

THE FARMER'S ADVOCATE

AND HOME MAGAZINE

PERSEVERE AND SUCCEED FOUNDED 1880

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

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PRINCE INCA (7844) A FAMOUS PRIZE-WINNING ABERDEEN-ANGUS BULL
 THE PROPERTY OF SIR GEORGE MACPHERSON GRANT

EDITORIAL.

The "hog cholera" epidemic this season has been one of the worst ever known in the history of the industry in the Western States. The losses have been appalling.

South Dakota farmers are reported to have been cutting and stacking Russian thistles which, when cured, smell like clover hay. Horses and cattle eat them greedily, it is said.

The events of the Ontario Fat Stock Show week beginning with Dec. 10th, at Guelph, constitute the next great center of attraction for breeders and farmers—the grand finale of the Canadian show season of 1895.

If we may judge from the enthusiasm of the New York Horse Show, as reported elsewhere in this issue, the "horseless age," upon which sundry magazine and newspaper scribes are so fond of dilating, is too vague of contingency to be seriously considered.

The Australian Government are about sending a special agent, Mr. Jas. Sinclair, to Great Britain to report on the conditions under which products from that colony are put upon the market and sold, and to gather any information that will be of service to them in developing openings for the sale of Australian food supplies.

Thos. Jefferson, one of the fathers of the American Republic, and eight years President, wrote:—"Cultivators of the earth are the most valuable citizens. They are the most vigorous, the most independent, the most virtuous; and they are tied to their country and wedded to its liberty and interests by the most lasting bonds."

An important trial under the Prevention of Cruelty to Animals Act took place recently before Sheriff Campbell Smith, Dundee, Scotland, the defendant being Mr. Harry Swan, farmer, Balhugie, Monikie, who had dehorned a number of cattle, some of which died as a result. It was shown that the cattle (stockers from Ireland) were in an unhealthy state before the operation and had not been allowed sufficient time to rally from being driven about the country. The defendant was found not guilty.

If you believe in the Farmers' Institute idea, why not agitate the opening of a small farmers' club, having for its members, say, twenty of your immediate neighbors. It is surprising how many good ideas are exchanged in such gatherings. The meetings may be held every two, three or four weeks all through the winter season at different farm houses or in the school house. A topic agreed upon at one meeting may be introduced at the next by a paper or talk from a successful member of the club in that particular line, say the care of a dairy cow, clover culture, and so on. Let every one present contribute something useful learned in his experience, and when the chairman sums up at the end the main points made, we believe all present will vote the hour well spent—much more profitably than "talking politics" at the corner grocery.

A Suggestion for Politicians.

The new British Minister of Agriculture, Hon. Mr. Long, recently took a step which might with advantage be adopted by politicians in this country. During a visit to Scotland he met a large gathering of representative farmers, irrespective of their political bearings; not to instruct them in their political duties, but to learn their wishes as practical agriculturists. As a rule even the representative of a rural constituency is never heard from till an election campaign is on, when various appeals to partizanship create such heated feeling that there is little or no opportunity for dispassionate and impartial consideration of matters that vitally affect the well-being of the farmer. A little more frank and non-partizan consultation between the parliamentary representative and his constituents would be of decided advantage to all concerned.

Fruit Growers in Session.

The annual and winter meeting of the Ontario Fruit Growers' Association will be held in Woodstock, on the 11th, 12th and 13th of December, 1895. Expert fruit growers from all parts of the Province will be present to deliver addresses or take part in the discussions. Among those expected are Prof. Wm. Saunders and Prof. J. A. Craig, Experimental Farm, Ottawa; President Mills and Prof. Hutt, O. A. C., Guelph; and Prof. Taft, Michigan Agricultural College.

Our Frontispiece--The Famous Aberdeen-Angus Bull, Prince Inca (7844).

This champion Aberdeen-Angus bull was bred by and owned by Sir George Macpherson Grant, Bart., Ballindalloch, Banffshire, Scotland. The following is his pedigree: Sire Iliad 2843, dam Pride of Invereshie 7059, by Justice 1462. Prince Inca won first prize and championship at the H. & A.'s Show, at Inverness, in 1892, and again at the H. & A.'s Show, at Dumfries, in 1895. He was six years and five months old when the photograph from which our illustration was prepared was taken. His produce have proved very successful in the show ring; amongst the prize winners this year being Equestrian 9953, winner of the Ballindalloch Cup at Dumfries; Her Majesty the Queen's Gentian 19258, and the Ballindalloch yearling heifer Mantlet 21825, all of which have been in the front. Others could be named, but these sufficiently show the caliber of Prince Inca as a sire.

Lovers of good stock in America, as well as in Great Britain, will learn with regret that this great bull died a few weeks ago from liver trouble. His place, both as show bull and stock getter, will be somewhat difficult to fill. We might add that intelligence of his death reached us since our artist completed the engraving on our first page.

The Feeding Value of Potatoes.

A large proportion of this year's potato crop will have to be disposed of in other ways than for culinary purposes. Fortunately, almost every farm has a market of its own.

The winter feeding value of all dry, bulky fodder crops is very dependent on a supply of turnips or other vegetables. The average quantity of water in a Swede is 89 per cent.; of carbohydrates, 7 per cent.; of albuminoids, 1.4 per cent.; of fats, .03. The average in the potato is 75 per cent. of water, 20 per cent. of carbohydrates, 2.2 per cent. albuminoids, and fats, .03. Casually observed, a ton of potatoes contains nearly three times as much starchy matter and nearly twice as much albuminoid; consequently the analytical feeding value of the potato is far more than twice as great as that of Swedes. In actual practice, however, the analytical value of green fodder crops is not the only factor to be considered. The water contained in green crops is analytically exactly the same as pure water from any other source; but in some unexplained way it acts more beneficially on an animal. Take, for instance, a rich pasture on which cattle fatten in summer without any outside assistance, then try to feed animals on the hay from the same pasture, supplying the water in the bucket instead of in the form of natural juices, and a far different result is obtained. The animal will not starve; at the same time it will not fatten, no matter how much hay and water are given it. Yet, analytically, water is the only constituent lost in the practice of haymaking. "I don't need to grow turnips now, I've got a windmill," remarked one individual who had fallen into the erroneous notion that his way of furnishing stock water would equal Nature's plan, as found in the succulent turnip. Treating from the other side of the question, the carbohydrates, albuminoids and fats can be supplied more cheaply in the form of cereals and other concentrated foods than from potatoes; but the value of the extra succulence of the potato diet more than makes up for the deficiency in constituents. Says W. J. Malden in "The Potato in Field and Garden":

"The full value of potatoes is not obtained unless they are cooked. In the case of sheep, large quantities of raw potatoes produce scours; in pigs and horses, indigestion. It is our personal experience to have had to feed large quantities of potatoes which have been injured in one way or another, so as to spoil them for market but not for feeding purposes, from which we have learned that two tons of Swedes have more value than one ton of potatoes. It is easier to grow 25 tons of Swedes than 12½ tons of potatoes, besides which there is the cost of cooking the latter. We have gone into the subject of the relative feeding values of the two crops, because results of a few experiments are frequently taken as data to show the exceptional value possessed by potatoes as a fodder crop. Experience shows us that there is no special advantage to be reaped by substituting potatoes for Swedes as a crop; nor is it more profitable to buy potatoes at double the cost per ton that would be paid for Swedes at the same time."

As before stated, potatoes should be cooked before feeding. They should also be washed free from dirt, which is easily done by placing a loose wooden grating in a tub or long trough. Fill half the trough with water, place the floating grating on this, then throw in the potatoes, stir and rub them with a broom or hard brush, and in a short time the potatoes will be clean and the dirt will have sunk beneath the grating. Cooked potatoes are readily eaten by all kinds of stock, and poultry thrive on them. They are particularly suitable for horses which are being fitted for sale, as they give a sleek appearance to the skin and a brightness to the coat.

International Exhibition, St. John, N. B. (Concluded.)

The new agricultural hall is a large two-story building. The ground floor of the east end of the building was occupied with farm implements. Messrs. Horncastle & Co. had a good exhibit, and several other firms showed useful implements. Messrs. John Clark & Son, Fredericton, exhibited root pulpers, grain crushers, and a fine display of Daisy churns.

The western end of the building was arranged for the dairy department. In the center Mr. J. H. White, of St. John, exhibited a large collection of creamery and cheese-factory outfits—hand separators, Babcock milk testers, butter moulds, thermometers, etc. On the south side the creamery and dairy crock butter was arranged, and along the west end the print and roll butter and the granular butter in glass jars. The creameries of the three Maritime Provinces made an excellent exhibit. The Nova Scotia creameries got first and second prizes; N. B. third. The dairy prizes were mostly retained in N. B. First and second in the granular butter remained in N. B. The judges reported some of the lots of dairy butter to be very fine, showing a great improvement. The granular butter, the judges said, was as fine as any they had ever seen, and it was greatly admired by the visitors. There were over fifty entries in butter. Probably no such exhibition of fine dairy produce was ever seen in the Maritime Provinces before, which shows the progress agriculture is making. One regrettable thing was that arrangement had not been made to protect the butter and yet give visitors better opportunities of seeing it. Judging by the score card, which gives the points of excellence in each lot, would also be desirable. These matters can be arranged for future exhibitions.

On the other side of the building tables were arranged for the cheese exhibit. There were eighteen entries of colored and twelve entries of uncolored cheese—three cheese in each lot, made between the 1st and 15th of August.

Mr. D. M. McPherson, M. P. P., Lancaster, Ont., was judge, and used the following score card: Flavor, 30 points; body and texture, 20 points; closeness, 20 points; color, 20 points; finish, 10 points. Perfection, 100 points.

The awards were as follows:—
COLORED CHEESE.—First prize, St. Mary's Cheese Co., 96 points; second prize, Peticoadiac Cheese Co., 93 points; third prize, Newport Cheese Co., N. S., 92 points; fourth prize (highly commended), Waterford Cheese Co., 90 points; fifth prize (commended), Glassville Cheese Co., 82 points.
UNCOLORED CHEESE.—First prize, St. Mary's Cheese Co., 97 points; second prize, J. F. Tilley, Woodstock, 96 points; third prize, T. J. Dillon, P. E. Island, 95 points; fourth prize (highly commended), C. L. Tilley, Woodstock, 88 points; fifth prize (commended), Jas. Good, Woodstock, 86 points.

These score points show how very close the competition was in both classes.

Mr. D. M. McPherson in his report said: "It is with a great deal of pleasure that we testify to the generally uniform quality of the cheese exhibited. We are pleased to observe that the best lots exhibited compare most favorably with the finest quality made in Ontario; and we are surprised that such uniform good quality throughout could be attained in a new section in such a short time. The obtaining of such satisfactory results to the dairymen of the Province clearly demonstrates the propriety and justification of the Government in taking an active part to promote the welfare of the farmers, and the expenditure of a reasonable amount of money to place the dairy business on a substantial and permanent basis, under the able supervision of Mr. John Robertson."

In the north-east corner the travelling dairy was in operation. The walls were decorated with field corn, horse beans and sunflowers neatly arranged—a fine object lesson on food for cattle. The corn was Compton's Early and Pearce's Prolific. There were other varieties, but the ears were not so well matured. The beans were excellent—well-podded and well-filled. The sunflower heads were large, some of them sixteen inches in diameter. Butter was made twice each day, some of it in granular form and preserved in pickle, and some printed. Fruit-dishes were used for the granular butter, and square stone platters for the prints, arranged on the table in front of the platform, where it could be easily examined and tasted by the visitors.

The Commissioner, Mr. Robertson, was kept busy giving information to enquirers, so that "the dairy" was quite an attraction as well as an educator, and seemed to be highly appreciated.

On the second floor were the grain, roots, vegetables, and all kinds of farm and garden produce. Around the building were the tables with fruits. We have rarely seen such a fine display of apples and pears—hundreds of separate exhibits. The fruit-growers of the Annapolis Valley, Nova Scotia, made a grand exhibit.

In the other outbuildings there was a good display of turkeys, geese, ducks, pigeons, and a great variety of different breeds of hens.

During the week there was some speeding of horses on the course, out of the city about a mile; but most of the country people preferred to spend their time in the show grounds—a better place to see and learn something that would be of benefit. The Directors did all they could to entertain the visitors and make the exhibition a success, and we think they have good reason to be satisfied with the results achieved.

THE FARMER'S ADVOCATE & HOME MAGAZINE

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

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JOHN WELD, Manager.

- 1. The Farmer's Advocate is published on the first and fifteenth of each month. It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical and reliable information for farmers, dairymen, gardeners and stockmen, of any publication in Canada. 2. Terms of Subscription—\$1.00 per year in advance; \$1.25 if in arrears; sample copy free. European subscription, 6s., or \$1.50. New subscriptions can commence with any month. 3. Advertising Rates—Single insertion, 30 cents per line. Contract rates furnished on application. 4. Discontinuance—Remember that the publisher must be notified by letter or post-card when a subscriber wishes his paper stopped. All arrears must be paid. Returning your paper will not enable us to discontinue it, as we cannot find your name on our books unless your Post Office address is given. 5. The Advocate is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law. 6. The Law is, that all subscribers to newspapers are held responsible until all arrears are paid, and their paper ordered to be discontinued. 7. Remittances should be made direct to this office, either by Registered Letter or Money Order, which will be at our risk. When made otherwise we cannot be responsible. 8. Always give the Name of the Post Office to which your paper is sent. Your name cannot be found on our books unless this is done. 9. The Date on your Label shows to what time your subscription is paid. 10. Subscribers failing to receive their paper promptly and regularly will confer a favor by reporting the fact at once. 11. We Invite Farmers to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve the ADVOCATE, Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage. 12. Replies to circulars and letters of enquiry sent from this office will not be paid for as provided above. 13. No anonymous communications or enquiries will receive attention. 14. Letters intended for publication should be written on one side of the paper only. 15. All communications in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper. Address—

THE FARMER'S ADVOCATE, OF THE WILLIAM WELD CO., LONDON, ONTARIO, CANADA.

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Clubbing Rates for 1896.

Our subscribers may obtain any of the papers and magazines mentioned below at the following prices: FARMER'S ADVOCATE and Home Magazine, and Toronto Daily Globe... \$6 00 Toronto Globe (evening edition), daily... 2 10 Toronto Saturday Globe... 1 10 Toronto Weekly Globe... 1 10 Toronto Weekly Mail & Empire... 1 10 Montreal Weekly Witness... 1 25 McClure's Magazine (monthly)... 1 00 Cosmopolitan (monthly)... 1 00

The New York Horse Show.

The eleventh exhibition, on Nov. 11-16, of horse-flesh, held under the auspices of the New York National Horse Show Association, in the Madison Square Gardens, New York, was, if possible, a greater success than any of its predecessors. The receipts from the sale of boxes exceeded by about eight thousand dollars that of any of the previous sales. The attendance of those who could not afford to gaze on the noble animals from amidst the enchanted circle of New York society and contented themselves with foot space on the promenade was, if anything, greater than ever, and at times degenerated into a "crush." The entries slightly exceeded those of last year. The prizes were larger in some cases, and in some classes there were more of them. Horse and spectator were, as usual, seen at their best, and though both were one year older, beauty, whether quadruped or biped, reigned supreme. Full evening dress was the order for the gentlemen, but the absence of low-cut dresses for ladies could not fail to be remarked by those who attended the show last year; nor were diamonds so conspicuously displayed as on former occasions. This falling off in respect to female attire is not to be regretted, for, whilst pretty dresses add greatly to the general effect of any display, the management of exhibitions ought not to encourage too much of it, for, whilst it may lure the idlers, it has a tendency to keep away those who have more interest in being present, and whom the breeder would be better pleased to see there. The presence of society in full force adds very much to the receipts at the gate, but the exhibitor does not take his stock to the show for the express benefit of those who furnish the prize money,—it is a matter of advertisement and gain to him, a means of livelihood. The mere prize money does no more than pay his out-of-pocket expenses; it is not a living, but can be made the means of attaining one if the right sort of people, viz., those breeders, dealers, exhibitors and farmers who wish to acquire or improve their stock, are attracted. The fact must never be lost sight of that whilst society will attend exhibitions of horse-flesh so long as they are made interesting spectacles for them, the object of all shows is to bring the buyer and seller together. Both must have ample opportunity of using their judgment and receiving instruction, and not be relegated to the background, as was attempted once upon a time, not very long ago.

Canadian breeders and citizens were, as usual, strongly represented amongst the spectators. We were pleased to see, amongst others, Messrs. Robt. Beith, Robt. Bond, Geo. Beardmore, M. E. H., James Cochrane, Mr. Coghlin, H. N. Crossley, Fay, Geo. Gooderham, Geo. Hastings, Stewart Houston, Major Laurie, J. K. Macdonald, Ramsay, Munroe, Alf. Smith, Henry Wade, and Adam Beck.

Owing to some harsh treatment received at the hands of the executive last year the exhibits from Canada were few and far between, though few horses sent from Canada this year failed to receive recognition at the hands of the judges. It is gratifying to notice how some of last year's decisions rendered by Mr. Livesey (who received a rather severe scoring at the hands of the newspaper men) were, under the hands of such practical and practiced men as Messrs. Arthur Fewson, Robt. Beith, and R. Stericker, reversed. These judges were blamed by some of the New York papers for exceeding their time limit, but surely, better it was to err in this respect against an arbitrary rule of the Society than to walk into a ring, as though you had learned it all outside, and suffer the humiliation of having your decisions unsustained by those who came after you. Whether classes are well filled or not every horse must receive its due share of attention at the hands of a judge, and no matter how practical and skillful, he cannot select four winners out of a pack of fifteen or twenty horses all hurrying 'round a ring and crowded in every shape and form.

London as usual took its share of the ribbons, and we were pleased once more to remark the success of Mr. Adam Beck, whose judgment never fails him in selecting a few good ones. His most notable successes were with Monarch in the green hunter class, first prize (\$150), and with Hurricane, who won first for best performance jumps five feet high, jumpers over six successive fences, two at five feet, two at five feet six inches, and two at six feet. Third in five feet class; hunters ridden by members of a Corinthian club; and a championship prize. Mr. Beck's winning amounted to \$650.00.

Mr. L. Meredith took first in the saddle class, 14.1 to 15 hands, with a rare good one. Mr. James Cochrane, representing Montreal, was fortunate enough to get third prize in the Hackney mare class, four years, 15 hands and over, with Princess Dagmar, in what was probably the strongest mare class ever shown at the Gardens; fourth prize with Barthorpe Performer, a two-year-old Hackney, a rare good Performer, who would undoubtedly have been higher up had he not been a little lacking in his middle; and Camymaid, whom he recently sold to Mr. Stevens, of Attica, took first in the three-year-old filly class. Mr. Geo. Hastings, with his usual good luck, secured second with his Black Nobleman in the class for four-year-olds under 15 hands. This horse, though a very good actor, was hardly in fit condition to show, or he might have been first.

Fireworks, shown by Mr. Crossley in the four-year-old Hackney stallion class, 15 hands and over, secured fourth prize. This was a strong class. As

usual, however, the conformation of the horse, though he is not a great actor, brought him honorable mention. Amongst horses bred in Canada, but owned by Americans, Gladys was again successful in the dog-cart. Four Stripper by Cadet, out of Blue Ribbon, a mare sold at Grand's sale three years ago, won the Hackney produce prize for colts. A horse sold by Mr. Beith, by breeding a half-bred Clyde, secured third in one dog-cart class.

Hackneys once more asserted themselves, winning several prizes in dog-cart classes. Every one was eager to see the recently imported Hackney stallion, Langton Performer, who created such a sensation this spring in London (Eng.), and those who failed to see him certainly missed a treat, for such action, combined with speed, has never been seen at New York before, and he well merited the success he gained—first in his class, and the junior championship, though we could find one or two faults in his conformation. His owner, Mr. Stevens, may well be proud of him; nor has he any reason to regret the other purchases he made; for a beginner, two junior championships, besides several firsts, is not so bad.

Mr. Twombly, another new exhibitor, secured first in most of the mare classes, besides the senior championship for mares. If he obtains a stallion suited to his mares, he will be a hard man to beat, and we are likely to hear of him frequently in the future.

The mares were, as a rule, a great deal better than the stallions, and we are rather afraid that this may be due to the large demand for males of the Hackney breed, which causes them to be preserved entire instead of being castrated at an early age, as many of those shown should have been some years ago. One word of thanks, before we conclude, to those American gentlemen who were so good as to take us in hand and pay us such marked attention and minister so well to our wants. There are those who ask the question, why bring Americans over here to judge our stock? This year we had quite a few, and we treated them well; they did not forget it. There are some who, remembering the good times they had in Toronto, said that whenever they met Canadians they felt bound to do all they could for them; their deed was as good as their word: they sought us out, showed us around and entertained us in every way possible. We get just as good decisions from Americans as from any other set of judges; and when our turn comes to go over to the other side, they reciprocate the good feeling which was extended to them here, and every one has experienced how much better it is to land amongst friends in a fresh city than find oneself a stranger in a strange land.

