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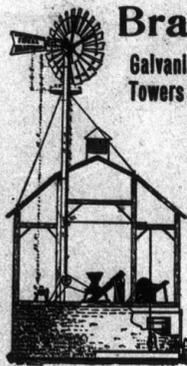
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VOL. XXXV.

LONDON, ONT., AND WINNIPEG, MAN., NOVEMBER 15, 1900.

No. 514

EDITORIAL.

The Bacon Industry.

The growing time, so much spoken and written of during the last few years, applies with no greater aptness to any other branch of Canadian agriculture than to the production of bacon hogs. Within the last decade, enormous strides have been made in export of hog meats. There was exported out of Canada, of bacon, hams and pork, during the years ending June 30th:

1890	- - - -	\$645,360
1899	- - - -	\$10,473,211

—an increase of \$9,827,851, or over 1,638 per cent., in nine years. Nor has the growth of trade been spasmodic, but of gradual development, brought about by the creation of its own demand, which could not have been without the co-operation of hog raisers, feeders and packers, in producing what the markets demand. It is true that when the supply is excessive, we hear of the lack of the proper type and weights, but the trouble in this direction is finding its own cure in the packers grading as they do the prices according to quality. The Canadian farmer is a business man, not slow to make changes that will result in greater profits in his business, but he is not the one to produce a more expensive product unless he gets a corresponding higher price for it. While earnest attention is being given to the production of the higher type of hog, we believe more deliberate consideration and experiment are devoted to the questions of cheaper foods, and more appropriate combinations of these. Along with the feeding of the hog is very closely associated his housing and yarding, which at the season of the year just upon us requires more attention than during the months that are past; in fact, the feeding and the care of fall and winter litters is about the most troublesome problem met with on the average hog-breeding farm to-day.

In order to get for our readers the best possible information upon this and other important branches of hog-raising, we secured from leading Canadian packing houses the names of farmers who supply them regularly with considerable quantities of bacon hogs of the correct type, free from objectionable features to the high-class trade. A number of these men have been heard from and their letters appear in the Stock Department of this issue, and will bear careful study. We are not surprised to notice the prominence given to the use of succulent and vegetable foods other than grain, also to the necessity for liberal exercise, especially for all breeding animals, and growing stock up to the finishing period and to the deferring of weaning the litters until they are well started in life. It will be noticed that all the breeders do not agree on some of the essential points, as, for instance, one writer, hailing from Wellington Co., recommends weaning at four weeks old and excluding roots and other coarse foods from the rations. It has occurred to us that if this writer sells 200-pound pigs, as he claims, at six months old, either his son or hired man manages their feeding and care, and does not report fully the methods employed.

The real value of succulent food for swine cannot be measured by simple gains in weights of pigs given such food. Undoubtedly, where animals are confined to a pure grain diet, the digestive tract is more torpid and sickness is more likely to occur than when succulent food is given. Then, the digestive organs are more active and natural in movement, and the body is better prepared to resist disease than when pure grain food is fed. The influence of this succulent food on sows in pig or suckling pigs cannot be measured by the scales, but the general testimony of practical feeders of experience is that such diet promotes easy parturition,

a generous milk flow and vigorous offspring. Pigs that are to be fattened in a short period of feeding do not perhaps need roots in their diet, though no doubt it would be to their advantage, but breeding stock, both male and female, and suckling sows, will certainly be materially benefited by summer pasturage and roots in winter.

In his work on "Feeds and Feeding," Henry quotes at considerable length certain Danish feeding experiments on pigs. In reference to the use of roots: In comparing mangels and grain, all the lots received skim milk or whey in addition to grain and roots, excepting two lots to which an equivalent of additional roots was given. It is shown that ten pounds of mangels more than equal and eight pounds about equal one pound of grain in trials. The quality of the pork produced by the different lots was very satisfactory. Even where one-fourth the daily feed was given in the form of mangels no ill effect was noted.

The preparation of foods is shown by the writers to be of importance, as well as the use of mixed grains, which we are persuaded is of greater importance than is generally supposed, making a better-balanced ration and promoting health and growth of bone and muscle. Fine grinding is favored, a number recommend soaking the chop for some time before feeding, and in one or two cases it is recommended to administer the feed in a warm condition. The methods of feeding roots, and the kinds preferred, also differ according to the practices of these men. Whole mangels are quite in favor, especially for a noon feed, but one writer estimates them as valuable more as an appetizer than a food.

It is remarkable to notice that grades or crosses are generally recommended, rather than pure-breds. This may be accounted for by the fact that pure-bred sows of good type generally cost more money than grades. The Tamworth sire is evidently a general favorite, but the blood of the Yorkshire, Berkshire and Chester White have their admirers, and it is important that only pure-bred sires be used.

The matter of hog-pen floors and walls is of no small moment, especially for winter quarters, as it seems to depend a good deal on these that the animals escape rheumatism and coughs. The wooden walls, with cement floors covered with lumber, are generally preferred, and a liberal use of bedding is recommended. One writer, who has had no trouble from rheumatism or other ailments in his pigs, allows them the run of a manure shed once a day for exercise.

While very little is said regarding the use of such condiments as sulphur, charcoal, salt, etc., we notice most of the writers recommend them in practice, some of them being mixed with the feed and others left where the hogs can help themselves. It is evident these products have a place in pig feeding, but we doubt the advisability of mixing them with the food, except perhaps charcoal (of which an excess can do no harm), as their virtue undoubtedly lies in their corrective influence. This being the case, the pig should be allowed his own discretion in their use, since it is the needs of the system that prompt the craving for them, while an excess is liable to derange the digestive organism.

Not in this issue, but in that for July 2nd, 1900, it will be remembered important evidence is given by Mr. E. D. Tillson on the subject of raising winter litters. After building a first-class new brick piggery, in which no expense was spared in making the place warm, dry, well lighted and ventilated, it was found that even in this seemingly model structure losses would occur in spite of the most careful management as to feeding, etc. This led to the use of small eight-by-eight feet outdoor pens in yards about fifty feet square. The sow and pigs are put into these when the youngsters are about three weeks old, and allowed free access to pen and

yard as desired. In cold weather a canvas covering is hung over the entrance of the pen to allow the pigs to pass in and out and still exclude the cold wind. Here the pigs keep healthy, thrive and grow rapidly, none of them ever dying except something very uncommon happens to them. Now, it is probable that certain readers have discovered other special or unusual methods of preventing winter loss or unthriftiness in winter or late fall litters, and we hope to hear of these and other precautions, not only to avoid loss, but to promote rapid gains and greater profits in producing hog products for the markets of the world.

Economy in Feeding.

The disposition to defer the day of commencing to draw on the winter store of provender is common to all farmers. While it is well to be careful that nothing is wasted, it is quite possible to be saving on one hand and wasteful on the other, with the result that the balance is against us. If the late fall months are favorable to the growth of grass, and the weather mild, as has been the case in most sections of Canada this year, there is, as a rule, little need of supplementing the pastures by a call on the winter stores, except in the case of milking cows, before the end of November. The coming of cool weather, and the consequent relief from the plague of flies which torture animals in summer, is in favor of the stock, and as long as the fields afford a fair bite of grass they may do well; but it should be remembered that young grass which comes up after autumn rains has not all the nutritive qualities of June grass, and when touched by frost it is still less nutritious, so that if it is desired to hold the flesh and condition that has been gained, there may be, and generally is, true economy in commencing to feed a little fodder before winter in real earnest sets in. Even access to a stack of straw is better than no provision to tide over the critical period between late autumn conditions and winter feeding, and animals, knowing instinctively the need of more substantial food than they can find in the fields, will help themselves to dry fodder if it is at all palatable and within their reach. Milking stock, of course, should be stabled at night when frost and cold weather comes, and fed a half ration at least, while cattle intended for beef should not be allowed to lose weight, which can only be regained by more expensive feeding later on. When hay is scarce, as is the case in many districts this year, the temptation is strong to put off the period of winter feeding longer than would otherwise be done. In this case, if a supply of ensilage or of cured cornstalks has been provided, the contingency is well met; but where such wise provision has not been made, the best use possible should be made of the straw and chaff in the barns as a substitute. To our mind, it is a good plan, where it is feasible, when threshing, to save the chaff separate from the straw, for early winter feeding, as any meal that is fed to cattle in the stables will give much better results if given in combination with chaff, cut straw or cut-corn fodder or ensilage, by reason of its being eaten slowly, masticated thoroughly, well mixed with saliva, and thus better fitted for digestion. One of the advantages of saving the chaff is that it comes handy for early feeding before winter work has set in and while the means for cutting straw may not be convenient or the time of all the hands may be taken up with outdoor work on the farm. Even where ensilage is provided, on which to feed any meal that is given, there is economy and profit in feeding it in combination with chaff or cut straw or hay, making more nearly a balanced ration and at the same time utilizing a large amount of rough fodder, often having much more nutriment in it than it is commonly credited with, and which may be rendered palatable by mixing it with the ensilage a few hours before feeding time, the straw being softened by the juices

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13. 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.
14. 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.

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THE WILLIAM WELD CO.,
LONDON, CANADA.

of the ensilage, and, becoming slightly heated, the aroma of the silage permeates the whole mixture, which may be improved by the addition of pulped roots. If the farm buildings are only moderately conveniently arranged, this preparation of the feed can be carried out with no great expenditure of time or labor, and will pay well for the doing. By thus utilizing straw, which if early cut and well saved is not to be despised as feed, hay may often be sold to advantage, and, if need be, the proceeds profitably invested in bran, oats or other grain or in corn or oil cake. When, for instance, the market price per ton of hay and bran are about the same, it is well worth considering whether a ton of hay may not be saved by substituting straw to some extent as part of the feeding ration and investing its value in bran and oats or corn, and thus securing a better-balanced and more nutritive ration and one better calculated to give profitable returns from milking cows or by building up the frame and flesh in the case of young stock of any class. The possible objection that cutting straw involves a considerable outlay for machinery and expense for extra labor is met by the reminder that the power needed for this purpose may be utilized for several other uses as well, but where one objects to the outlay for the requisite machinery, the necessary outfit may readily be hired for a day at a time two or three times during the winter to cut all of this sort of feed that is needed and do considerable grinding of grain besides. Thanks to the revelations of scientific investigation, much light has in recent years been thrown upon the subject of the intelligent and economical feeding of live stock, and it is safe to say that a more general and careful study of the subject by farmers in the light of some of the excellent books written by competent authors on this theme will be helpful to all who are willing to

learn. The time has quite come when farmers, in order to make the most of the means within their reach, must study the science of their business, which simply means seek to know more about the principles which govern and influence the growth and development of the plants and animals on which their income depends, and we are quite sure that the intelligent application of the knowledge thus gained will satisfy them that it pays to mix the meals of farm stock not only with fodder, but also with or by the use of brains.

The Argentine Opportunity.

