with it in recent years. He was succeeded as secretary two years ago by Mr. A. P. Westervelt, who is fulfilling the duties of this office in a satisfactory and energetic way.

We would have liked, had space permitted, to have made some extended reference to the other gentlemen associated with this work. But that is hardly necessary. The names of Arthur Johnston, G. W. Clemons, Henry Wade, James Tolton, John Jackson, John A. McGillivray, J. M. Gardhouse, Wm.



F. W. Hodson, Dominion Live Stock Commissioner, Vice-President Provincial Winter Fair.



A. P. Westervelt, Secretary Provincial Winter Fair.



Prof. H. H. Dean, O.A.C., Guelph.



Prof. G. E. Day, O.A.C., Guelph.

Jones, Geo. Green, Thos. Teasdale, Major Hood, J. E. Brethour and D. G. Hamner are well and favorably known to everyone acquainted with live stock association work in this Province. Others who have aided materially in furthering the interests of the show are Prof. G. E. Day, Prof. H. H. Dean and R. G. Murphy.

A little over a year ago the On-

tario Poultry Association decided to cast in its lot with the organizations controlling the Provincial Winter Fair. This brought into line several parties interested in furthering the poultry industry of this country, among whom are W. R. Graham, Wm. McNeill and A. W. Tyson.

These comprise the men who make the show, or better perhaps,

who manage the show. Strictly speaking the exhibitors perform no small share in the making of the show. If there were no exhibitors there would be no show. But we will reserve what we have to say regarding these parties till after the show is over, when their part in contributing to its success will be fully dealt with in the report.



W. R. Graham, Manager Poultry Department, O.A.C.



Henry Wade, Registrar of Live Stock.



Jno. A. McGillivray.



Arthur Johnston.



D. G. Hanmer, (Supt.)



Thos. Teasdale.



James Tolton.



J. M. Gardhouse.



J. E. Brethour.



John Jackson.



G. W. Clemons.



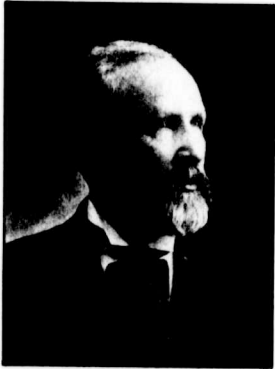
Major G. B. Hood.



Geo. Green



John Bright.



R. G. Murphy.



A. W. Tyson.



J. H. Saunders (Asst. Supt.)



A. G. Gilbert, Manager Poultry Department Central Experimental Farm, Ottawa.



C. H. Cottrell.



Wm. McNeill.

Prominent Institute Workers



Miss Blanche Maddock.



Miss Laura Rose.



Miss Alice Hollingsworth.



Henry Glendenning.



G. C. Creelman, Supt.



W. S. Fraser.



Duncan Anderson.



Alex. McNeill.



Major James Sheppard.



T. G. Raynor.



Andrew Elliott.



R. S. Stevenson.



A. C. Hallman.



A. W. Peart.



D. Drummond.



T. H. Mason.



Robt. Thompson.

The Workers for Higher Agri culture.

The group of photographs in this issue comprising the leading Institute workers in Ontario, is a most interesting one. Take a second look at them. Do they not represent the very best type of the sons and daughters of Ontario? The genial and energetic Superintendent is placed in the centre, and around him, as if to uphold him in the good work he is doing, are to be found many of the old war horses in Farmers' Institute service in this Province. There are few Institutes in Ontario that have not

Then the women's department must not be neglected. We show a few of the workers in this branch. Foremost among these is Miss Rose, who, by the way, is a regular contributor to the Farm Home department of The Farming World. The others are also well and favorably known and in demand at Institute gatherings. Several new lady speakers will enter the arena

the task that Mr. Creelman laid out to do a couple of months ago, and that he has completed it in a satisfactory manner is shown by the well-arranged programme of meetings published in the Gazette department of The Farming World two weeks ago.

Ontario Institutes and their work have made rapid advancement in recent years. In 1895 one hundred and seventy meetings were held in this Province, the attendance not being enumerated. In 1897 six hundred and fifty-nine meetings were held, with 125,177 persons in attendance, and in 1899 seven hun-



G. C. Caston.



R. McCullough.



F. M. Lewis.

received benefit from the teachings of such veterans as Duncan Anderson, Henry Glendenning, Andrew Elliott, W. S. Fraser, A. McNeill, W. C. Shearer, A. W. Peart, T. G. Raynor, Major Shepherd, R. S. Stevenson and A. C. Hallman. The others are also tried warriors who are rendering valuable service to the Province in their endeavors to build up a higher and better agriculture in Ontario. There are one or two more of the tried ones whom we would have liked to have had in this group, but photographs did not reach us in time. Quite a number of new men will engage in this work for the first time this season, but space will not permit us to illustrate them here.

this season from whom valuable service is expected.

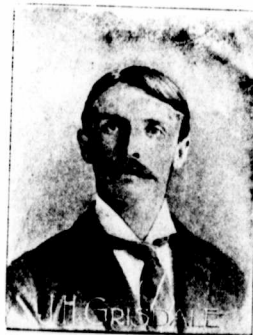
It is no light task for the Superintendent to gather together such an array of speakers and distribute them over the Province in such a way that each locality will have the speaker or speakers who will do it the most good. But this is

dred and fifteen meetings, with 138,982 in attendance. The paid-up membership has also grown steadily from 12,384, in 1896, to 20,387, in 1900. Many forces have worked together in Ontario to accomplish all this, but perhaps credit must first be given to the active workers themselves, who, in many instances, have sacrificed both time and money while devoting themselves to this work.

Women's Institutes have now become a feature of the work, there being at present thirty-three organized Women's Institutes, with a membership of 1,602. During this winter eight lady speakers will address Women's and Farmers' Institute meetings in the Province of Ontario.



J. E. Orr.



J. H. Grisdale, Agriculturist, Central Experimental Farm, Ottawa.

He is not an Institute Worker, but will address some of the Winter Fair gatherings.



W. N. Hutt.

The Agricultural Gazette

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

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

Annual Membership Fees:—Cattle Breeders', \$1; Sheep Breeders', \$1; Swine Breeders', \$2.

BENEFITS OF MEMBERSHIP.

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

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

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

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

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

The list of cattle, sheep, and swine for sale will be published in the Gazette, are required to notify members having stock for sale, in order that they may be included in the Gazette, are required to notify the undersigned by letter on or before the 9th of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue. The data will be published in the most condensed form.

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

FARM HELP EXCHANGE.

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

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

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

Situations Wanted.

Wanted.—A position by a man 32 years of age, who has had 16 years' experience in farm work. Willing worker, good ploughman and handy with cattle. Wages expected \$175 a year, to include board and washing. No. 956. a.

Wanted.—A position on dairy farm by an unmarried man 30 years of age, who has had considerable experience and understands cattle and all kinds of dairy work. Can give references. No. 958. a.

Wanted.—A situation by married man, aged 35 years, uses neither tobacco, liquor nor profane language, used to general farming, dairying and stockraising. Would like house, fire wood and small garden furnished. Can give good reference. No. 959. a.

Help Wanted.

A young man wanted, about 17 or 20 years old, to engage by the year on a farm near Toronto. General farm work in summer, attending to stock in winter. Must be willing to assist in milking. Good wages, good home. Board and washing and position for a number of years for a good reliable, trustworthy person. No. 862. b.

Wanted.—A good all-round man, competent to undertake the work of 60-acre farm in British Columbia. Must be able to do ordinary farm work including milking of 8 or 10 cows. Wages, \$300 a year, including board. No. 863. b.

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

Programme of Meetings at Winter Fair.

BACON HOGS—TUESDAY, DECEMBER 10TH, AT 7 30 P.M.

"Desirable and Undesirable Points of Bacon Hogs," illustrated by living specimens, F. W. Hodson, Ottawa.

"How to Select, Breed, Care and Feed for the Production of Such Animals," Prof. G. E. Day, Guelph.

BEEF CATTLE—WEDNESDAY, DECEMBER 11TH, 1.30 TO 3.30 P.M.

"Desirable and Undesirable Points of a Beef Bullock," illustrated by living specimens, Prof. G. E. Day, Guelph.

"How to Select, Breed, Care and Feed for Production of Such Animals," Hon. John Dryden, Toronto.

MUTTON SHEEP—WEDNESDAY, DECEMBER 11TH, 3.30 TO 6 P.M.

"The Desirable and Undesirable Points of Mutton Sheep," illustrated by living specimens, J. H. Grisdale, Ottawa; A. W. Smith, Maple Lodge; John Campbell, Woodville.

"How to Select, Breed, Care and Feed for Production of Such Animals," John Jackson, Abingdon.

PUBLIC MEETING—WEDNESDAY, DECEMBER 11TH, 7.30 P.M.

Hon. John Dryden, chairman; address, Dr. Jas. Mills; address, Hon. Sydney Fisher; address, Hon. G. W. Ross. Music.

POULTRY LECTURES—THURSDAY, DECEMBER 12TH, 9 TO 11 A.M.

"Results of Experiments at Dominion Fattening Stations and Central Experimental Farm," 9 to 9.30 a. m. F. C. Hare, Ottawa; A. G. Gilbert, Ottawa.

"Results of Experiments Conducted at the Ontario Agricultural College, Including the Effect of Food on the Color of the Meat," 9.30 to 10 a. m. W. R. Graham, Guelph.

"Necessity of and Use of Incubators," 10 to 10.20 a. m. L. H. Baldwin, Toronto.

"Poultry Raising for Profit," 10.20 to 10.40 a. m. C. R. Cottrell, Milton.

"The Best Shaped Fowl From a Feeder's Standpoint," W. R. Graham, Guelph, 10.40 to 11 a. m.

"The Desirable and Undesirable Points of the Different Breeds of Poultry," illustrated by living specimens. Sharpe Butterfield, London; T. H. Smelt, Woodstock; L. Jarvis, Montreal; Jas. Anderson, Guelph.

SWINE CARCASSES—THURSDAY, DECEMBER 12TH, 2 TO 5 P.M.

"The Sort of Carcass Required to Make Wiltshire Sides," illustrated. F. W. Hodson, Ottawa; J. W. Flavelle, Toronto; C. F. Hodges, Brantford; C. C. L. Wilson, Ingersoll.

CATTLE CARCASSES—THURSDAY, DECEMBER 12TH, 7.30 P.M.

"The Kind of Carcass Required to Bring the Highest Price in the Best Markets," illustrated. Wm. Russell, manager Beef Department, Swift & Co., Chicago; Prof. G. E. Day, Guelph; H. A. Foulds, Brantford; A. W. Tyson, Guelph.