Among other important trotting stallions, Quarter-master, by Alcyone; Rundle & White, Danbury, Conn. Thoroughbreds.—First, St. Saviour, by Eolus; Frederick Gibbard, New York. Best Hackney stallions.—Imp. Rufus Jr., by Rufus, shown by George Green, Katonah, N. Y.; the reserve ribbon went to Enthorpe Performer; F. G. Bourne, Oakdale, L. I. In Coach stallions, the French Oratem, owned by McLaughlin Bros., Columbus, won first. In Draughts, the first was won by the Clydesdale, Imp. Reserve, by Douglas Chief, owned by W. L. Law.

Our Efforts Appreciated.

We are indebted to a host of old and new friends for the cordial expressions of approval that are reaching us regarding the FARMER'S ADVOCATE, and in returning our hearty acknowledgments can only state that our earnest purpose is to continue to render still better service. The demands of more urgent and practical matter upon our space will not permit reproducing more than a couple of typical expressions from readers and our newspaper contemporaries:—

Mr. Thos. A. Sharpe, Superintendent of the Experimental Farm at Agassiz, B.C., in renewing his subscription for another year, expresses himself in very appreciative terms, concluding thus:—"I have read the paper for over 20 years with pleasure and profit."

Commenting on our last issue, the Echo (of Amherstburg, Ont.) has the following to say:—

"The FARMER'S ADVOCATE, of London, Ont., has very appropriately made special recognition of Thanksgiving Day in its November 15th issue. As usual, it is full of good, practical things for farmers and breeders; in fact, appears to grow better as it grows older. C. C. James, Deputy Prov. Minister of Agriculture, writes interestingly of 'The Hopeful Features of Canadian Farming'; an able paper is given by Thos. McMillan, on 'Breeding and Feeding Beef Cattle'; James Bowman discusses 'The Advantages of Sheep Raising'; Prof. H. H. Dean deals with that live dairy subject, 'The Valuation of Milk for Cheesemaking'; 'Tuberculosis Among Cattle' is discussed by S. J. Thompson, V.S.; 'The Care of Farm Implements' is well handled; also, 'Manuring Meadows,' 'The Classification of Grade Cattle at Shows,' the Live Stock Trade, and a lot of seasonable topics for dairy farmers, beekeepers, poultrymen, and others. The illustrated 'Helping Hand Department' is a new and useful feature, and the 'Home Department' is admirable. Besides the fine Shropshire frontispiece, we notice two beautiful engravings—a Manitoba Bonanza Threshing Scene, and the C. P. R. Stock Yards at Winnipeg. We congratulate the ADVOCATE on the good service it is rendering the farmer, and do not wonder at its growing popularity."

Comments on Last Issue.

SIR,—For several years I have been a subscriber to the FARMER'S ADVOCATE, and after reading the last issue I was more forcibly impressed than ever that the ideas found on its pages, if put in practice, would be the key that would open the door to success in farming and breeding. The articles are opportune and practical, and should meet the requirements of all who are in search of useful information. Mill says: "The worth of a State in the long run is the worth of the individuals composing it." So I may say of an agricultural paper: "The worth of an agricultural paper in the long run is the worth of the individual articles found on its pages."

I desire, however, to make a few comments on some of the articles in your last issue. Prof. James' "Thanksgiving Day Reflections" are well worthy of careful perusal and study. He takes a broad view of the agriculture of Canada and shows wherein consists the national wealth of our Dominion. The great sources of our national wealth are the farm, the forest, the fisheries and the mines, and the industries connected with them. He quotes the number of persons engaged in each of these and gives the amount of wealth derived therefrom. Part of this wealth is locked up in the bowels of the earth, part is concealed under the water, part is crowded in the dense forests, and last, but not least, part may be seen in profusion on our farms in the form of grains, fruits, dairy products, animals, etc. These all speak eloquently of the great wealth of our land, and for which we all should be truly thankful. The farmers of Canada came from hardy stock, and, as Prof. James rightly says, the intermingling and coalescing of the nationalities from which they spring will produce a rural people "unexcelled if not unequalled." The great variety of our resources and the quality of our products, in whatever form they may be, are encouragements and inducements to strive still more energetically to make of our land a great nation. But the crowning point is the great intellectual activity aroused in the farming community. This is seen by the increase in the reading of agricultural papers, in institute meetings, in associations, and in a deeper interest being taken in all the leading questions of the day.

The Classification of Grade Cattle at Agricultural Shows.—Mr. D. F. Wilson has very aptly pointed out the difficulties in classifying grade cattle, and his suggestion in advocating two classes—the dairy grade and the beef grade—is worthy of consideration. The prizes now are too small, and more classes mean smaller prizes. This is a very serious obstacle. Some have suggested that there be fewer classes, e. g., strike off all under one year and give better prizes to the more developed animals; others think that there should be fewer classes and that they be shown in pairs, as best pair of dairy grades and best pair of beef grades, etc.—There is also a difficulty in obtaining suitable judges, as pointed out, but this may, to some extent, be overcome by giving definite instructions to the judges, and require them to judge in accordance with these rules.

Breeding and Feeding Beef Cattle.—Mr. Thos. McMillan very wisely urges that to succeed we must make a specialty of some particular department of the farm, and that we must have some definite object in view and endeavor to attain to it. Having decided upon what particular line we shall engage, we must prepare ourselves as well as have a liking for it. Taking for granted that the special line is beefing animals, Mr. M. gives a concise description of the type of such an animal. Too much stress cannot be laid on the proper selection of animals, and he gives some very valuable hints. We should next improve the quality by careful selection of males. His advice regarding males is sound and should be followed. He emphasizes the importance of keeping sires for longer than from one to three years. A sire that transmits to his offspring health and vigor of constitution and gives good stock should certainly be kept for years. Weed out the inferior ones and make war on the scrub. Mr. M. gives a telling example of loss in feeding inferior animals by a Mr. B. near Toronto. His remarks on general conformity and capacity to feed well are good, and on them rests largely the profit or loss in feeding. He also shows us the profit from early maturity and the benefit derived from keeping animals always in good condition. His experience in rearing calves shows success, and I think his advice very beneficial; however, my experience causes me to differ with him in one or two points. I prefer a mixture of chopped oats with a little oilcake to his crushed oats and oilcake, as it is not so rich and heavy. Besides this the oilcake and chopped oats keep the bowels and coat in a better condition. Corn ensilage is certainly very good, and with a little meal sprinkled over it forms an excellent food for calves. I have the impression that roots are too cold and heavy for young calves and tend to make them have too large bellies, but after they have become five or six months old roots are very good. Clover hay is an excellent food for calves, and Mr. M.'s ideas on it are in perfect accord with mine. Regularity and kindness are essential.

The Advantages of Keeping Sheep [Jas. Bowman].—This article is taken up in a practical way and shows many points in favor of sheep raising. Mr. B. says that the fertility of the soil may be improved by pasturing sheep on rape. In fields where weeds abound sheep almost destroy them.

He suggests using hurdles made dog-proof, or of bringing the sheep home every evening. In winter sheep consume food that no other stock would eat, and in this respect save that food. The expense of housing them is very small. They return a two-fold profit—wool and lambs. They are easily prepared for market and can, with care, be made profitable.

A Plan for Securing Greater Uniformity in the Quality of Cheese.—It requires wise forethought to find and keep a good market for our products, and the suggestion offered in your last issue in regard to cheese should be promptly acted upon. We derive a large revenue from cheese, and it would be a great pity if this should pass out of our hands through indifference or neglect. The article suggests a means now within reach, and before next spring such steps should be taken that there could be no possibility of our lessening our reputation in the cheese markets of the world. Let us neglect no practicable means to improve the quality and not allow any inferior article to leave our country for British or other markets.

Tuberculosis Among Cattle [by Dr. S. J. Thompson].—Dr. Thompson's article on tuberculosis is well worthy of being carefully read. He believes there is not more than three per cent. of the cattle in Manitoba affected with this disease. He advocates the use of the tuberculin test to find out to what extent this disease may be found in herds. He claims that beef from animals with localized tuberculosis is not harmful if well cooked, and that 80 per cent. of the milk from them is not affected. His advice upon measures to prevent the spread of the disease should be studied carefully and put into practice. Animals should be either destroyed (if the disease is deeply seated) or isolated (if localized or not deeply seated). This will prevent spreading. Cleanliness and disinfecting the stables are essential preventives. He gives some very sound advice on breeding from diseased animals. This advice should be carefully considered by every stockman. The paper is a thoughtful exposition of this disease and should have a good effect upon those who heed his warnings and practice his advice.

[NOTE.—A good many veterinary authorities have no doubt recommended the use of tuberculin as a diagnostic agent for tuberculosis, but we are disposed to say that there is yet much to be learned regarding its effects. Indeed, our contemporary, the English Live Stock Journal, goes so far as to say: "One thing is pretty obvious, that the unregulated use of it in the present state of our knowledge is more likely to increase than diminish the prevalence of tuberculosis; and it seems really necessary that some measure should in the meantime be adopted to check its promiscuous employment." Meanwhile it would be wise for breeders to hasten slowly in regard to tuberculin.—Ed.]

Covering Strawberry Plants [E. F. Augustine].—Experience is the best teacher, whether our own or some other persons. Mr. Augustine's experience must be useful to all who wish to grow strawberries successfully. He says it is best to cover the plants as soon as the ground is firmly frozen, but it may be done later. Good clean (he emphasizes clean) wheat, oat, or barley straw is the best covering. Spread evenly over the field from two to three inches deep. In the spring part of this should be raked off the rows, and tramped down in the paths between, leaving just what the plants can readily push their way through. The straw thus serves as a mulch, and keeps the plants clean during heavy rains. It also prevents the weeds from growing. No cultivation is needed before the fruit is harvested.

There are two papers on poultry,—one on "Fitting Poultry for the Shows," which may be read with profit by those who fit birds for exhibition; and the other is on "Eggs and Meat," in which Mr. Maw shows the value of eggs, and how to get the best results, and also wherein the profit of raising poultry for market lies.

Besides these there are, in the last issue of the ADVOCATE, several other important subjects, as Manure for Hay, Feeding Potatoes, The Question Drawer, The Home Department—full of interest and instruction, The Children's Corner, The Quiet Hour, the illustration of Mr. Macmillan's Shropshires, The Foal in Winter, and several others. Thus we, as farmers, find a fund of practical experience stored in the ADVOCATE'S pages, which, to be appreciated and put to profitable use, must be carefully read and studied. D. E. SMITH, Peel Co., Ont.

A Promising Young Agriculturist's Death.

For many years the name of Mr. John I. Hobson, of Moshborough, Ont., has ranked high among the progressive farmers and business men of this country. Occupied with public affairs, he has of late entrusted the management of his fine farm and stock to his only son, Mr. Joseph Hobson, a young man of some 23 years, who by his wide and practical knowledge and many excellencies of character had won for himself a host of friends, and bid fair to rise to eminence in his calling. It was therefore a painful shock to learn of his sudden demise from peritonitis on Nov. 26th. His loss is greatly to be deplored, and has called forth many expressions of sympathy to Mr. and Mrs. Hobson.

STOCK.

Meetings of Live Stock Breeders.

AMERICAN SHROPSHIRE ASSOCIATION.

CANADIANS AGAIN HONORED.

New York City, November 26th—(Special)—Shropshire Sheep Breeders in session. Election of officers as follows:—President, Hon. J. Dryden, Toronto; Vice-President, Prof. W. C. Latta, Lafayette, Ind. Executive Committee, for three years—R. Gibson, Delaware, Ont.; J. L. Thomson, Gas City, Ind. On Pedigree Committee—Marion Williams, Ind.; Robt. Miller, Brougham, Ont. Vice-Presidents by States, etc.—W. H. Beattie, for Ontario; J. N. Greenshields, Quebec.

WINTER FAT STOCK AND DAIRY SHOW.

Prospects are for a large gathering of breeders and others at Guelph, Ont., beginning on Tuesday, Dec. 10th, the week of the annual Fat Stock Show, for which upwards of \$3,000 is offered in prizes. Secretary Wade writes from Toronto that there will be a large display, particularly of sheep and swine. Entries were also coming in for the beef and dairy classes, which were expected to fill up well as the time drew near. Several important breeders' meetings have been called, particulars of which are given below. As announced in last issue, the Ontario Agricultural and Experimental Union will hold its annual session at the Agricultural College, immediately at the close of the show (December 12th and 13th), so that all who are in Guelph can take advantage thereof.

SHEEP AND SWINE BREEDERS' ANNUAL MEETINGS.

The annual meeting of the Dominion Sheep Breeders' Association will convene in the City Hall, Guelph, at 2 p. m., December 10. From 2 p. m. to 6 p. m. will be spent in carrying out the following programme: Addresses and reports of officers, reports of committees, nomination of expert judges, election of delegates to fair boards, election of officers and auditors.

The annual Swine Breeders' Association meeting will convene same place as above, on December 11th, at 9 a. m. The forenoon will be spent in carrying out a programme similar to above. At 7:30 p. m. an open meeting will be held under the auspices of the Sheep and Swine Breeders' Association, the Guelph Fat Stock Club, and the Dairymen's Association of Western Ontario. The following programme will be carried out: 7:30, chair taken by Hon. John Dryden; 7:40, address of welcome by Mr. James Innes, M. P., Guelph; 8:00, response by Andrew Pattullo, Woodstock, President of Western Dairymen's Association; 8:20, address, "The Requirements of the British Market, with Special Reference to our Exports of Cattle, Sheep, Swine, and Products Therefrom," by Prof. Jas. W. Robertson, Ottawa; 9:00, "Economic Cooking of Meats" (demonstrated), Miss B. Livingston, Superintendent Ottawa School of Cookery.

HEREFORD BREEDERS TO MEET.

The Canadian Hereford Breeders' Association will hold its annual meeting in Guelph Skating Rink, on Wednesday, December 11th, at 10:30 a. m. This is the second day of the Ontario Fat Stock Show.

CANADIAN HORSE BREEDERS.

The first annual meeting of Canadian Horse Breeders' Association was held in Toronto, November 21st. Members present—Robt. Davies, Toronto; David McCrae, Guelph; R. Beith, M. P., Bowmanville; N. Awrey, M. P., Hamilton; John Gardhouse, Highfield; H. N. Crossley, Rosseau; Dr. A. Smith, Toronto; Jos. Duggan, Toronto; J. H. Allen; Pictou; Leeming Carr, Stony Creek; J. C. Boyd, Sault Ste Marie; A. G. Ramsey, Hamilton; Wm. Wilkie, Toronto; Wm. Hendrie Jr., Hamilton; Hugh Smith, Claude; C. P. Geary, St. Thomas; H. Wade, Toronto; R. Graham, Claremont; H. Cargill, M. P., Guelph; F. Chisholm, Milton; W. A. Lawrence, Milton; Jas. Cochran, Hillhurst, Que.; G. Bowker, Woodstock; John Vipond, Guelph; John Holderness, Toronto.

The Constitution and By-laws of the Association were presented by Secretary Wade, and adopted. They provide that the object of the Canadian Horse Breeders' Association is to encourage the importation and breeding of pure-bred stock in all the recognized breeds of horses in every legitimate way.

The officers of this Association shall be a President, Vice-President, and Secretary-Treasurer, whose term of office, with the exception of the Secretary-Treasurer, shall be for one year, or until their successors are elected.

The Association shall be governed by a Board of Directors, consisting of ten members, to be elected annually by ballot, from members of this Association, and representing as far as practicable, the different Horse Breeders' Associations now in existence, which are as follows:—The Hackney Horse Society, the Clydesdale Horse Association, the Shire Horse Association, the Thoroughbred Horse Association, and the Trotting Horse Breeders' Association.

The membership shall consist of the present provisional officers, and any person who takes an interest in horses, may and shall become a member, who, having signified to the Secretary his desire to do so, by paying \$1.00, providing his name be approved by the Board of Directors.

The annual meeting shall be held at such time and place as may be designated by the Directors. Fifteen days' previous notice to be mailed to each member of the Association, giving time and place of meeting.

The Sub-Committee shall hold meetings at the call of the President and Secretary, when requested in writing by any three Directors. The Secretary shall hold office during the pleasure of the Directors.

Persons desirous of becoming members shall so notify the Secretary, pay one dollar entrance fee, and agree, if elected, to conform to the rules of the Association, and not to withdraw without giving three months' notice of his intention to do so. Members shall pay an annual fee of one dollar, which annual subscription shall be due and payable on or before the first day of January of each year, and all reports of the Association will be mailed free to each member.

Directors were elected as follows:—From Clydesdale Horse Association, R. Davies and David McCrae; from Hackney Horse Society, R. Beith, M. P., and N. Awrey, M. P.; from Shire Horse Association, John Gardhouse and H. N. Crossley; from Thoroughbred Horse Association, Dr. A. Smith and Wm. Hendrie, Jr.; from Ontario Trotting and Pacing Horse Breeders' Association, H. Cargill and Dr. L. Carr.

It was Resolved, "That the Directors take immediate steps to incorporate this Association under the Agriculture and Arts Act for 1885."

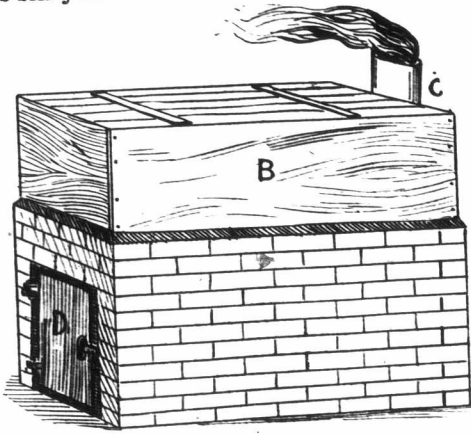
Mr. McCrae suggested improvements in the classification of horses at shows, and the giving of prizes for herds the get of one animal.

Mr. Wm. Wilkie said it was only by seeing his get, that the true worth of a stallion could be known. Moved by Mr. Wilkie, seconded by Mr. H. N. Crossley, "That the Directors of the Toronto Industrial Exhibition be asked to give prizes to a herd of four for the different breeds of horses, ages of the gets not to exceed two years." Carried.

Messrs. R. Beith, M. P., and H. Cargill were appointed delegates to the Industrial Fair Board.

A Home-Made Cooking Furnace.

The accompanying illustration represents the feed-boiling furnace in use by Mr. J. E. Brethour, the widely-known breeder of Yorkshires, at Burford, Ont. The upper portion or box represents a plank box with heavy sheet iron bottom, which is nailed securely to the bottom of plank sides with screw-nails, or three-inch wire nails would answer. The box is two feet wide, six feet long and eighteen inches deep. The lower portion of sketch represents brick masonry four inches narrower on the inside than the box, so that when the box is in place the fire will not come in contact with the wooden sides. Iron bars should be placed across the top of masonry to take the strain off the bottom of box, and a piece of iron, three inches wide, should be placed across the back where the smoke enters the chimney to keep the fire from the box. To fasten the sheet iron bottom to the wood sides have holes punched in the sheet iron about two inches apart all around where it comes in contact with the planks. Mr. Brethour suggests that a strip of asbestos placed between the woodwork and sheet iron would do doubt be a benefit, but he has used his six years without it.



BOILING FEED.

Mr. Brethour writes:—"I boil a great deal of feed for my hogs, although I am aware that eminent writers claim there is no benefit from cooked food. I find that I can convert a lot of food that would otherwise be wasted into palatable food for hogs. Potatoes, pumpkins and roots of various kinds are relished and made more easily digestible by being cooked. They should all be put through a root pulper, as they boil more readily and mix better with chopped grain, which I stir in with the cooked food, and allow the mixture to stand a few hours before feeding."

Making the Best of Short Food Supplies-- From an English Farmer's Standpoint.