"With the ports of this country closed to importations from the United Kingdom, the attention of Australian and North American breeders will be doubtless directed to this as a market for pure-bred stock, and it will be matter for surprise if they let such an opportunity escape them. Australian cattle ought to do well here, and the process of acclimatization should be an easier one than from the colder climates of the north. Californian Merinos too should have the same advantage, while in sheep it is well known that Australasia can produce an animal hard indeed to beat."—*Review of the River Plate.*

Dr. Saunders at the Paris Exhibition.

Dr. Wm. Saunders, Director of the Dominion Experimental Farms, Ottawa, who has been visiting the Paris Exhibition in connection with his official duties as one of the commissioners for the exhibition, has returned home. The special work assigned him was the bringing together of specimens of the agricultural and fruit products of the Dominion. During his absence he has also spent some time in other parts of France and Great Britain, inquiring into the progress of agriculture and horticulture in these countries, and has visited as many of the agricultural schools and experiment stations in both countries as was practicable. He expresses himself as much pleased with the excellent display made by Canada at the Paris Exhibition, particularly in agricultural products and fruit. The exhibits of grain were quite imposing, and had been most artistically arranged by Mr. W. H. Hay, of the Experimental Farm staff, who visited Paris early in the year for that purpose.

The agricultural products of the Dominion are shown in provincial groups, by a series of trophies; also, very effectively, in a general way by a grand central trophy, placed in the middle of the first half of the Canadian court. This central trophy is built up with a large series of glass containers of different sizes, showing excellent samples of clean grain from all the principal grain-growing districts in Canada, including a most excellent display from the Experimental Farms. With these were associated a first-class showing of fine sheaves of grain in the straw, also representing the many grain-producing sections of the Dominion. This important part of the exhibit attracted much attention and was very much admired.

The fruit display, a part of which was in the Canadian Pavilion, and the other and larger part in the Horticultural Hall, has been the subject of most favorable comment. The large collection of about 1,200 glass jars of pears, apples, plums, peaches, cherries, and small fruits, which were put up in antiseptic fluids, has been a great success. The fruit has preserved its form and character, and, to a very large extent, its natural appearance, and has been a source of constant wonder to visitors. That such magnificent specimens of fruit could be grown in Canada, many could scarcely credit. The exhibit, however, speaks for itself, and was a constant advertisement to the genial character of our summer climate and the capabilities of the country to produce fruits of the finest and most luscious quality.

The show of fresh fruit, including a large variety of our best sorts of winter apples, the growth of 1899, was continued all through the summer and up to the close of the exhibition, and awakened much interest. This constant exhibit was made possible by the cold-storage arrangements perfected under the direction of the Hon. Sydney Fisher, Minister of Agriculture, by Prof. J. W. Robertson. This cold-storage plant, which was placed under the Canadian building, worked admirably and rendered most efficient service, not only in preserving the more perishable of the food products brought together by Prof. Robertson, of which there was an admirable exhibit, but also rendered possible the preservation, in perfect condition, of the fine display of fresh fruit brought together by Dr. Saunders. The crispness, juiciness and high flavor of these fruits, shown so long past their normal season, deserved and received the most favorable comment.

The arrangement of the fruits, fresh and preserved, in the Horticultural Hall, which was made by Mr. Robt. Hamilton, of Grenville, assisted by Mr. Hay, was most effective, and to the assiduous attention given to this collection by Mr. Hamilton and by Mr. H. S. Knowlton, of Knowlton, Que., a large measure of our success in obtaining awards may be attributed. The specimens on exhibition were examined from day to day, by these gentlemen, and as soon as any of them showed sign of deterioration or shrivelling from exposure in a

heated atmosphere, fresh specimens were brought from the cold-storage chamber to replace them. At the time of Dr. Saunders' first arrival in Paris our best winter apples were represented by 18 varieties, all in good condition. When he was leaving, however, on the 6th of October, the number of varieties shown was reduced to 8 or 9 sorts. Prior to this, on October 4th, the large collection of fresh fruits made under instruction of the Minister of Agriculture, in different parts of the Dominion, and forwarded by cold storage, arrived in Paris. Those came in splendid order, and with the help of a second supply, since received, will insure a large and varied exhibit of Canadian fruits to the close of the exhibition.

Mr. A. McD. Allan, of Goderich, Ont., who has lately arrived in Paris to assist especially in promoting the fruit trade, had, before Dr. Saunders left, made several large sales of fruit to wholesale dealers in Great Britain and different parts of Europe, and was negotiating further business in this direction. A careful study of the conditions in which our Canadian fruits have reached the Paris Exposition, under different methods of packing, has been made by Dr. Saunders, and he hopes to be able to put the information gained to practical value in furtherance of the fruit-growing interests of this country.

The more important food products of Canada, of which a large collection was brought together by Prof. Robertson, have been arranged and looked after by Mr. W. A. Mackinnon, of the Commissioner's branch of the Department of Agriculture, who has rendered very efficient service.

The mineral and mining interests of Canada have been ably looked after by the Director of the Geological Survey, Dr. Geo. M. Dawson, as shown in the magnificent collection displayed in the Canadian Pavilion. This exhibit has furnished the most convincing proof of the great extent and varied character of the mineral resources of Canada, which must be highly beneficial to this country.

Our fishery products and the attractions offered to sportsmen by the variety of game in different parts of this country, were ably shown in the fine display arranged at the entrance of the Canadian court, under the superintendence of Colonel Gourdeau. In this connection, Mr. Andrew Halkett, of the Department of Marine and Fisheries, has, under Col. Gourdeau's guidance, rendered very efficient service.

The collection of forest products shown in the large building devoted to this purpose, in which all our more important woods are illustrated by both the raw and manufactured material, has drawn many encomiums. These have been brought together mainly by the persevering efforts of Mr. James M. Macoun, of the Geological Survey, and have been arranged tastefully and with good judgment. This collection has awakened much interest in our timber productions, and from the many inquiries which have been made, it is believed that, as a result of this display, new openings will be made in connection with the trade of Canada in timber.

To the Commissioners who have succeeded in bringing together the excellent display of Canadian manufactured goods, much credit is also due for the energy and good judgment they have brought to bear on this work, and for the tasteful manner in which the exhibits have been arranged.

While in Paris, Dr. Saunders attended the Congress of Pomologists and the Congress of Botanists. He also visited Ussy, in Normandy, a great center for the growing of forest and ornamental trees and shrubs, for the purpose of gaining information on this branch of industry, and also, at the same time, selecting a supply, for the Ottawa Improvement Commission, of young stock for planting on the boulevards which are being laid out in connection with the new drives now under construction in that city. A fine selection has been made, consisting of over 20,000 trees and shrubs suitable for this purpose, including evergreens and deciduous sorts, which will be forwarded in the spring. A visit was also made to Brittany for the purpose of studying the results which have been obtained from tree planting on the drifting sands of the seashore in that part of France, and some useful lessons learned. Some of the caves in the outlying parts of Paris were also visited, where mushrooms are extensively grown.

While in England, Scotland and Wales, many of the stations where experimental work in connection with agriculture is conducted, were visited by the Director, and the progress made in this direction noted. The meetings of the British Association, held at Bradford, England, early in September, were also attended, where opportunities were afforded of explaining the nature and progress of experimental agriculture in Canada.

Some new varieties of cereals were secured, both in England and from among the exhibits of foreign countries at the Paris Exposition, for test in Canada. Many new sorts of trees, shrubs and plants have also been obtained for trial at the Experimental Farms.

Pleased with the Watch.

Mr. F. E. Pollard, Leeds Co., Ont., writes:—"My son received the No. 4 watch from you on Oct. 24th, and wishes to thank you for same. He thinks it better than he expected, and is very much pleased with it, and is anxious to get more subscribers for you."

STOCK.

Our Scottish Letter.

The past few weeks have been phenomenal ones in the live-stock world. We have got clear rid of all suspicion of foot and mouth disease, and the Board of Agriculture has climbed down from an untenable position with as good a grace as possible. The whole country is declared free of the scourge, and we are breathing freely once more. Here in Glasgow we have also got rid of the bubonic plague scare, and as with foot and mouth further north, there is a general feeling that a deal too much was made of the business. If it does nothing else, the scare has succeeded in drawing attention to the evils of "wakes," and this is a decided gain. There is something heathenish about wakes, and hardly any means better fitted to spread disease could be imagined. Another plague or "scare" in the shape of a general election has also been got over, and the country again breathes freely. Agricultural topics have not bulked largely this time, and if farmers get little from next Parliament they will at least know that they asked for little.

The main features of the past three weeks in the agricultural world have, however, not been these things, but the autumn series of

SHORTHORN SALES.

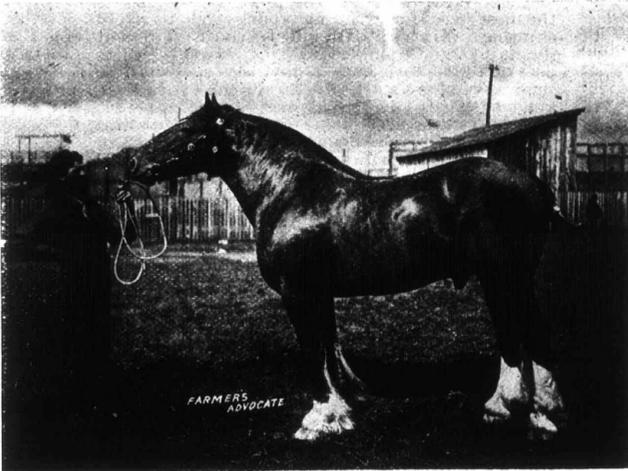
Nothing to equal these have ever before been seen in Scotland, and extraordinary averages for bull calves have been made by Mr. Duthie, Collynie, and Mr. Marr, Uppermill. The attendance at the series of sales conducted by Mr. Fraser, of Macdonald, Fraser & Co. (Ltd.), has been very large, visitors being present from the United States and Canada, as well as from all parts of the United Kingdom. The bull calves were scarcer than usual this year, and possibly this was one reason for the extraordinary prices made by them. I do not know that they have ever been much better, but possibly it is a mistake to say that they were the best lot ever offered from the two great Scottish fountain-heads of Sittyton blood at the present day. In England there is the famous Bapton Manor herd, and as long as it exists the laurels for Sittyton will not all go north. Mr. Duthie had an average of £150 8s. 6d. for 19 bull calves, and Mr. Marr got £126 3s. 2d. for 13, the average overhead for the 32 sold on that one day being £140 6s. 8d. apiece. No such trade was ever before recorded even in the palmiest days of the Shorthorn craze, and yet, although Sittyton deserves most of the credit, it is to be observed that the most successful sire was not a pure Sittyton, but an Inverquhomery bull, named Silver Plate 75633, whose breeding is Sittyton with an outcross of Bates. The foundation of the late Mr. Bruce's famous herd was a pair of large-framed English Shorthorn heifers, and all through its honorable history the late Mr. Bruce endeavored to maintain the traditions connected with this foundation. The result was seen in the greater style and gaiety of the Inverquhomery stock, and many considered the best lot of cows in Aberdeenshire, Sittyton included. Silver Plate is a white bull, now owned by Mr. Deane Willis, who has the Bapton Manor herd, and the four calves after him, sold at Collynie the other day, made the extraordinary average of £271 13s. 9d. One of them, Silver Mist, a roan, made £315, and I believe goes to Canada. Another, Silver Bell, made £283 10s., and went to Mr. Harrison, Gamford, Darlington. This was regarded as the best calf in the sale, but as he was sold early and before the fever was at its height, he did not make the highest price. This, however, was made by another son of Silver Plate, named Violet Victor, also a roan, for which Mr. P. L. Mills, Ruddington, paid £372 15s. Another capital sire is a young red bull named Lovat Champion 74948. For him Mr. Duthie paid 200 gs. as a calf at Inverness in 1899, and four of his gets made an average of £117 apiece. The greatest number of calves sold by any one sire was seven: these were from Mr. Marr's herd and were got by the good old bull, Wanderer. These made £112 19s. apiece. The second highest price at the sale was £367 10s., paid by Mr. Jolliffe, from Stratford-on-Avon, for Primrose Pride, a fine young bull by the great champion, Pride of Morning, owned by Mr. Duthie. The highest price made by Mr. Marr's calves was £211 10s., paid by Mr. Ward, from Ohio, for Spicy Marquis.