DAIRY CATTLE—FRIDAY, DECEMBER 13TH, 9 TO 10.30 A.M.

"The Desirable and Undesirable Points of a Dairy Cow," illustrated by living specimens. Prof. H. H. Dean, Guelph; Prof. J. W. Robertson, Ottawa.

"Feed and Care of the Dairy Female from Birth Until Four Years Old," Hon. Sydney Fisher, Ottawa.

SHEEP CARCASSES—FRIDAY, DECEMBER 13TH, 10.30 A.M. TO 12 NOON.

"The Kind of Carcass Required to Bring the Highest Price in the Best Markets." Wm. Russell, of Swift & Co., Chicago; J. H. Grisdale, Ottawa; H. A. Foulds, Brantford; A. W. Tyson, Guelph.

POULTRY PLUGGING COMPETITION—FRIDAY, DECEMBER 13TH, 1.30 TO 2 P.M.

Auction Sale of Cattle, Sheep and Swine Carcasses and Dressed Poultry, Friday, December 13th, 2 p. m.

Farmers' Institutes.

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

G. C. CREELMAN,
Superintendent Farmers' Institutes.

Change in Division 2 A.

SUPPLEMENTARY.

The meetings in East and West Lambton have been re-arranged, so that they will now be held as per list on this page, and not according to the list as published in The Farming World of November 12th. It will be noted that the delegates will go from Lobo, in North Middlesex, to Arkona, in East Lambton, instead of from Lobo to Alvington, as per former arrangement. The meetings at Sarnia and at Moore Line School House will both be held on the same day, February 22nd.

Corn is King.

A few years ago it was thought that only the Lake Erie counties of Ontario could produce corn. Such a thing as attempting to grow corn north of Toronto was unheard of, except in the gardens for roasting ears, and some of the very early varieties in small patches for feed. Now, however, by selecting the earliest ripening ears of the earliest varieties, corn has been matured as far north as one hundred miles north of Ottawa.

Probably no subject occupied more time at the Institute meet-

ings last winter than the subject of corn and ensilage, so we give to our readers at this time some of the thoughts presented at the meetings on this subject.

By T. H. Mason, Straffordville.

—A celebrated American statesman has said that the growing of corn is a matter of longitude rather than latitude. This fact—for it is a fact—is beginning to be understood in the Province of Ontario.

Corn A Northern Crop.—Our American neighbors have been growing corn away to the north of a large portion of Ontario for many years, in Michigan, Wisconsin, Minnesota and Dakota. The failure of the pea crop and the great expansion of the dairy industry have of late years directed the attention of farmers to the possibilities of this crop, and to-day we find corn successfully grown and matured 100 miles north of Ottawa, and in the Parry Sound District. I think it is safe to say that the product of the corn crop exceeds in value per acre that of any other farm crop in Ontario.

Select Suitable Varieties.—One of the most important points in corn growing is the selection of a variety suitable to the location, and that will mature in that particular locality. A good variety is the one that will give the largest total yield of stalks and grain per acre, and that will mature safely any average year. We would put special emphasis on the yield of grain, for we must remember that the nutritive value of a lot of grain is many times that of a pound of stalks.

Some of the best varieties for Southern Ontario are: Mastodon Dent, Improved Leaming, Cloud's Early and Wisconsin White Dent.

For Central Ontario: Wisconsin White Dent, White Cap, Yellow Dent, and Salzer's North Dakota.

For Northern Ontario: Blue

Blade, White Flint and King Phillip.

Select Your Own Seed.—Having finally decided on the variety, after the first year select your own seed. Go through the field when the corn is ripening and select the earliest ripening ears, then braid braid up and dry thoroughly before severe weather. You then get seed that is absolutely certain to grow, and if you repeat this custom you will secure a strain that will in a few years be several days earlier than the original seed you started with.

Any Soil But Hard Clay.—Any of our ordinary soils will grow corn successfully, except very hard clays, that are deficient in humus. Moreover, it is a gross feeder, and will make use of a liberal quantity of manure.

Corn should be the clearing up crop of the rotation, but as it is very often handled it is the dirtiest crop. If land is full of weed seeds, liberally manured, and cultivation stopped when the corn is a couple of feet high, we get a great quantity of weeds and a small crop of corn.

Cultivation.—Two systems of cultivation are commonly practised in the corn belt. One is to plow very late in the fall, manure in the winter and spring, than gang plow or disc in May, making a shallow seed bed. There are two advantages gained by following this plan: (a) By late plowing the cut worms are killed. Some years these insects are very destructive, especially on sod. (b) The moisture accumulated by the winter snow and rain is conserved and held for the growth of the crop during the summer—a very important matter these dry seasons.

The other system practised is to avoid plowing in the fall. Let the grass and clover get a good start and leave the plowing as late as possible, say, after the middle of May. Then put on full force and plow as quickly as possible about four and one-half inches deep and roll down; then thoroughly work, to get a good seed bed, and plant as soon as possible. This system is very often followed on very heavy soils, and the advantages claimed are that the soil is rendered more pliable and mellow by the fermentation of the green stuff and roots turned under, and that it does not become heavy and sodden, as it sometimes does when plowed in the fall.

Hills vs. Drills.—Planting in hills has several important advantages over the drills: (1) The crop of grain is a little larger. (2) There is better exposure to the sun and a freer circulation of air, thus hastening maturity, and giving better quality. (3) There is a decided advantage in cutting where corn binder is not used. (4) Last and greatest, a much more thorough cultivation can be given, cleaning the land with the least expense, and doing away almost entirely with hand cultivation.

Plant at from 3 feet 6 inches to

Supplementary Meetings.

DIVISION 2 A.

Andrew Elliott, Galt; C. W. Nash, Toronto.		
1	Wingham (Town Hall)	W. Huron Feb. 4th
2	Auburn (I. O. G. T. Hall)	W. Huron Feb. 5th
3	Port Albert (Foresters' Hall)	W. Huron Feb. 6th
4	Benmiller (Gledhill's Hall)	W. Huron Feb. 7th
5	Bayfield	S. Huron Feb. 8th
6	Zurich (Town Hall)	S. Huron Feb. 10th
7	Crediton	S. Huron Feb. 11th
8	Greenway (Wilson's Hall)	N. Middlesex Feb. 12th
9	Sylvan (Maccabee's Hall)	N. Middlesex Feb. 13th
10	Beechwood (Grange Hall)	N. Middlesex Feb. 14th
11	West McGillivray (Town Hall)	N. Middlesex Feb. 15th
12	Lucan (Town Hall)	N. Middlesex Feb. 17th
13	Granton (Town Hall)	N. Middlesex Feb. 18th
14	Lobo (Masonic Hall)	N. Middlesex Feb. 19th
15	Arkona (Showless' Hall)	E. Lambton Feb. 20th
16	Uttoxeter (Grange Hall)	E. Lambton Feb. 21st
17	Sarnia Town (Council Chamber)	W. Lambton (aft.)
18	Sarnia T'n'p (Moore Line S. House)	W. Lambton (eve.)
19	Petrolia (Council Chamber)	W. Lambton Feb. 22nd
20	Courtright (Steward Hall)	W. Lambton Feb. 24th
21	Wilkesport (Richmond Hall)	W. Lambton Feb. 25th
22	Beacher (School House)	W. Lambton Feb. 26th
23	Rutherford (Township Hall)	W. Lambton Feb. 27th
24	Oakdale (School House)	E. Lambton Feb. 28th
25	Inwood (Orange Hall)	E. Lambton Mar. 1st
26	Alvington (Town Hall)	E. Lambton Mar. 3rd
		E. Lambton Mar. 4th

4 feet each way, according to variety. As soon as planted, if land is in suitable shape, harrow thoroughly, and give a stroke of the harrow every two or three days until corn is up, then start the weeder, and do not be horrified if it does cover up some corn and tear out a few plants. You will never miss them at harvest time. Keep weeder going until corn is one and one-half feet high, then cultivate deeply at first, but very shallow later, as long as you can possibly get through without too much damage. Do not cultivate more than two inches deep after corn is three feet high, or you will destroy the shallow feeding roots and injure the crop. When you have nothing else to do, cultivate corn. One of our oldest and most successful corn-growers told me that he counted a boy and horse worth at least \$2 per day in the corn field.

The Silo The Best.—After the crop is grown, then the question of preservation comes up. There is not the slightest doubt now that the silo is the best place to put it. Ensilage is no longer an experiment. Where they are once introduced they gain ground annually, and the man who is opposed to ensilage is invariably the man who never used it, and therefore knows all about it.

DISCUSSION.

Q. Which is the best method of planting corn, in hills or in drills?

A. We prefer planting in hills for several reasons. First, we get

a larger yield of grain to the acre. Second, the corn is several days earlier, getting more sun exposure. Third, we can give more thorough cultivation, cleaning the land with less expense.

Q. Do you use a weeder?

A. We have used a weeder for two seasons, and like it. We first harrow the corn if soil is in suitable condition as soon as planted; then harrow every three or four days until the corn is up; then put on the weeder until the corn is over a foot high. The weeder will not kill thistles or quack grass, but if used in time will thoroughly stir the whole surface of the soil and kill the weeds before they appear on the surface. But do not let the weeds get a start, or you cannot do good work with the weeder.

Q. What variety of corn do you prefer?

A. I have found the White Cap Yellow Dent to give great satisfaction in this neighborhood, both for ensilage and for grain. I am satisfied that I had at least 125 bushels to the acre.

Q. Is it advisable to save your own seed?

A. Decidedly yes. By going through the field just as it is ripening and selecting the earliest and best formed ears, and then thoroughly drying the seed before severe weather comes, we secure perfect seed that starts strongly as soon as planted, and that can be depended on as sure to grow. Most of the seed we get from local

dealers comes from the elevators of Chicago or Toledo, and is slightly heated. As a consequence the germinating power is weak, and often serious loss results from such seed. Another thing—seed selected in this way becomes acclimated, and in a few years will be several days earlier than the original seed with which we started. I think we should adopt some plan to raise our own seed. We have suffered a great deal here by the use of improper seed. I think if a few of our best farmers would form an association to raise and properly care for seed corn and offer it for sale, that it would benefit themselves and the whole community.

Q. Mr. McPhedran: I find from my three years' experience with a silo, that I cannot afford to be without it. The old way of curing corn in large shocks makes expensive handling, and then after February 1st the value of the feed is reduce one-half by repeated thawing and freezing, and especially by the ravages of rats and mice, the corn has lost its succulence, and it cannot be restored no matter how much water we may add to it.

Q. What varieties of corn are best for silage purposes?

A. In this locality I fancy that the "Mastoden Dent" and the Wisconsin Earliest White Dent," or the "Improved Leaming," should give good results. You are near the lake here, and have a comparatively long season, and should ripen any of these varieties.