Having in view the short root and straw crop of Britain this season, and a very moderate supply of hay, the *Farmer and Stock Breeder* tenders its readers the following advice, from which a few suggestions might be gleaned of service on this side of the Atlantic:—

"The devices which the feeder had to practice to spin out his slender stores of fodder should be of considerable service in a year like the present. We are thankful indeed that feeding stuffs are so cheap, and in this the feeder will find some consolation. True, the price of beef is not very high, but prime Scotch is quoted at 42s. per cwt. live weight in the Metropolitan Market. If, therefore, the feeder has purchased his stores at 27s. or 28s. per cwt., there is every prospect, so far as we can see, of reaping a very fair profit. One of the benefits which a year like the present will confer upon the farmer is to make him value economy. Far too many are slipshod in their feeding. We do not mean to infer anything by this term, other than that the chaff-cutter (cutting-box) is too sparingly used. It is becoming increasingly evident that stock feeding, like other branches of the agricultural industry, must be done economically if it is to pay. Where fifty or a hundred head of cattle are concerned, a saving on each one means a considerable sum in the feeder's pocket. Our advice is to chaff more, pulp more, and use more treacle. The root crop being much below average, and mangels, to a considerable extent where unsecured, damaged by the frost, the feeder may with advantage turn to the potato crop as affording a solution to his difficulty. At present market price—a great quantity of only slightly damaged tubers may be had at from 20s. to 30s. a ton—they will certainly appeal to the feeder as this crop has never yet done during its wonderful history. Owing to the amount of starchy matter which they contain, caution must be exercised in the feeding. The albuminoids in the potato are deficient, but, in the balancing of the ration, flesh formers might be supplied by some other food. The fat-forming element predominates, but a judicious combination with cotton cake, bean meal, or pea meal, would place the farmer in a much better position to meet the exigencies of the times. Potatoes slightly diseased may be profitably employed for feeding, especially in the case of swine. Disease attacks the albuminoids, i. e., the flesh-formers, which are converted into ammonia, or some similar volatile substance, which accounts for the unpleasant smell. If cooked by steaming or boiling, and then tightly packed into flour barrels or casks, with an occasional sprinkling of salt throughout, the tubers will keep in eatable condi-

tion for some time. It is necessary, however, to exclude the air. If fed raw, as some people who object to cooking prefer, caution must be exercised, as colic may result. It is also worth noting that water should not be given till some time after each meal. The results obtained by feeding potatoes in France warrant the belief that they might be more extensively employed by British feeders."

DAIRY.

The Dry Cow.

BY F. J. S.

On the handling of the milch cow while dry, the success or failure of the dairy herd largely depends. There is a tendency among farmers toward the opinion that when a cow is not giving milk she should exist, if not on the wind, at least on very little more. Of course, the farmer himself who does not work on the Sabbath eats little or nothing during that day, feeling that it would be a waste of food. Ha, ha! Yes, methinks so! Is the comparison not a relevant one.

Now, what is really the position. Our most profitable cows milk within four to eight weeks of coming in. Even a very moderate quantity of milk is a very considerable drain on the system for such a length of time, and the period while dry is a necessary resting period in which she is to recruit her wasted energy. But wherein comes the recruiting or building up if the ration is insufficient or unbalanced? Straw and turnips, for instance, are very good fodders in their places, but to confine a cow to these while dry is plain evidence of a total lack of understanding of the first principles of herd development. Corn stover is a good fodder if properly saved, but this and straw, without any grain addition, is an unsatisfactory ration upon which to build hopes of a satisfactory milking season. We believe that where a cow milks ten or eleven months per year, that she should be fed as rich and satisfying a ration during her resting period as while milking, if the best returns are to be had. We never knew a farmer do this who was not a successful dairyman. The cow thus handled comes to parturition period in a well nourished condition, and will, if it is in her, give a good account of herself, while her famished sister will spend the first three months of her milking period in an attempt to regain her lost condition physically, and if, as is a too common practice, she comes in in the spring, by the time she is in normal condition pastures are failing, heat and flies do the rest, and she is fast drying up; and at the end of six or eight months she is on the "dry" list. But the trouble does not end here. The longer she is dry the worse is she fed as a rule, and thus the evil grows.

But, further: the effect of low feeding, of feeding coarse, innutritious fodder is disastrous to the offspring. The fetus of a cow thus fed comes into the world with an imperfectly nourished system, and with an inability to digest and assimilate large quantities of fodder—a prime essential in a profitable cow. Many of our present dairymen have been feeders of beef and need no information relative to the possibilities, or rather impossibilities, of feeding at a profit an animal that as a calf had not been well fed. And this is not alone bad. If the cow, by bad feeding and worse management, tends to go dry early in the season the calf will do likewise, and this despite even good feeding. And this leads us to the fact that this system, so common among us, is a *continuing* injury, and the herd subjected to it will of necessity deteriorate. And what of the males we use that are the offspring of such cows; truly he is in a pitiable condition whose herd is thus headed.

But a look at another side of the subject—the cost of butter and cheese production. The cow that milks but seven or eight months of the year will produce butter at a cost of at least three to four cents more than the cow that milks ten or eleven months, other things being equal, and cheese in proportion.

What, then, might be considered a safe practice to follow in the feeding and management of the dry cow? First we must discriminate between the cow that takes on flesh easily and readily, and the cow that really cannot be fattened, but after the usual needs of the system have been met, puts the rest in the pail. In the former case, while dry, we would reduce the grain ration sufficient to avoid a very fat condition before parturition, leaving the coarse fodder ration much as usual. Silage, if from fodder corn, and straw for our beef breeds and well-eared corn, and straw for our milk breeds, while their grades will frequently be sufficient, while in some cases a slight admixture of grain will be necessary. In the case of the representatives of the dairy breeds, as we have stated, when they milk to within a short period of parturition, they should be fed almost or quite as liberally as when milking. In the cases of cows inclined to milk fever, they will, of course, be fed more sparingly of heating food and more fully upon roots and such laxative and cooling fodders. Barnyard quarters are not to be recommended for the dry cow. Where the cows have to be "lifted" in the spring, better sell half the herd and feed all the fodder available to the rest.

Bacteriology in the Dairy.

Among the various phases of the study of bacteriology, there are none which affect our life and well-being more intimately than those connected with dairying. Milk is one of the best media for the growth of germs, both harmless and disease-producing. It contains bacteria when drawn from the cow's udder, and the condition of most stables is such that contamination in various ways takes place in the process of milking and immediately thereafter. The influence of the germs on milk, cream, butter and cheese is a matter of vital interest to all consumers of dairy products. Our knowledge of the various classes of bacteria and the effects which they produce, although largely increased of late years, is still meager and very much scattered.

The importance of bacteriology to dairymen is just beginning to be recognized. The application of the knowledge already acquired to the butter industry of Denmark has done much, within the last few years, to improve the quality and increase the uniformity of the product of Danish dairies. The result has been achieved largely by pasteurizing the milk and cream and then introducing the desired kind of bacteria known to scientific men as *pure cultures*. This method, so useful and satisfactory in Denmark, has found favor in the United States also. Over 100 creameries on the other side of the line are introducing pure cultures. So it may now be stated as a fact, that the science of bacteriology is furnishing information which enables the buttermaker to make butter of superior flavor, more uniform character, and better keeping quality; the milkman, to have his milk sweet and free from disease-producing germs; the cheesemaker, to understand and control to a large extent the ripening and flavor of his cheese.

It is true that the methods of applying our present knowledge of lacteal bacteriology are still imperfect; but by patient study, persistent effort, and unswerving perseverance, the bacteriologist may eventually do for dairying what he has already done in the field of medical science.

We are pleased to learn that provision has been made at the Ontario Agricultural College, Guelph, for giving second and third year students in the regular course, and all dairy students, instruction and practice in the pasteurization of milk. As announced in the last issue of the *ADVOCATE*, Mr. Harrison has charge of this important department.

Care in Milking.

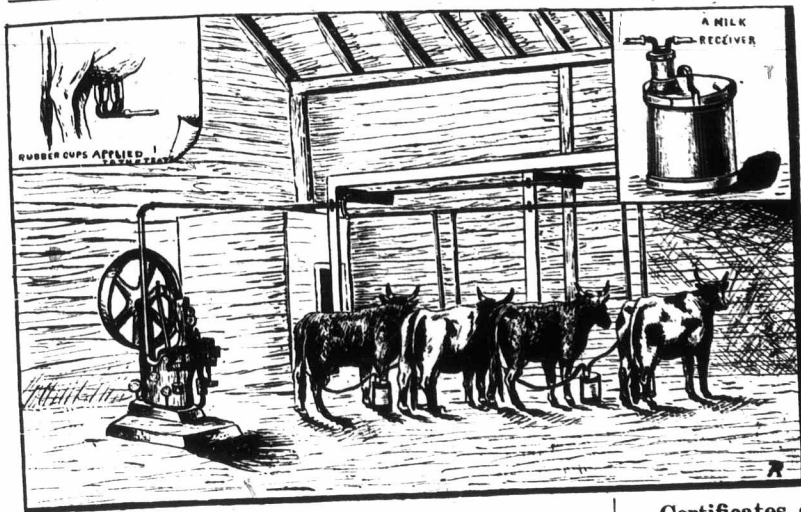
It is claimed by good authorities that a certain system should be adopted in the act of milking a cow. The teat is held closed by the contraction of the sphincter muscle, which is relaxed by gently squeezing the tip of the teat when commencing to milk, after which the milk should be drawn as rapidly as possible. It is also claimed that the pair of teats commenced should be milked thoroughly before commencing the others. When this system is adopted the same pair of teats should not always be commenced, because the first quarters emptied have the assistance of the compression made by the remaining distended quarters, and the last quarters have no assistance from this source. If, therefore, the same teats are always selected in the same order, the teat first milked would develop that quarter of the udder to increased capacity, while the last half would correspondingly diminish in capacity. A deficient quarter can therefore be brought up by always milking it first.

Thorough and careful milking should always be practiced. If for any reason cows are milked imperfectly there is danger of converting them into worthless dairy animals. The milk that remains in the udder is held by the small pouches or milk veins high up in the bag, and will form curd that will excite inflammation and destroy the secreting function of its lining, and tend to cause the adhesion and entire closure of the small cavity or vesicles. When care is taken for the cow's comfort while milking she will evince a feeling of relief and pleasure when the distended member is being relieved. This is not only a valuable assistance to the milker, but perfect milking cannot be done without this co-operation of cow and milker. The present advantage of clean milking is obvious when the richness of the strippings is taken into consideration, besides the permanent benefits above referred to.

Kingston Dairy School.

The Kingston Dairy School will open its doors to students on Dec. 10, 1895, to continue till March 26th, 1896. The season's work will comprise eight courses of two weeks each. The subjects taken will be those of last year, with the addition of lectures on bacteriology by Prof. McConnell, of Queen's University. The special course in cheesemaking commences Feb. 15th and continues until March 26th. The staff is to be the same as last year: General Director of the School, Jas. W. Robertson, Dominion Dairy Commissioner; Resident Superintendent, J. A. Ruddick.

Conditions of admission.—Any person over sixteen years of age, who has worked at least one season in a butter factory, is eligible for admission to the *Ordinary Courses*. Admission to the *Special Course* in cheesemaking will be limited to those who have had at least two years' experience working in a cheese factory. The fees are very light.



The Thistle Milking Machine.

The accompanying illustration gives a very good representation of the Thistle Milking Machine tested at the O. A. C., as reported in the ADVOCATE of September 2nd, 1895.

Ontario Agricultural College Dairy School.

The Dairy School in connection with the Agricultural College, Guelph, will reopen on January 14th, 1896, and remain in session till the 14th March—two months. The buildings and equipment are complete, and students are offered a very broad and thorough course of theoretical and practical instruction in dairying. In addition to the ordinary appliances, there are in the dairy stables, close to the school, a herd of thirty cows, of different breeds, for observation and instruction in the methods of feeding and caring for dairy stock; and a cream separator, run by tread power, in a room attached to the dairy barn.

The course of practical instruction consists of two branches of the dairy business, viz., Factory Dairying and Home Dairying; In the former, students, under competent instructors, make cheese and butter on a large scale, learn how to run cream separators, and are given full and repeated instruction in the use of the Babcock tester and the lactometer, together with directions as to paying patrons for their milk in factories where the Babcock tester is used. There are five large cream separators in this department—the Danish, the Weston, the Alexandra, the Alpha de Laval, the United States, and the Sharples' Imperial Russian. Full and repeated instruction with practice in the running and general management of these machines is given daily. In the milk-testing room there are eight of the best makes of the Babcock tester, of different capacities, some run by hand and others by steam—all for the use of the students in attendance from year to year; and in the butter room there is constant practice throughout the session in the churning, and in the working, printing and packing of butter according to the most approved methods.

Discussion on practical dairy topics, especially on the difficulties which arise in making cheese and butter, are carried on in the cheese room for an hour every afternoon. These discussions have been of much value to students. From time to time during the session this hour is devoted to the judging of cheese and butter by experts brought to the school for that purpose. The scoring of the judges is compared with that of the students, and reasons are given for the conclusions in each case. In this way students get a clear conception of the difference between poor, medium and first-class goods. Cheese and butter factories should encourage their makers and butter factories should encourage their makers to devote a couple of months in the winter to this course. It is not intended to take the place of practical experience in a factory, but to supplement it. It is of much practical value to those who take it, and will undoubtedly result in material advantage to the factories in which they are employed.

The Home Dairy Course is intended especially for farmers' sons and daughters who wish to learn something about running cream separators, using the Babcock tester, and making butter on a farm. The department is furnished with hand separators, butter-workers, printers, etc., and full instruction is given by a competent buttermaker in every detail regarding home dairy appliances, the handling of milk and cream, and the making of butter. Special instruction in cheesemaking is also given when required. Home dairy students are admitted to all lectures and discussions, including practical drill by the Professor of Dairying, on the points and peculiarities of dairy cows, in a live stock class-room provided for the purpose. From fifteen to twenty students can be accommodated in this course. Applicants may enter on or after the 11th of January and remain as long as they wish—two weeks, the entire session of two months, or longer.

The instructors are:—1. Cheesemaking—A. T. Bell, Tavistock, Ont.; assistant, R. W. Stratton, Guelph, Ont. 2. Milk-testing—T. B. Millar, London, Ont., Instructor and Inspector for Western Dairyman's Association. 3. Cream Separators—Mark Sprague, Ameliasburg, Ont., Instructor for Creameries Association. 4. Buttermaking: F. Rogers, Guelph, foreman of butter department; J. Sleightholm, B.S.A., Instructor with Travelling Dairy for 1894-95.

A course of lectures will be given as follows:—Professor of Dairying—Twenty-four lectures on milk, butter and cheese; milk-testing, buttermak-

ing and cheesemaking; the marketing of dairy products; selection, breeding and feeding of dairy stock, etc., etc. Agriculturist—Three lectures on general agriculture in relation to dairying. Professor of Veterinary Science—Three lectures on the diseases and treatment of dairy stock. Professor of Biology—Four lectures: two on geology and two on botany. Professor of Chemistry—Four lectures on the nomenclature and general principles of chemistry and its relation to dairying. Bacteriologist—Five lectures on lacteal bacteriology. Mathematical Master—Seven lectures on mathematics and book keeping, explaining fully the decimal system.

Certificates of standing are given to those who pass all prescribed written and practical examinations—some during the course and a more difficult one at the close. The standard for passing is 40 per cent.; for second-class honors, 60 per cent.; and for first-class honors, 75 per cent. To obtain this certificate, students must attend at least seven weeks during the course and take regular work in all the branches of the factory course.

To any who hold a general certificate of standing, a special dairy certificate of proficiency in buttermaking, cheesemaking, or both, will be granted when he has proved his ability to manage a creamery or cheese factory:—

- (1) By at least two years' experience of manager, one of which must be subsequent to his college course.
- (2) By sending monthly factory reports during at least one season to our Professor of Dairying.
- (3) By passing a satisfactory inspection as to cleanliness, tidiness, and quality of goods made by him during the season.

No entrance examination is required. Tuition is free to residents of the Province of Ontario; to non-residents, \$5 for the course. A payment of \$3 in advance for incidental expense is required of all students in the regular course; also a deposit of \$2 to cover possible breakage. This sum of \$2, if not required for breakage, will be refunded when the student leaves. Board and lodging in Guelph (a student and a half from the College, or close to the College grounds) may be had for \$3 per week.

Special provision is made for ladies who wish to take either the factory or the home dairy course. Special apartments have been fitted up and furnished for their comfort and convenience.

In the Home Dairy Course there is no charge for tuition; but students are charged \$1 for incidental expenses, and a deposit of \$1 is required to cover breakage. This latter, if not required, will be refunded when the student leaves. Farmers' sons and daughters who are engaged in the making of butter should be specially interested in the Home Dairy department, as it affords an opportunity for them, at little expense, to receive valuable instruction in this very important branch of farming.

With the Travelling Dairy in British Columbia.

BY J. A. RUDDICK, OF THE DAIRY COMMISSIONER'S STAFF.

Our first stop was at Ashcroft, on the Thompson River and 204 miles from Vancouver. Ashcroft is situated in what is known in B. C. as the "upper country," or sometimes the "dry country." Both terms are very appropriate, for in the first place it lies 1,075 feet above the sea level, and in the second place it very seldom has rain there. Owing to the lack of moisture, there are no crops to speak of where irrigation is not practical, but where the water is laid on it is astonishing to see what wonderful crops are grown. The finest potatoes in the world (an Ashcroft man told me so) are grown here. Certainly, they are of enormous size and prime quality. I heard a man offer to bet that he could produce a ton of potatoes not one of which would weigh less than 5 lbs. Fruit raising is an important industry; apples doing particularly well. It was from Spence's Bridge, near Ashcroft, that the big apple at the World's Fair came. The apples have a fine color, owing to the abundance of sunshine. The cattle ranching is followed quite extensively, the nutritious "bunch grass" affording excellent pasturage.

Ashcroft is noted for being the point of departure for the Cariboo gold fields, some 300 miles north. Besides the regular stages, pack trains and freight wagons are constantly going and coming, conveying supplies to that important mining district. Although as yet there is not much dairying carried on around here our meeting was well attended. Ex-Governor Cornwall occupied the chair in a very acceptable manner. Mr. C. E. Semlen, M. P. P., Messrs. Penny, Barr, Burr, and others took an active interest in making our visit a success. We were informed that there are several large miles up the Cariboo trail there are several large dairy farms, where as many as 60 cows are kept on some of the ranches. All the butter finds a ready sale at the gold fields. From Ashcroft we travelled down 133 miles to Agassiz. What a change! both as regards climate and general appearance of the country. In place of the treeless hills and bare look which characterize the country around

Aschroft, we find ourselves surrounded by a luxuriant vegetation, for we are now in the famous Fraser Valley, with its big trees and rank growth as a result of the heavy rainfall and excessive moisture. Ferns grow so persistently here as to become a noxious weed. They frequently attain a height of 12 or 14 feet, and are very hard to get rid of, even in the cultivated land.

The Dominion Experimental Farm for the Province is located at Agassiz. As in Manitoba and the Territories, I find this institution very popular, and wielding a big influence for good; a fact due, in a large measure, no doubt, to the wise selection of a superintendent, in the person of Mr. T. A. Sharpe. Particular attention is paid to fruit growing at this farm. The justly celebrated Harrison Hot Springs are four miles distant, on Harrison Lake, and are a more beautiful and restful spot I have never seen. Altogether, the traveller who stops off at Agassiz is not likely to regret it, especially as one of the best hotels in the Province is located here. The guests at the Bella Vista are always well cared for.

Hop growing is quite an important industry just around here, but many of the farmers are turning their attention towards dairying, and there are some very good herds in the neighborhood. We had a good meeting here.

From Agassiz we crossed the Fraser River in an Indian canoe, made from one of the large cedar logs, and found ourselves in the Chilliwack district. People who live in Chilliwack will tell you that it is the best agricultural district in the Province. I won't dispute it. Our first meeting was held at Cheam School House, followed by one in the town of Chilliwack, and still another at a point about three miles west of the town near Sumas. A cheese factory was started in the district last spring, and has proved quite successful. It is the first and only one in the Province, although A. C. Wells & Son have operated a private one on a large scale for some time. Messrs. Wells have a fine farm, with magnificent buildings, silos, etc., and are well equipped with a herd of about 60 cows. A creamery was being erected in the town of Chilliwack, and it was expected that it would be started late in the fall.

(TO BE CONTINUED.)

VETERINARY.

Live Stock Disorders.

A fatal epidemic among lambs recently broke out in Lincolnshire, England, and a large meeting of representative farmers was held to discuss the subject. One speaker mentioned the loss of 250 lambs in one lot, 150 in another, 40 in another, and 75 in fourth. The disease had thoroughly baffled the skill of veterinary surgeons and sheep farmers. He fully believed that they had a fresh disease not heretofore discovered in England, and which was contagious. Mr. R. J. Smaby administered 1 oz. castor oil and 1 oz. laudanum, and had lost none since, but Mr. John Spilman did not believe a farmer's skill could allay the disease. The ram lambs were most to suffer; and those fed the most artificial food were the most susceptible. In most cases acute inflammation of the lungs and bronchial tubes was found. The lining was, as a rule, pallid and friable, and in many cases there was a reddish effusion into the peritoneum. In some cases the common lung worm was found; in others, the lungs and pleura were inflamed, but no parasites were discovered. In one case the lambs developed a high fever, drooped their ears and frothed at the mouth. One lot only stripped their wool entirely.

A motion was passed, asking the Board of Agriculture to make a special investigation.