The second days sale was held at Newton, when drafts were disposed of from three noted herds, those of Mr. Gordon, of Newton; Mr. Wilson, Pirriemill, and Mr. Graham Stirling, of Strowan, in Perthshire. Twenty-one head from Mr. Gordon's herd, which has bred several champions in recent years, made £41 8s. apiece, and the average price of two two-year-old heifers in this lot was £108 3s., while three bulls averaged £63 7s. An equal number from Pirriemill made £32 13s., but these were six yearling heifers and fifteen bull calves. The average price of these was £23 7s. 7d., a figure more within the range of ordinary mortals than those current at the Duthie-Marr sale. From Strowan, only

eleven head were sold, and the average price of these was £32 7s. 2d. Three two-year-old heifers in this lot made an average of £51 16s. The sale on the third day was held at Sanquhar Mains, near Forres, when drafts from two of the best herds in the north, owned by Messrs. Law, were sold and made splendid averages. Forty-four head from Mains of Sanquhar went through the ring, and their average price was £53 11s. 8d. Here again the heifers were in favor, 12 two-year-olds making an average of £69 9d., and 9 yearling heifers £73 7s. 8d. apiece. The six heifer calves made £37 16s. From HOLL farm, 19 were sold at an average of £38 17s. 6d., four yearling heifers in this case making the fine average of £51 19s. 6d. The last sale of the series was held still farther north, when the herd owned by Mr. George Inglis, of Neumore, was dispersed. The 52 head made an average of £31 10d., 17 cows going as high on the average as £40 2s. 11d. Mr. Inglis was not an absolute devotee of Sittyton, although that blood predominated at Neumore as elsewhere in the north. He, however, liked a little "bit of Bates," and he had his reward in a good trade for useful stylish cows. His 14 heifer calves made an average of £21 11s. 3d., and his yearling heifers went as high as £12 5s. 3d., a very good average indeed.

English sales of Aberdeen-Angus cattle concluded this week, when 40 head from the herd of Mr. Crisp, near London, made the fine average of £31 3s. 2d. The average price of the 11 cows was £42 9s. 6d., one of them making 100 gs., while the stock bull, Governor of Abergeldie, made the same price. Mr. Crisp is giving up the breeding of black cattle, at least on the same scale as heretofore.

Horse sales in the north of England have turned out well, and a grand trade was experienced for Clydesdale foals. The Seaham Harbor draft sale on Tuesday last, nine fillies made £30 1s. apiece, and 16 colt foals, £33 10s. 8d. Five yearling fillies made an average of £49 7s., and four yearling colts, £40 13s. 9d. The superb gray horse, Pearl



ALEXANDER'S HEIR (10151) [2557].

Imported six-year-old Clydesdale stallion; sired by Prince Alexander (8899). Winner of second prize at Ottawa and third at Toronto Exhibition, 1900.

PROPERTY OF T. H. HASSARD, MILLBROOK, ONT.

Oyster 10831, two years old, made 320 gs.—that is, £336. This is a very fine horse, and in spite of his color he is likely to be very popular in the north of Scotland, where he will henceforth travel. A number of very fine Clydesdale geldings were sold, and the average price of nine matured working horses was £78 9s. 1d. A pair of these—two immense horses—sold for £215 5s. On the day succeeding the Seaham Harbor sale, another took place at South Acomb, on Tyneside, when 10 Clydesdale mares made an average of £59 4s. 1d., and two three-year-old fillies went at £39 6s. 6d. At the ordinary auctioneers' autumn sales there has been good trade in Clydesdales, and generally this has been a remunerative business these times.

The great dairy produce shows are over, and at the Kilmarnock cheese show the championship went to Mr. Andrew Barrowman, Caigton, Castle-Douglas; while at London, in open competition against all England, the first place was taken by Mr. Hugh Hunter, Mossbog, Ayrshire, whose prize cheese sold at 1s. per pound. "SCOTLAND YET."

The pig has the reputation of being able to produce a greater weight of meat and in a shorter time from a certain quantity of food than any of our other farm animals. As illustrative of this, it may be mentioned that while a well-fed, comfortably-quartered pig will increase in weight at the rate of 1 pound for every 5 or 6 pounds of dry food which it consumes, an ox requires to consume from 12 to 15 or 18 pounds of dry food (depending on the materials used) in order to produce the same weight of meat.

Questions in Bacon Hog Raising.

1st.—What is the best treatment for sow before and after farrowing, in fall or winter, in order to raise large litters of healthy, thrifty pigs?

2nd.—At what age, and what do you think the best plan of weaning fall and winter litters to avoid stunting and to promote the most thrifty growth?

3rd.—In winter pig-feeding, to what extent, and how is it profitable to use clover hay, ensilage, mangels, sugar beets, turnips, or boiled potatoes?

4th.—What grain foods, such as corn, barley, peas, shorts, do you prefer, and how should the food be prepared and fed?

5th.—What pure breed, grade or cross of pigs do you find most satisfactory to yourself and the packer?

6th.—In case you buy young pigs or store hogs, at what age do you like to begin fattening, and at what age can you reach the weights that packers call for?

7th.—In order to fatten hogs in winter and keep them free from rheumatism or other ailments, what walls, floors, bedding, sleeping room and space for exercise do you advise?

8th.—Do you give them charcoal, ashes, sulphur, sods, salt, etc., and how?

EXERCISE IMPORTANT—FEED MIXED GRAINS.

To the Editor FARMER'S ADVOCATE:

SIR.—In regard to the care of brood sows during the cold weather, we consider it very essential to provide a warm shelter for sows to run in, as there is nothing so good for them as plenty of exercise. The sows should be fed anything they will eat in the shape of green food, such as scalded clover, turnips, mangolds, or sugar beets. These I would prefer to be fed with a little grain once a day. Sows kept in this way should be in good flesh at the time of farrowing. The sow should be housed at least two days before farrowing, to get her used to her pen and feel more at home. She should be fed on oat chop (ground fine) and bran, with a little oil cake.

See that the sow is free from vermin at the time of farrowing, and that the pen is dry and clean. Supply her with a little cut straw or chaff for a bed, and, above all, keep her as quiet as possible. Feed the sow at least three times a day on milk-producing foods, such as oatmeal, bran and oil cake, and roots once a day.

When the young pigs are about four weeks old, they will begin to feed at the trough. As the feed the sow gets is not just what they should get, it is better to partition off part of the pen and feed them a little milk or some such food to make them grow.

2nd.—The age of weaning depends on whether the pigs are thriving well on the sow or not. If they are not doing well, it is better to wean them at the age of six, or even five, weeks; but, as a rule, we get better results by weaning at about seven weeks old. Take the sow away and put her in a warm pen where she will not take a chill, and, in about twenty-four hours' time, allow her to remain with her pigs for a short time. Continue to feed the pigs as near as possible as the mother has been fed, but feed it to them warm.

3rd.—In winter pig-feeding it is advisable to have as great variety as possible. Feed grain morning and evening, and turnips, sugar beets and mangels (pulp and fed raw) or clover hay (cut and scalded) at noon. Boiled potatoes should be mixed with chopped grain.

4th.—All grain foods should be ground fine and soaked at least twelve hours before being fed. As hogs do not relish all one kind of grain, it is well to mix several grains. A mixture of barley, peas and oats is preferable for fattening hogs; while bran and shorts may be used to greater advantage for brood sows and young pigs.

5th.—We find the Tamworth takes the market as well as any breed which we have ever tried. As a cross, the Tamworth with the Berkshire makes a very commendable pig for packer and feeder.

6th.—As a rule, we shut in our hogs at the age of four months, and feed them lightly for three or four weeks, then gradually increase the feed. Hogs fed with a good ration of grain twice a day and roots once should weigh from two hundred to two hundred and 20 pounds at the age of seven months.

7th.—As a dry wall is certainly preferable in a hog pen, we would recommend frame or cement. The floors should be of good cedar plank, with plenty of clean straw for bedding. The pigs should be turned into the barnyard at least once or twice a week for exercise.

8th.—Charcoal, sulphur, ashes and salt should be mixed together and kept where the hogs can have free access to it.

As it is very necessary to keep a hog pen clean, it is advisable to throw a shovelful of slacked lime about the floor of the pen after removing the manure.

As regards crosses, use only the first cross. Another very important point is "black teeth." At the age of two or five days, these should be extracted. By neglecting them, a whole litter may be stunted or lost.

W. W. M.
Wellington Co.

MUSIC IN PIG-FEEDING.

To the Editor FARMER'S ADVOCATE:

SIR,—A sow will do very well fed on roots, with enough grain to keep her in a thrifty condition, but not fat. With plenty of exercise up to within a few days or a week of farrowing, she should then be put into the pen she is to use, which should be light, comfortably warm and dry. A liberal bedding of straw should be given her, and no more added until a week or so after farrowing. For the first day after farrowing, feed nothing but a little very thin, lukewarm slop, and lightly for a few days, until she is getting all she will eat up clean three times a day.

Wean at from seven to eight weeks old, when they will have learned to eat with the mother. Let her in beside them three or four times after weaning, for her sake as well as theirs. I think shorts is the best feed for young pigs; but one feed per day might be corn, fed in the ear, with a few mangels sliced. But to avoid stunting, and give them good appetites, I would emphasize exercise.

I prefer mangels; feed whole, if to large hogs; sliced, if to small pigs; but regard them more profitable as an appetizer than as a regular feed. I usually give the noon feed of corn in the ear, and, not having grown either peas or barley, I feed ground oats and shorts mixed equal parts by measure. The feed is soaked in a small concrete tank the size of a salt barrel and two-thirds the depth, from morning till night, and *vice versa*. This tank is in the passage, and, being underground, it is out of the way, and the feed never freezes.

I have lately been crossing Chester White sows with Tamworth boars, with very satisfactory results.

I am satisfied if the hogs weigh from 180 lbs. to 200 lbs. at eight months old.