If you want anything in the line of

BUTTER OR CHEESE MACHINERY

OR SUPPLIES

Write to:

THE CREAMERY PACKAGE MAN'F'G CO., LIMITED

OWANSVILLE, QUE.

Makers of Butter or Cheese-making Machinery for Factory or Farm Dairy

Ask for our New Catalogue, just out—Free.

ALWAYS MENTION THE FARMING WORLD WHEN WRITING ADVERTISERS.

The Farm Home

Company To Day.

Oh Lucy hurry up the work
And set the parlor straight;
I don't see what's the matter
That we always sleep so late.
There's baking and some ironing
left
But it must all be done
For company is coming sure
Before the setting sun.

Don't snicker now nor waste your
time
In asking questions vain;
I can't say who, nor if they come
By wagon or by train.
But I have dropped the dishcloth;
A fork stuck in the floor;
That Dawson girl who came in
here
Went out the other door.

The cat is cleaning up her face,
And, in a forgetful way
I took a slice of bread while one
Beside my coffee lay.
So someone's coming hungry for
My bread—I hope 'twill be
As lovely as that other batch.
The sponge is up now—see?

Pin that new tidy on the chair,
Fly round and mix a cake;
Of course these signs do sometimes
fail
But Oh! for mercy's sake
Just hear that rooster on the
steps
How plain he seems to say,
With flap of wing and lusty crow—
"Com-pa-ny to-day."
—A. H. J. in Oregonian.

A Splendid Offer Repeated.

We have decided to repeat the offer published in this department on Nov. 12th to the parties sending us the best answers to a question asked by one of our regular

correspondents, Mrs. M. E. Graham, Ailsa Craig, Ont. Such replies must be sent direct to Mrs. Graham, who informs us that she has already received several replies to our first offer. The question and particulars of the offer are as follows:

"What education should the girl receive who expects to become a successful helpmate for the up-to-date farmer?"

All replies should contain not more than one hundred words, should be written on one side of the paper only, and should be sent to Mrs. Graham within three weeks from the date of this issue. As an inducement to the readers of this department to give their views on this important question, the publisher of The Farming World will offer prizes for the best answers as follows:

To the senders of the two best replies a copy each of Nuttall's Encyclopaedia of Universal Information will be given, and to the senders of the two second best replies a copy each of the Ideal Cook Book will be given.

Serving the Thanksgiving Turkey.

Stuff the Thanksgiving turkey with a forcemeat made of bread and mushrooms; or a pound of mushroom caps—less if desired—peeled and sautéed in butter. Place in the body of the turkey during the last half-hour of cooking. A piece of bread may close the opening of the turkey to keep in the flavor and odor of the mushrooms while cooking. The mushroom stems may be cooked with the giblets and used in the gravy.

Escalloped oysters may be served with the turkey in the place of

oyster stuffing. If the oysters are properly prepared, they will be found much better than when subjected, as in stuffing, to the heat of the oven for the length of time needed to cook the turkey. An onion, a cup of cooked oatmeal or other cereal, or even a piece of bread, may be put inside the turkey to aid in keeping it moist, though this is unnecessary, if the temperature of the oven, after the outside of the turkey is seared over, be lowered, and a frequent and generous use of the basting liquid be kept up. Do not forget to have the tendons of the drum-sticks drawn. Truss the turkey neatly, not only on account of its better appearance, but also to keep the wings and legs from becoming dry and tasteless.

Sons Unlike Fathers.

Columbus, the discoverer of America, was the son of a weaver. Cervantes, the illustrious Spanish author, was born of an ancient but reduced family. He early entered military service and served as a common soldier.

Terence, the celebrated Roman dramatist, was at one time a slave.

Homer, most illustrious of poets, was at one time a beggar.

The Greek poet, Hesiod, was a farmer's son.

Demosthenes, the most celebrated orator of antiquity, was a cutter's son.

The great English preacher, George Whitefield, was the son of an innkeeper of Gloucester.

Thomas Wolsey, the English Cardinal and statesman, was a butcher's son.

Dr. Thomas Bishop, or Durham, was the son of a beggar.

Joseph Hall, Bishop of Norwich

Ten Telling Points

THE FARMING WORLD is absolutely indispensable to every person engaged in any department of Agriculture. It possesses the following strong points:

1. It is the only strictly agricultural weekly in the Dominion.
2. It supplies during the year more original articles than any other similar paper published in the country.
3. Its staff of writers and correspondents comprise the very ablest and most experienced men and women in the Dominion.
4. It is fearless and independent in discussing matters affecting the farmer's interest.
5. It is the Official Organ of the Dominion Live Stock Associations, and consequently is the authority in this country on all live stock matters.
6. It is the Official Organ of the Farmer's Institute System of the Province of Ontario.
7. It is the only paper in the Dominion containing a regular Department devoted to the cultivation of Sugar Beets.
8. Its Market Review and Forecast is compiled by an expert and is thoroughly reliable. This feature of the paper each week is alone worth many times the yearly subscription price.
9. It contains each week a Home Department, in which appears articles, stories and what not of interest and value to both old and young in the home.
10. During the year several numbers of special interest are published, such as our Annual Autumn Number, our Horse Number, Poultry Number, etc., etc. These numbers are very much larger than the ordinary issues, and in themselves are well worth the careful reading of every farmer and Live Stock Breeder.

New subscribers for 1903 will receive the remainder of this year, free.

ALWAYS MENTION THE FARMING WORLD WHEN WRITING ADVERTISERS.

The Publisher,
THE FARMING WORLD,
Confederation Life Building, Toronto.

Dear Sir,—Please send THE FARMING WORLD every week from the present date to 1st January, 1903, for which I enclose \$1.00.

Name _____

Post Office _____

and theological writer, was a farmer's son.

Virgil, the great Latin epic poet, was the son of a potter.

Horace was a shopkeeper's son.

The English lexicographer, Dr. Samuel Johnson, was the son of a book dealer.

Robert Burns, the Scotch poet, was a plowman at Ayrshire.

William Shakespeare, "the chief literary glory of England," was a yeoman's son.

The celebrated American engineer, Robert Fulton, was at one time a jeweller's apprentice.

Daniel Webster was the son of a small farmer.

From the most humble origin Thurlow Weed became one of the leading journalists of the United States and a great political leader.

William Cullen Bryant was the son of a physician.

Andrew Jackson was born at Warsaw settlement, South Carolina. While the future President was still a mere child his father died, and the family was left in reduced circumstances on a half-cleared farm in a new settlement.

Abraham Lincoln was the son of a poor farmer.

Thomas Jefferson, the writer of the Declaration of Independence, was a planter's son.

William E. Gladstone, "the grand old man," was a merchant's son.

Hints by May Manton.

WOMAN'S FANCY WAIST, NO. 3904.

To be made with puffed or plain sleeves.

Fancy waists are much in demand, both for entire costumes and the odd bodice. The smart model shown is in the latest style and can be relied upon as correct for the coming as well as the present season. The material of which the original is made is cream Cluny lace over white, with revers, yoke

and vest of white taffeta, full front and puffs of cream mousseline banded with black velvet ribbon, but all dress silks and soft wool fabrics are suitable.

The lining is snugly fitted and



3904 Fancy Waist,
32 to 40 Bust.

closes at the centre front. On it are arranged the various parts of waist proper. The back is smooth and seamless. The fronts have shapely revers and simulated vest portions that are attached invisibly beneath the edge. The front is gathered and joined to a pointed yoke portion and closes invisibly beneath the left front. The sleeves are novel and becoming. The upper portion of lace is slightly full, while the puffs of mousseline are held and banded by strips of lace banded with velvet ribbon, but plain ones are provided and can be used when preferred.

To cut this waist for a woman of medium size, $3\frac{1}{8}$ yards of material 18 or 21 inches wide, $2\frac{1}{2}$ yards 27 inches wide or $1\frac{1}{2}$ yards 44 inches wide will be required, with $\frac{3}{4}$



MR. H. LEWIS.

AN EXAMPLE FOR AMBITIOUS YOUNG MEN

Mr. Lewis, a young man of York County, gained a fair public school education while "working out" for farmers in his locality. He received as much as \$15 a month and board at different times, and by prudence and thrift, saved enough from his earnings to spend six months in our College.

Within one year he was comfortably located in mercantile life at \$60 per month, and in less than two years he won promotion to a mark of \$125 per month. He is one of many who have no regrets for securing a practical education in our School.

ANOTHER EXAMPLE

of the success which comes to farmers' sons who enter business life is that of Mr. Chet Graham, of Bloomington, Ont. He came to us with a decent public school education. After spending two years as "hired man" on a farm he saved funds for a six months' course (about \$130), and in two weeks after completing his course we found a good place for him at \$1,000 per annum. He enjoys six weeks holidays in the year, has pleasant but regular work to do, and is glad he had the ambition to reach for higher things by securing a bread and butter education.

OTHER EXAMPLES

of just the same success could be given by the score. Every term brings us good material, sometimes raw and crude, but we soon transform it into earning power, and send it out to aid in the commercial enterprises of our country.

We covet the bright, brainy, young man from rural life as the best product of our land for the most responsible places in mercantile life.

OUR SCHOOL,

The Central Business College. Toronto, is worthy of your consideration. We have twelve teachers—a good building—fine equipment, including eighty typewriting machines—and do good, honest work. Our Winter Term opens January 6th. Get our circulars in the meantime and arrange to spend a term with us. Address

W. H. SEAW, Principal
Yonge and Gerrard Streets TORONTO

DINEEN'S

Fur Coats.....

We are close upon the weather for heavy fur coats. Our coats are all guaranteed of best quality and workmanship. They are made on the premises from selected fur. **Write for particulars.**

Men's Canadian Coon Coats. Best of solid fur, in natural colors and well tailored. \$30.00 to \$85.00.

Men's Astrachan Coats. High-class fur, beautifully finished and tailored. \$35.00 to \$60.00.

Men's Wombat Fur Coats. Good quality of fur, well and strongly tailored. \$18.00 to \$30.00.

Men's Kangaroo Coats. A very warm and serviceable garment, made of the best Australian fur and well tailored. Natural color. \$25.00 to \$28.00.

Men's Australian Coon Coats. Made of dark-colored and very heavy fur, strongly tailored and finished. \$22.50 to \$25.00.

Men's Australian Wallaby Coats. A good serviceable garment. \$12.00.

Men's Black Dog Coats. Very warm and heavy, strongly tailored. \$12 to \$20.

Your money back if not satisfactory. Write for Style Book.

THE W. & D. DINEEN CO., LIMITED

Cor. Yonge and Temperance Sts., Toronto

yard of taffeta for yoke, revers and vest portions, 1½ yards of mousseline for full front and puffs and one piece of velvet ribbon to trim as illustrated.