Swine fever, according to recent accounts, shows no signs of abating in England. During the forty-two weeks ending 19th October, 1895, it is said that 8,068 pigs have died from it, compared with 6,271 in the corresponding period of 1894, and 4,795 in the corresponding period of 1893. The council of the Associated Chambers of Agriculture decline to regard this in any other light than as a result of the weakening of the veterinary department of the Board of Agriculture. The expenditure of money for the stamping out of swine fever has been enormous; and while undoubtedly progress has been made in grappling with the disease in Scotland, these figures prove conclusively that in England the administrative department has completely failed in its object.

The above but emphasizes the warnings frequently uttered in the ADVOCATE, and indicates the imperative necessity for drastic measures (quarantine, slaughter and cremation) in such cases as the "hog cholera" or swine fever outbreak in Essex Co. some time ago. At the time some regard this as undue severity, but the aim is to stamp out—not to spare feelings or economize in the first outlay.

Stocked Legs and "Scratches."

A great many farmers have trouble with their horses' legs for some time after autumn work ceases. In fact that seems to be the commonest season for attacks of "weed" and "scratches." At a recent farmers' club meeting several good horsemen testified to the value of giving a small handful (a large tablespoonful) of Epsom salts in each evening's feed for a couple of weeks. The effect is to keep the blood cool, and the animals in healthy condition.

POULTRY.

Winter Eggs.

BY M. MAW, WINNIPEG.

The winter production of eggs is an important item in the poultry account, and should be looked after carefully and prepared for if you wish your hens to show a good balance on the profit side.

Like cows, hens need educating in this branch of their industry, and a great deal of care and attention is required in selecting only those hens that moult early and commence laying in the fall and early winter, weeding out the old-style fowls that lay a few eggs in the spring, sit all summer and mope all winter. A great deal of blame for this state of affairs is traceable to the surroundings: generation after generation of fowls badly housed, badly fed, allowed to drag through a miserable existence till death claims them, has caused many a fine breed of fowls to deteriorate back to the wild instincts of their ancestors, and only lay a few eggs when nature inclines them to raise a little family. The above specimens, commonly known as the old dung-hill breed, have still many admirers, and on several occasions I have been told by men who had advanced ideas in other lines, that they preferred the "dung-hills" to any of the new-fangled breeds of poultry. Well, these men only talked—they never really valued their poultry and preferred the "D. H.'s" because they cost nothing to keep, being never fed, brought up to steal their way, and when caught in the garden or grain-bin, if the missile thrown at them happened to do its duty, the loss was small. But the majority of farm-yard flocks have been greatly improved during the last few years, either by exchanging "D. H." eggs with kind neighbors who had improved stock, or by purchasing a cockerel from some pure-bred stock and by so doing laying the foundation for better size and larger egg capacity. Unfortunately, many who improve their flocks in this way seem satisfied with the results, and allow the flock to deteriorate for years after. This is wrong. A pure-bred male bird of any of the leading varieties will imprint his qualities on all the offspring, but the cockerels from this mating must not be used—they are only grades. It is better to mate the best pullets with the original cock, and so bind the good qualities that for years they will produce stock equal to the first crop. But inbreeding causes loss of size, and the vital properties seem to weaken. The best and only successful way is to use pure-bred males only; if possible get fresh blood every year or every second year at the outside, and be sure it is pure. The first cross cockerels are usually grand birds both in appearance and size, often larger than the sire, but useless for breeding purposes.

What has this to do with winter eggs? Everything. Without the proper material it is only waste of time to try. If you have a flock of early hatched pullets and year-old hens that you can separate from the rest of the flock, pen them up in a good comfortable building with plenty of light, be careful to avoid draughts, but have a ventilator if your house is warm. In feeding, make the hens work for their feed. In the early morning give them a warm mash composed of house scraps, stiffened up with bran, shorts, or any other material that you can get. See that they do not get enough to load up their crops. Throw some small grain in a litter of straw (screenings will answer best) and they will work all day to get the last grain. Hang up a cabbage or a turnip so they will have to jump to get at it. At night give them a plentiful feed of hard grain, but not more than they can eat up clean. A box with grit, oyster shells, and cut bone will complete the outfit. Give fresh water every day, throwing out what they have left at night if the house freezes, and see they have a place to dust in. If these rules are followed your hens will lay during the winter months, and continue during the summer months, thus doubling the egg production, and leaving a large margin of profit. If all who are trying to make their poultry a success would keep a strict account of cost of feed, number of eggs laid, when laid, value received for eggs and stock, give system adopted, and if known, causes for either success or failure, it would prove very instructive and interesting reading, and when published in the *ADVOCATE* would open the eyes of many who can't see any profit in keeping poultry.

Experimental Hen Feeding.

At the New York Experimental Station pens of Leghorns and Cochins were fed experimentally to ascertain whether a diet of whole dry grain or a diet partially of crushed and moistened grain gave the best results. Bulletin No. 90 gives the following summary of results:—

1. Two lots of laying hens, of large and small breeds respectively, having their grain food only dry and whole, ate more food at greater cost per fowl and for the live weights than did two similar lots having about 35 per cent. of their grain ground and moistened.
2. A pen of Leghorns, which had for the year 37 per cent. of their food ground and moistened grain, produced eggs at a greater profit than did an exactly similar pen fed whole grain.
3. Of two like pens of Cochins, the one fed whole grain produced eggs at much less cost than did the pen having ground grain, which result is attributed partly to the exercise assured in feeding whole grain.

4. With the kinds of whole grain ordinarily available it is not possible to feed a largely grain ration having as narrow a nutritive ratio—that is, containing as large a proportion of the nitrogenous food constituents—as is perhaps necessary for best results from laying hens.

5. By using some of the highest nitrogenous by-products (such as cottonseed meal, pea meal, gluten feed, etc.) with ground grain, it is possible to feed a somewhat narrow ration without feeding an excessive amount of meat.

6. With hens fed similar rations, when the hens of smaller breeds give only the same egg yield as the hens of larger breeds, the eggs are more cheaply produced by the smaller hens, but taking into consideration the cost of raising and the ultimate poultry value of the hens, the profits will be equally or more favorable for the larger hens.

GARDEN AND ORCHARD.

Paying Hours in the Orchard, Nursery, and Garden.

BY PROF. E. E. FAVILLE, NOVA SCOTIA SCHOOL OF HORTICULTURE.

"All things come to those who wait,
But, alas! oft times they come to late;
To men of brains or men of muscle,
All things come to those who hustle."

The above few lines are suggested to the mind of the writer in reading in the last issue of the *ADVOCATE* a short note calling the attention of the fruit growers to the too often practiced error of leaving the orchard as soon as fruit is packed, and waiting for the next picking season to roll around, forgetting, seemingly, the many essential and paying duties that should be performed in that same orchard during late fall and early winter months. One cannot help but observe the thrifty fruit grower counting on his next year's crop, and in doing so is hustling about and rightly attending to, the many necessary needs of the orchard, nursery, and garden. The former should be undergoing thorough inspection, dead or decaying limbs pruned with judgment, and surface left exposed protected with a covering of paint or mixture of shellac and alcohol; rough bark scraped off and surface treated with a solution of washing soda and soap mixed; decayed fruit caught in branches, refuse accumulating among fallen leaves carefully raked into a pile and burned, thus removing the too often hibernating resorts of insects and their eggs, destroying thereby fungous growths resting as winter spores in waiting for the warm days of spring so as to break open and spread havoc among the fruit trees, causing apple scab, rust, black-knot, etc. If possible, in young orchards, and often old ones as well, shallow plowing should be practiced just before the ground freezes for winter, covering up rubbish, placing earth in a condition to be acted upon by frost, leaving a fineness of soil in the spring helpful to surface-feeding roots. When an orchard or locality is affected by the common pest, the "canker worm" (which feeds upon the young leaves), remedial measures of prevention should be taken at once to prevent the wingless female from climbing the trunk of the tree and depositing its eggs among the branches during the sunny days of late fall and early winter. This may best be done by binding the trunk of the trees with tarred paper six or eight inches in width, the outside being covered with a mixture of printer's ink. In German orchards "Excelsior" is used beneath the bands next to trunk, thus stopping any liability of insects passing under the band. This method has proven to be very practical. An excellent mixture, which is being used with best results in fruit sections of Nova Scotia, is composed of one pound of resin to one and one-half pints of castor oil, mixed by heating, forming a cheap and exceedingly sticky mixture, resisting water and lasting for a long time. There being two broods of canker worms, fall and spring, the bandages should not be removed until leaves begin to form in the spring.

In the nursery may be found opportunities for busy hours—last spring's root grafts need hilling or banking up with earth. In fact, all the young trees in the orchard should have a mound of earth ten to fifteen inches in height placed at base of trunk to keep out mice, to protect the roots and serve the purpose of stiffening the young tree against wind, preventing opening about collar where water is liable to find its way thus injuring roots. This is of especial importance to young transplanted stock. Every fruit grower or farmer should have a root cellar, as they are cheap in construction and invaluable. A root cellar is really a cave constructed by sinking a pit five feet in depth, in a dry location (better on side hill), placing posts at sides and ends, boarding up roughly the sides and top and covering the whole with earth, leaving door in north end, or, if adjoining a building, place ventilation opening at the top, ventilating at night time, never during the day. On the grounds of the Nova Scotia School of Horticulture one of these cellars is in operation, and during the winter months the temperature does not vary more than one or two degrees, acquiring a temperature a few degrees above the freezing point, keeping in excellent condition roots, grafts, cuttings, scions, etc., for spring use. Forest leaves should be gathered for packing scions in before snow comes, and the seedlings of apples, plums and cherries for root grafting should be placed in earth or sand in the cellar, bearing in mind the staid rule that "a root

should never become dry." The best seedlings' roots will be found in those nurseries or grounds where subsolling has been practiced, thus permitting the top root to penetrate freely, forming a smooth, strong growth of root. Now is a good time to put up grape cuttings in pits. Having made the cuttings of two buds, cutting just below the lower bud and an inch above upper bud, these, having been prepared and tied in bundles, should be placed in pit with butts toward the surface, covering with about three inches of loose earth, placing leaves and boards on top of this, and in the spring removing the leaves permitting the heat of the sun to callous the butts of the cuttings so that the lower ends will start first.

The garden for vegetables should be spaded up before it freezes, not raking down smooth, but letting the frost get in its work, producing fineness of soil. This same method can be carried out with equally good results on the grounds of the proposed new lawn. A top dressing of well-rotted manure on the rhubarb plants and the asparagus bed before the snows should always be made. To the compost heap add refuse from vegetable produce, burning everything that will spread weeds. In the fruit garden the old canes of raspberry taken out and burned, the old wood of gooseberries as well, and after ground has frozen hard enough to bear a team and wagon, mulch the strawberry bed with mulch, evenly distributed, not too thick, remembering that this mulch should be left on until severe frosts are all over in the spring, thus preventing alternate thawing and freezing so injurious to plants. Above have been enumerated a few of the many things that the fruit culturist has to see to at the end of the season's crop in order to make way for a proper return the coming season. The more "hustling" the better, bearing in mind that "out-door housecleaning" is as essential to health of orchard, nursery, and garden as "indoor housecleaning" is essential to health of its inmates.

Ontario Entomological Society.

The annual meeting of the above was held at London, on Nov. 27-8, when addresses were delivered by Prof. C. C. James, Deputy-Minister of Agriculture for Ontario, and Prof. Fletcher, Ottawa; papers being read by Messrs. Fyles, Lyman, and Fletcher. The local attendance was not large, but the membership is increasing. The Society continues to do steady and useful work. The following officers were chosen for the ensuing year:—President, J. Dearness, I. P. S., London; Vice-President, H. H. Lyman, Montreal; Secretary, W. E. Saunders, London; Treasurer, Wm. Balkwill; Librarian and Curator, J. Alston Moffat; Directors.—Division No. 1, James Fletcher, Ottawa; No. 2, Dr. Bethune, Port Hope; No. 3, Gamble Geddes, Toronto; No. 4, A. H. Killman, Ridgeway; No. 5, R. W. Rennie, London. Editor Canadian Entomologist, Dr. Bethune; Delegate to Royal Society, J. D. Evans, Trenton.

QUESTIONS AND ANSWERS.

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

Veterinary.

CARRIES JAW.

J. E. DAWSON, Oxbow:—"I have a four-year-old mare that had her jaw injured with a tight halter when she was two years old; there has been a running sore on the jaw ever since. I think the bone is injured, as the pus discharged smells bad. The sore breaks out at intervals. Please prescribe a remedy. What food would you advise for her?"

[It will be necessary to open the part and remove, with forceps, all detached and partially detached pieces of decaying bone. Afterwards dress daily (using a syringe for the purpose) with the following lotion: Corrosive sublimate, one dram; muriatic acid, two drams; alcohol, four ounces; water, eight ounces. Wholesome food of any kind is suitable. W. A. DUNBAR, V. S., Winnipeg.]

POSSIBLY GLANDERS.

"INQUIRER," Oxbow, Assa:—"I have a horse, twelve-years old, that commenced to discharge yellowish pus from the left nostril about the 20th of Aug. last. I thought he had a cold and continued working him for about two weeks; then I rested him for three or four weeks, and he seemed better and discharged very little. Then I worked him a week, and he is discharging the same as before. The discharge was very offensive at first, but I don't find any bad odor at present. There is a lump about the size of a large filbert between the bones of the lower jaw on the left side close to the jaw bone, but not on the bone. The membrane lining the nostril looks natural; there are no sores or inflammation that I can see. The discharge has only been from the left nostril. The horse has not coughed any; he is in good condition, feels well and looks well. What do you think ails the horse? What shall I do for him?"

[Some of the symptoms are suspiciously indicative of the contagious disease known as glanders; while some of the other appearances you have mentioned are those generally observed in connection with "nasal gleet" or in decaying teeth.



HER LAST SHOT—AN UP COUNTRY STORY.

BY ETHEL WILLIAMSON, JOCELYN, ALGOMA.

I've often heard tell of a bear hunt as being the cause of a death, but I don't know fancy as how one often leads to a marriage; but as this one did, and as it wuz my own marriage into the bargain, I guess I might as well tell how it came about.

Well, in the first place, bears wuz mighty thick around us that fall, and, in the second place, we had just got a teacher for the new school up on the hill. It's curious how them two things should be anyways connected; and it's more curious still to see how threads cross each other, and how the most opposite ends very often meet; and it's a mighty good thing for people when they happen to be the right ones.

Well, as I said before, there wuz a new school up on the hill; it had been a considerable while agettin' built, fur we didn't go in much fur eddication in those days, and the teacher (as pretty a lass as ever I seen) had begun to knock the A B C inter harder heads than ever she had ter deal with afore, I'll be bound.

Though just a slip of a gal, she wuz wonderful clever, and knew a powerful lot; and the boys and gals took ter her right away. The parson had got her up from down country somewhere, but she had none of them airs and graces like some of the city folk has that comes our way nowadays. "Tourists," they calls 'emselves,—"Lazy Creatures," I calls 'em, though I know it ain't charitable.

Well, all our folks, both big and little, thought the world of her. And who could help it, with her sweet, pale face and winsome smile alightin' up her dark, serious eyes, that always seemed ter find out all the good things in a person; makin' 'em feel the want ter hide up quick out of sight, as if they wuz ashamed of being seen by anything so pure and sweet as that Mountain Lilly.

I always called her that, in my mind, ever since I first seen her in her white dress at the meetin' house, a singin' away fur all the world like them white robed angels the parson tells about; she only wanted the wings, but I'm glad she hadn't got 'em, else she might er flown right off. I know the golden gates would er been opened wide fur her; she looked ter be a deal nearer than earth, which ain't such a very good sort of a place, though she has taught me ter find considerable beauty in it that I never could see afore her sweet help made my eyesight clearer, and I won't say I ain't the better fur it.

Afore she had been with us some little time, I noticed that Tom Hall (the son of old Sam Hall, who wuz a great man around our way and owned considerable property, and had a pot of money put away in the savin's bank, they said) wuz beginnin' ter take up with the little schoolmarm. She boarded down ter his mother's, so, perhaps, it wuz only natural that he should fetch her round some; still, I didn't like the feller, with his high and mighty ways; though I guess I shouldn't say so, and I couldn't bear ter see my Mountain Lilly a ridin' beside him, which wuz only natural, too, I guess.

I didn't call her mine in any disrespectful kind of a way, but just because she seemed somehow to belong ter me.

The boys wuz all ready ter worship her if they only could get a chance, but Tom, with his grand airs and fine horses, always managed ter git his own way; and whenever ther wuz a quilting or a corn-huskin', with a little hop for the young folks at night, it wuz Tom that always took the little schoolmarm.

Most of us thought ourselves pretty lucky in those days if we owned a team of oxen to plow with, let alone horses, and I tell yer we didn't feel much like askin' such dainty blossoms as that ter jolt along in an old farm wagon, though I noticed she would often come and ride a piece with me if I happened ter be comin' along when she wuz a leavin' school, and somehow I often wuz—it's surprisin' what a deal I had ter do along that road in those times, although she knew that Tom would soon be along fur her. And how he would scowl when he seen us there though he would off with his hat as polite as ever, but there wuz an ugly look in his eyes, though I didn't think she ever seen it. She wuz more likely to be a watchin' fur the first red leaves, or a lookin' at the squirrels a friskin' among the branches, or the rabbits a jumpin' over the fallen logs; them wuz the things she liked, and a deal of pleasure our old woods gave her. Although she looked so delicate-like she wuz quite strong and healthy, and had lots of pluck. The boys taught her how ter shoot; and though at first she wuz kind of startled, her soon got inter the way of it. All our gals can handle a gun; it's a good thing to know in these parts, even if yer are a woman. She used to carry a little pistol—"just ter keep off the bears," she said, but would never kill anything for sport. She wouldn't have hurt a rabbit or a partridge ter save her life; she said it wuz cruel, and maybe she wasn't fur wrong.

II.

Well, as I said before, bears wuz mighty plentiful around us just then, and wuz doing considerable damage among the sheep. We had some good sport a huntin' them, and one day, killin' a couple of big fellows not far away, we brought 'em home in triumph fur the folks ter see. They wuz fierce-lookin' brutes although they wuz dead, and the sight of 'em made the little teacher look pretty scared. I wuz glad of it—not cause I liked ter see her frightened—not a bit of it—but because she slipped up close beside me, as if for protection like; and I knowin' she was kind of timid, not being used ter sich sights, took hold of her little hand and held it in mine, just ter encourage her, though I knew Tom didn't like it. But I didn't care fur Tom or anything else, just then, fur my heart wuz a beatin' like a sledge-hammer, and I felt like standin' there fur ever and her right there be-side me, with her golden head a shinin' in the sun making her look more like an angel than ever.

A few days after this, when I wuz a crossin' the lower fields a carryin' my gun, I seen a big bear a crouchin' down in the grass a eatin' away at a sheep it had just been worritin'. Gitin' mad—fur I knew it wuz one of my best Shropshires—I let fly at him, and maybe it wuz because I wuz in too much of a hurry that I didn't kill the brute, only wounded him; and with an ugly growl, he made off inter the brush in the edge of the hill road. I followed, with my heart in my mouth, fur I knew it wuz about time fur her to be a comin' home—perhaps that wuz the reason I happened to be a goin' across the fields in that direction, I won't say as how it wasn't, and Tom wuz away just then a huntin' timber or somethin'.

Well, I tracked him pretty close for some time, but the brush kept a gettin' thicker, and at last I couldn't see him at all, but could tell by the crashin' of the brush about how fur off he wuz. We kept on in this way fur some distance, when the brush gettin' a bit thinner again, I got another glimpse of him, and he seemed ter be a gettin' pretty well tuckered out. But he still kept on as hard as he could go and me after him, fur I calculated that by this time he couldn't be very fur from the road.

We couldn't er come more than half a mile altogether, but wuz a comin' up from the back of the hill like, which sloped down pretty steep on that side, and it was a tough climb through all that underbrush and heavy timber, and it seemed about an age afore we reached the top.

Just as we wuz nearly on level ground again, and I wuz a gainin' on him every step, all of a sudden he seemed ter vanish and disappeared completely out of sight. I listened, but couldn't hear a sound, exceptin' for the rustlin' of the leaves stirred by the wind and the faint ringin' of a cow-bell in the fields below; everything wuz silent as the grave.

There wuz a half-fallen tree, a leavin', not many rods from where I wuz, and I thought the best thing I could do wuz ter climb up a piece and take a look round, fur I knew he might be a hidin' somewhere pretty close. Bears is mighty cunning creatures, and there's no gettin' ter the bottom of their tricks; and when they gets desperate, there's no tellin' what they'll do next.