My pig house is frame, on a concrete foundation, with concrete floors and plank sleeping beds laid directly on the concrete. Good ventilation into loft above is an important point. The pens are only 10x11 feet, accommodating from eight to ten hogs; but they are let outdoors or into a large manure shed for exercise every day. Use wheat straw for bedding, and after exercise the pigs lie quite clean and dry. In this connection, I might add that I think it safer not to feed too heavy; let the pigs be always ready for their feed at meal time, not too noisy, but musical. I have had no trouble with rheumatism or other ailments.

I find a weigh scale very useful in fattening hogs. First, in order to note gains; second, to find out when they are ready to go; and third, to know what they weigh on the morning they are delivered. Middlesex Co., Ont. ADAM BATY.

WEAN AT SEVEN OR EIGHT WEEKS OLD.

To the Editor FARMER'S ADVOCATE:

SIR:—1st.—I think that a sow should have plenty of exercise; and while the pigs are running with her, bran and shorts is the best food; and after the pigs are weaned, I would feed roots and very little grain.

2nd.—I would let the pigs run with the sow until they are six or eight weeks old. I would teach them to eat a little warm milk with some bran and shorts stirred into it; and then when they are weaned they go right ahead and do not miss the mother but very little.

3rd.—I have never fed any ensilage nor clover hay; but I do like the sugar beet for winter feeding, and I always feed them raw.

4th.—I prefer ground peas and bran or shorts for grain feeding. I would have it soaked and soured, and I would feed it warm in the winter.

5th.—We have now a litter that are crossed, the mother being half Chester White and half Berk. and the hog a Poland-China, and they have done the best that we have ever had. We are going to try the Tamworth and Berk. crossed; we think that they are still a better cross of pigs.

6th.—We cannot reach the weights that the packers require under eight months, and most of the fattening is done in the last two months. We keep our hogs growing well and in good flesh until they are about six months old, and then we try to shove them as fast as we can. They usually weigh from 200 to 215 pounds.

7th.—I think that wooden walls are the best; mine are matched lumber, tar paper and lap siding, then lined with inch lumber on the studding. Our exercise space is sixteen by twenty-four feet. I think that it is immaterial as to the kind of straw for bedding so long as they have plenty of it and are kept dry. They do not want to sleep in damp bedding.

8th.—We feed ashes, charcoal, sulphur, and salt. We feed the sulphur in the swill, and the ashes, charcoal and salt dry. WM. I. BUTTERY.
Middlesex Co., Ont.

TWO HUNDRED POUNDS AT SIX MONTHS OLD.

To the Editor FARMER'S ADVOCATE:

SIR:—1st.—The best treatment for sows after farrowing in fall and winter is to keep in a moderately warm pen, not too much straw; feed on oat and barley chop or a little mull feed.

2nd.—The best age to wean fall and winter litters to avoid stunting is as soon as they can eat and drink, say about four weeks.

3rd.—The most profitable way to feed pigs in winter is not to keep more than there is good accommodation for, and feed the best kind of feed it is possible to get.

4th.—The grain preferred to feed profitably is chopped barley until about four or five months old; finish on dry peas.

5th.—The kind of pigs preferred for the packing-house, and for profit, is the York. or Berk. sow crossed with the Tam. boar.

6th.—In case I should buy pigs, I prefer starting to fatten as soon as taken off the sow; make them weigh 200 at six months old.

7th.—In order to fatten pigs in winter, shut up in small pens, not more than four in a pen, better have only two, better still if there was only one; plank floor and wooden walls preferred; lots of pea straw to lie on.

8th.—Charcoal, ashes, sulphur and salt are all very good. SCOTT COWAN.

Wellington Co., Ont.

[NOTE.—What do readers think of this? See our editorial in this issue.—Ed. F. A.]

IMPOSSIBLE TO FEED PIGS PROFITABLY ON GRAIN ALONE.

To the Editor FARMER'S ADVOCATE:

SIR,—I may say I deal largely in hogs. I sold last year \$1,125 worth, and have sold already this year \$665. This amount of hogs can easily be raised if you keep a lot of cows; but I have only seven; and there is nothing takes the place of milk. This one thing I will say, that it is impossible to raise hogs at a profit on grain alone, but it can be done successfully by feeding grain with grass in summer and roots in winter.

1st.—A sow should have abundant exercise, should not be penned up. If on pasture, she should have a little grain so as to be kept in healthy condition. If in winter, she should have roots, and after farrowing do not give any grain without scalding. Boiled roots of any kind mixed with shorts or oatmeal is best say for first two or three weeks; after that you may give stronger feed—barley or pea meal. To avoid any stunt, the feed should be scalded, and, please understand, the shorts or meal should be mixed with the boiled roots.

2nd.—Wean at six to seven weeks. Shorts is the best feed for weaning young pigs to avoid stunting. Mix with skim milk, if you have it, but if not, it should be mixed with boiled roots, a few peas or a little corn once a day, say one quart to six or seven for a start. Be careful not to overfeed, and feed often.

3rd.—I never used clover or ensilage; this is, I understand, for store hogs. I prefer sugar beets or turnips, and they will winter well with very little grain.

4th.—As to what kind of grain, I do not know how to answer. Looking at it in an all-round way, of course peas are best; but when you take into consideration that, as a rule, we can only grow in this section from 10 to 15 bushels per acre, while we can grow 45 to 60 bushels of barley or 100 or more of corn in the cob, we must leave peas out of the question. I think it all depends on how you feed the grains, or grain. Get it ground into meal, and then mix it with boiled roots; I prefer turnips. If you want the hog to grow, use less meal and more turnips; if the hog has its growth and you want to fatten, feed less turnips and more meal.

5th.—A Yorkshire sow crossed with Berkshire boar.

6th.—Begin to fatten at six or seven months, so as to be ready when eight or nine months old.

7th.—Walls should be double boarded, with tar paper between, on concrete foundation. I prefer concrete floor with boards or planks in one corner for sleeping laid on the cement. Keep 10 hogs in 12 feet square, as the space in a good hog pen is valuable. Then, I have a yard outside to let them run out once in a while when I think they need it.

8th.—I throw the charcoal in the pen, all they want, and put the sulphur and salt in their feed. I never use sods.

The most money in hogs, to my mind, is in wintering them and turning them out to grass in the spring at say about 60 to 75 lbs., and with a little corn or peas they will reach 200 lbs. by August. It's a mistake to feed corn in the cob; it should first be shelled and then strewn around on the grass, so that they do not eat it too fast. ELGIN CO., ONT. JAMES WATKINS.

WOODEN WALLS AND PLANK FLOORS PREFERRED.

To the Editor FARMER'S ADVOCATE:

SIR:—1st.—My experience in raising young hogs in winter has not proved very successful. My mode is to have the pigs come in April and again in October, two litters per year. In treating the farrow, I note that first lots of room for exercise is required, with pulped turnips and a little oat chop for food.

2nd.—I wean my young pigs at five weeks. I feed shorts or middlings, not too strong.

3rd.—I have had no experience in feeding clover hay, ensilage or sugar beets. I have, however, fed turnips, mangels, and potatoes. I find most profit and less labor in feeding the two former pulped, mixed, of course, with a small quantity of grain.

4th.—In the feeding of grain, I use a mixture of oats, peas and barley chopped, regulated in accordance with the age and constitution of the hogs. Feed dry, giving plenty of water to drink.

5th.—The breed I prefer is a cross with Tamworth hog and Chester White or Yorkshire dam. These I prepare for the packer at the age of seven months.

6th.—I begin to fatten at five months, ready for packer at seven months.

7th.—I prefer wooden walls, with plank floor, wheat-straw bedding. Again I say lots of room for exercise.

8th.—I give frequently charcoal, sulphur, and salt. Throw the coal in feed and the others by themselves to be used at their pleasure. I note that frequent sprinkling of wood ashes on the backs of the hogs will keep the skin clean and clear of vermin. C. W.

Wellington Co., Ont.

STONE PIGPENS CONDEMNED.

Before trying to answer the questions, I will state that our pigpen is a stone building, and very cold. I would never build another stone pen. I think a pen double boarded, with tar paper between, much warmer and drier. I allow my sow to take all the exercise she wants until two weeks before farrowing, when I shut her in to get acquainted. She has to be housed in the cattle stables for farrowing in winter. I feed roots until she is shut up, then barley chop, not too heavy at first. My plan is to wean the pigs when six weeks old. I think if you can keep them warm and dry, that is half the battle, with plenty of exercise. Six months is long enough to feed pigs so as to weigh from 180 to 200 pounds. I feed barley chop and slop until five months old; the last month, peas. I have found the Berkshire sow, crossed with the Tamworth boar, both thoroughbred, most satisfactory. I had a lot of trouble with pigs crippling. The floor is cedar blocks. I boarded the pen up to keep the pigs away from the stone wall, and raised half the floor for them to sleep on, and have had no more trouble. A pen 12 feet square gives room enough for 8 or 10 pigs. People differ about how much space they should have. Some pigs won't take exercise if they have a field to run in. The cross I am working with now don't need a very big place; they gallop around the pen like blood colts. There is generally a good lot of earth and broken bits of roots in the root house in winter. This I gather occasionally and give to the pigs. That is all in the way of grit that they get, except when they are let out for exercise when the ground is bare of snow. GEO. HENDERSON.
Wellington Co., Ont.

Word from England on Raising Fall Litters.

When fall pigs have been weaned, the critical season has come. The chief difficulty with autumn litters is found in tiding them over the growing period between weaning and fattening. If they go wrong during this period, the work cannot be made profitable, however good the price may be that is received for them when they are marketed. The chief item of difficulty arises in the want of opportunity for exercise. Of course, they should have the freedom of a yard, but oftentimes the weather is so cold that they do not care to take exercise much of the time. Because of this difficulty it will often happen that pigs will go off their feed in winter on a diet that would have answered admirably for them in the summer while they were running in the pastures.

The Floor of the Pig House.—It is important that the floor of the pig house be properly made. If the pigs sleep on the floor underneath which the air and wind has free access, and, moreover, if the bedding on this becomes damp, the pigs become rheumatic, no matter what the food given or the nature of the care. Concrete floors are too cold. Plank floors well fastened will prove satisfactory. And it is very important that the pigs take exercise on the sunny side of the building.

The young pigs should be taught to take food freely, by themselves at first, and then later with the dam. Skim milk will be necessary to accomplish this in good form at so early an age. And here it may be mentioned that without the aid of skim milk it will be difficult to succeed with autumn litters, owing to the early season at which they have to be weaned. Because of this, and because of the great suitability of skim milk for producing growth in swine, the rearing of autumn litters may be carried with much advantage along with winter dairying.

The food during the season of growth will be the same substantially as for spring litters. In lieu of the pasture which the spring litters have access to, autumn litters should be fed field roots. Growth is wanted, and the food must be adapted accordingly. Therefore, oats, shorts and bran, with roots, will furnish the principal portion of the diet before the fattening period. But as the latter period approaches, more of the carbonaceous foods, as rye, barley and corn, may be given, to lead up gradually to the final finishing period.