The pattern 3904 is cut in sizes for 32, 34, 36, 38 and 40 inch bust measure.

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

Three Great Books

The Ideal Cook Book

Contains Over 1,000 Receipts.

The most practical cook book in the world. The receipts are of a kind that appeal to the common sense of the housekeeper. Grouped together in black-face type at the commencement of each receipt is a statement giving the kind and quantity of ingredients required. The chapter on "The Stew" is itself worth the price of the book. Bound in substantial oilcloth cover for the kitchen.

A copy of the Ideal Cook Book will be sent free to any present subscriber sending one new subscription to THE FARMING WORLD, or to any subscriber not in arrears, for 50c. The published price of the book is \$1.00.

Bunyan's Pilgrim's Progress

A Classic of the Ages.

This is one of the books of the ages, and one that never grows old—that generation after generation delights to read. In the edition we offer as a premium to FARMING WORLD subscribers there is a valuable memoir of John Bunyan, the famous author of the Pilgrim's Progress. The wonderful allegory itself occupies nearly 300 pages, set in large clear type, with illustrations on almost every page adding to the attraction of the text—bound in cloth, handsomely embossed, size 9 x 6 and 1½ inches in thickness. Regular price \$1.00.

Bunyan's Pilgrim's Progress will be sent free to any subscriber of FARMING WORLD who will send us two new subscriptions, giving FARMING WORLD from present date to January 1903, or to any present subscriber not in arrears, postpaid, on receipt of 50c.

Home Nursing

By Evelyn Harrison.

The book itself possesses almost incalculable value in any home. What information is more important than that which will help us to increase the comforts of the sick and infirm—and that will teach us to deal skilfully with those who are unwell? Just this information is to be had in Home Nursing. It is written by an experienced nurse, and in a manner that makes it useful to every one—practical and scientific and yet free from anything of a technical nature.

Home Nursing will be sent free to any subscriber of FARMING WORLD who will send us two new subscriptions, giving FARMING WORLD from present date to January, 1903; or to any present subscriber not in arrears, postpaid, on receipt of 50c. Regular price, \$1.00. Address—

THE FARMING WORLD

Confederation Life Building, Toronto

"Waal, Jim, I heard you was over to Charlotte, and I thought I'd stop and inquire how things went?"

"Who you callin' Jim?"

"Why, you of course."

"Then, sir, I'd have you know that my name is James Johnson Jones."

"But we've bin nayburs and friends for the last fifteen years, and I've allus called you Jim."

"Yes, I know, but things are different now. Sumthin's happened."

"Good Lord, but what kin it be?"

"You know that red calf of mine—the one you said was a whooser? Waal, I entered him at the county fair, and he took the blue ribbon."

"Jim Johnson, you don't mean it?"

"It's a cold fact."

"Then, by gum, if you'll run for President of the United States, I'll vote for you all day long."

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

When writing to advertisers please mention **THE FARMING WORLD.**

GOING INTO CONSUMPTION.

Thousands of Persons are Hastening Towards their Graves as a Result of this Dread Disease.

**READ HOW TO SAVE YOURSELF
Full Free Course of Treatment to Our Readers**



DR. SLOCUM IN HIS LABORATORY

Demonstrating to Medical Men, Scientists, Statesmen and Students the Value of the New Slocum System of Treatment for the Permanent Cure of Consumption, and all Pulmonary and Wasting Diseases.

- Do you cough?
- Do your lungs pain you
- Is your throat sore and inflamed?
- Do you spit up phlegm?
- Does your head ache?
- Is your appetite bad?
- Are your lungs delicate?
- Are you losing flesh?
- Are you pale and thin?
- Do you lack stamina?

These symptoms are proof that you have in your body the seeds of the most dangerous malady that has ever devastated the earth—consumption.

Consumption, the bane of those who have been brought up in the old-fashioned beliefs that this disease was hereditary, that it was fatal, that none could recover who were once firmly clasped in its relentless grip.

But now known to be curable, made so by the discoveries of that man whose name has been given to this new system of treatment.

Now known to be preventable and curable by following and practising his teachings.

The new system of treatment will cure you of consumption and of all diseases which can be traced back to weak lungs as a foundation.

It is not a drug system, but a system of germ destruction and body building.

Not guess work, but science.

Not a step backward, but a stride out of the old rut.

Made possible only by Pasteur's, Virchow's, Metchnikoff's and Slocum's latest discoveries in bacteriology, hygiene and therapeutics.

In plain English, a system of modern scientific disease curing.

The Slocum System consists of Four Preparations which act simultaneously and supplement each other's curative action.

You are invited to test what this system will do for you, if you are sick, by writing for a FREE TRIAL TREATMENT and the Four Free Preparations will be forwarded you at once with complete directions for use.

The Slocum System is a positive cure for consumption, that most insidious disease, and for all lung troubles and disorders complicated by loss of flesh, Coughs, Catarrh, Asthma, Bronchitis and Heart Troubles.

Simply write to the T. A. Slocum Chemical Company, Limited, 179 King street west Toronto, giving post-office and express address, and the free medicine (the Locuse Cure) will be promptly sent.

Persons in Canada seeing Slocum's free offer in American papers will please send for samples to Toronto.

Mention THE FARMING WORLD. For sale by all druggists.

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The Farming World.

A PAPER FOR FARMERS AND STOCKMEN.

Publisher, D. T. McAINSH.
Editor, J. W. WHEATON, B.A.

The Farming World is a paper for farmers and stockmen, published weekly, with illustrations. The subscription price is one dollar a year, payable in advance.

Postage is prepaid by the publisher for all subscriptions in Canada and the United States. For all other countries in the Postal Union add fifty cents for postage.

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Advertising Rates on application.
Letters should be addressed to:
THE FARMING WORLD,
CONFEDERATION LIFE BUILDING,
TORONTO.

Leaves the O.A.C.

Mr. G. A. Putnam, secretary to Dr. Mills, president of the Ontario Agricultural College, has resigned to accept the position of assistant manager of the City Dairy Company, Toronto. Mr. Putnam has been associated with the College for 12 years. During that time he, in addition to his office work, took the full course in Agriculture and received his degree a couple of years ago. He is well qualified to render valuable services to his new employers.

Ontario Fruit Growers.

The 42nd annual meeting of the Ontario Fruit Growers' Association will be held in the City Council Chamber, Cobourg, Ont., on Wednesday, Thursday and Friday, Dec. 4th, 5th and 6th, 1901. An attractive programme has been arranged for. Among those who will address the convention are Hon. John Dryden, Prof. J. W. Robertson, C. C. James, Dr. Saunders, Prof. Van Deman, Pomologist, Washington; Prof. Waugh, horticulturist, Burlington, Ont.; Rev. Father Burke, Alberton, P. E. I.; Prof. Macoun, and Prof. Hutt. All phases of the fruit question will be discussed by practical men, and farmers and others will profit largely by being present.

Butter Maker at Kingston.

Mr. Robert Ireland, Beachville, Ont., has been appointed instructor in butter-making at the Kingston Dairy School. Mr. Ireland is one of the most successful butter-makers in Western Ontario and the Kingston School is to be congratulated on having secured his services. In the butter-making competition of 1900 at the Toronto Industrial Exposition Mr. Ireland won first place and the highest score in a large class of competitors.

American Clydesdale Association.

The 21st annual meeting of the American Clydesdale Association will be held on the evening of Thursday, December 5th, at 8 o'clock. For the convenience of those attending the International Live Stock Show at the stock yards, Chicago, the meeting will be held in the office of Mr. R. B. Ogilvie, Exchange Avenue, just outside the north gate leading into the Show.

As business of great importance will be transacted, including the election of officers for the next two years, it is hoped that every member of the Association will make an effort to be present.

Volume 10 of the Stud Book, containing 1,000 entries, is now in the press and will be ready for distribution in a few weeks.

It is important that all foals of 1901 be registered without delay, in order to save paying the penalty fees which will be exacted on and after January 1st.

Alex. Galbraith, Sec.
November 14, 1901.

Turkey Club Meeting.

The annual meeting of the Turkey Club of Canada will be held in the Council Chamber, City Hall, Guelph, on Tuesday, December 10, 3.30 p. m.

Besides the election of officers for the ensuing year and passing the constitution and by-laws, it is expected that lectures on roup and

Genuine Solid French Ebony BRUSHES

LACK throughout—Bristles are hand-drawn and pegged, in sizes suitable for both ladies and gentlemen—Silver shield on which we engrave one or two letters free of charge—On pages 32 and 33 of our Catalogue will be found a large variety of designs in Ebony Toilet Articles.

Our Catalogue... replete with suggestions for Holiday Gifts, is free for the asking.

Ambrose Kent & Sons LIMITED

Manufacturing Jewelers
156 Yonge St., Toronto

"Many happy returns of the day, grandpa, and mama says if you give us each fifty cents, we mustn't lose it!"

Make Wise Use of Your Winter Evenings

Summer is a time of toil with the young man on the farm. Winter is, comparatively, a season of leisure. He has time to think of his mental make-up rather than harvesting crops all day.

Why not use the time wisely this winter by taking a course in one of the schools of the Federated Business Colleges? Fortify the general education you have received at Public or High School in this way and you have laid a good foundation for success in the affairs of life.

The Federated Business Colleges of Ontario Include:

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| The British American Business College
Toronto, Ont. D. HONKINS,
Chartered Accountant, Principal | St. Catharines Business College
St. Catharines, Ont.
T. F. WRIGHT, Principal |
| The Hamilton Business College
Hamilton, Ont.
C. R. McCULLOUGH, Principal | The Metropolitan Business College
Ottawa, Ont. S. T. WELLS, Principal |
| The Forest City Business College
London, Ont.
J. W. WESTERVELT, Principal | The Galt Business College
Galt, Ont. G. E. WIGGINS, Principal |
| The Sarnia (Nimmo's) Business College
Sarnia, Ont. W. BROCKS, Principal | The Berlin Business College
Berlin, Ont. J. W. WIGGINS, Principal |

—Address College nearest your home, naming this
—paper, for copy of our new Year Book—FREE.

ALWAYS MENTION THE FARMING WORLD WHEN WRITING ADVERTISEMENTS.

black-head or liver diseases, will be given by Prof. Graham and others. The papers furnished by exhibitors of turkeys will, in all probability, be read and commented upon, and the Secretary hopes to have the leading breeders and Mr. Anderson, the judge, point out the proper shape, color, etc., of exhibition specimens.

The fee is now \$1.00 per annum, and all members will do well to attend as a lot of useful information will be brought out. The Club has donated \$17.50 to the prize list of the Ontario Poultry Show, free to all comers.

W. J. Bell, Secy.

In Five Years.