Well, up I went, a holdin' my gun—which I had loaded again afore startin'—carefully under my left arm. But I hadn't got very far, when, just as I wuz a catchin' hold of a limb ter steady myself, it snapped off short, and, losin' my balance, over I went backwards, fallin' about six feet, right inter the middle of a brush-tangle, which isn't a very pleasant place ter fall in, I can tell yer. There wuz a loud crack like thundersome-where near my ear, and a sharp, tinglin' pain in my left arm; I knew I had shot myself pretty bad, but didn't care much about that, although it wuz a hurtin' considerable. What I did care fur wuz the thought of that infuriated bear a prowlin' 'round, and me a layin' there as helpless as a babe.

Yes, there I wuz, a jammed up in a brush-tangle, my head somewhat lower than my feet, and one arm lyin' helpless by my side; not a very comfortable position, you bet, at any time, and especially just then; while ter make matters worse, I could hear somethin' a stirrin' about among the bushes again, and I knew that creature wuz't very far away. I tried hard ter git up, but the more I tried the further I seemed to be a slippin'. A person that has never fell inter a brush-tangle can't have much of an idea of what it feels like. But imagine yerself a fly caught in a big spider web, with plenty of thorns and prickles ter scratch yer, and yer won't be far wrong.

The next thing I seen made me feel more uncomfortable than ever, for there just above me, right on that old tree trunk from which I had just come such a cropper, was that old bear a lookin' at me with snarl'n teeth, and his little red eyes full of pain and fury; I won't say as how I didn't feel squeamish, because I did. He give two or three ugly growls and came a bit nearer. Another second, and I guess he would er sprung at me, when somethin' came whizzin' through the air just over my head, and the next minute he wuz a lyn' almost on top of me with a bullet through his brain, dead as a stone.

I guess I must er lost my senses fur a while after that, fur the next thing I knew some one wuz a pourin' water all over my face and neck—and mighty cold it wuz, too!—and there wuz the little schoolmarm, a cryin' as hard as she could and a shakin' like a leaf. She had wandered off the road inter the woods a huntin' leaves, and the crack of my gun had nearly frightened her out of her wits. Guessin' somethin' wuz wrong, she had made her way ter the place the sound came from, and got there just in time ter save me from a fearful death, fur I had a foe ter deal with that would er shown me mighty little mercy, I can tell yer. Plucky! I should say so; her little pistol did a good deed that day, but she has never used it since, the very sight of firearms always made her shudder after that.

And how the boys did cheer, and the women folk they didn't seem as how they could make enough of her. I didn't tell her till long afterwards, when my arm wuz well and the winter had come and gone, and all the woods wuz green and sweet with the scent of the spring flowers. Then, one evenin', when the sun wuz a goin' down behind the hill in a golden-crimson glory, and the whip-poor-wills wuz a singin' away off in the poplar groves, I told her, and she didn't seem vexed. No, a light came into her sweet eyes that wasn't the reflection of the sunset, although it looked like it, and a restful smile broke over her winsome face, and I knew I wuz alright.

That wuz years ago, and bears ain't so plentiful around our way in these days; there's many changes since then in our little village. Tom's married ter the parson's daughter, and they live on the farm where the old folks used ter be.

There's shreds of gray in my darlin's golden hair, and I have ter take a stick now when I want ter climb the old hill with her, as we often do, ter watch the sunset, fur our hearts is young yet in spite of years; and we like to recall the time, now so long ago, when my Lilly, ter save me from a deathful death, so bravely fired "Her Last Shot."

THE CHILDREN'S CORNER.

A prize will be given in January for the best short original fairy tale. The writer must not be more than sixteen years of age. Send the stories, with name, age, and address of writer, to Cousin Dorothy, FARMER'S ADVOCATE, London, Ont.

A "Proverb-Hunt" will now begin this column. A prize is offered for correct solutions of the first three pictures. Only children of subscribers may compete, and competitors must be under sixteen years of age. Answers should be sent in for each group, e. g., 1-3, 4-6, 7-9, etc. A prize is offered for each group of three pictures, and a better one at the end of the year for the largest number of correct answers. Letters marked "Proverb-Hunt" will not be opened until ten days after the first picture of each group is issued. The first letter opened, containing correct answers, will be prize winner; all others will receive honorable mention. Address your letters to Cousin Dorothy, as above, and mark them "Proverb-Hunt"—outside the envelope.



HIDDEN PROVERB—NO. 4.

I have received two letters from little Attfield Dennin, Brooklyn, N. Y. She is only seven years old and her letters are very neatly printed in capital letters. If you can answer the third Proverb correctly, Attfield, you may get a prize, but don't set your heart on it too much, my dear. I am always glad to hear from you children, but cannot always answer the letters separately.

Cousin Dorothy.

A Hasty Judgment.

It was holiday time, and the Ayling family were all at the seaside. A merry party they were—three girls, two boys, and all on excellent terms with each other, and wanting no other society but

their own. So that they were not over pleased when one morning their mother read out from a letter just received from their aunt, a request that they would call on a lady and a little girl who lived at No. 10 on their terrace.

"No. 10!" exclaimed Lucy. "Why, that's where the girl we call 'Grumps' lives—you know Grumps, Bernard? That stupid girl who is always shrimping all by herself, and who looks so sulky and stupid."

"Know Grumps!" shouted Bernard, excitedly; "of course we do. You are not going to call and ask her to be with us, Mother? She'll spoil all our fun, she is such a stupid girl. Don't call on No. 10, please, Mother. You won't, will you?"

Mother laughed. "No, no, Master Bernard; I am not going to let you settle my visiting list. I shall certainly call on Mrs. Gerrard this very day. And, children, don't be selfish just because you are all so happy together. I shall ask Rhoda Gerrard to come to see us this afternoon, and I put you children on your honor to be very good to her.

"Well, Mother, we will," said Bernard, slowly; "but it will be just to please you, for I never shall fancy Grumps, I know that."

The day was not over before Bernard had to change his opinion.

Rhoda Gerrard was an only child, and painfully shy, and when she joined the family that afternoon she felt and looked as miserable and unhappy as a child could look. Bernard, however, meant to keep his word, so he bravely went up to poor "Grumps" with his puppy in his arms, and shaking hands with her, he said pleasantly, "Do you care for dogs?"

"Yes," said Rhoda, in a very unpromising voice; but she stretched out her hand to stroke the puppy's fluffy head.

"We want to get him photographed," Bernard went on, trying to keep up the conversation.

"If you can keep him quiet," said Rhoda, still in the same low voice, "I will take him for you; I have my camera here!"

"Do you photograph?" said Bernard, now really interested. "Oh, do let me see you do it; I do so want to know how to photograph! Lucy and I are saving up for a camera, but we haven't got near enough money yet."

"I'll teach you all I know," said Rhoda, "and you may use my camera as much as you like," and this time she actually lifted up her eyes and smiled at Bernard.

"Oh, it's awfully good of you," said Bernard, and before that day was over he and Rhoda and Lucy were the firmest of friends, and the rest of their visit to the sea was either spent at No. 10, where Rhoda had a dark-room, or else with Rhoda and the camera on the shore, photographing any likely "bits" that came in their way.

"Those old copy-books really tell the truth sometimes," Bernard admitted when they had just returned from a very pleasant evening spent with Rhoda at No. 10: "Beware of forming hasty judgments." I wrote that copy last term, but I never thought of it when I took that dislike to Rhoda—and she was only shy, not a bit stupid."

"No, indeed," said Lucy, indignantly, and Mrs. Ayling smiled as she said quietly, "A hasty judgment is generally a wrong one." E. A. B.

—From Sunday Reading for the Young.

Baby's Logic.

To-day I asked my mama if I could whittle,

Yes I did.

"Oh, no, my girlie," said she, "you're too little,"

So she did.

But when Tom stepped so hard right on my toe,

(I cried, I did.)

She said, "Oh, you're too big a girl to cry out so,"

That's what she did.

Why can't I cry if I am little?

Or, if I'm big why can't I whittle!

THE QUIET HOUR.

School Life.

I sat in the school of sorrow,

The Master was teaching there;

But my eyes were dim with weeping,

And my heart was full of care.

Instead of looking upward,

And seeing His face divine,

So full of the tenderest pity

For weary hearts like mine,—

I only thought of the burden,

The cross that before me lay;

So hard and heavy to carry,

That it darkened the light of day.

So I could not learn my lesson,

And say, "Thy will be done!"

And the Master came not near me

As the weary hours went on.

At last, in my heavy sorrow,

I looked from the cross, above,

And I saw the Master watching

With a glance of tender love.

He turned to the cross before me,

And I thought I heard Him say,

"My child, thou must bear thy burden,

And learn thy task to-day.

"I may not tell the reason,

'Tis enough for thee to know

That I, the Master, am teaching,

And give this cup of woe."

So I stooped to that weary sorrow;

One look at that Face Divine

Had given me power to trust Him,

And say, "Thy will, not mine."

And then I learnt my lesson,
Taught by the Master alone;
He only knows the tears I shed,
For He has wept His own.

But from them came a brightness,
Straight from the Home above,
Where the school life will be ended,
And the cross will show the love.

-E. A. Godwin.

Helpful Words from Bishop Doane.

Consider the fretfulness of restiveness under the discipline of life. Unbroken colts that champ the bits, and toss their heads, and pull against the reins—you have seen them, how they are hot, and breathless, and lathered with foam. And the strong hand holds on with steady pressure, till they are worn out with resistance, and succumb. That is the discipline of life. God's hand would hold us still, till we can feel and get our part in the magnetism of His calm and patient purpose; and grow patient, and calm, and strong, in harmony with Him. Fret not thyself. The old Greek word for patience means, lying under the pressure and the presence of God's hand, till we learn to suffer and be still. It is St. Peter's thought to "humble yourselves under the mighty hand of God, that He might exalt in due time."

We use the word "broken" of a horse, not meaning mean-spirited and cowed, but trained and lifted up to the dignity of conscious self-control. So I would have you not break your hearts, as birds against the bars, or colts against the bits, with the fret of vain resistance to the wise, strong Will: but only let yourself be "broken" in this better sense of training, that shall develop in yourselves mastery, and the dignity of discipline.

The Master's Touch.

Let your life show that it has been sealed to the right. The pupils of a great artist were left alone for some weeks, on account of the absence of their teacher. But one morning as they entered their study-room, they beheld upon the crude work of this and that one of their number the discerning touches of a practiced hand which had traced in here and there the delicate shades and lines that approached the perfection their less skilful hands had failed to achieve. "The master has come," they cried, looking about them for the form of their admired and revered teacher, for well they knew that none of their own number could have done the work they saw before them.

So let our work in life appear. The Master's hand is ready to assist us. Let us not disdain the aid, but, accepting His willing guidance and counsel, let us so labor that the world will know who is our helper and guide. The Master's touch gives life and beauty to the handiwork of the humblest of His creatures.

The Turned Lesson.

"I thought I knew it!" she said,
"I thought I had learnt it quite."
But the gentle teacher shook her head,
With a grave yet loving light
In the eyes that fell on the upturned face,
As she gave the book
With the mark still set in the self-same place.

"I thought I knew it!" she said;
And a heavy tear fell down,
As she turned away with bending head,
Yet not for reproof or frown,
Not for the lesson to learn again,
Or the play hour lost;
It was something else that gave the pain.
She could not have put it in words;
But her teacher understood,
As God understands the chirp of the bird
In the depth of an autumn wood,
And a quiet touch on the reddening cheek
Was quite enough;
No need to question, no need to speak.
Then the gentle voice was heard:
"Now I will try you again."
And the lesson was mastered—every word;
Was it not worth the pain?
Was it not kinder the task to learn,
Than to let it pass,
As a lost, lost leaf that she did not learn?

Is it not often so,
That we only learn in part,
And the Master's testing-time may show
That it was not quite "by heart"?
Then He gives, in His wise and patient grace,
That lesson again,
With the mark still set in the self-same place.

Only, stay by His side
Till the page is really known,
It may be we failed because we tried
To learn it all alone,
And now that He would not let us lose
One lesson of love,
(For He knows the loss)—can we refuse?

But, oh! how could we dream
That we knew it all so well!
Reading so fluently, as we deem,
What we could not even spell!
And, oh! how could we grieve once more
That patient One
Who has turned so many a task before!

That waiting One, who now
Is letting us try again;
Watching us with the patient brow
That bore the wreath of pain;
Thoroughly teaching what He would teach,
"Line upon line,"
Thoroughly doing His work in each.

impressing him with faith in her heavenly mission. She assumed male attire, a suit of white armor, and with a sword and white banner put herself at the head of the French troops. The inspiration of her enthusiasm was contagious. Victory after victory was obtained under her banner, till finally she conducted the Dauphin to Rheims, where he was crowned. Joan now thought her mission was accomplished, and was earnestly bent on return to her home. The insistence of her king overbore her design and she remained with the army, and was present in many subsequent conflicts, but her old inspiration seemed to have deserted her and she became subject to fearful forebodings. She was at last captured by a Burgundian force and sold to the English for some three thousand dollars. Being conveyed to Rouen, the headquarters of the English, she was brought before the spiritual tribunal of the Bishop of Beauvais as a sorceress and heretic, and after a long trial, accompanied by many shameful circumstances, she was condemned to be burnt to death.

Our picture represents a supposed visit of the Bishop to Joan while in prison, accompanied by his secretary, during which he used all his ingenuity

and exercised all the terrors of his spiritual authority to wring some confession from her, but in vain. Joan's truthfulness, sincerity, and purity of character foiled all efforts to obtain just grounds for her condemnation, which was at last based on most disgraceful trickery. The intricate circumstances connected with her trial and condemnation reflects home upon the nation she defended, and are a blot upon the records of the enemies she repulsed.

The Shah's Museum.

The Shah of Persia has a museum in his palace at Teheran, and it is said to be a curious place. It contains jewelry and treasures of different kinds worth a fabulous amount. The so-called Peacock Throne, carried off from Delhi one hundred and fifty years ago, is alone valued at many millions. In this museum one may also see vases of agate in gold and lapis-lazuli, said also to be worth millions, and alongside of them empty perfume-bottles of European make, with gaudy labels, which can be had at twopenny apiece. One sees priceless mosaics and exquisitely-painted cups and cans and vases which were presented by some European potentate, and side by side with them one notices horrible daubs, veritable sixpenny chromos, picked up no one knows how or where. One perceives glass cases filled with huge heaps of rubies, diamonds, emeralds, sapphires, turquoises, garnets, topazes; beryls of all sizes and kinds, cut and uncut, and cheek by jowl with these one's eyes see cheap music-boxes, Jew's-harps, squeaky hand-organs. The Shah must also be in a condition to "bull" the market in pearls; for here

is, for instance, a big glass case half filled with beautiful pearls—mostly from the Persian Gulf fisheries—of all sizes and degrees of loveliness. The crown jewels are in a little box which is always locked, and the keys of which the Shah himself ever carries, walking or sleeping. The contents of this box, and of the several vaults where he keeps his never allows others to view, although the museum may be visited once a year by the European diplomatists and the friends that they vouch for.

An exchange tells a story of a Scotch minister whose physician ordered him to drink beef tea. The next day, when the doctor called, the patient complained that the new drink made him sick. "Why, sir," said the doctor, "that can't be. I'll try it myself." As he spoke he poured some of the tea into a skillet and set it on the fire. Then, having warmed it, he tasted it, smacked his lips, and said: "Excellent, excellent!" "Man," said the minister, "is that the way ye sup it?" "Of course; what other way should it be suppit? It's excellent." "It may be gude that way, doctor; but try it wi' the cream and sugar, man. Try wi' that and see hoo ye like it."



JOAN OF ARC.

Then let our hearts "be still,"
Though our task is turned to-day,
Oh! let Him teach us what He will,
In His own gracious way,
Till, sitting only at Jesus' feet,
As we learn each line
The hardest is found all clear and sweet.

-F. R. H.

Joan of Arc.

The Maid of Orleans stands out the strangest and most romantic figure in history; the most sober records when they deal with her read like the pages of a modern novel. A village maid of humble birth, of enthusiastic and imaginative temperament, she was eminently pious and modest; her imaginative-ness was combined with much good sense and intelligence. She was very early subject to visions and unearthly voices, and as her feelings became wrought upon by the miseries of war around her native place, occasioned by the raids of the English, her excitable mind gave new form to the revelations she supposed herself in all sincerity to have received. Joan of Arc was only fifteen when she felt herself called to go and fight for the Dauphin. She persisted in spite of all opposition from her relations, and finally succeeded in obtaining access to the Dauphin and

UNCLE TOM'S DEPARTMENT.

MY DEAR NEPHEWS AND NIECES,—

It seems almost too good to be true that Christmas is almost here again—it appears such a short while since last we heard the jingle of good old St. Nicholas' sleigh-bells, as his reindeers skurried along from house to house with the wonderful packages that were found scattered among the young folks on Christmas Day.

What a joyous season it is! Old mother earth seems to understand that it is so, and bedecks herself in a festal robe of glittering, downy crystal, entrancingly beautiful in its matchless purity and fit emblem of what all hearts should be to greet the coming of the heaven-sent Christ-child.

In some countries there are some very pretty customs observed at this season. In Norway the last sheaf of the harvest is never threshed, but is laid away until Christmas morning, when it is fastened to the top of a pole or set upon the roof of the peasant's humble home for the wild birds to feed upon, for the peasants say it is not fitting that anything should want at such a season of joy.

In England a beautiful custom is that of the Christmas waits who go about from house to house singing in serenade fashion the quaintly sweet old Xmas carols, "God rest you, merry gentleman," "In Bethlehem in Jewry," and "The Holly and Ivy," etc.

In Canada the well-beloved Christmas Tree is the young people's chief attraction, but in some places even this charming institution is dying out and being replaced by the simple exchange of presents. In homes where there are children the gifts are generally entrusted to the care of good old Santa Claus, who carefully stows them in the expectant stockings that so faithfully keep vigil by the chimney-side, so that Santa may have no difficulty in finding them.

If sometimes we feel inclined to envy our English cousins their having the holly and mistletoe to decorate their homes for Christmas, let us remember that they rarely have the pleasure of a sleigh-ride then or at any other time, while our want is fairly well supplied with the rich evergreens and the scarlet clusters of woodbine berries. So if we may not sing with them:

"Here's to the holly, the Christmas holly,
That hangs over peasant and king;
We'll laugh and carouse 'neath its glittering boughs,
To the Christmas holly we'll sing."

we can at least say:

"Heap on more wood, the wind is chill,
But let it whistle as it will,
We'll keep our Christmas merry still."

and remember that "small cheer and warm welcome make a merry feast."

The competition in the puzzle department has not been as keen as I would like to see it, so perhaps we may find a more interesting contest for the new year.

With the hope that all the choicest gifts of the festive season may be showered on my dear nephews and nieces, I remain, as ever,
Your fond old—
UNCLE TOM.

A Chinese Description of a Piano.

The *Francis Quotidien* quotes an amusing legend of the Chinese notion of a pianoforte:

"The people of the West are in the habit of keeping in their homes a singular animal. It has four feet, sometimes only three, and it can be made to sing at pleasure. Men and women, and occasionally quite young children, have only to sit down in front of it and tap on its teeth, now and again treading on its tail, and immediately it commences to sing. Its song is louder than a bird's, but not so harmonious. Despite the terrible development of its jaws, and its habit of showing an alarming array of teeth, it never bites. There is no necessity to chain it up, for it will not run away."

The Friendship of Books.

To fall in love with a good book is one of the greatest events that can befall us. It is to have a new influence pouring itself into our life, a new teacher to inspire and refine us, a new friend to be by our side always, who, when life grows narrow and weary, will take us into his wider and calmer and higher world.

Whether it be biography, introducing us to some humble life made great by duty done, or history, opening vistas into the movements and destinies of nations that have passed away, or poetry, making music of all the common things around us, and filling the fields and the skies and the work of the city and the cottage with eternal meaning—whether it be these, or story-books, or religious books, or science, no one can become the friend even of one good book without being made wiser and better.—
Henry Drummond.

Recipes.

XMAS CAKE.

Three and a-half pounds butter, creamed; 3½ lbs. brown sugar, 3 dozen eggs, beaten separately; 8 lbs. raisins, 2 lbs. currants, 1 lb. candied lemon, 1 lb. citron and orange, mixed; 1 lb. blanched almonds, 1 tablespoonful cinnamon, 1 teaspoonful ginger, 1 teaspoonful cloves, ½ pint black molasses, 2 wineglasses sherry, 1 wineglass brandy, 1 wineglass rosewater, 1 dessert spoon of soda, ½ cup sour cream, browned flour to stiffen.

XMAS PUDDING.

Three pounds raisins, 1 lb. currants, 2 lbs. suet, 1 lb. mixed peel, 1 doz. eggs, 2 lbs. bread crumbs, ½ cup black molasses, spice, 1 cup whisky, 1 lb. sugar, flour to stiffen.

Puzzles.

1.—ENIGMA.

Add a portion of "doubt" to the sound of a glass, And 'twill give you the name of a warrior brave, Who was led by the Bruce, and who bled in his cause; Who at home found renown, and abroad found a grave.