One of the Greatest Difficulties.—The greatest difficulty with autumn litters is found in keeping them on their feet during the growing period. To prevent them from breaking down thus early, give not only foods that are largely nitrogenous, but also some foods that will keep the bowels in tone, such as a free supply of field roots, mangels or turnips, or sugar beets, and also a small quantity of oil cake. The great danger arises from constipation, and when skim milk is very freely fed, the danger from constipation is all the greater. The droppings should, therefore, receive a careful

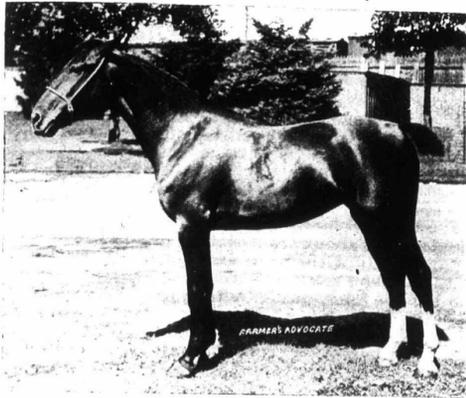
and constant scrutiny. When the animal becomes constipated, the secretions become inactive, then some organ will speedily get out of tune. With pigs at such a time the kidneys commonly first fail to do their work, and this produces more or less paralysis of the limbs. Some linseed oil given in small doses at such a time will prove helpful, but it will be found greatly preferable in every way not to have such difficulty arise. And here it may be mentioned, that the difficulty will be greatly aggravated by lack of proper ventilation.

The food during the finishing period should consist of such grains as corn, barley, rye, wheat

experiment it was found that it required about 4 1/2 lbs. of barley when fed alone to produce 1 lb. of pork, while only 3 1/2 lbs. of the same food were required to produce 1 lb. of pork when fed with a quart of skim milk. These experiments, like others carried out elsewhere, afford conclusive proof of the great value of skim milk as a food for pigs.

Feeding Pigs on Sweet and Sour Milk.

The Agricultural Department of the Nottingham (England) University College has been carrying out some tests with sweet and sour separated milk for pigs. Ten pigs of the Yorkshire breed, all of them of the one litter and nineteen weeks old, were divided into two lots of five each. Both lots were so evenly matched that the difference in their total live weight amounted to only four pounds. The experiment extended over a period of just twelve weeks, and all through the animals received the same quantities of separated milk and meal (principally corn meal), but the separated milk given to lot 1 was allowed to become sour before being fed, while lot 2 received sweet separated milk. At the commencement of the experiment in August the pigs in lot 1 weighed 700 pounds, while those in lot 2 scaled 704 pounds. The experiment came to a close on November 21st, on which date the weight of the pigs in the two lots had increased to 1,407 pounds and 1,422 pounds, respectively. Both lots were killed on the conclusion of the experiment, and sold for 8s. 9d. per 20 pounds. The dressed weight of lot 1 was 1,020 pounds, which, at 8s. 9d., produced £22 6s. 3d., while lot 2 weighed exactly 20 pounds more, so that the cash difference in their favor worked out to 8s. 9d. From this difference must be deducted 1s. 9d., the estimated value of the 4 pounds extra weight of lot 2 at the commencement of the trial. A balance of 7s. is thus left in favor of the use of sweet separated milk. The butcher's report was that both lots were of equally good quality. It would seem, therefore, from this experiment, that the feeding value of separated milk is not increased by souring, but that, if anything, its feeding properties are slightly impaired.



HERMIA.

Two-year-old Hackney filly, by Royal Standard; dam Cherry Ripe. Winner of first prize in every competition entered, including sweepstakes at Toronto Industrial, 1900.

OWNED BY ROBT. BEITH, BOWMANVILLE, ONT.

and peas, or a combination or an alternation of these and one-third of the whole by weight should be nitrogenous, and composed of such foods as bran, shorts or oats, alone or in combination. One half pound of oil meal should also be given per day to each animal.—*Lectus, in Stock-breeder and Farmer.*

The Bacon Curer's Pig.

Having been watching for some time past the marked improvement which the efforts of the South of Ireland Bacon Curer's Pig Improvement Association have effected in Irish swine generally, I think I am in a position to know exactly what is the next step advisable.

Swine have been much improved, and to a great extent we have got rid of the greyhound type so noticeable in the past; but we must not go too far in any one direction, and I think it is time to draw attention to the fact that in one point among the cardinal points of the best class of swine we have gone quite far enough. I refer to the depth of the sides.

Originally, deep sides to the pig were suggested as necessary on account of the accompanying vigor of constitution, etc. The Irish pig was too light in carcass and had not room for healthy organs of respiration and digestion. Well, that shortcoming has been remedied now, and we must not run into the other extreme and thereby suffer in the production of the highest possible percentage of the finest portion of the meat.

Irish pigs are now being bred rather of too great depth of side, unnecessary from the point of view of constitution, etc., and wasteful as regards fine bacon production. The bacon trade, which, after all, is the best customer the Irish pig-producer has, now wants less depth of side, as possessing a greater proportion of the choicest cuts of bacon therein, and showing less waste in the cutting out.

Let us now begin to tuck up what we have a little over-developed, and keep what we have been so far able to keep—the cream of the bacon trade of the United Kingdom, which is at present in our hands. Shortly, do not aim to have your pig quite so deep from the top of the shoulder to the breast, and all will turn out satisfactorily.—*A. W. Shaw, in Farmer's Gazette.*

Skim Milk as a Pig Food.

Immediately after young pigs are weaned there is no better food for them than skim milk enriched with such grain foods as barley meal, oatmeal or maize meal, or, better still, a mixture of all three. As a food for pigs in general, milk possesses more nutritive value than it is usually credited with, but it acquires special value when given to young pigs at this stage of their existence. The animals are then in need of some food to make up for the loss of the natural supply of milk which they have received from their dams prior to the separation, and skim milk is a better substitute for this than any other class of food. As illustrative of the value of skim milk as a food for pigs, it may be mentioned that in an experiment recently carried out in the States it was found that while it required on an average about 3 1/2 lbs. of a mixture consisting of peas, wheat and rye to produce 1 lb. of pork, a little over 2 lbs. of the same mixture was found to produce the same quantity of pork when fed along with less than a gallon of skim milk. In this

nothing at London, a stable companion being placed at London before her, and she got nothing at Toronto. Here we have one mistake rectified, but another made. And did space permit, a multitude of similar instances could be mentioned. Now, of what good is such work to the breeders or the public? We may "cuss" the judges, but they are not so much to blame; only if they will undertake to do the impossible, then they must bear the criticism of breeders, the public, and reporters.

THE WAY OUT.

There is only one rational way of judging dairy cows, and that is by the scales, Babcock and lactometer. By this method of judging, there is no "kick coming," because we can get at the exact capacity of all in-milk cows, 3-year-olds, and 2-year-olds, and as the yearling heifers are now shown in milk (being really from 22 to 24 months old); the most important classes can be so judged by their works, and with practical dairymen "handsome is as handsome does." Personally, I would not care whether the cows are tested on the show ground or by what is known as the "Ohio Method" at their home at any time during the year. A description of the method and its practical working out, from the pen of J. McLain Smith, a breeder of Red Polls, I append:

"The milk and butter test conducted by the Ohio Experiment Station, under the auspices of the State Agricultural Board, is increasing in popularity. The test is for one day only, conducted at the home of the owner, at any time, but the rules require, for a prize, that the cows shall be shown at the succeeding State fair. There are separate classes for each of the leading breeds, but none so far, I think, have been entered except Holsteins, Jerseys, and Red Polls. In addition to the breed prizes, there is a champion class for the best cow of any breed and the best herd of five cows owned by one person and tested at one time. All the prizes named above are double—that is, for largest yield of fat and largest yield of other solids—except championship, which is determined by score—thirty points for each pound of fat, six points for each pound of other solids.

"This year there were sixty-seven entries—fifty-eight Holstein-Friesians, six Jerseys, and three Red Polls. As stated, these do not compete together, except in the champion class, but all are tested in the same way and under similar conditions, so that the records are readily comparable. In this comparison, the Holsteins eclipse all rivals, as they have done in this test for some years past. The largest yield of fat was 2.57 pounds from 70.1 pounds of milk, by the Holstein, Orvice 5th. The largest yield of solids not fat was 6.58 pounds from 80 pounds of milk, by Payne's Lady Dervies. The Holsteins with fifty-eight entries have a better chance for a phenomenal performance than the other breeds represented by six and three, respectively. A much fairer basis of comparison is the average yield of all the entries. On this basis, the Holsteins still lead, but are not so entirely out of sight, and the comparison is interesting.

Whilst judging by actual test does justice to all contesting cows, yet it has its effect upon the development of dairy stock; that, to my mind, is its strongest point. We have an instance of what record-making has done in developing speed in trotting stock. Nobody would think of judging trotters or racers by putting up a judge to look them over, and no such speed would have been

Misjudging at the Fairs—The Way Out.

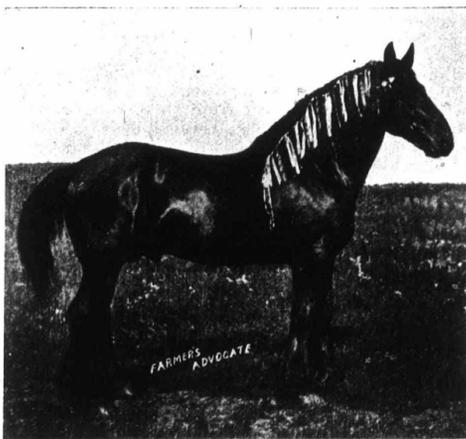
To the Editor FARMER'S ADVOCATE:

DEAR SIR,—I read with much interest your able and timely article, in your issue of Oct. 15th, on "Judging at the Fairs"; unfortunately, such comments seem in order after every fair.

In order to have, if possible, more competent judges, the different breeders' associations have undertaken to recommend judges, but are met with the difficulty that really good judges are mighty scarce, and those that might be considered as the most capable are not available, being engaged in showing their own herds; and other large breeders that have been very successful as breeders—consequently apt to be good and experienced judges—having sold stock, very likely, to one if not more of the possible exhibitors—they would thus be interested in some of the stock on exhibition. So that associations, in recommending judges, have to fall back upon a second or third class breeder or an unsuccessful breeder now out of the business, and such are not likely to make good judges, because their want of success in their own case is quite likely for want of good judgment.

I agree with what you say that it will not better things to have the judges give their reasons for the awards they make. This would, no doubt, bring to the front talkers instead of practical judges. We had a good instance of that at Toronto not so many years ago. After the judge made a particularly bad mess of placing the awards in the ring, he was in the stables amongst the breeders the same evening, and the "boys," to have a bit of sport, got him talking, and led out some cattle in the passage to have him show them just how to judge. I don't think it dawned upon that judge that the breeders were making fun of him. Most of his listeners were more experienced breeders and better judges than he was. The judge was seemingly much pleased to hear himself talk, and, judging by the laughter that followed after the judge departed, the breeders were mightily amused, but I can't say instructed.