That truth is stranger than fiction, is strikingly illustrated by the remarkable growth within the past five years in the business of the Creelman Bros. Typewriter Co., of Toronto. The business of the first year but totalled \$2,000, while the close of the fifth year showed a grand total of \$150,000 for the year.

Five years ago a small office constituted the business premises of this firm. To-day the entire two floors of the large premises at 15 Adelaide street east, extending one hundred and fifty feet deep, are occupied by this concern, and every inch of space is needed for the requirements of the business.

When questioned as to the cause of this phenomenal growth, Mr. Seitz, the energetic and capable manager of the company replied, "To the Underwood Typewriter rather than to any other cause, must we give the credit."

The Underwood Typewriter is a radical departure from the old writing machines. It is the only high-class typewriter made where the writing is in sight from the first letter to the finish. Some machines show one line of writing; others have an extension front, but none of these, as a matter of fact, are any improvement on the old-fashioned lifting carriage machines.

It only needed the introduction of a few Underwoods into leading business offices and educational institutions until everyone wanted the machine with such unquestionable advantages over every other. This is borne out by the records of the leading business colleges of the country.

Mr. W. H. Shaw, of the Central Business College, Toronto, was the first to take up the Underwood machine, and there are now sixty-five machines in daily use in that college. The Federated Business College of Ontario, which include nine of the leading colleges of the province, use some fifty Underwoods. Nimmo & Harrison took eight. Mrs. Wells has five. Loretto Abbey has four; Separate schools, three; Toronto Collegiate Institute, seven; and in the smaller institutions there are an aggregate of at least twenty-five. Not less than one hundred and fifty Underwood machines, according to the record of the Creelman Bros. Co., are in use in the educational institutions of Toronto.

The blue books of the Government afford further evidence of the popularity of this machine. "The customs returns," said Mr. Seitz, "show that 1000 typewriters were imported from the United States into Toronto last year. One thousand machines were

Underwoods, showing that there are more machines of this one make than of all other makes combined."

In addition to the Underwood business, the Creelman Bros. Typewriter Co. are the selling agents in Ontario for the Empire typewriter, made in Canada, which is a visible writing machine. Its cost is only \$60—a simple, durable and portable typewriter. Its popularity is shown in the fact that about thirty are sold each month in Ontario.

The Creelman Bros. Typewriter Co. are agents for the Neostyle Duplicator, there being about one thousand of these in use in Ontario. This is probably the most perfect duplicating machine that has been invented, making from fifty to one thousand duplicate copies from the one stencil. It is used largely in newspaper offices, by business men for circulars, and teachers for examination papers. This practice of making duplicate copies necessarily calls for a constant and large demand for a duplicator supplies in the way of paper, stencils, and so forth. The supplies that answer for the Neostyle are good for any other duplicating machine, and this means a considerable trade in this class of material.

In addition to their Toronto offices, Creelman Bros. occupy just about as large premises in Montreal, and have also branches in Hamilton and London, it being their intention to open, within a short time, offices in all the chief cities of the province.



FATTENING AND CONDITION POWDER

THE great Blood Purifier for Cattle, Horses, Sheep and Hogs. A handful of this wonderful Purina mixed with the usual feed strengthens the nerves, hardens the muscles, and generally invigorates. Recommended by eminent veterinary surgeons in Canada and United States.

Gustave LaBelle & Co. Montreal, Que.



Champion Evaporator Construction

The corrugated pan of a Champion Evaporator, placed directly over the hottest part of the fire, is its shallow boiling heater. The arrangement is such that the first sap entering the evaporator is first made into syrup. Simple in operation, and easy to clean. A boy fourteen years old can handle our largest outfit. Send for circular giving full details of best method for handling a maple sugar camp.

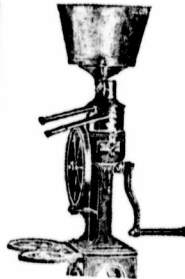
The GRIMM MFG. CO., 84 Wellington St., Montreal, Que.

"EAGLE" in 100's and 200's. "VICTORIA"

EDDY'S PARLOR MATCHES

Are put up in neat sliding boxes convenient to handle. No sulphur. No disagreeable fumes. Every stick a match. Every match a lighter.

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CREAM SEPARATOR

Before you purchase. Simple, durable, easy to clean, close skimmer and low in price. Write for circulars and full information to

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P. O. Box No. 1053 - ST. MARY'S, ONT.

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MEN WANTED

To introduce, distribute advertising matter, and take orders for the

Expansive Tree Protector

It proves a good site line for agents engaged in selling other goods. We would like to have some good farmers interest themselves in this during the winter.

Agents also wanted to sell high-grade NURSERY STOCK on most liberal terms.

EXPANSIVE TREE PROTECTOR COMPANY Limited

Box 574

10 TORONTO

AGENTS WANTED

for the NEW PICTORIAL STOCK DOCTOR AND LIVE STOCK CYCLOPEDIA, revised to 1911 with the assistance of the Professors of the Ontario Agriculture College, Guelph. The finest illustrated, cheapest and best book of its kind ever published. Large wages for agents. Particulars mailed free. Address—

World Publishing Co., Guelph, Ont.

GARDENER WANTED

Married man preferred. Must be reliable and temperate. Write stating salary expected. Address

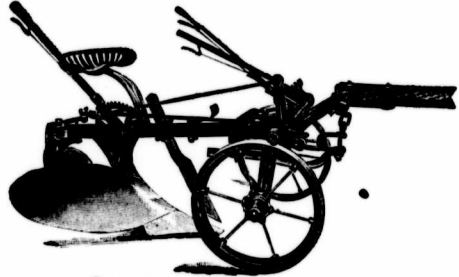
St. Hyacinthe Poultry Farm
St. Hyacinthe, Que.

BE UP-TO-DATE

"He who by the Plow would thrive
Must never walk but always drive"

Save Money Labor and Team by Using the Ontario Riding Plow

This plow has a lighter draft than any other plow doing the same work. Anything a plow should be asked to do it can do with less strain on team or ploughman.
It is the simplest plow made and can be run by any man, woman, boy or girl who knows how to manage a team.



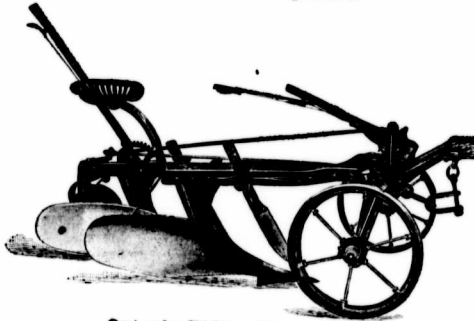
Ontario Riding Plow, No. 3

Plowing is made a Pleasure by Using
our Riding Plow

We make single and double Riding Plows with mould-boards adapted for any soil and cutting any width of furrow.

Apply for Catalogue and particulars to

THE PERRIN PLOW CO.
LIMITED
SMITH'S FALLS, ONTARIO



Ontario Riding Plow, No. 4

Growth of Foals.

Prof. Shaw of the department of animal husbandry of the University of Minnesota, says:
"It is interesting to note the growth in young foals. Much attention has been given to the daily gains in meat-making animals, as cattle, sheep and swine. With foals, however, but few records have apparently been kept. Of course, much depends upon the kind of foal, that is, the class to which it belongs and also its individuality, but with an average foal of what may be termed mixed breeding for every day use on the farm, the average increase in weight during the period of gestation is about one-third of a pound daily. As with calves that are well fed, the average daily growth is highest soon after birth, and gradually decreases for a time, in a healthy foal it ought to be as much as four pounds per day. Young pigs will not grow so much on the dam as they will subsequently—that is, some months after they are born. These facts are very interesting; the explanation of them is not very easy. Some one who desires knowledge and thirsts for fame should investigate this question, and tell us why these differences occur."

After the Spanking.—Bobby (subdued and humble)—Say, ma! Ma—What is it, Bobby? Bobby—Won't y' please lend me a little piece of bread an' butter?



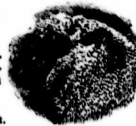
Silver Creek Stock Farm

Shorthorn Cattle
Oxford Down Sheep
Bronze Turkey

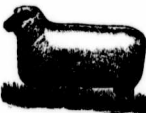
THOS. ARKELL,
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OXFORD DOWN SHEEP

Durham Cattle, "Milk-
ing Strains"; York-
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John Cousins & Sons,
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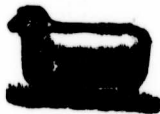
Oxford Downs for Sale!



1 Imported aged Ram
4 Good Shearing
Rams
15 Good Ram Lambs
12 Nice Ewe Lambs
8 Shearing Ewes
The above are all
sired by Imp. Rams,
8 or 10 aged Imported
Ewes

—PRICES REASONABLE—
SMITH EVANS, : GOUROCK, ONT.

OXFORDS AT BRANT FARM



Some good yearling
feed rams. Limited
number of ram and
ewe lambs, splendid
type and style. Some
aged ewes cheap.
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H. JULL & SONS,
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DAVID McCRAE, Janefield, Guelph, Canada, Im-
porter and Breeder of Galloway Cattle, Clydesdale
Horses, and Cotswold Sheep. Choice animals for sale.

RETTIE BROS.

HOLSTEIN-FRIESIAN BREEDERS
A few choice young animals for sale. **RETTIE**
BROS., **NORWICH, ONT.**



Live Stock Label-in
large or small lots,
also odd numbers
supplied. Send for
circular and price list
R. W. JAMES,
Bowmanville, Ont.



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Breeders of Clydesdale
horses and Shorthorn
Cattle, are offering one
Clydesdale Stallion, 7
years old; one Clydes-
dale Stallion, 3 years old;
3 2-year old Stallions;
also a few young mares
in foal to Grandeur II.
and Nickel Steel.

I. DEVITT & SONS

Burlington Jct. Station on G.T.R., Freeport P.O.
1/4 mile from farm.

Our market reports are reli-
able and up-to-date. They are
written specially for The Farm-
ing World and are of inesti-
mable value to every farmer.

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IMPERIAL HOLSTEIN-FRIESIAN STOCK FARM

10 Young Bulls from one month to four months, bred from Winnie R's De Kal.

W. H. SIMMONS,
New Durham, Ont.

Glen Crescent Shorthorns and Oxfords

Two Young Bulls by imp. "Precious S-one" and imp. "Blue Ribbon" for sale. Can spare a few more Oxford females.

J. W. WIDDIFIELD,
Uxbridge, Ont.

SHORTHORN BULLS

Two choice bulls about a year old

FOR SALE

JOHN McNAB,
Rockwood, Ont.

The Up-to-date Herd Tamworths

Bred from sweepstakes herd.
Young stock of both sexes for sale.