2.—CONUNDRUMS.

1. What must you add to nine to make it six?
2. What is the difference, numerically, between two and three and three and two?
3. What must you subtract from fifty-nine to make it sixty?

3.—RIDDLE.

How can a man plant nine apple trees so that he may have ten rows, each containing three rows in a direct line?

4.—DROP VOWEL.

-n th-gh sc-rn's m-l-gn-nt gl-nc-s
Pr-- h-m p-r-st-f h-s cl-n,
H-s n-bl- wh- dv-nc-s
Fr-d-m-nd th- c-s-f m-n.

Answers to Puzzles in Nov. 1 Issue.

1. To thine own self be true; and it must Follow, as the night the day, Thou canst not then be false to any man.
2. Con-sis-tent. 3. Plane, palm, pine, beech. 4. Ingelow, Byron, Pope, Gray.

An amusing story is being told in Lincoln's Inn of an old woman who appeared a short time ago before Mr. William Barber, Q. C., the newly-appointed judge of the Derby County Court. An impecunious old man, whom she was suing for arrears of rent—he had lodged in her humble house—informed the judge that he would be able to pay off the debt only by very small instalments. "What terms are you prepared to accept?" Mr. Barber asked the old dame, who was deaf, however, and did not catch his honor's question. "What will you take?" shouted the usher standing by her side. A bright smile illumined her features as she replied, "Well, I've been in this 'ere court many a time afore, but you"—pointing to Mr. William Barber—"is the very first judge that ever asked me what I'll take. A little gin hot, if you please." It was some time before the judge, who has long been a teetotaler, recovered sufficiently from his astonishment to proceed with the ordinary business of the court.

STOCK GOSSIP.

In writing to advertisers, please mention the *Farmer's Advocate*.

The Dorset Dorned sheep sale of Mr. John A. McGillivray, Uxbridge, had, unfortunately, an extremely wet day, which caused the attendance to be small. This, together with the few Dorset flocks needing sires, caused the withdrawal of many of the animals. Mr. McGillivray disposed of a considerable number of animals after the sale by private bargain.

Alex. Hume & Co., Burnbrae, Ont., when directing us to change their advertisement write:—"We are much pleased to get the *ADVOCATE* every two weeks. There is always something in it for each of the household. The stock we offer is really first-class. The bulls fit for service have all been successfully exhibited at the leading fairs, and the young calves are from prize-winning animals on both sides. The pigs are bred from prize winners. We are overstocked. Registered pedigrees are furnished with all stock."

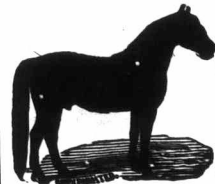
Tape Bros., Ridgeway, Ont.:—"We noticed in your last issue a query from F. J. Barber concerning the prolificacy of the Duroc Jersey hogs, and stating that he had a year-old sow that recently farrowed 18 pigs. We would say that we are now in receipt of a letter from Mr. Barber stating that the sow purchased from us at Toronto Fair had farrowed 18 pigs; and we would also say that we had two Duroc-Jersey sows that farrowed 18 good, big, strong pigs each in first week of this month, but they were both third litters, so Mr. Barber is still ahead. The demand is still good for Duroc-Jerseys, notwithstanding the very dull state of the pork market, and the outlook is quite encouraging. Our recent sales have been:— Alex. Steele, Almont, a pair; Wm. Shunk, Sherwood, a boar; Anthony Bowes, Thornhill, a boar; Geo. Charlton, Thornhill, two sows; Chas. Anstice, Springfield, a sow; Scott Bros., Strathroy, a boar; A. Elliott, Pond Mills, a boar; Robt. Wilkinson, Longwood, a sow; Z. Paul, Croton, a pair; Geo. Ott, Arkona, a boar; Samuel Sanders, Round Hill, a boar; Richard Hewson, Dresden, a sow; Miller Bros., Thamesville, three sows; C. Mackay, Thorndale, a pair; P. X. Dilliot, Ridgeway, a sow; Jacob Messiner, Cas City, Mich., U. S. A., a pair. We have recently imported a boar of the very finest quality procurable; he is a perfect specimen of the breed. Our brood sows and young fall pigs are in excellent condition."

NOTICE.

HOW TO GET "SUNLIGHT" BOOKS.

Send twelve "Sunlight" Soap wrappers to Lever Bros. (Ltd.), 43 Scott St., Toronto, who will send post-paid a paper-covered book, 160 pages. By leaving the ends of the parcel open, it will go for one cent postage. Remember "Sunlight" now sells at six cents per twin bar.

Horse Owners! Try GOMBAULT'S Caustic Balsam



A Safe Speedy and Positive Cure
The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle 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 circular.—
THE LAWRENCE-WILLIAMS CO., Toronto, Ont.

DR. LEAVITT'S

NEW CHAMPION

DEHORNING CLIPPER

The quickest working and the strongest clipper made.

Every Pair Warranted.

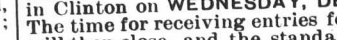
For list, etc., address,
S. S. KIMBALL,
577 Craig St., MONTREAL
7-y-om

TO HORSE BREEDERS

The ninth annual meeting of the Dominion Draught Horse Breeders' Society will be held in Clinton on WEDNESDAY, DECEMBER 11th. The time for receiving entries for Volume "C" will then close, and the standard of registration be raised to your crosses. Entries for registration under present standard must be sent to Secretary at once. The meeting will also consider a proposal for placing the Register under the supervision of the Government Inspector, in common with the other stock books of record of Ontario. Further information can be had from
JOHN McMILLAN, JAS. MITCHELL,
Pres., Constance P.O. Sec., Goderich P.O.

CARCILL HERD OF SHORTHORNS.

Stock from imp. bulls and imp. and home-bred cows. Catalogue now in printer's hands. Send for one.
H. CARCILL & SON,
CARCILL, ONT.
11-y-om



HORACE N. CROSSLEY,

PROPRIETOR OF THE SANDY BAY STOCK FARM.

Importers and breeder of SHIRES, HACKNEYS, AND COLLIE DOGS.



The above stud, though only commenced in 1890, has achieved unparalleled success at all the leading Canadian shows, such as Montreal, Toronto and London, also at the *GRAND WORLD'S FAIR*. The most notable in this stud are, the Shire horse Bravo II, 12335, winner of first at Toronto, Montreal and London, and also beating all Clydes at the latter show in the sweepstakes. Hackney, Fireworks No. 3602, winner at Chicago, Toronto and London. Shires and Hackneys always on hand for sale. For further particulars apply to the Proprietor, ROSSEAU, Muskoka. 10-y-om

FOR SALE—Shorthorns: A fine 18-months' old Bull; Heifers giving milk and younger ones. Also Fruit Farm, at Clarkson, 16 miles west of Toronto. Fifty acres of land, good house and outbuildings, 425 apple trees, 500 pear trees and other fruit. Possession immediately. Apply to C. G. DAVIS, Freeman P.O., Ontario. 17-1-y-om

AMPLE SHADE STOCK FARM

—BREEDS AND HAS FOR SALE—

Shorthorn Cattle, Leicester Sheep, Mammoth Bronze Turkeys.

All of the best quality, at reasonable prices. Inspection solicited. Stock shipped to order and satisfaction guaranteed. Address—
E. GAUNT & SONS, St. Helens, Ont.
13-1-y-om

PRIZE WINNER FOR SALE AT A BARGAIN

A beautiful Shorthorn Bull, 13 months old; sired by Wimple's Warfare 15392, who was bred by Arthur Johnston, Greenwood.
F. BIRDSALL & SON, Birdsall, Ont.
11-1-y-om

EDMUND WELD,

Barrister, Solicitor, Notary Public, Etc.

Monies loaned on real estate, at lowest rates. Investments procured. Collections made. Address, 87 Dundas Street, London, Ont.

BARGAINS

BARGAINS FOR ONE MONTH!

Ayrshire Bull Calves two to four weeks old, at \$15. Bulls fit for service in proportion; all from prize-winning stock at the large fairs.

Yorkshire Boars, weighing 175 pounds to 200 pounds, at \$12.

ALEX. HUME & CO., Hoard's Stn., Burnbrae P.O.

4 CHOICE 4

Hereford Bulls

Three Yearlings (thirteen to eighteen months), and one three-year-old.

The above are extra good specimens, and of unsurpassed breeding, and are for sale at reasonable prices. Also three yearling

SUSSEX HEIFERS.

(Sire and Dams imported.)

Stables on Waterloo Ave., at the end of the Electric Railway; five minutes from G.T.R. and C.P.R.

ALFRED STONE,
P. O. Box 499, 42 Gordon St., Guelph, Ont.

MAPLETON STOCK FARM

Parties wishing to purchase a fine young Shorthorn Bull, 11 months old, should call on me at the Fat Stock Show, Guelph. He is from the World's Fair milking strain, and a fine calf; will make a very large bull, and a neat one.

HERBERT WRIGHT, Box 47, Guelph, Ontario.
5-1-y-om

SHORTHORN BULLS

AND A FEW CHOICE Heifers

(got by the grand young sire Abbotsford 19446—) for sale at hard times prices. Drop a card for particulars to
H. & W. SMITH Hay, Ont.
Exeter Stn., G. T. R., ½ mile. 23-1-y-om

"Farmer's Advocate" Premiums! Every one good value.

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



DUKE (PLAIN).



DUCHESS (ENGRAVED).

Read What Those Say Who Have Earned It.

To the Farmer's Advocate:—
 DEAR SIR,—I received your watch as a premium, and it has given entire satisfaction in every way. I will always endeavor to further the interests of your paper by sending a few names now and again.
 Yours truly,
 JACOB STOLTZ.
 NEW DURDEE, October 23rd, 1894.





Editor of the Farmer's Advocate, London:—
 DEAR SIR,—The watch which you sent me for getting subscribers for your paper has given entire satisfaction, being an excellent time-keeper. I will try to get you some more subscribers.
 Yours truly,
 WM. C. WILSON.
 EAST ORO, ONT., October 23rd, 1894.

To the William Weld Co.:—
 DEAR SIR,—I received your letter the 23rd inst.; also, the watch came to me in good order, and I am very much pleased with it. I am endeavoring to get more subscribers for the ADVOCATE, but almost every farmer takes it around here.
 Yours truly,
 JOHN LONGMORE.
 CHATHAM, November 26th, 1894.

Either watch, with chain and charm, will be given to any subscriber sending us the names of three new yearly paid-up subscribers.

To find the size of ring required, take a narrow strip of paper that will draw tightly around the finger, forward same to us, and we will assure you a perfect fit.


CHILDREN'S OR MISSES' REAL STONE SETTING.

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|  |  |  |  |
| No. 1—Price, \$1.25.
1 Pearl, 2 Garnets.
2 New Subscribers. | No. 2—Price, \$1.25.
1 Garnet.
2 New Subscribers. | No. 3—Price, \$1.50.
3 Pearls.
3 New Subscribers. | No. 4—Price, \$2.00.
1 Pearl, 2 Garnets or Coral.
3 New Subscribers. |

LADIES' REAL STONE SETTING.

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|  |  |  |  |
| No. 5—Price, \$3.50.
2 Pearls, 3 Garnets.
5 New Subscribers. | No. 6—Price, \$3.50.
2 Garnets, 5 Pearls.
5 New Subscribers. | No. 7—Price, \$3.50.
1 Garnet, 2 Pearls.
5 New Subscribers. | No. 8—Price, \$2.00.
3 New Subscribers. |

SOLID GOLD KEEPERS.

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| No. 9—Price, \$2.00.
3 New Subscribers. | No. 10—Price, \$4.00.
6 New Subscribers. | No. 11—Price, \$2.50.
Wedding.
5 New Subscribers. | No. 12—Price, \$6.50.
Beautifully Chased.
10 New Subscribers. |

FOR ONE NEW SUBSCRIBER.

To any subscriber sending us the name of one new yearly paid-up subscriber we will give any one of the following premiums:

- Canada's Pride.
 - Canada's Columbian Victors.
 - Two Copies of Dairying for Profit.
- (BY MRS. E. M. JONES.)

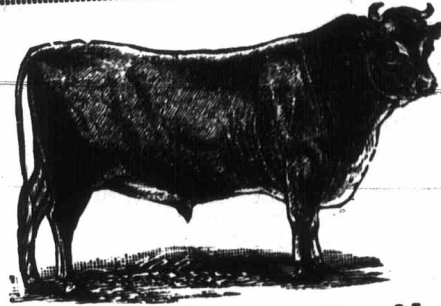
LIVE STOCK

To those desiring pure-bred stock of any breed as a subscription prize, we are prepared to supply same on most favorable terms.

How to get the FARMER'S ADVOCATE



FOR SENDING us the names of 3 new yearly paid-up subscribers we will give free, 12 months' subscription to the FARMER'S ADVOCATE.



A.J.C.C. Jersey Bull Calf

(SIX MONTHS OLD.)

For sixty new yearly paid-up subscribers, or thirty new subscribers and \$20 additional cash. Sire, Carlo of Glen Duart 15037; dam, Mina of Arklan 69221. This is a great opportunity to get a choice animal easy.

An Extraordinary Offer.

BELOW is given a brief outline of the contents of this handsomely illustrated Cook Book. See page 440, November 1st issue.

- | | |
|--|---|
| <ul style="list-style-type: none"> Food and Health. Foods in General. Table Etiquette. Morning Meal. Mid-day Meal. Evening Meal. Party Suppers. How to Carve. Selecting Meats. Soups. Fish. Shell-fish. Meats. Sauces for Meats. Poultry and Game. Pickles. Sweet Pickles. Vegetables. Butter and Cheese. Eggs and Omelets. Salads. Bread. Biscuits, Rolls, etc. Waffles and Griddle Cakes. Unleavened Bread. Grains and Mushes. | <ul style="list-style-type: none"> Cake. Layer Cake. Filling for Layer Cake. Frosting and Icing. Cookies and Jumbles. Gingerbreads. Crullers and Doughnuts. Pastry and Pies. Custards and Creams. Ice Cream and Ices. Puddings. Sauces for Puddings. Preserves. Jellies and Jams. Canned Fruits and Vegetables. Fruit and Fruit Sauces. Drinks. Confectionery. Menus for Every Month. Folding Napkins. Housekeepers' Hints. Keeping Fruits and Vegetables. The Toilet. Miscellaneous. The Laundry. |
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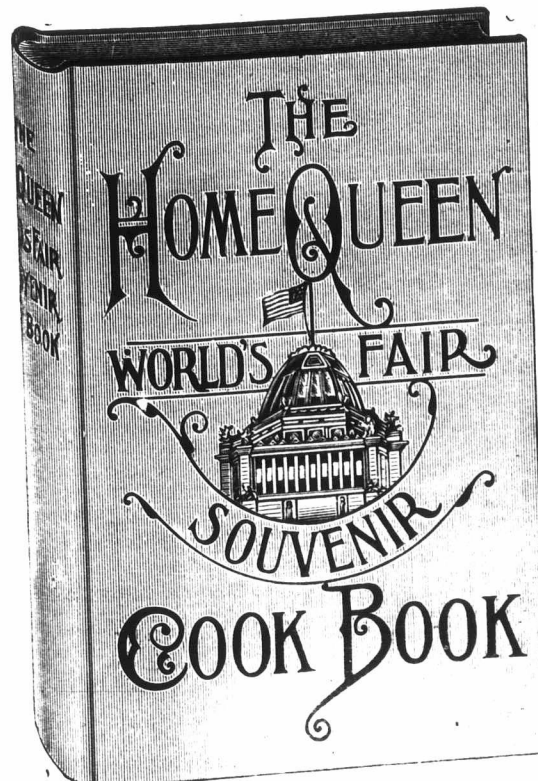
This premium will be sent to any subscriber sending us the name of only one new yearly paid-up subscriber.

IF PREFERRED, WE GIVE LIBERAL CASH COMMISSION.

How to Get a First-Class Collie



To any subscriber sending us the names of 10 new yearly paid-up subscribers we offer a young Collie, six weeks old or over, eligible to registration, and bred by Mr. R. McEwen, Byron, Ont. (See Nov. 15th issue, page 43, for fuller description.)



BOOK TABLE.

A new weekly journal, known as the "New York Produce Review," the first copy of which has reached us, promises to answer a good purpose in covering the interests of producers, shippers and sellers of dairy and poultry products.

Vol. XVII. of the Ohio Poland-China Record, containing pedigrees of boars Nos. 33419-38361, and sows Nos. 83062-90752, has been issued by the Secretary, Carl Freigau, Dayton, Ohio.

The Clydesdale Stud Book of Canada, Vol. VIII., has been received from the secretary and editor, Mr. Henry Wade, Toronto. The Vol. contains the pedigrees of stallions Nos. 2006-2188, and mares Nos. 1988-2219; besides the Scotch appendix pedigrees of 22 stallions and 59 mares.

A timely little work on "Pasteurization and Milk Preservation," by J. H. Monrad, Winnetka, Ill., has been sent us. It is gotten up in pamphlet form and contains 80 well-printed pages, illustrated throughout with 70 engravings. One of the most important chapters to the ordinary dairyman is on selling milk.

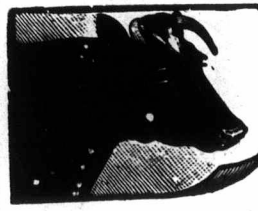
The Annual Agricultural Calendar for the year 1896 has been received from the publishers, John Wiley & Sons, New York. It is a reference book for agriculturists, prepared by Prof. F. W. Wall, of Wisconsin University.

A good thing in potato culture has come to us from England. It is a finely illustrated work known as "The Potato in Field and Garden," by R. A. S. E. Experimental Farm, Woburn, and published by W. A. May, Mark Lane Express office, 150 Strand, London, Eng.

Copp Clark Co., Toronto, send us a copy of their "Canadian Almanac" for 1896; being the 49th year of issue. It is steadily improving, growing larger and more comprehensive in contents, and this time wears a bright colored cover.

STOCK GOSSIP.

Messrs. W. & H. Jones, the well-known Poland-China breeders, Mt. Elgin, Ont., report the following list of recent sales: Two boars and two sows to Wm. Shepherd, Ashcroft, B. C.; boar and two sows to Samuel Arkell, Springfield, Man.; boars to Thos. Hillier, Leamington, Ont.; W. E. Reeder, Bothwell, Ont.; James Mutch, P. E. I., Chas. E. Downie, Wardsville, Ont.; I. H. Trask, Yarmouth, N. S.; boar and sow to R. N. Dale, Oakwood, Ont.; sow to J. Tuttle, Iroquois, Ont.; boar and sow to John Burns, Man.; boar and sow to Albert Holmes, Russell, Ont.; boar to W. F. Staples, Baltimore, Ont.; boar and sow to F. Hurren, Aspringe, Ont.; three sows to John Creighton, Napanee, Ont.; boar to W. J. Clemence, Bowmanville, Ont.; boar to Jas. Taylor, Richmond Station, Que.; boar to John McLaughlin, Knowlton, Que.; boar to John Campbell, Woodville, Ont.; sow to Henry Yecley, Bracebridge, Muskoka; boar to Jas. Le'bridge, Strathburn, Ont.; boar to Frank R. Slipp, Jacksonville, N. B.; boar and sow to Nathan McCann, Vankleek Hill, Ont.; boar and sow to Wesley Cavanagh, Frankville, Ont.; boar to John A. Creech, Randwick, Ont.

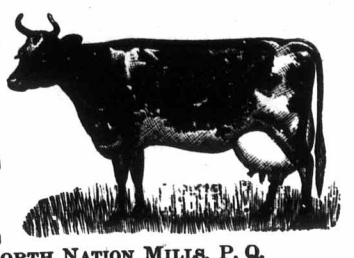


W. C. EDWARDS AND COY IMPORTERS AND BREEDERS.

PINE GROVE STOCK FARM, Rockland, Ont.

ELMBUR ST STOCK AND DAIRY FARM, CLARENCE, ONT.

Laurentian Stock AND Dairy Farm



NORTH NATION MILLS, P. Q. Ayrshires, Jerseys and Berkshires. Imported Emperor at the head of a grand lot of Imported and Canadian-bred Ayrshires; also St. Lambert Jerseys and Imported Berkshires.

SHROPSHIRE AND SCOTCH SHORTHORNS The imported Cruickshank bulls Knight of St. John and Scottish Sportsman are at the head of this herd of Imported and Home-bred Cows & Heifers of the most approved Scotch families. JOS. W. BARNETT, Manager.

Our flock is from the choicest English flocks, headed by the ram sent out by Mr. Thos. Dyke; also milking Shorthorns, with imported bull Pioneer at the head of the herd. HENRY SMITH, Manager.

FAT STOCK AND DAIRY SHOW

TO BE HELD IN THE CITY OF GUELPH, on December 10, 11 & 12, '95, Prize List can be obtained from the Secretary, HENRY WADE, Toronto.