I agree that there is great need for more competent judges; and much better could be done by a thorough, posted, and practical man—one who had made cattle a life study. But taking the judging of dairy stock: No man can tell within five or ten pounds of what a cow will give, and some judges we have had don't appear to estimate within forty pounds. We then see just where a judge's difficulty comes in, because he is there not only to judge cows whose capacity is within five pounds of each other, but it often happens that there may not be one pound difference between some of the cows. I don't say this is a reason that a judge should go and give the prize to the poorest cow in the ring because he can't tell which is the better of two or more good ones, as sometimes happens. Take, for instance, the Holstein class this year at Toronto. In the milk test, one cow was only 1 1/2 lb. of total solids behind another, yet the scales, Babcock and lactometer showed which was the better. Well, how about the judge? This cow that was 2nd in the milk test, also the cow that was 3rd, did not get a place in the ring. But the same cow the following week at London was awarded 1st prize in the ring, and the cow that won 2nd at Toronto got



GROVE RINGMASTER (292).

Shire stallion, sired by Imp. Grove Ringleader (11341); dam Imp. Jessica (10182).

OWNED BY J. T. MONROE, NEEPAWA, MAN.

developed by such a system of judging. But there is more reason why dairy stock should be judged by their work, because speed is only one of the desirable things in horses; style, form and action are also desirable. But in the case of dairy cows, their sole and only value with practical dairymen is for what they can produce. It is the "record" that makes the value on dairy stock. Oxford Co., Ont. GEO. RICE.

The Breed Shows and Sales.

The success of the combined show and sales of Shorthorn and Hereford cattle at Kansas City last month, in point of entries and prices, appears to have been all that could reasonably be expected. There were strong inducements, in the form of large prizes and lots of them, to bring out a great display of show animals, and, judging from the reports published, it was the greatest exhibition of cattle of the red, white and roans, and white faces, that has been seen on this side the sea since the Columbian Exposition of 1893. In so far as the judging and placing of many of the animals in the prize list, as compared with their relative standing at other leading shows in the last two months, is concerned, it appears to have been a regular carnival of reverses, and even in the various competitions for sweepstakes and specials at the same show, under different judges, the decisions were such as to make it almost safe to wager at the opening of each new event that the last in former contests would be first in the next. The advantages of such object lessons from an educational point of view, in the way of fixing a standard of excellence, are past finding out, and evidently tend to render confusion worse confounded. The ups-and-downs of the showing in Western stock exhibitions would appear to be a suitable caption for a chapter of accidents at the Kansas City Show, for, as one visitor remarked, you never knew where lightning was going to strike. The work of Canadian judges and juries is sometimes hard enough to reconcile with one's ideas of consistency, but for irregular and incomprehensible verdicts their United States contemporaries certainly take the bun.

The auction sales of cattle, which took place at the close of the show, considering the large number catalogued—150 Shorthorns and 250 Herefords, of which 144 and 185 respectively were sold, taking it for granted that all transactions were genuine—must be recorded as a success, as the prices proclaimed—an average for the Shorthorns of \$316.90, and for the Herefords, of \$320.46, particulars of which are given in our Stock Gossip columns—show. An average of \$318.91 for 329 head in the seven days' sales, three of which were devoted to the sale of the Shorthorns and four to the Herefords, sets a pace which it may not be easy to keep, although the average price is less than half that realized at Mr. W. D. Flatt's individual sale at Chicago in August last.

The fact that so large a number of cattle found buyers at so good an average of prices reveals a great demand and a large field for good stock, and is full of encouragement to breeders who are raising pure-bred animals of the beef breeds, and who need have little apprehension that the present activity of the trade in pedigreed stock is only spasmodic or ephemeral. It seems to be only the beginning of a period of wholesome expansion, which may last for many years, since the market outlets are also increasing and expanding. A special feature of these sales is that they were entirely under the auspices of the Shorthorn and Hereford Breeders' Associations, respectively, and wholly independent of Government subsidies or supervision, and, therefore, free from the possibility of political scandal.

Why Colostrum Coagulates.

The peculiar coagulative property possessed by the milk of newly-calved cows is due to the presence in it of an exceptionally high percentage of albumen. In ordinary milk the percentage of albuminous matter, as represented by casein, averages about 3½ per cent., whereas in the milk of freshly-calved cows the albuminoids, as represented by casein and albumen, amounts to from 15 to 20 per cent. The quantity of this albumen present greatly diminishes with each milking, until from three to four or six days after calving it has quite disappeared, and the milk assumes its normal composition. The presence of this high percentage of albuminous matter does not seem to exercise any material influence upon the quantity of butter-fat present, because the milk of newly-calved cows gives an average of practically the same quantity of butter-fat as that of the same cow some weeks subsequently.

Quality, Not Pounds.

In an editorial admonishing its readers to caution in the development of their live-stock operations, the *Wallace Farmer* thus sums up its argument:

"The stock business is quite different from raising grain. There are a whole lot of things in it that can be learned, like the precepts of the Good Book, only by doing them; in other words, by actual experience. As the family is likely to increase as fast as the ability to take care of them, clothe and educate them, so a reasonable amount of live stock, properly managed, will increase about as rapidly as the farmer's ability to handle them properly. In other words, the forces of nature that work for multiplication are fully as well developed in man and beast as the forces that make for the development and growth of the increase. The important point for the farmer is to secure good males in every department of his farming operations. Here is where most farmers break down. The profits in live stock are not in the pounds, but in the quality of the pounds, or their selling price on the market; hence, better raise fewer individuals and have them of the best, at least while you are learning the business, and do not make the change from grain-growing to stock-farming too rapidly."

Judging Dairy Bulls.

We have more than once taken occasion in these columns to point out what has appeared to us a mistake not infrequently made by judges of dairy cattle, in the attempt to judge bulls by the same standard as that by which they judge females of the dairy breeds, a course which, to our mind, tends directly to the encouragement of bulls lacking in the indications of constitutional vigor and masculine character, and consequently in the power and quality of prepotency, which is of the first importance in a sire. We have seen the same mistake made in judging some other classes of stock, notably rams in the department of sheep, and boars in the classes of hogs where the bacon-type theory has been carried to extremes. Holding strong convictions on these lines, we note with satisfaction an able plea for masculine bulls, by Mr. F. S. Peer, in the *Country Gentleman*, in which, among other good things, he says:

"A recognized type or conformation of dairy cows is generally agreed on, while in the bulls of the dairy breeds there seems to be no fixed standard. Broad hips, deep flank, sharp, clean withers, thin, cordy neck, a fine, bony head and mild, placid countenance are the prominent characteristics in the build or form of a high-class dairy cow.

"There is, however, a tendency nowadays among many showing judges and breeders (the latter, no doubt, having absorbed the idea from the former) to require, as far as possible, that bulls should be of similar mold as that found in the cow. That is to say, preference is given to a bull that has what is called a 'dairy head.' 'Cowy head' expresses it better. Sharp, thin withers and broad hips are also demanded, and are looked upon as evidence of dairy qualities.

"This demand that a bull should be prominent in the features that characterize the cow is evidently based on a mistaken notion of the laws of transmission. It doubtless comes about from attempting to put into practice those oft-repeated and much-abused maxims: 'Like produces like,' 'What is food for the goose is food for the gander,' etc. A little reflection, however, will show that the cultivation of these 'cowy' tendencies in bulls must of necessity lead to effeminacy, which is certainly something to be avoided.

"Whatever else a bull may possess, I believe he should be thoroughly and throughout masculine. There are comparatively few who will venture to disagree on this point, but when we come to compare the conformation of a thoroughly masculine bull with the build of a thoroughly effeminate cow (which is only another name for the highest type of a dairy cow), we find that instead of being similar, the prominent characteristics of the bull are quite the reverse of what is looked for in the cow. The head of a masculine bull is broad, heavy, rather meaty; the head of an effeminate cow fine, clean-cut and bony. The face of the former indicates resolution, courage; while the latter indicates docility, timidity, etc. The neck of a masculine bull is broad, heavy, thick, full and arched; the effeminate cow's the very reverse—thin, cordy, light, tapering and usually drooping forward of the shoulders, where the sire is most prominent. The shoulders and whole fore quarters of a masculine bull are as broad and deep as the cow's are sharp and light. In this the extremes are very marked. While the hips of the masculine bull are narrow in comparison to his size, and quite hidden, the hips of an effeminate cow are one of her most prominent features.

"We see, therefore, that so far as general conformation is concerned, the lines of a masculine bull are quite the reverse of what they are in an effeminate cow. In a general way, you may say the heavy end of the desirable wedge-shaped cow is in the hind quarters, while the bulk and weight of the masculine bull is on the forward quarters. Because we like the big end of a cow back of the heart, it is no sign whatever that a bull to get cows with that desirable conformation should be built like her. The very reverse would seem to be nearer the truth; i. e., that to produce the most perfect type or form in the female (which must of necessity be the highest type of a dairy cow), we should rather look for it to come from a sire that was thoroughly and throughout masculine.

"Let us, in our eagerness to discover dairy type in the showing and in the selection of sires to head our herds, take thought of what we are doing and whither we are drifting. Let us not condemn a bull (as I have seen done so often of late years in the ring) simply because he has not as 'cowy' a looking head as another, or because he is heavy in the neck and at the shoulders, and because he is not 'cowy' or dairy-looking about the hips; or because in a female we want the heavy end of the wedge behind, condemn a bull because he is built the other way about. If you wish to produce thoroughly feminine cows, select a thoroughly masculine bull, so that their sons at least may be fit to perpetuate the race without deterioration, but with added vigor. Let us study what constitutes the dairy characteristics of a dairy bull, and judge bulls from a bull's and not from a cow's standpoint."

FARM.

Dynamite for Removing Stumps.

In our issue for Nov. 1st a question was asked our readers regarding the use of dynamite in tearing out stumps. Relative to that subject, Mr. J. E. Muncaster writes, in *American Agriculturist*, as follows:

"I have used a couple of hundred pounds of dynamite in the last four years, and can recommend it. My first experience was with stumps which had been cut five or six years. A lot of about two acres contained 186, varying from 10 inches to two feet in diameter, mainly about 12 to 15 inches. With two colored laborers I blew them all out in two half-days, at an average cost for dynamite, fuse and primers of six cents each. The manufacturers will give printed directions as to use, which is all I had for a start. Of course, one has to learn by experience how much it takes for a stump. I used from one-third to one stick, according to size of stump.

"The tools needed are a long crowbar, a knife, and a stick about one inch in diameter to ram with. Ram firmly with moist earth. Put the charge as nearly under middle of stump as possible, and keep out of the fumes made by the explosion, or you will get the worst headache you ever had in your life. Get enough under to bring the stump on the first explosion, but there is no use putting in too much. Last year we knocked enough rocks out of our cornfield in one day to keep a team hauling four, and they were not moved far, either. Most of them were moved by putting the explosive under with the bar, the same as with a stump. It takes a larger charge for stone.