W. H. McCUTCHEON, BRUSSELS, ONT

Yorkshires for Sale

Boars fit for service.
Boars and Sows 8 weeks to 4 months old; all stock registered of the lengthy even deep type. Write

JAS. A. RUSSELL,
Precious Corners, Ont.

Maple Cliff Dairy and Stock Farm

20 Boars fit for service. Improved Berkshires and Tamworths several of them winners at Buffalo and Ottawa

REID & CO., - Hintonburg, Ont.
Farm adjoins Central Experimental Farm.
Mention FARMING WORLD.

FOR SALE
Pure Bred Improved York-
shire Pigs.
ANNANDALE FARM,
TILSONBURG, ONT.

SHROPSHIRE

Bred from the best Imported Stock.
Also Silver and White Wyandottes.
W. D. MONKMAN, Bond Head, Ont.

MAPLE LEAF HERD
OF LARGE YORKSHIRES

...Young Stock for Sale
ROBERT NICHOL, BRUSSELS, ONT

W. R. BOWMAN
Mt. Forest, Ont.

Breeder of POLLED ANGUS CATTLE
Young Stock of both sexes for sale.

AYRSHIRES AND
YORKSHIRES
FOR SALE.

PURE-BRED AYRSHIRE BULLS
coming 1 year old, fit for service, and
one coming two years old. All sired
by "White Prince" (Imp.) except the one
coming 2 years old. As I am about renting
my farm these bulls will be sold cheap if
taken at once. Also a number of fine pure-
bred Yorkshire Sows from one to four
years old.

JOHN H. DOUGLAS,
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JOHN DRYDEN
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BREEDER OF
CRUICKSHANK SHORTHORNS and CHOICE
SHROPSHIRE SHEEP
Choice Young Bulls and Ram Lambs
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IMPROVED CHESTER WHITES
and English Berkshires. Young Stock
for sale at reasonable prices.

TILMAN E. BOWMAN,
Berlin, Ont.



ROCK SALT for horses and cattle, in ton and car
lots. **TORONTO SALT WOKKS, To onto**

Rapids Farm
Ayrshires

Reinforced by a recent importation of 20 cows, 2
bulls, and a number of calves, selected from noted
Scottish herds, and including the male and female
champions at leading Scottish shows this year. Re-
presentatives of this herd won the first herd prize at
the exhibitions at Toronto, London and Ottawa.

Come and See, or
Write for Prices

Young Bulls and Heifers for sale, bred from high-
class imported stock

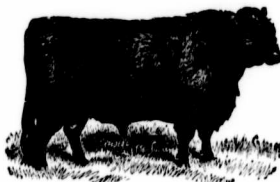
ROBERT HUNTER,
Manager for W. W. Ogilvie Co.,
Lachine Rapids, Quebec

GALLOWAYS

D. McCRAE, GUELPH, ONT.

60

Cows and Heifers



20

Bulls and Bull Calves

SPLENDID SPECIMENS OF THIS HARDY, HORNLESS BEEF BREED

PAN-AMERICAN CHAMPION

CEDRIC 4TH (6468)

At the head of this Herd.

The Galloways grow the best of beef. Fine robes. Are easily kept; very hardy and great
rustlers. They are unexcelled for ranching and for excellent marbled beef.

ALWAYS MENTION THE FARMING WORLD WHEN WRITING ADVERTISERS.

PURE-BRED STOCK

NOTES AND NEWS FROM THE BREEDERS

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

Horses

Mr. Peter Crawford has sold four very useful horses to go to Canada, one of them being the excellent short-legged horse, Captain Alexander, so long owned by Mr. M. Marshall. He was bred by Mr. J. M. Hannah, and has been secured by Mr. Hay, who also gets Lord Smith, a big powerful horse, by Ethiopia. The other two sold were both disposed of to Messrs. Dalgetty Brothers. These were Prince's Model and Royal Fortune, the former being by Moncreiffe Marquis, the first prize aged horse at the Highland Society this year, and the latter by Prince of Fortune, which gained first prize at Glasgow Stallion Show when a four-year-old. Both are typical short-legged horses, and, like the first mentioned

two, were disposed of at good prices. Three well-bred horses were also shipped last week to Canada by Mr. Walter Park to the order of Mr. R. D. Dundas, Springville, Ontario. One of these was the excellent yearling colt Fyvie Gold, by Gold Mine, which was third at the Aberdeen Spring Show this year. Another was a thick well-coloured colt, by Mains of Airies, while the third was by Mr. Jackson's well known premium horse Prince of Craigend. All three were exceedingly useful, well bred young horses, Fyvie Gold being possibly one of the best colts of his age that has been shipped for some time.—North British Agriculturist.

Cattle

Jos. Yuill & Sons, Carleton Place, Ont., write: "We have late-

Horses, - Carriages, - Harness

Robes,
Rugs,
Blankets,
Saddles,
Bridles,
Etc., Etc.



The Largest
Assortment in
Canada for
Private Sale
or Exchange.

Auction Sales every Tuesday
and Friday at 11 o'clock.
"Annex," 18-28 Nelson St.

Grand's Repository, 53 to 59 Adelaide
St. W., TORONTO
WALTER HARLAND SMITH, Proprietor.

ONTARIO PROVINCIAL WINTER FAIR

A Combined Exhibition of Fat Stock, Dairy Cattle and Dressed Poultry,
will be held at

Guelph, Ont.

DECEMBER 10th to 13th, 1901

Every provision made for the convenience and comfort of Exhibitors and
their Exhibits.

Entries should be made before Nov. 23. After that date an extra fee
will be charged. Positively no entries will be received after Dec. 1.

Single Passenger and Freight rates.

All applications should be made to the Secretary,

A. P. WESTERVELT,
Parliament Buildings, TORONTO

A. W. SMITH, President,
Maple Lodge, Ont.

PRIZE LIST NOW READY

ALWAYS MENTION THE FARMING WORLD WHEN WRITING ADVERTISERS.

EFFECTUAL

The most effectual remedy in use for
the cure of ailments of horses and cattle is

GOUBAULT'S CAUSTIC BALSAM

Used as a Blister
or Lotion.



This preferred remedy is prepared exclusively by J. E. Gombault, ex-Veterinary Surgeon to the French Government Stud.

As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, etc.—it

Every bottle of Caustic Balsam sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address:

THE LAWRENCE-WILLIAMS COMPANY, Cleveland, Ohio.

OR 21 FRONT STREET WEST, TORONTO, ONT.

NO SPAVINS

The worst possible Spavin can be cured in 45 minutes. Curbs, Splints and Ringbones just as quick. Not painful and never has failed. Detailed information about this new method sent free to horse owners.

Write to-day. Ask for Pamphlet No. 1.

FLEMING BROS., 58 Bay St., Toronto, Ont.



Any Lump Cured

If you have a real or suspected case of Lump Jaw among your cattle cure it at once with Fleming's Lump Jaw Cure. Don't take chances on a disease that always proves fatal if neglected. Don't waste money on experiments; use the remedy that invariably cures. One bottle cures one severe or two or three ordinary cases. Cures any lump or enlargement on cattle or horses.

Argyle, Ont., April 3rd, 1900.
Sirs,—Enclosed please find \$2, send me a bottle of your Lump Jaw Cure. I got a bottle from you last fall and it gave good satisfaction.

ARCHIE McFARLANE.
Price \$3, or three bottles for \$5. At druggists or sent by mail prepaid. Money promptly refunded if it ever fails.

FREE—Our Illustrated Pamphlet to readers of this paper.

FLEMING BROS., Chemists
Room K, 58 Bay Street, TORONTO, Ont.

Spoooner's "PHENYLE" Powder "Phenyle" GERMIDE DISINFECTANT..

KILLS CHICKEN LICE

and Lice on Horses and Cattle, and Ticks on Sheep. Keeps them Healthy. Easily applied; no dip required.

60lb. boxes, 1lb. packages.....25c. lb.
70lb. pails.....15c. lb.
400lb. barrels.....10c. lb.

If your Druggist does not sell it, send direct to

ALONZO W. SPOONER,
Laboratory, PORT HOPE, Ont.

Will cure and prevent hog cholera.

ly sold the following animals (Ayrshire cattle): Charmer Meadowside No.—13714—to Walter Wilson Sarsfield, Ont. This calf took first prize at Almonte fair and third at Ottawa, 13 competing. One of our own took first. Lucy Meadowside—13715— sold to Augustin Daoust, Sturgeon Falls, Ont. This calf took first at Ottawa for bull calf under six months, 15 competing. A bull calf to Wm. McCoy, Morewood, Ont. One two-year-old heifer to Miss L. Bell, Qu'Appelle, Assa. In Shropshire sheep we sold one Shearling ram to Matthew Donald, McDonald's Corners, Ont. This ram took first at Almonte and Middeville, and second at Ottawa. One ram lamb to George Olliver, Perth, Ont. Two ewe lambs to Ormond Wright, Algonquin, Ont. Berkshires, one young sow to Duncan McNeil, Avonmore, Ont. We also sold quite a number of Barred Plymouth Rocks."

It is reported that W. D. Flatt's Highland prize bull, Choice Goods, which as stated in last week's issue, was sold by private sale at Chicago, brought the handsome figure of \$7,500, the highest figure ever paid for a Shorthorn in America. The general average on the 45 head sold by auction was \$1,123, the highest made in America since the spring of 1882, when Hon. H. M. Cochrane closed out his Airdrie Duchesses and other Bates-bred Shorthorns at an average of \$2,081.

Mr. H. C. Graham, Ailsa Craig, Ont., writes: "Our Shorthorns and poultry, as you are aware, are up-to-date in type and breeding, and we have always sold to please customers. See announcement elsewhere in this issue."

Sheep

On Thursday, October 27th, Messrs. Alfred Mansell & Co. shipped from Liverpool per s. s. "Persic" of the White Star Line a high class Shropshire ram and two choice in lamb ewes to Mr. Arthur Smith of Australia. The ram, which was one of exceptional merit, hailed from Mr. Andrew Mansell's noted flock, being No. 4 at the recent Dispersion Sale, where he was purchased at 90 guineas. He was one of the second prize rams in the prize pen at Cardiff Royal Show, and owned as his sire Fortification, one of Mr. A. E. Mansell's most successful sires. The ewes were specially selected from Messrs. Evans' reserve lot of Shearling ewes, and were in lamb to Montford Monarch, a high priced ram bred by Mr. T. S. Minton by the 120 gs. Phenomenon.

A LONG RECORD OF SUCCESS in curing cuts, burns, and bruises, as well as all bowel complaints, is held by Pain-Killer—over 60 years. Avoid substitutes, there is but one Pain-Killer, Perry Davis, 25c. and 50c.