UNDER THE AUSPICES OF The Agriculture and Arts Association of Ontario, The Sheep and Swine Breeders' Associations, The Dairyman's Association of Western Ont., And the Guelph Fat Stock Club.

Bargains for next 30 days in Holsteins, Jerseys, and Ayrshires. As I am overstocked and short of feed, I will sell the following choicely-bred stock at a great sacrifice: Four Holsteins, two bulls and two heifers, seven to ten months old, by Post-master-General 471, and from choicely-bred (imp.) cows, \$25.00 each. Two choice Jersey heifers, coming two years old, in calf to an imp. bull (if taken before January 1st) \$55.00 each. Three Ayrshire bulls, from seven to nine months old, \$20.00 to \$25.00 each. Will register stock in purchaser's name if taken soon. 23-1-y-o ALEXANDER WOOLLEY, SPRINGFIELD, ONT.

ISALEIGH GRANGE STOCK FARM, DANVILLE, QUEBEC.

WE have now on hand for private sale, choice stock of pure-bred AYRSHIRE and GUERNSEY CATTLE, SHROPSHIRE SHEEP, and IMPROVED YORKSHIRE SWINE. At our recent annual auction sale we disposed of a lot of our surplus stock, consequently we are in better shape to attend to the requirements of our correspondents. We are preparing for publication a permanent stock catalogue, which, when ready, we shall be pleased to mail to all applicants. CORRESPONDENCE INVITED. J. N. GREENSHIELDS, Proprietor. T. D. M'CALLUM, Manager, Danville, Que.

CLYDESDALES AND HACKNEYS

A FEW FIRST-CLASS CLYDESDALE Stallions, Mares & Fillies for sale. Prices to suit the times. Come and see them, or write for prices.

GRAHAM BROS., Claremont, Ontario. 25 miles east of Toronto, on C. P. R.

CRAIGIEBURN Stock Farm. BETHESDA P. O. G. A. BRODIE, breeder of Scotch Shorthorns. A few good young bulls for sale. Write me for prices and particulars. All orders and correspondence promptly attended to. Mention ADVOCATE. 21-1-y-om

SHORTHORNS. I have FOR SALE two Shorthorn heifers and two bull calves of fine breeding, fine colors, fine form and carriage, in fine condition, at fine cut prices. Also one or two cows. D. ALEXANDER, BRIDGE DEN, Lambton 5-y-o Co., Ont.

Shorthorns, Shropshires, and Berkshires. Having rented one of my farms, I will sell at very much reduced prices five young cows due to calve Sept. to Dec.; 40 ewes, one to four years old; my (imp.) Bradburn stock ram (first prize winner in England); 16 yearling rams and a choice lot of lambs; four sows, due to farrow in Sept. and Oct.; one boar, 12 months old; and six litters of springpigs. All registered. 15-y-om W.C. Pettit, Freeman P.O., Burlington Stn., C.T.R.

HAWTHORN HERD of DEEP MILKING SHORTHORNS. FOR SALE—Four young Bulls, all reds, descendants of 2nd Fair Maid of Hullett =9047=, with a record of 52 lbs. of milk and 2.54 lbs. butter in one day. WM. GRAINGER & SON, Londesboro, Ont. 13-y-om

JOHN MILLER, MARKHAM, ONT., Breeder of Shorthorn Cattle. Five choice young bulls also heifers by prize bull Aberdeen for sale, winners at the Industrial for best young herd of four; two of the bulls won second and third in their class. My stock are choice. Write for prices. 19-L om

A. & D. BROWN, BREEDERS OF IONA, ONTARIO, Scotch Shorthorns. Three very choice young roan bulls, and also a number of good heifers for sale at very reasonable prices; bred from the noted stock bull Warfare (imp.). 21-1-y-o

2 THOROUGHBRED COWS FOR SALE. CHEAP. Forward in calf to 1st prize bull Commander =18828=, and three young bulls at bargains. 12-y-om A. J. C. SHAW & SONS, Thamesville.

VALENTINE FICHT, MAPLE LEAF FARM, ORIEL, ONT., Breeder of Scotch Shorthorns, Clydesdale, and Shire Horses; Cotswold and Shropshire Sheep; Yorkshire Hogs. Young stock for sale at hard times prices. Young bulls supplied in carload lots. 7-1-y-om Write for particulars.

SIMMONS & QUIRIE. Shorthorn Cattle, Berkshire Swine—Money-making Sorts. The matchless bull, ROYAL SAXON =10537= (by Imp. Excelsior), 1st at Toronto, 1894, heads the herd, with BARMPTON M. =18240=, 1st, Toronto, 1895, by BARMPTON Hero =324=, in reserve. Female representatives of the celebrated Mina, Strathallan, Golden Drop and Myrtle families. The Berkshires are choice prize-winning stock. Easy to feed, quick to sell. Stock for Sale. C. M. SIMMONS, Ivan P.O., Ont. 1-1-y-om JAMES QUIRIE, Delaware, Ont.

THOS. PUGH & SONS, Breeders of Shorthorn Cattle and Shropshire Sheep of No. 1 quality. Young stock for sale at moderate prices. Write us or come and see our stock. WHITEVALE P.O. Locust Hill Station, C.P.R. Pickering, G.T.R. 15 1 L-o

SHORTHORN BULL CALVES FOR SALE. Four Reds and a rich Roan, including 1st and 2nd prize winners at different fairs. All good ones. Prices and terms easy. Come & see them, or write me. WM. RIVERS, Springhill Farm, WALKERTON. 13-1-y-om

For Sale Cheap. Yorkshire, Berkshire, Poland-China, Tamworth, Duroc-Jersey, Suffolk boars fit for service. Poled-Angus bulls, fancy poultry; all registered; also Ontario dogs. For particulars, write J. MCKENZIE, Scotch Block, Ont.

75 PER CENT. OF PRIZES WON AT LEADING FAIRS BY

Ingleside Herefords. Special offerings for next thirty days. Choice young bulls. YORKSHIRE and TAMWORTH SWINE. Fall litters at bargains. H. D. SMITH, Ingleside Farm, Satisfaction guaranteed. COMPTON, QUE. 17-y-om

HOLSTEINS AND YORKSHIRES. None but the best are kept at BROCKHOLME FARM, ANCASTER, ONT. R. S. STEVENSON, Proprietor. Write me for prices if you want first-class stock at moderate figures. Holsteins in the advanced registry. Yorkshires all recorded. 13-1-y-om

SPRING BROOK STOCK FARM! Great bargains in prize-winning HOLSTEIN-FRIESIANS, and Tamworth Swine. GET A PRIZE-WINNER! Stock must be reduced the next three months. Great choice in young bulls, also females of all ages. Breeding the best. Over 60 head of Tamworth Swine for sale. A.C. HALLMAN, New Dundee, Waterloo Co., Ont. 7-1-y-om

MAPLE HILL HOLSTEIN-FRIESIANS. Have you the blood of the great butter cows, DeKol 2nd, Empress Josephine 3rd, Mechthilde and Pauline Paul, in your herd? If not, why not? The demand for this blood exceeds the supply. Speak at once if you want some of it. 11-y-om G. W. CLEMONS, St. George, Ont.

GEM HOLSTEIN HERD 6 MONTHS' CREDIT GIVEN. BULLS, all Registered Holsteins; quality the best, and fit to head any herd; we have them all ages. Write for particulars to ELLIS BROTHERS, BEDFORD PARK P.O., ONT. 7-y-om

THE KEYSTONE DEHORNER. Cuts clean on all sides—does not crush. The most humane, rapid and durable knife made. Fully warranted. Highest World's Fair Award Descriptive Circulars Free. A.C. BROSIUS, Cochraneville, Pa. Can ship from Picton and Hamilton, Ont. 17-L-om

STOCK GOSSIP.

In writing to advertisers, please mention the Farmer's Advocate.

Capt. A. W. Young, Tupperville, Ont., writes:—I have received from quarantine my new Poland-China boar that was described in the Nov. 1st issue. He is all one could desire in type, size, shape, and color. The customers who secure his stock next spring will obtain something fine. I will breed a number of Wilkes sows to him for the season's trade, and sell to suit the times. I recently sold a pair of good ones to D. N. Windover, of Dresden, Ont.

H. E. Williams, Sunnyside Farm, Knowlton, Que., in changing his advertisement writes:—"The two heifers offered are the best I have ever raised, and are superior to any at the Montreal Exhibition this autumn. I was very successful at our local fairs; took all first prizes but two out of seventeen entries." These animals are desirable property. A well-bred, large-producing female introduced into a herd means a new start towards a high-class stock.

Dr. E. P. Ball, Lee Farm, Rock Island, Que.:—"Winter has again found us in the Province of Quebec, as it is snowing hard to night; and we cannot complain, as we have had a most beautiful autumn. Our Jersey herd is in for the winter, rather crowded but looking hale and hearty. We exhibited a herd at all the leading fairs in the Province and as far as Ottawa, winning our share of prizes, and were much pleased with result, as they were taken directly from pasture to first fair and were not fed for exhibition purposes as all which I believe is the true way to exhibit dairy stock. Have had a fine lot of fall calves from two-year heifers; they show well for the dairy. Although our sales were large in 1891 we find our stable again crowded, and have concluded to sell a draft of the young cows and heifers that will please anyone who appreciates a Jersey."

VALLEY HOME STOCK FARM.

A representative of the ADVOCATE recently called on Mr. S. J. Pierson & Son, of Meadowvale, proprietors of the Valley Home Stock Farm, which is situated a couple of miles north of Streetsville, and close by the Village of Meadowvale. The farm is well adapted for grazing purposes, as part of the property is low-lying land, and well watered by a never-failing stream. The stock comprises some thirty head of highly-bred Scotch Shorthorns (and embraces the blood of the noted Nonpareil, Cecilia, Jilt, and Mina families) and a small herd of choice-bred Berkshires. Nothing but the best imported Shorthorn bulls have stood at the head of this herd, including such ones as Tothills—11113—, Sir Redmond, and others of equal note; British Statesman (63729), imp., a magnificent three-year-old bred by the representatives of the late S. Campbell, Scotland; imported by John Isaacs, Markham, and got by Royal James (54973), and from Red Jess by Gladstone (43286). Mr. Campbell has said that he considered Red Jess one of the best milkers he ever owned in his herd. British Statesman is a grandly-topped bull, and of exceptionally fine conformation throughout. He is a rich roan in color, and has remarkable quality and finish for a bull of his size and weight. Probably one of the best cows of the herd is Mina Lass (imp.)—11657—, bred by the late S. Campbell, and imported by J. & W. Russell, Richmond Hill. She is a grandly modeled cow, and has been one of the best breeders in the herd. She is by Luminary (34715). A very fine bull calf about ten months old was seen from Mina Lass—a rich roan of capital build and good style, very much like his sire British Statesman. A very fine two-year-old heifer, Mina Lass 4th, also from Mina Lass, was seen, sired by Tothill. A number of Mina Lass' progeny have been sold by her owners at high figures, and she is still in her prime, and no doubt some grand stock will yet owe their origin to her. Jilt 2029— might also be numbered as one of the best—a large, well-developed cow of good quality and an extra good milker. She is by imported Reporter—6424—, dam Jubilee—17700—, by the noted imported Baron Lenton. Among the heifers of the herd we were particularly pleased with five beautiful yearlings—a short-legged, strong-boned, smooth-fleshed, handsome quintette they made. The Booth heifer, Sowerby's Lass, is a grand one—thick-fleshed, neat and compact; sired by Mina Lad 14877—, a son of Mina Lass; her dam being Sowerby's Bridal Wreath 22690—, of pure Booth blood; while the other four yearlings are from Nonpareil cows and by Village Boy 6th. In Cecilia 11th Mosses, Pierson have a remarkably fine twelve-months heifer, beautiful in form, rich roan in color, clean cut and stylish. Should she turn out as good another year as she promises at present she should win an honorable place in the best show rings. She is by British Statesman and from Cecilia 8th—2420—. A couple of good bulls now about two years old were seen that should be ready sellers, and several very promising young bulls and heifers in adjoining stalls by British Statesman and from Nonpareil & Cecilia cows. The Berkshires are of Messrs. Teasdale's or Snell's breeding, or directly descended from their stock. Berkshire Bill—2731—, a well-bred, useful boar, heads the herd. He had for his sire London Champion—1554—, and for his dam Minnie May—2519—. A very smooth, well-built boar about seven months old was seen, sired by Berkshire Bill and out of Oxford Maid. He is a trifle undersized, possibly, but what he lacks in quantity he makes up in quality. Oxford Maid is a true breeder, and is due to farrow again in January by Berkshire Bill. She was bred by Mr. Teasdale, of Concord, and was sired by the noted imported Enterprise, her dam being Oxford Girl 2373. Minnie May 2nd—3971— is also a good breeder, and has done good service in the herd, and is herself well come, being sired by London Champion—134—, dam Minnie May—2519—. Some good young sows were noticed, bred from her and now for sale—age seven months. Messrs. Pierson & Son intend holding an extensive sale some time in April next, of which due notice will be given, when they will offer for sale without reserve their entire herd of highly-bred Scotch Shorthorns, thus affording the public an excellent opportunity of starting a choice herd or replenishing their stock with some of the best blood in the country at their own prices.



DISEASED LUNGS CURED BY TAKING AYER'S Cherry Pectoral.

"I contracted a severe cold, which settled on my lungs, and I did what is often done in such cases, neglected it. I then consulted a doctor, who found, on examining me, that the upper part of the left lung was badly affected. The medicines he gave me did not seem to do any good, and I determined to try Ayer's Cherry Pectoral. After taking a few doses my trouble was relieved, and before I had finished the bottle I was cured."

Ayer's Cherry Pectoral Highest Awards at World's Fair. Ayer's Pills Cure Indigestion.

To Smokers

To meet the wishes of their customers The Geo. E. Tuckett & Son Co., Ltd., Hamilton, Ont., have placed upon the market

A Combination Plug of

"T & B" SMOKING TOBACCO.

This supplies a long-felt want, giving the consumer one 20-cent plug, or a 10-cent piece, or a 5-cent piece of the famous "T & B" brand of pure Virginia Tobacco.

The tin tag "T & B" is on every piece.

MAPLE LODGE STOCK FARM. We have very choice LEICESTER Rams and Ewes, and Shorthorn Bull Calves, for sale just now. JAS. S. SMITH, Maple Lodge P. O., Ontario.

ASHTON GRANGE HERD IMPROVED YORKSHIRES Imported or out of imported stock. We have a choice lot of young stock ready for shipping. We ship to order, and guarantee satisfaction. WM. TAIT, St. Laurent, near Montreal.

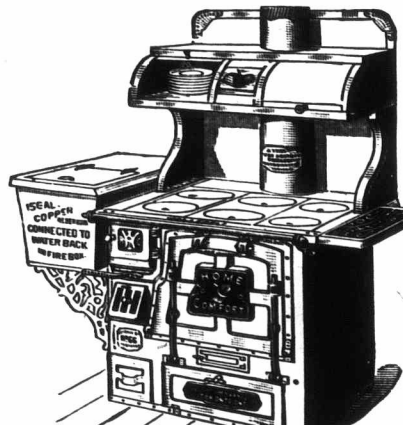
A Large White Yorkshire Swine. Specialty of Snell's breeding, or directly descended from their stock. Berkshire Bill—2731—, a well-bred, useful boar, heads the herd. He had for his sire London Champion—1554—, and for his dam Minnie May—2519—. A very smooth, well-built boar about seven months old was seen, sired by Berkshire Bill and out of Oxford Maid.

Over 250 pigs of different ages on hand of the most desirable type. Quality of stock guaranteed as described. All stock delivered free of express charges. J. E. BRETHOUR, Burford, Brant Co., Ont.

LARGE IMPROVED YORKSHIRES A choice lot of young pigs from four weeks to six months old, including boars fit for service and sows ready to mate. Prices to suit times. Satisfaction guaranteed. Apply to WM. GOODGER & SON, Box 160, Woodstock, Ont.

Webster's International Dictionary THE BEST CHRISTMAS GIFT. Standard of the U. S. Supreme Court, the U. S. Gov't Printing Office, and of nearly all Schoolbooks. Commended by all State School Superintendents. THE BEST FOR PRACTICAL PURPOSES, BECAUSE It is easy to find the word wanted. Words are given their correct alphabetical places, each one beginning a paragraph. It is easy to ascertain the pronunciation. The pronunciation is shown by the ordinary diacritically marked letters used in the schoolbooks. It is easy to trace the growth of a word. The etymologies are full, and the different meanings are given in the order of their development. The definitions are clear, explicit, and full, and each is contained in a separate paragraph. G. & C. Merriam Co., Publishers, Springfield, Mass.

HOME COMFORT ROLL OF HONOR. THREE GOLD And ONE SILVER Medal World's Industrial and Cotton Centennial Exposition, New Orleans 1884 and 1885. HIGHEST AWARDS Nebraska State Board of Agriculture, 1887. DIPLOMA Alabama State Agr'l Society at Montgomery, 1888. AWARD Chattanooga Valley Expo., Columbus, Ga., 1888. HIGHEST AWARDS St. Louis Agricultural and Mechanical Ass'n, 1889. SIX HIGHEST AWARDS World's Columbian Exposition, Chicago, 1893. HIGHEST AWARDS Western Fair Association, London, Can., 1893. SIX GOLD MEDALS Midwinter Fair, San Francisco, Cal., 1894. SILVER MEDAL Toronto Exposition, Toronto, Canada, 1895. ABOVE HONORS WERE RECEIVED BY WROUGHT IRON RANGE CO., 70 to 76 PEARL STREET, TORONTO, ONTARIO, and Washington Avenue, 19th to 20th Streets, ST. LOUIS, MO., U. S. A. FOUNDED 1864. PAID UP CAPITAL, \$1,000,000.



STEEL, HOTEL AND FAMILY RANGES. Above Style Family Range is sold only by our Traveling Salesmen from our own wagons at one uniform price throughout Canada and the United States. Made of Malleable Iron and Wrought Steel and will Last a Lifetime if properly used. Over 317,720 sold to Nov. 1st, 1895.

YORKSHIRE PIGS Of the best type and breeding. Pairs not skinned for sale at all seasons. J. M. HURLEY & SON Belleville, Ont. Box 442. 17-1-y-om

J. G. CLARK, Woodroffe Stock Farm, OTTAWA, BREEDER OF CLYDESDALE HORSES, AYRSHIRE CATTLE, and IMPROVED LARGE YORKSHIRES.

I now have on hand a number of choice young Yorkshires, both sexes, which I will sell at prices to suit the times. Pairs supplied not skinned. Correspondence solicited. 11-1-y-om

LARGE ENGLISH BERKSHIRES The sweepstakes herd at the Western Fair, London, 1885, the only large fair we showed at. Choice young stock for sale. Write me for prices before you order. My motto: "A Good Pig at a Fair Price."

T. A. COX, Sunnyside Stock Farm, Brantford, Ont. 19-1-y-om

SHORTHORNS: AND: BERKSHIRES FOR SALE. At very low figures. Choice boars ready for immediate use, and sows of fine breeding and quality from spring litters. Also a few good bull calves. For description and prices, address—JNO. RACEY, Jr., Lennoxville, Que. 17-1-y-om

BERKSHIRES AND YORKSHIRES! Choice stock for sale at reasonable prices. Orders filled in rotation. Inspection invited. Write for prices. THOMAS WATSON, Springvale, Ont. 11-1-y-0

ENTERPRISE STOCK FARM. FOR SALE—Large English Berkshires and Poland-China Swine. I am prepared to supply young stock of the above, either sex, any age. Pairs supplied not skinned. Prices moderate. Correspondence solicited. 11-1-y-0 E. CAVERLEY, Sine P. O., Ont.

ADVERTISE IN THE ADVOCATE.

FOR SALE! Some very fine young Berkshire Pigs; pairs not skinned.

Also COTSWOLD RAM LAMBS, EWE LAMBS, and BREEDING EWES. F. BONNYCASTLE & SONS, 11-1-y-om CAMPBELLFORD, ONT.

LARGE ENGLISH BERKSHIRES My herd are imported or bred from imported stock, and have carried winnings at leading shows for years, including sweepstakes over all breeds at last Guelph Fat Stock Show. Pigs of all ages for sale, pairs supplied not skinned. 9-y-om GEO. GREEN, Fairview, Ont.