"It will not blow up green stumps after the tree is cut off without an excessive charge of a pound or more; but a tree 10 inches in diameter can be removed with a half stick, or a quarter of a pound, by blowing under it and then cutting the roots exposed. This latter can be done in just about the time it would take to cut the tree down. Last year dynamite cost in Baltimore 12 cents per pound, fuse 70 cents per 100 feet, primers 75 cents per 100. I think it is perfectly safe so long as primers are kept away from it and it is not thawed by an open fire. It freezes at about 40 degrees, and will not explode well unless warmed, so I always wait for warm weather to do my blasting."

Removing Stumps by Dynamite.

To the Editor FARMER'S ADVOCATE:

In reply to "Enquiring Farmer," I would say that the best method of removing pine stumps is, I believe, by dynamite, and can be done as follows: First get the necessary tools, which consist of a wood auger, a dirt auger, a wooden tamping rod, fuse-cutter and cap-crimper. The augers should be from 1½ to 2½ inches in diameter, with shank about 5 feet long. Now take your auger and bore, in an oblique direction, under the stump, at the point of greatest resistance; that is, where the roots are biggest and strongest. Sink the hole till it is slightly past the middle of the stump, then insert the dynamite and ram tightly to the bottom. This applies only to the first that goes in. The last cartridge, with the cap and fuse attached, must be inserted with care, to avoid accidents, and pressed gently home, after which the hole is filled up with sand or dirt, taking care not to tamp it too much till 4 or 5 inches away from the cap.

The manner of attaching cap or primer to fuse, and connecting with dynamite, is as follows: Cut fuse square across the top and insert it in the cap, and crimp cap tightly around the fuse. Then open the end of your cartridge, and make a hole in the end of same with a sharp stick about the size of a lead pencil. Now insert cap with fuse attached, and tie tightly around the end to hold the fuse in place. Do not push the cap in more than its own length.

The amount of dynamite to be used will vary according to the kind of land on which the stumps grew, and, of course, according to the size of stump. From 1 to 3 pounds is the usual charge, the larger amount being used where the soil is light or sandy. It is better to use too much than too little at first, and gradually decrease as you find less will do the work. The cost of blowing out stumps in this way will vary from 10 to 25 cents apiece. The materials to be used can be secured through any large hardware house.

Glengarry Co., Ont.

J. E. McINTOSH.

Our Stand Commended.

To the Editor FARMER'S ADVOCATE:

SIR,—Please find money order enclosed for my renewal subscription to the FARMER'S ADVOCATE. I could not do very well without a farm paper, and the stand you have taken re our fairs is just what we want. Every true man should uphold you and the fairs that shut down on all side issues apart from what are pure and advantageous.

Lanark Co., Ont.

J. R. ROBINSON.

Cattle Barn for 200-Acre Farm.

The stock barn of which the ground plan and an external view are presented herewith is that of Mr. John D. Ferguson, near St. Thomas, Ont. It was built in 1898, and has proved to be very satisfactory to the proprietor. It is 80 feet long and 48 feet wide, has stone wall 8 1/2 feet high enclosing a basement for cattle, and a capacious superstructure, which has 19-foot corner posts and abundance of room above the plates, as is shown in the photograph. It may be stated just here that the peak of the roof is 52 feet up from the ground.

proof, handy to get roots in and out, and occupies a space that would require to be filled with soil were it not there to engage the space.

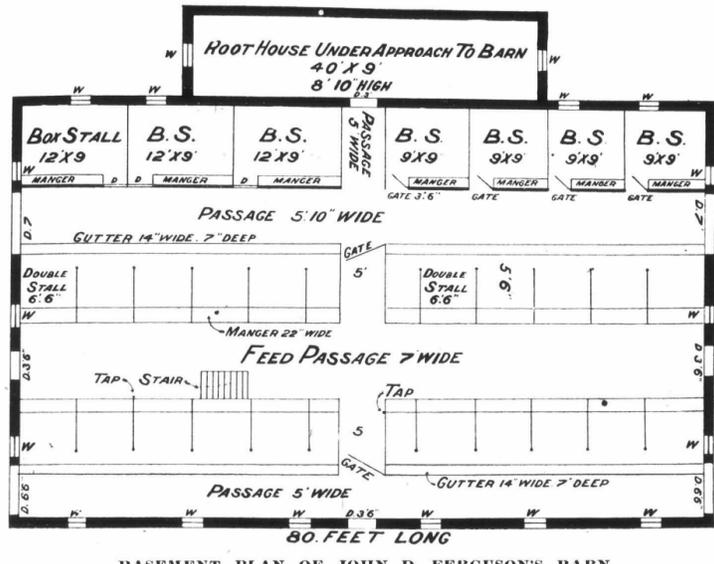
The upper barn plan is very simple, having two threshing floors, each 11 feet wide, side by side in the center, across the barn. This leaves two large mows, one at either end. The granary occupies the east third of the south mow. The stairway runs down off the threshing floor in the corner of the granary. The barn doors run on rollers. The west ones, through which the crop is drawn, are each 13 feet, and the east ones 8 feet. The windmill shown on the top of the barn is a Brantford "Ideal," having a 15-foot wind wheel. It is set up on a 62-foot mast of rock elm, 10 1/2 by 11 inches. It is used for pumping, grinding, cutting feed and pulping roots. The position of the pumps is shown to the right of the illustration (fig. II.). The pump is worked by a jerk rod, shown running from the barn over the water tank. The tank is connected with the well by a pipe running underground, up through the bottom of the tank. The tank is connected with the taps in the stable in a similar manner. Mr. Ferguson has decided to build a milk house to occupy the space beneath the water tank, for use the year around.

for spring crops gives best results from fall plowing and surface cultivation in spring, and as a rule sod had better be plowed in the fall. This certainly applies where oats is the crop to be grown, or if roots or corn is the crop to follow. If intended for peas, the plowing may be done either in fall or spring with nearly equal advantage. Whether plowing is done in the fall or not, care should be taken to have surface drainage attended to before the land freezes up, as it is of the first importance that the surplus water in the spring be gotten away as soon as possible. Experience has taught that as a rule the early-sown crops yield much the best returns, and in order that spring seeding may be commenced at the earliest possible date, surface drains should be run through all low or slack places, and their outlets opened so that the water may have a free run.

Among other work which will be in season when the land freezes solid and field work is ended, is the repairing of farm buildings, closing all unnecessary openings, and making the stables as warm and comfortable as can be done. Fine or expensive buildings are by no means essential to the raising of good stock, and old or cheap stables may be made comfortable at little cost by lining with tar paper and cheap lumber, or even with paper alone, with strips of lath tacked over the edges. A little forethought and effort well applied may go a long way in the saving of feed and the growth and thrift of the stock, and will be found to pay well. It is wise to provide for the closing of cellar doors and windows at short notice when a cold snap comes and fruit, roots or vegetables are in danger of being affected. Keep the doors and windows open for ventilation as long as it is safe to do so, but be prepared for closing them at any hour if the weather takes a sudden change. These are but a few of the points needing to be looked after at this season, and the wise provider will find many others which should be attended to at this particular time.

Agriculture in Illinois Schools.

In response to the demands made by various Farmers' Institutes, agricultural societies and individual farmers, Prof. Ralph Holmes, superintendent of schools of Vermilion county, Illinois, has introduced into the common schools of that county the study of agriculture in addition to the other branches taught. The matter was taken up at the beginning of the present school year, and the idea has proven to be quite popular in the more progressive rural communities. The superintendent has sent a supplemental outline of the course of study to the teachers of the county, outside of the three cities of Danville, Hoopston and Rossville, embodying the plan and containing instructions for its practical application. The text-books adopted for use in pursuing the new branch of study are: "Practical Agriculture," by C. C. James, of the Ontario Department of Agriculture, and "The Principles of Agriculture," by L. H.



BASEMENT PLAN OF JOHN D. FERGUSON'S BARN.

The basement plan (fig. I.) shows clearly the internal disposition of the space. It has in all twenty double and four single stalls for tied-up cattle, and seven box stalls, three of which are 12 by 9 feet, and four 9 by 9 feet, each having a suitable manger. The three larger boxes have strong doors suitable for enclosing a bull, and the four smaller ones slatted gates each 3 1/2 feet wide. The balance of the basement is taken up with two rows of stalls and three passages. The dimensions of these are shown in the plan. The passages behind the cattle are wide enough and have large enough doors at either end to allow a horse and boat to pass through for cleaning out. The feed passage is roomy, and supplied with three water taps, stairway to enter the barn above, and chutes down from barn for feed. The gutters behind the cattle are 14 inches wide, 7 inches deep, and constructed, like the entire floor, of Queenston and Thorold cement. The mangers are 22 inches wide inside, the bottom of which is of cement raised 2 inches from the floor level of the stalls. The front board of the manger, that is next the feed passage, is 22 inches high, over which the feed is dumped. Three feet and a half up from the floor is a 2-inch plank 8 inches wide, immediately over the center of the manger. This does not interfere with putting in the feed; it is not in the way of the animals feeding, and it prevents them from standing too far forward while not feeding, thus preventing much of the droppings from falling on the platform where the cattle lie down.

The basement inside is 8 feet high, and well lighted and ventilated. The windows, of which there are 16, each have four panes 12 by 14 inches. Each sash swings on a pivot inwards at the top. In addition to this, there are three 6-inch tiles passing through the wall near the top at each end, eight on the east side and five on the west. These can be closed when desired.

The root house, underneath the driveway to barn floor, is perhaps the most unique feature of the whole structure. It consists of an arch of brick built on a stone foundation. One similar to it was described in our May 1st, 1900, issue by Mr. R. A. Penhale, who, by the way, is a neighbor of Mr. Ferguson. The arch is 9 feet wide and nearly 9 feet high in the center. It is constructed similar to an arch over a stream beneath a railroad or other like situation. When commencing to construct the arch, a ledge of masonry 6 or 8 inches wide is built outside the wall of the basement as high as where the arch commences, on which one side of the arch rests. The other side and ends are built up in similar manner, but of heavier wall. An arch 9 feet wide should be commenced 5 feet 6 inches below the barn floor. This allows for a rise of 4 1/2 feet for the arch—being half its width—and 1 foot for soil above. When the wall is built up to where the arch commences, 9-foot wooden arches are put up and covered with lumber, and the arch built over this with bricks trimmed wedge-shape and set on end. When the mortar is solid, the wooden arch is taken out. Mr. Ferguson's arch is 40 feet long, and has a capacity for about 1,800 bushels of roots. At each end there are two 6-inch tiles, passing through the wall near the top for ventilation, also a window in each end and an opening in the center of the top to put in roots. The structure is water-

most every way. The only change he would make in building another barn would be to raise the basement walls one foot higher, and raise the floor of the stable just that much, which would provide for more fall away from all sides, so as to easily get rid of all surface water. This is a very important point in building any class of farm structures.

Farm Work for November.