FOR SALE

SHORTHORNS—Males and females of milking strains.
TURKEYS—Males, Mammoth White and Mammoth Bronze.
BARRED ROCKS—Males.
Write for what you want. We can please you both in quality and prices.

H. C. GRAHAM
AILSA CRAIG, ONT.

ALWAYS MENTION THE FARMING WORLD WHEN WRITING ADVERTISERS.

Alva Farm Guernseys

The Typical Dairy Breed

Good Animals
of both Sexes
for Sale.



SYDNEY FISHER, Knowlton, Que.

INGLEWOOD FARM Jerseys and Tamworths

Magnificent Stock For Sale

Write for full particulars to

ANDREW ELLIOTT & SON, - - Galt, Ontario



90 HEAD HEREFORDS

High quality, early-maturing

Prizewinners

Young Bulls, Cows, Heifers

The blood of "Corrector," "Eureka," "Ancient Briton," and "Kupert," on an "Anxiety" foundation. Send for illustrated catalogue.

H. D. SMITH

COMPTON, Que

W. C. EDWARDS & CO. Breeders and

.....Importers

LAURENTIAN STOCK and DAIRY FARM, North Nation Mills, Que.

PINE GROVE STOCK FARM, Rockland, Ont.
On the C.P.R. and G.T.R. Railways.
Special bargains on young bulls of superior merit and select Scotch breeding. Also thick young heifers at the right prices.

Ayrshires, Jerseys, Shropshire Sheep, and Clydesdale Horses.

Post Office, Telegraph Office, and Steamboat Landing, Rockland, Ont., on the C.P.R.

W. HARNET
Manager.



Ayrshires, imported and home-bred herd headed by Imported Tam Glen 2nd, No. 1310 D. A. H. B. Jerseys all of the celebrated St. Lambert family; herd headed by Liger Fogle of St. Anne's 3704 A.J.C.C. Berkshire Pigs. Young stock of all the above breeds for sale.

Post Office, Telegraph Office, and Railway Station, North Nation Mills, P.Q., on the C.P.R.

A. E. SOHYER,
Manager

OAK LODGE YORKSHIRES



are acknowledged to be the best type of bacon hog to produce the ideal carcass for the best English trade. CHAMPIONSHIP HERD AT TORONTO INDUSTRIAL EXHIBITION FOR NINE YEARS also sweepstakes on Dressed Carcass at Provincial Winter Show. We have on hand now a large herd of different ages. Our prices are reasonable and the quality is guaranteed to be choice. Write

BRETHOUR & SAUNDERS,

Surford, Ontario

Market Review and Forecast

Office of The Farming World,
Confederation Life Building,
Toronto, Nov. 25th, 1901.
Trade conditions continue good and business in wholesale lines is more active than usual in many lines. Remittances are improving and trade generally seems to be in a very satisfactory condition. Money keeps steady at 5 per cent. on call and discounts on commercial paper at 6 to 7 per cent.

Wheat.

There is nothing new in the wheat situation. The market has ruled fairly steady during the week and prices at the time of writing are firm with no very big drop in sight. European markets are firmer and higher, while Chicago was dull and slightly lower towards the end of the week. The offerings here are light and there is a fair inquiry from millers and the home trade. Local dealers quote red and white at 70c to 71c middle freights. Goose is steady at 65c for No. 2 East and 64c middle freights. Spring wheat keeps steady at 70c for No. 1 East. Manitoba is firm at 85c for No. 1 hard, 82c for No. 1 Northern, and 79c for No. 2 Northern grinding in transit. On Toronto farmers' market red and white bring 70c to 74½c, goose 66c to 67½c, and spring life 69½c per bushel.

Oats and Barley.

The market for coarse grains and oats in particular continues firm and advancing. Some are looking for a drop in price as soon as Manitoba oats come forward, but that is hardly likely, if the Government contract for oats in the west is filled. Oats are now over 20 cents a bushel higher than they were last year at this time. They sell at Montreal now at 51c to 52c per bushel in large lots. The market here keeps firm and No. 2 are quoted at 45c middle freights and 45½c east. On Toronto farmers' market oats bring 48½c to 49½c per bushel.

Barley is now 8c to 9c per bushel higher than at this time last year. Quotations here range from 47c to 56c at outside points as to quality. On the farmers' market here malt barley brings 54c to 61c and feed barley 53c to 54c per bushel.

Peas and Corn

Peas keep advancing and present prices are about 18c per bushel higher than at this time last year. Quotations here are 77c to 78c middle freights and 76c to 77c North and West. On the farmers' market small peas bring 78c per bushel.

The corn market is still booming. Smaller yields from husking the American crop is reported than was expected. Canadian corn is in good demand here and firm at 55c for new yellow and white mixed. American No. 3 yellow is nominal at 69c on track, Toronto.

**The Canada Permanent & Western Canada
Mortgage Corporation**

Head Office, Toronto St., Toronto

SAVINGS DEPARTMENT

\$1 and upwards received on deposit
 Interest paid or compounded 3 1/2% \$100 and upwards received for which de-
 half yearly at.....
 ponies are issued with cou-
 interest at..... 4%

Invested Funds - - - - - **\$23,000,000**

Wheat and Shorts.

During the week Ontario bran has advanced 50c per ton at Montreal and quotations there are \$18 to \$18.50 for car lots and \$22 to \$23 per ton for shorts. Manitoba bran is quoted at \$18.50 to \$19. City mills here sell bran at \$16 and shorts at \$18 in car lots f. o. b. Toronto.

Potatoes and Beans.

There is a decidedly firm tone in the potato market. The American market has gone up with a rush and quite a lot of Canadian potatoes are being shipped to the United States. Montreal quotations are 70c to 72½c for car lots of good quality on track. The market here is firmer and car lots sell at 55c. On the farmers' market potatoes bring 65c to 75c per bag.

The bean market is a little easier. Montreal quotations are \$1.32 to \$1.35 per bushel for car lots. There is a fair demand here at \$1.60 to \$1.65 for hand-picked and \$1.45 to \$1.50 for unpicked in a jobbing way.

Hay and Straw.

There is a brisk business in hay at country points east. The local and export demand at Montreal keeps up and quotations there for baled hay in car lots are:

No. 1 timothy	\$10.00 to \$10.50
No. 2 timothy	9.00 to 9.50
Clover mixture	8.00 to 8.50
Clover	7.50

Baled straw is quoted there at \$5 to \$5.25 in car lots. The Government is reported as paying \$8 for No. 2 baled hay at country points. The market for baled hay keeps steady here at \$8.50 to \$9 in car lots on track. On Toronto farmers' market timothy brings \$11 to \$13.00, clover \$7.00 to \$8.50,

sheaf straw \$11.25 and loose straw \$6 to \$7 per ton.

Eggs and Poultry.

The good export demand for eggs keeps up and the outlook is for a continuance of present high prices. At Montreal there is a splendid export and local demand. Straight fresh stock is quoted there at 20½c in case lots. Exports this season are over three times what they were for 1900. Though offerings are more liberal here. Strictly new-laid and fresh gathered stock are not plentiful. Demand is strong and prices steady at 18c for fresh gathered and new-laid, and 16c to 17c for ordinary fresh in case lots. On Toronto farmers' markets eggs new-laid bring 25c to 30c per dozen.

The colder weather brings out larger receipts of dressed poultry. Montreal quotations are: Choice dry picked turkeys 9½c to 10c, chickens 6½c to 8c, ducks 8c to 9c, and geese 5½c to 6c in case lots. Scalded stock brings from 1c to 1½c per lb. less than these prices. Offerings are heavy here and prices keep low at 4c to 5c per lb. for geese and 5c to 7c for turkeys, and 20c to 30c per pair for dressed, 30c for live and 40c to 75c per pair for ducks in a jobbing way. On Toronto farmers' market chickens bring 25c to 50c and ducks 45c to 60c per pair, and turkeys 6c to 8c, and geese 6c to 7c per lb.

The Canadian Produce Co., 36 and 38 Esplanada East, Toronto, will pay until further notice for spring chickens 5c per lb.

IMITATIONS ABOUND, but insist upon getting the genuine "The D. & L." Menthol Plaster. "The D. & L." has stood the test of years. It cures. Its imitations are impotent. "The D. & L." is made by the well-known Davis & Lawrence Co., Ltd.

OUR PRICE FOR CHICKENS HAS GONE UP

Our demand has doubled. Deal with a reliable firm; be careful of strangers. See our prices on this page.

THE CANADIAN PRODUCE CO., TORONTO

ALWAYS MENTION THE FARMING WORLD WHEN WRITING ADVERTISERS.

For hens (including last year's birds) 2½¢ per lb. For ducklings 5¢ per lb. Crates supplied free and express paid up to 50¢ per 100 lbs. of birds. These prices are for live weight.

Fruit

The apple market keeps strong, \$4.50 to \$5 per barrel as the quotations at Montreal for large lots and \$5.50 to \$6 in a smaller way. On Toronto fruit market apples bring from \$2.50 to \$4.50 per barrel as to quality.

Seeds

Late advices indicate that English dealers are looking to Canada to supply them with considerable red clover seed. Red clover is quoted at country points east at \$8 to \$9, timothy at \$5.50 to \$5.75, and alsike at \$10 to \$12 per cwt. f. o. b. On Toronto farmers' market alsike brings \$6.50 to \$7.50, red clover \$4.75 to \$5.00 and timothy \$2 to \$2.75 per bushel.

Cheese

There is no improvement in the cheese situation. English dealers continue to buy on the hand to mouth plan and there is little activity and no speculation in the market. The consumption of cheese has fallen off immensely and large quantities of June and July goods are said to be in store at Montreal on English account. Late reports indicate a steady feeling without any great increase in the volume of business doing. Prices at the local markets, many of which have shut down for the season, range from 8½¢ to 8¾¢ with little activity.

Butter

The recent decline in prices is said to be due to a lowering in the quality. Great Britain has bought more butter and less cheese this year from Canada. The total increase in exports from Canada and the United States this year over last year is 172,477 packages. Choice creamery is selling at Montreal at 20½¢ to 20¾¢ and fine at 20¢. Good merchantable fodder and fodder mixed goods sell there at 19¢ to 19½¢. Choice dairy rolls in half bbl. lots sold there last week at 17¢. Choice creamery is in good demand here at 20¢ to 22¢ for prints and 19¢ to 20¢ for solids. Offerings of dairy are more liberal but good choice stuff sells readily at 16¢ to 17¢ for pound rolls and 16¢ for large rolls. On Toronto farmers' market lb. rolls bring 15¢ to 17¢ and crocks 14¢ to 16¢ per lb.