Large English Berkshires! Our Berkshires made a clean sweep of all the first (11) prizes offered for Berkshires at the late Toronto Industrial Exhibition, including 1st and 2nd prizes for boar and four of his get, and four of her produce. We now have a fine lot of young pigs for sale from two to three months, also boars and sows about five months old. Write for prices. J. G. SNELL & BRO., Snelgrove, Ont. Brampton and Snelgrove Sts. 2-y-om

H. J. DAVIS, Woodstock, Ont., Breeder of Short-horn Cattle, imp. Large White Yorkshire and Berkshire Swine. Some very fine young bulls of good color and breeding, from 12 to 18 months old, for sale. Also a number of Yorkshire Boars old, for service, and a good lot of Yorkshire Sows ready to breed. Berkshire boars of the right stamp fit for service; also sucking pigs of both breeds for sale at moderate prices. Inspection invited, or write for description and prices. 8-y-om

ISRAEL GRESSMAN, New Dundee, —IMPORTER OF— Large - English - Berkshires 4-y-om

BERKSHIRE, Chester White, Jersey Red & Poland China Pigs, Jersey, Guernsey & Holstein Cattle, Thoroughbred Sheep, Fancy Poultry, Hunting and House Dogs. Catalogues S. W. SMITH, Cochranville, Chester Co., Pa. 17-y-om

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D. A. GRAHAM, Parkhill, Ont.,

Importer and breeder of Berkshire Pigs, offers for sale some choice Brood Sows of all ages; also a few grand young Boars fit for service, at prices to suit the times, and young pigs four to eight weeks old, and choice Bronze Turkeys. Write for prices. 21-L-om

W. P. HUFF, CHATHAN, ONTARIO,

BREEDER OF

CHOICE TAMWORTHS

Descended from the stock of John Bell, of Amber, and the Grant & Co's importation. Young stock of No. 1 quality always on hand. Some choice sows now ready to breed. Rock-bottom prices. 21-1-y-o



BARTON HERD OF TAMWORTHS

Choice stock of all ages and either sex, descended from imp. stock. Pairs and trios not akin. Write for prices. 19-1-y-om

W. T. ELLIOTT, Hamilton Market.

MR. H. REVEL

Woodlands Farm, INGERSOLL, - ONT.,

Breeder of

Choice Tamworth & Poland-China Swine

Young stock of all ages and either sex for sale at reasonable prices; bred from or descended from imported stock.



Tamworths for Sale.

Young stock of all ages and either sex descended from Grant & Co's importation. Stock choice, and price right. Prompt attention given to all orders and correspondence. JOHN L. REVEL, Putnam, Ont. 17-1-f-om

JOHN C. NICHOL, HUBREY, ONT.,

Breeder of Tamworths of the best type and breeding; some very fine Boars fit for service; choice sows ready to breed; and younger ones, both sexes; pairs not akin. Satisfaction guaranteed. Prices right. 21-1-f-o

HERRON & DAFOE, AVON P.O.

Importers and Breeders of

Poland-China, Chester White and Tamworth Swine

Young stock of the above, any age and either sex, imp. and descended from imp. times prices. All stock registered. Mention ADVOCATE.

CANADA: WILKES

Over 100 head - all ages, sexes and different families. DO YOU WANT A BARGAIN IN RED OR BLACK RASPBERRIES IN 1,000 PLANT LOTS. Write for prices.

CAPT. A. W. YOUNG, Tupperville, Ont. 17-y-om

THE FARGO HERD OF POLAND-CHINAS

Are of the choicest quality and breeding. I have young stock for sale from an imp. boar and imp. and home-bred sows, also a few choice sows in farrow to the imp. boar Black Joe. Those desiring a first-class article at the right price, should write at once or come and see my stock. OLIVER DRURY, FARGO, ONT. 13-1-y-o

OXFORD HERD OF POLAND-CHINAS

Our herd made a clean sweep of all the first prizes (\$9) at the late Toronto, Montreal and Ottawa Exhibitions. DARKNESS QUALITY, the unbeaten winner at the World's Fair, heads the herd. Stock for sale. Write for prices.

W. H. JONES, Mount Elgin, Ont. 15-y-om

SPECIAL OFFERING IN DUROC-JERSEYS

Four fine young boars (2 extra good) ready for service; five very fine young sows fit to breed, and choice lot young fall pigs. Very low prices to sell quick. PETER LAMARSH, Pioneer Herd, Wheatley, Ont. 5-1-y-om

DUROC-JERSEYS

of the best type and breeding. Choice young sows ready to breed. Boars fit for service, and younger pigs (both sex) now on hand. Hugh McClellan, Glenora, Ont.

Farmers' Scales

We make a specialty of house and barn Scales for farmers' uses. These Scales are all stamped and inspected by government officials, and the cost of inspection is included in the prices given below:

Table listing various types of scales and their prices, such as Butter Scales, Union Scales, Platform Scales, etc.

Our terms are cash with the order. Send money in registered letter or post office order. We ship promptly and pay freight on all orders over \$10 to Ontario stations. To stations outside of Ontario we make liberal freight allowances, according to the size of the order we receive. Address: STANLEY MILLS & CO., HAMILTON, ONT. 2-y-om

Advertisement for Dick's Blood Purifier, featuring an illustration of a horse and text describing its benefits for horses and cows.

Advertisement for THE COLEMAN PULPER, featuring an illustration of a pulper machine and text describing its uses for root pulpers, grain crushers, etc.

DUROC-JERSEY SWINE

We have the best and greatest prize-winning herd in Canada. Write for what you want. We have everything. TAPE BROS., Ridgetown, Ont. 18-2-y-om

DUROC-JERSEYS FOR SALE

Our stock is of the best quality and breeding obtainable. Special offer of young sows now ready to breed. Boars fit for service; and younger ones of both sex at hard-time prices. BERDAN & McNEIL, STRATHBURN, ONTARIO. 21-1-y-o

Summit Farm Herd of Duroc-Jersey Swine.

I still have a couple of nice Boars for sale, a couple of grand sows, and some young Pigs farrowed in July and August. F. W. TERHUNE, Box 690, BRANTFORD. 3-1-y-om

E. D. GEORGE

PUTNAM, ONT. Importer and Breeder of Ohio Improved Chester White Swine. The largest and oldest established registered herd in Canada. I make this breed a specialty, and furnish a good pig at a fair price. Write for prices. 15-1-y-om

ADVERTISE IN ADVOCATE

STOCK GOSSIP.

In writing to advertisers please mention the Farmer's Advocate.

H. Bollert, Cassel, Ont., should have no difficulty in obtaining his desire, expressed in his change of advertisement. To feed an inferior animal that gives no return for food consumed is worse than folly. Such females as Mr. Bollert offers should not only return a profit for their keep but produce stock that should sell readily for good prices.

John Miller & Sons, Brougham, Ont.: "We have been too busy to say much lately, but now, having time to speak, can still say that we have not had a person come this season with a view to buying but has purchased from us. We have, during the past four weeks, shipped three full carloads of rams, a lot of one ram and twenty-three ewes to Wisconsin, a lot of one ram and seventeen ewes to P. Q., and a number of small lots to many States and Provinces. We have a number of ram lambs sold but not away. We show at New York, and have several intending purchasers coming the following week."

R. B. McMullin, Goldsmith, Ont., writes: "I am pretty well sold out of pigs at present. I have a few of August, one of June and two of October farrows still on hand. I am breeding some first-class sows for March farrow, and I intend to import another sow or two this winter, bred for spring litters. I am well pleased with my returns from advertisement in the Advocate. My latest sales of Poland-Chinas are as follows: Sow (bred) to Wm. Allen, Comber, Ont.; boar (imported in dam) to Wm. Allen, Comber, Ont.; sow (imported in dam) to J. A. Hicks, Essex, Ont.; boar (imported in dam) to Mather, Ruscomb River, Ont.; boar to Joe Lalonde, Comber, Ont.; boar to John Dick, Goldsmith, Ont.; boar to Herman Pettit, Comber, Ont."

A. & G. Rice report: "The demand for Holsteins continues very good, owing, no doubt, to their success in the dairy test. We have sold the fine bull, Marcona's Pet's Baron, to Mr. Adam Greene, Diamond P. O.; he was awarded 1st prize at London. His sire is Siepkie 3rd's Mink Mercedes Baron, a World's Fair prize winner. He is also the sire of prize winners, being the sire of the 1st prize yearling bull and 1st prize three-year-old cow at the big fairs, and has many other good ones to his credit. The dam of the young bull is Marcona's Pet, record 54 lbs. in one day at five years old, and a good stamp of a dairy cow. Another young bull, dam Marcona's Pet Jewel, sire Siepkie 3rd's M. M. Baron, we shipped to Wm. Rice, Wawanessa, Manitoba. Another Bull, Daisy Texal's Sir Jewel, we sent to Mr. Thos. Johnston, Malakoff P. O., Ont. This is a son of Daisy Texal, one of the best sires in our herd; she won 2nd to Eunice Clay in Toronto milk test, 1894. She has given 13,000 lbs. milk in 11 months, and a regular breeder, three of her daughters winning prizes this fall at the great fairs: one a yearling prize, one a two-year-old, D. T.'s Sir Jewel is full brother to these three young cows, all being sired by "Jewel 3rd's D. Netherland," whose dam (Jewel 3rd) gave 2,378 lbs. milk in 30 days, and granddam, Jewel, one of the greatest cows of the breed, victorious wherever shown in the States, 1885 to 1888; record 100 lbs. milk in one day, 31 lbs. butter in seven days. We have also sold Catholine 5th's Sir Aggie Clothilde to Mr. Thos. Davidson, to head his fine herd. It will be remembered, Mr. Davidson bred Carmen Sylvia, that won so much honor for herself, her owner and her breeder, in the dairy test. The dam of this young bull, Catholine 5th, is a milker of the highest order, having given us 51 lbs. in one day, 200 lbs. in four days at three years old; and the sire's dam has a record of 82 lbs. 4 oz. milk in one day, and 21 lbs. 8 oz. butter in seven days. The purchasers of such bulls as these are bound to succeed. P. S. - We have sold two sow pig (Poland-Chinas) to Mr. Truesdale, Spring Valley, Ont."

MEADOWBROOK HERD OF JERSEYS.

Meadowbrook Farm is situated but a short walk from Shedden, Ont., and comprises some two hundred acres. Its proprietor, Mr. Edgar Silcox, is an enterprising and affable gentleman, and the visitor may be assured of a cordial welcome. On looking over the Jersey we found them in prime shape, a vigorous good constitution, and well marked for good handlers, and, from appearances, fine milkers. The Jerseys are kept for their utility as butter producers. Some sixteen cows are kept milking and a cream separator is used. The butter is neatly done up in one pound prints and shipped to Toronto, where the top prices are realized. Mr. Silcox claims his Jerseys bring him in from \$50 to \$60 a year each with butter besides raising the calves. Among the cows we would mention Rose of Oak Grove 58352, A. J. C. C., a nicely marked cow (bred by Samuel Smoke, of Canning, Ont.), a grand milker in many respects, with a rich, mellow skin, a fine silky udder and well-lined milk veins. She is sired by King Hugo of St. Lambert 16396, by Orloff's Stoke Pogis 11157. Dam of Rose of Oak Grove is Daisy of Maple Lane 44540, daughter of Mammie of Maple Lane. Rose of Oak Grove traces back to Stoke Pogis 3rd, Miller & Sibley's great bull for which they refused \$15,000. A good four-year-old is Lady May Stoke Pogis 75430, by Oak Grove Stoke Pogis 2295, dam Champion Zippie 50693. A fine two-year-old heifer from the same dam was seen in Lady Edna Hugo 86601, by King Hugo of St. Anne's, 81 per cent, same blood as Mary Ann of St. Lambert. A very promising heifer is the yearling May Butter Queen, by Robin of Meadowbrook 31965, and from Lady May Stoke Pogis 75430. This heifer is of fine conformation and a good handler. We also saw a beautiful heifer calf from same dam as the yearling and by Ida's Romeo. In another stall we saw Rose's Heifer, a beautiful four-year-old son of Robin of Meadowside, and from Rose of Oak Grove, winner of a diploma at London in the past. Rose's Heifer won first wherever shown this year, and, well handled, is the making of a grand bull. He has a beautiful head, a stylish appearance, a good skin, and shows quality all through. This bull is now for sale, as will be seen in Mr. Silcox's advertisement, and also a good nine-month-old calf from Lady Edna Hugo and also a Polon of Meadowside.

A Pension For Life!

FOR MEN AND WOMEN.

The Pension Bond Policy of the Manufacturers' Life guarantees an income for life of from \$100 to \$10,000 a year, from any age after 45. No medical examination required. Should death occur at any time before the Pension becomes payable, all the money paid by the assured to the Company will be returned to his or her beneficiaries.

This is the easiest, cheapest, simplest, and most convenient way of providing for old age. Same rates for both men and women. No medical examination required.

Write for particulars, etc.

The Manufacturers' Life Insurance Company,

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THE CELEBRATED "Maple Leaf Grinder"

Ten reversible plates, Relief Springs, Ball-bearing Plates, Shake Feed, grinds fine and fast.



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WHEN DEALERS SHOULD MAKE THEIR SELECTIONS OF GOOD PAYING AND GOOD SELLING

ARTICLES FOR 1895.



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Shrubs, Roses, Grape Vines, Small Fruits, etc. First-class stock. Leading Varieties; true to name. Also 100 bushels Joannette Seed Oats.

1-y-om CROW & PAGE, Ridgville, Ont.

Windsor Salt

For dairy use is the best. Perfectly dry and white and no lime in it. Better Cheese and Butter can be made with it than with any other salt. It pays to use it.

CHAMPION EVAPORATOR



THE G. H. GRIMM MFG. CO., HUDSON, Ohio, & MONTREAL, Quebec

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Wholesale General Merchants, 100 GREY NUN ST., MONTREAL

IMPORTERS OF Scotch Glazed Drain Pipes, Chimney Tops, Vent Linings, Flue Covers, Fire Bricks, Fire Clay, Portland Cement, Roman Cement, Canada Cement, Water Lime, Whiting, Plaster of Paris, Borax, China Clay, etc., etc.

MANUFACTURERS OF BESSEMER STEEL SOFA, - CHAIR - AND - BED - SPRINGS A LARGE STOCK ALWAYS ON HAND. WM. CURRIE. 7-y-o F. P. CURRIE.

USE RAMSAY'S . . .

VARNISHES.

HANDY CANS.

IN

THE JONES LOCKED WIRE FENCE

STOCK PROOF LOCK

The words of praise spoken of the merits of The Locked Wire Fence from the people that examined our exhibit at the leading fairs, also the testimonials that we have received from farmers and others that have the fence erected on their lots and farms, are very flattering indeed. And now, as the leading fairs are over, we are prepared to fill all orders that may be given us satisfactorily for lawn, farm and railroad fence. Our superior wire gates, which combine strength, lightness and durability, should be on every farm. Prices to suit the times. Agents wanted in unoccupied territory. Correspondence solicited.

THE LOCKED-WIRE FENCE COMPANY Ingersoll, Ont.

12-y-om

BOYS FOR FARM HELP

The managers of Dr. Barnardo's Homes will be glad to receive applications from farmers or others for the boys whom it is proposed to send out from England in several parties during the coming season. All the young immigrants will have passed through a period of training in the English Homes, and will be carefully selected with a view to their moral and physical suitability for Canadian life. Full particulars, as to the terms and conditions upon which the boys are placed, may be obtained on application to Mr. ALFRED B. OWEN, Agent, Dr. Barnardo's Homes, 314 Farley Ave., Toronto.

4-y-o

We want Every Farmer's Son or Daughter who desires to secure

THE Very Best,

BUSINESS EDUCATION to attend one of our Schools. CENTRAL BUSINESS COLLEGE, STRATFORD and TORONTO, ONT.

Unquestionably the leading Commercial Schools of Canada; advantages best in the Dominion. Catalogues free. Mention this paper. SHAW & ELLIOTT, Principals. 17-o

NORTHERN Business College

IS THE PLACE TO ATTEND if you want either a Business Education or a course in shorthand. The best in Canada. Full particulars free. Address, C. A. FLEMING, Principal, Owen Sound, Ont.

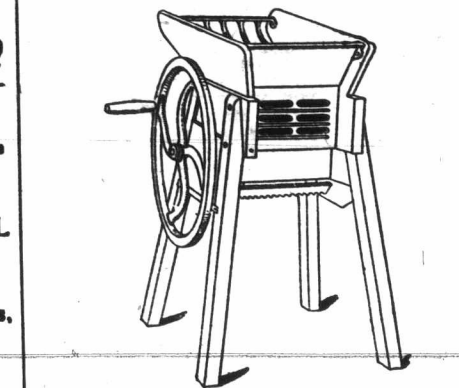
STOCK RAISERS!

We manufacture a full line of

Root Pulpers and Slicers.

(Single or Combined and for Hand or Power.)

SEND FOR DESCRIPTION.



DAVID MAXWELL & SONS,

St. Mary's, Ontario.

Mention FARMER'S ADVOCATE. 15-

The Improved KNITTER

Will knit 15 pairs of socks a day. Will do all Knitting required in a family, homepun or factory yarn. SIMPLEST KNITTER on the Market. This is the one to use. A child can operate it. We guarantee every machine to do good work. We can furnish ribbing attachments. Agents solicited.

Price, \$8.00. wanted. Write for particulars. Dundas Knitting Machine Co., Dundas, Ont. 17-y-om

THE JONES LOCKED WIRE FENCE

STOCK PROOF LOCK

The words of praise spoken of the merits of The Locked Wire Fence from the people that examined our exhibit at the leading fairs, also the testimonials that we have received from farmers and others that have the fence erected on their lots and farms, are very flattering indeed. And now, as the leading fairs are over, we are prepared to fill all orders that may be given us satisfactorily for lawn, farm and railroad fence. Our superior wire gates, which combine strength, lightness and durability, should be on every farm. Prices to suit the times. Agents wanted in unoccupied territory. Correspondence solicited.

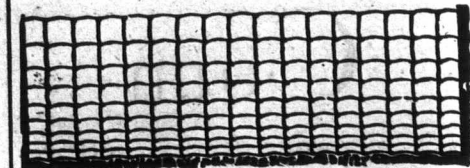
THE LOCKED-WIRE FENCE COMPANY Ingersoll, Ont.

12-y-om

BOYS FOR FARM HELP

The managers of Dr. Barnardo's Homes will be glad to receive applications from farmers or others for the boys whom it is proposed to send out from England in several parties during the coming season. All the young immigrants will have passed through a period of training in the English Homes, and will be carefully selected with a view to their moral and physical suitability for Canadian life. Full particulars, as to the terms and conditions upon which the boys are placed, may be obtained on application to Mr. ALFRED B. OWEN, Agent, Dr. Barnardo's Homes, 314 Farley Ave., Toronto.

4-y-o

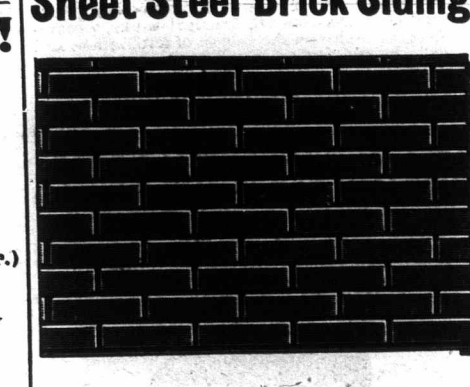


SAVED BY A DREAM.

Farmer Oak, setting posts for Page fence, is set upon by another agent, with a machine to "make it yourself, just as good," etc., etc., who soon talks him to sleep. He dreams he's back at the World's Fair, almost famished, can't live without a good cup of coffee, quick. Meets stranger with machine. "You buy the green berry, anything cheap, roast carefully, grind in this: p-e-r-f-e-c-t-l-y-d-e-l-i-c-i-o-u-s." "Oh yes, of course, you must steep it, and sugar and cream it, takes a little time, but it's so cheap." Here the nightmare kicks the agent off the field and brings farmer O. to his senses, and he'll use the Page. Circulars, and a copy of our illustrated monthly paper gladly sent to any address.

The Page Wire Fence Co. of Ontario, Ltd., WALKERVILLE, ONTARIO.

Sheet Steel Brick Siding.



AS WARM AS A BRICK WALL. CHEAPER THAN WOOD. ENTIRELY WATER, WIND, STORM, FIRE AND LIGHTNING PROOF.

We manufacture any kind of desirable Sheet Steel Siding, Sheet Steel Roofing, and Sheet Steel Ceilings.

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3-1-y-o

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Metallic Roofing Co., Ltd.

SOLE MANUFACTURERS, TORONTO. 11-y-o

9 CORDS IN 10 HOURS

RUNS EASY. Saws down trees. Carried easily. Weighs only 41 lbs.

BY ONE MAN, with the FOLDING SAWING MACHINE. It saws down trees. Folds like a pocketknife. Saws any kind of timber on any kind of ground. One man can saw FIVE times as much as two men in any other way, and do it EASIER. 97,000 in use. Send for FREE illustrated catalogue showing latest IMPROVEMENTS and testimonials from thousands. First order secures agency. Address FOLDING SAWING MACHINE CO., 62-66 S. Clinton Street, Chicago, Ill.

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