Cattle

The receipts of live stock at Toronto cattle market on Friday were 789 cattle, 1,145 hogs, 1,750 sheep and 30 calves. The quality of the fat cattle was not good. All of good quality found a ready market at fair prices but the common and inferior stuff was slow of sale. The demand for heavy feeders is not as great as it was a week ago. Good milch cows are wanted. Quite a lot of Canada stockers are being sold at Buffalo. Good

quality sells well there but the common run sell slowly.

Export Cattle—Choice loads of these are worth from \$4.40 to \$4.50 per cwt., and light ones \$4.00 to \$4.30 per cwt. Heavy export bulls sold at \$3.75 to \$4.25 and light ones at \$3.25 to \$3.60 per cwt., choice export cows sold at \$3.00 to \$3.50 per cwt.

Butchers' Cattle—Choice picked lots of these, equal in quality to the best exporters, weighing 1,075 to 1,150 lbs. each, sold at \$4.00 to \$4.35 per cwt., good cattle at \$3.50 to \$3.85, medium at \$3.15 to \$3.40 and inferior to common at \$2.00 to \$2.75 per cwt.

Feeders—Heavy, well-bred steers from 1,100 to 1,200 lbs. each, sold at \$3.50 to \$3.75, and other quality at \$3.25 to \$3.50 per cwt. Light steers, 900 to 1,000 lbs. each sold at \$3.00 to \$3.20 per cwt. Feeding bulls for the byes 1,000 to 1,300 lbs. each sold at \$2.50 to \$3.00 per cwt.

Stockers—Yearling steers weighing 500 to 800 lbs. each sold at \$2.50 to \$2.75 and off colors and those of inferior quality at \$1.75 to \$2.00 per cwt. Light stock bulls 500 to 800 lbs. each sold at \$1.75 to \$2.50 per cwt.

Calves—These are firmer at Buffalo. Good to choice veals bring \$7.00 to \$7.35 per cwt. At Toronto market ordinary calves bring \$2 to \$8 each.

Milch Cows—Milch cows and springers sell at \$30 to \$50 each as to quality.

Sheep and Lambs

Sheep and Lambs—There was a large run of sheep and lambs on Friday and prices took another drop. The market for sheep was probably the worst of the season, the average prices for both sheep and lambs being about \$3 per cwt. Sheep were easy at \$2.75 to \$3.12½ for ewes and \$2 to \$2.50 for bucks. Spring lambs sold at \$2.50 to \$3 each and \$2.75 to \$3.20 per cwt. Eirick Bros. of East Buffalo write on Nov. 21st in reference to Canada lambs:

"Canada lambs are rather slow—the bulk that are coming are entirely too heavy for the trade; the handier weight lambs weighing 85 to 88 lbs. selling at \$4.50 to \$4.55 with the extreme heavy grades very dull and slow at \$4.40 to \$4.50; buck lambs are selling at 4¢ for the very best."

Hogs

The hog market is firmer and a much stronger feeling prevails. Prices, though they have remained at \$5.50 for select bacon hogs, \$5.37½ for fats and \$5.25 for lights, seem to have an upward tendency and higher figures may be obtained this week. Unculled lots sold on Friday at \$5.40 per cwt.

The Wm. Davies Co., Toronto, for the week ending Nov. 30th will pay \$6.00 per cwt. for select

THERE HAS BEEN MUCH TALK about Pny-Balsam, the greatest modern remedy for coughs and colds. It cures quickly and certainly. 25c. Of all dealers. Made by proprietors of Perry Davis' Pain-Killer.

bacon hogs, \$5.62½ for heavy hogs, and \$5.50 for lights.

The Trade Bulletin's London cable of Nov. 21st, re Canadian bacon, reads thus:

"The market is firmer and 4s higher with good demand at the advance."

**Windsor
Salt
Makes
Good Butter
Better
Yet!**

BEST GROCERS SELL IT

The Razor Steel

Secret Temper, Cross-Cut Saw



WE take pleasure in offering to the public a Saw manufactured of the finest quality of steel and a temper which toughens and refines the steel, give a keener cutting edge and holds it longer than by any process known. A saw, to cut fast, "must hold a keen cutting edge."

This secret process of temper is known and used only by ourselves.

These saws are elliptic ground thin back, requiring less set than any Saws now made, perfect taper from tooth to back.

Now, we ask you, when you go to buy a Saw, to ask for the Maple Leaf, Razor Steel, Secret Temper Saw, and if you are told that some other Saw is as good, ask your merchant to let you take them both home and try them, and keep the one you like best.

Silver Steel is no longer a guarantee of quality, as some of the poorest steel made is now branded silver steel. We have the sole right for the "Razor Steel" brand.

It does not pay to buy a Saw for one dollar less and lose 2½¢ per day in labor. Your Saw must hold a keen edge to do a large day's work.

Thousands of these Saws are shipped to the United States and sold at a higher price than the best American Saws.

**MANUFACTURED ONLY BY
SHURLY & DIETRICH,
GALT, ONT.**

Horses.

There is a demand for first-class heavy draughts and other good special lines, but as we pointed out last week these are hard to get. Outside of this there is practically no demand. Some second-hand horses were sold at Grand's last week at the usual run of prices.

Wintering Sheep.

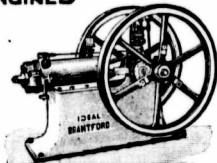
Every shepherd and flockmaster who studiously endeavors to be a successful sheep raiser, knows that in order to winter sheep as they ought to be wintered it is essential to good management that they be put into a thrifty condition during the fall months. This is the special time of the year when all those having blemishes, or those whose usefulness is now becoming impaired through old age, should be carefully sorted out, fed and prepared for the shambles. The climatic conditions during this season are generally favorable in aiding sheep which have defects, consequently they can be put in better condition for the butcher and fed off cheaper and more expeditiously than during the winter. Beyond this their absence will help to provide more and better accommodation for the breeding flock throughout the winter months. In managing the breeding flock during the fall and winter months there must be taken into consideration the whole question of environment, and the best efforts of the flockmaster should ever be directed toward bringing the breeding flock along in a thrifty condition. This condition can never be attained by starts and fits of irregular feeding, but by strict regularity, which avoids the extremes of getting them too fat or allowing them to fall off too much. There is a happy future for a breeding flock lying between the extremes mentioned, which should be the aim of every shepherd to gauge.

Programme at Amherst.

The programme for the Winter Fair to be held at Amherst, N. S., on Dec. 17th, 18th and 19th is as follows: Judges—Cattle, Prof. G. E. Day, Guelph; sheep, D. G. Hanmer, Mount Vernon; swine, J. E. Brethour, Burford; poultry, W. R. Graham, Guelph. At a public meeting to be held on the 17th of December the speakers will include Hon. Sydney Fisher, Prof. Robertson, Hon. T. R. Black, Hon. W. T. Piper, Hon. L. P. Ferris, Hon. L. J. Tweedie, Premier of New Brunswick; Hon. G. H. Murray, Premier of Nova Scotia; Hon. Benj. Rogers, Premier of Prince Edward Island, and Dr. James Mills.

NINE TIMES OUT OF TEN Pain-Killer will be found to fill your needs as a household remedy. Used as a liniment for stiffness and taken internally for all bowel complaints. Avoid substitutes. 25c. and 50c.

BRANTFORD ENGINES.
STRICTLY HIGH GRADE.
2 to 25 H.P.



AS AND IDEAL ASOLINE ENGINES

The Perfected Product of Many Years' Experience.
Also Makers of Steel Windmills and Water-works Outfits, Etc.
WRITE US.

GOLD'S SHAPLEY MUIR CO. LTD.
BRANTFORD CAN.

LOOK INTO THIS . . .



The Atlantic Refining Company
Manufacturers and Importers of Illuminating and Lubricating Oils, Grease and Specialties.
Foot of Jarvis St. TORONTO, ONT

MICA ROOFING

Use Mica Roofing on all your buildings.
IT IS CHEAPER THAN SHINGLES.
Waterproof
Fireproof



Use Mica Paint to repair leaky roofs.
Shingle, Iron or Tin Roofs painted with it will last twice as long.

RAPIDLY TAKING THE PLACE OF SHINGLES

Is put up in rolls of one square each, 40 ft. long by 32 in. wide, and costs only \$2.25, including nails, thus affording a light, durable and inexpensive roofing, suitable for buildings of every description—especially flat roofs—and can be laid by any person of ordinary intelligence.
HAMILTON MICA ROOFING COMPANY, Office 11 REBECCA ST., HAMILTON, ONTARIO

THE TIME TO INSURE IS NOW

WHILE YOU ARE WELL, STRONG AND INSURABLE.

THE Confederation Life

ASSOCIATION issues policies on all approved plans of insurance, and is a prosperous and progressive Canadian Company.

PROTECTION FOR YOUR FAMILY. PROFITABLE INVESTMENT FOR YOURSELF.

Pamphlets and full information sent on application.

Hon. Sir W. P. Howland, K.C.M.G., C.B.,
PRESIDENT.
W. H. BEATTY, Esq., W. D. MATTHEWS, Esq.,
VICE-PRESIDENTS.
W. C. MACDONALD, ACTUARY. J. K. MACDONALD, MANAGING DIRECTOR.

HEAD OFFICE, - T J R O N T O.

PAN-AMERICAN EXPOSITION 1901



F. A. CONVERSE,
SUPERINTENDENT OF LIVE STOCK,
AIRY AND AGRICULTURAL PRODUCTS,
735 ELLICOTT SQUARE.

MODEL DAIRY,
EDWARD VAN ALSTYNE, Supt.

Nov. 1st, 1901.

Vermont Farm Machine Co.,

Bellows Falls, Vt.

Gentlemen:

Referring to the record of the work done by the United States Separator in the Model Dairy at the Pan-American Exposition, from September 29th to October 30th, inclusive, I have the pleasure of informing you that in the fifty consecutive separate runs made by that separator during these days with the milk of the ten different herds in the dairy test, the average per cent. of fat left in the skim milk was .0138.

Very respectfully yours,

Supt. Model Dairy

Mr. Van Alstyne also states under date of Nov. 1st, "I find, since the receipt of your letter, after carefully going over the figures of the seventy one runs of their (the DeLaval) machine that I miscalled the figures, and the reading should be .0172 instead of .0161."

De Laval average test of skim milk.....	.0172
The U.S. average test of skim milk0138
Difference in favor of the U.S.....	.0034

Which shows that the De Laval Separator left 25 per cent. more butter fat in the skim milk than the U.S. Separator—an immense waste.

From the above it will be seen that the **U.S. SEPARATOR**, winner of **Gold Medal—Highest Award**—at the Pan-American, proved itself justly entitled to this honor by its work in the Model Dairy, and on the practical every-day work.

Stands Without a Peer

VERMONT FARM MACHINE COMPANY

Bellows Falls, Vt., U.S.A.