The close of the season for outdoor work on the farm is nearing, and while to those who have kept the well up with the work required to be done before the ground freezes up, the approach of this period will have no terror, yet those who have "dawdled," or from any other cause have failed to get well forward with their farm work, it will not be a welcome time. As it is presumed that the apple and root crops have been well secured before the middle of November, the principal farm work for the remainder of the month will be plowing the land intended for crops next spring. This work should now be pushed with energy, as the days are short, and the weather is liable to turn cold at any time, and frost sufficient to stop the plows is in order at short notice. The importance of having heavy clay land intended for spring crops turned up to the influence of the frost is now generally acknowledged, and the work of pulverizing the soil so as to get the seed in early in the spring is thereby greatly facilitated. On lighter land fall plowing is not so essential, and in some instances is perhaps of no advantage, especially where drainage is good, and even spring plowing on such land, when it has not been turned over in the fall, is not really necessary following such crops as corn and roots, where a thorough surface cultivation in the spring may answer even a better purpose than plowing, since the surface soil makes a warmer seed-bed than the subsoil turned up, and the moisture in the soil is better conserved by surface cultivation than by plowing in the spring.

As a rule stubble land in any kind of soil intended



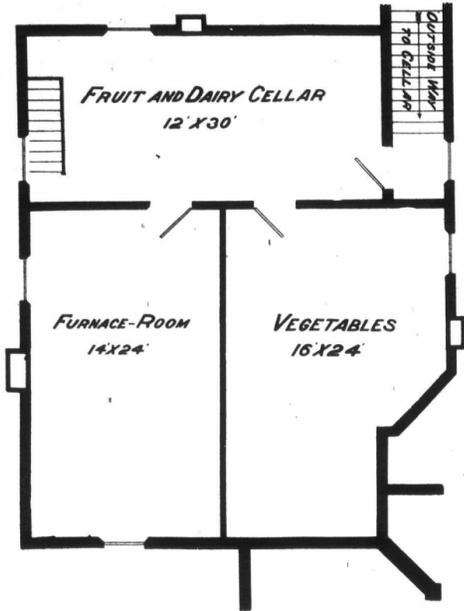
EXTERIOR VIEW OF JOHN D. FERGUSON'S BARN, YARMOUTH TOWNSHIP, ONTARIO.

Bailey, Professor of Horticulture in Cornell University.

It is the purpose to make the study as practical as possible, and arrangements will be made for much work along the line of experimentation, and the intelligence of the pupil will be appealed to rather than the memory. The everyday fact of farm work, the growth of plants, the fertility of soils and their constituent elements, the value and application of fertilizers to secure the largest returns from different crops, and all the varied and interesting phases of agricultural operations will

be investigated, and simple experiments tending to develop the primary principles underlying the sciences pertaining to agriculture will be features of the new departure.

This experiment will be watched with a great deal of interest, not only by educationists, but by



BASEMENT PLAN OF FARMHOUSE.
PREPARED BY W. J. ANDERSON, BEETON, ONT.

practical farmers who wish to see their pursuit elevated and the young people of the country imbued with an appreciation of the dignity of the farmer's calling.

First Prize Farmhouse at Toronto Industrial Exhibition.

The plans accompanying this description are for a two-story building (30x36 ft.), and were designed with special care for as much comfort and convenience of work as was consistent with what was wanted, namely: "A set of original plans for farmhouse suitable for farm of 100 acres, building to cost \$2,000."

The heights of ceilings can be changed if thought wise to do so (the same may apply to all other measurements), but I would suggest that the cellar ceiling be made 7 ft. high, the first floor 10 ft., and the second floor 8 ft. 6 in. The cellar walls can be built of whatever material desired, but common field stone will make a good wall and will give a good appearance for a farmhouse if properly finished. The wall should be at least 20 in. thick, and the floor cemented. There should be a good drain put in at once to take away any soakage that may appear. The section walls can be of brick, and should be about 9 in. thick, or the width of two bricks laid flat, making a solid foundation for the weight of the joists and partitions directly above. The chimneys should be built from the foundation, having their beginning with the stonework, and brought up on the outside of brick wall. They are better to be double flued, especially the one with fireplace, which should have one flue for fireplace and another for stovepipe. The walls and ceiling of cellar should be plastered, and can be done on the stone wall. Cellar windows should all be double and so arranged as to open up for ventilation in winter, and a screen should be put on outside for summer use.

There can be a woodshed and summer kitchen conveniently built at the back, the one chimney doing for both kitchens. This building can be run out past kitchen veranda as far as might be needed for the room required. The close proximity of the kitchen, pantry and dining-room saves the good housekeeper many a step during the day—in fact they are as conveniently arranged as if all three were the one room. The dumb-waiter in pantry is quite handy to both kitchen and dining-room; though not opening directly into the dining-room, is still easy of access from it. There is some fault to be found from the want of a set of back stairs on first-floor plan. This can easily be remedied by putting in a stairway directly over the cellar stairs in pantry, where little room will be taken up by them and a good landing is afforded on the second floor. Hard and soft water pumps might be placed quite handy in summer kitchen. However, a tank, as marked in bath-room, should be used if possible, and if there is a system of waterworks at the barn, of hard water, have it arranged to go to the tank in the house first, and then let the overflow go to the barn or to a trough somewhere near for the stock. In this arrangement you will always have a good supply of cool, fresh water in the house.

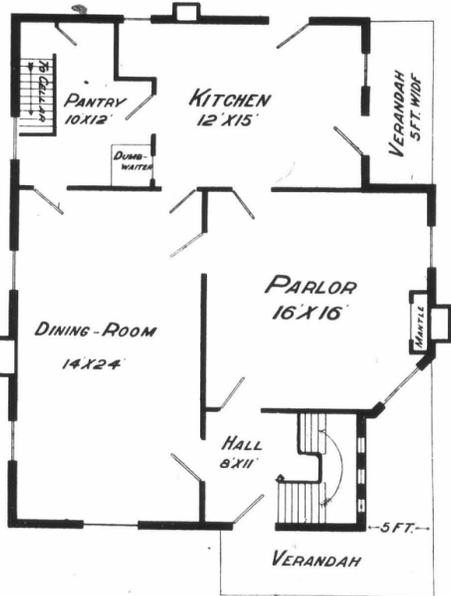
There is a small space taken off the pantry on the side next the kitchen and let into the kitchen, which is suitable and intended for a wash-room. The same pipe will supply water here to sink in

pantry. By using a hot-water heater in connection with the kitchen range, hot water can be had wherever wanted at a minimum cost by plumbing along with cold-water pipes.

The dining-room (14x24 ft.) might be considered by some as being rather larger than necessary. If so, an arch could be put in and make it into two rooms of reasonably good size. The turning stairs in front hallway, from first to second floor, take up much less room for floor space than if run up straight. At the first landing there should be some sort of ornamental windows put in either in the form of a circle or, say three narrow ones, one rising slightly above the other. These will improve the appearance as well as brighten the stairway.

The roof should be put up something after the style of a cottage roof, only having gothics enough to relieve the sameness of a plain four-sided cottage pattern. The back might go straight out over the kitchen part in peak-roof form, having a gable in back end. There should be a gothic (a large one) over the wing on right side, the ridge of this to meet the ridge of main roof. Another gothic should be put on, covering the two windows in the front or second floor. This one should run just about three-fourths of the main roof in height. These gothics and gables may be finished with scroll work and cornice to suit. In this style and good appearance of roof finish can be shown to good advantage and made very attractive. A slate roof, I suppose, is preferably the best, but a man building should figure on about \$100 extra for slate in place of shingles.

These plans are most suitable for a location having the front towards the south or west. However, to have the front to the north or east, it is only necessary to change the rooms a little by putting the parlor on the opposite side and also change the kitchen and pantry to opposite sides the same. The drive past the house to the barn will invariably go past the side of house the pro-



GROUND-FLOOR PLAN OF FARMHOUSE.
PREPARED BY W. J. ANDERSON, BEETON, ONT.

jecting wing and veranda are on, this side having a more attractive appearance and serves as a good front, therefore should be the sheltered side of the house.

The cost of the material and work might be figured somewhat roughly in the following calculation. Of course, this is a farmhouse, and the hauling of material and cleaning up, along with the boarding of the workers, goes without consideration.

These figures are approximate; the values of different articles are not the same in all sections. Then, again, the prices of some materials are very fluctuating, and cannot be reckoned with very much certainty, such as glass, pipe, lumber, nails, heating appliances, etc.

ESTIMATES.

Brick, pressed, 38,000 at \$9 per M	\$ 342
Masonry and plastering	175
Carpenter	140
Material for roof, including cornice and scroll work, about	190
Door and window frames, oak sills in doors and dressed	
stone in windows, all sash, doors and surbase (price	
only as mentioned)	320
Painting and glazing, glass and paint	143
Lumber (hemlock), about 13,000 ft. at \$12 per M	155
Lath, about 150 bunches at 20c	30
Sand, 30 to 35 loads, worth 25c. per load in pit, or about 60c.	21
delivered.	13
Cement, about 10 barrels at \$1.30 per barrel	13
Plaster of paris, about 3 barrels at \$3 per barrel	9
Hardware, including eavestroughing, material for gutters,	
nails, etc.	100
Furnace	90
Plumbing, pipe, taps micked, bath-tub, basin and sink	100
Total	\$1,828

There are other extras necessary, such as tile for cellar drain, sash weights, and locks, etc., which, while adding to the comforts and convenience, will

also add considerably to the cost. In building a house, it is, as a rule, only done once in a long time, and therefore should be done well. The best material should be used, and always the best workmen employed, regardless of the price asked.

Simcoe Co., Ont. W. J. ANDERSON.
[NOTE.—The set of farmhouse plans prepared and described in the above article by Mr. W. J. Anderson received first award, donated by the Massey-Harris Co., at Toronto Industrial Exhibition, 1900, for best set of plans for house suitable for 100-acre farm, building to cost \$2,000. While the plan is undoubtedly a good one from many standpoints, it has features that can readily be improved on without interfering with the size of the structure or general outlay.

As is admitted in Mr. Anderson's description, Fig. II. (ground floor) shows no back stairs to upper story, which in a farmhouse with stairway rising from front, as this one does, is simply indispensable. This he suggests could occupy the space in the corner of the pantry over the cellar stair. We would suggest that this be changed by turning the cellar stairway across the end of the pantry and placing the upper stairway over it, opening from the kitchen. The objection to having the way to the upstairs through the pantry is obvious.

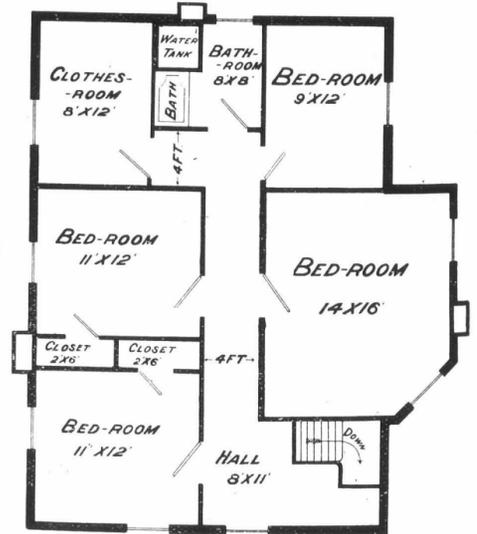
A change would probably also be found desirable in the position of the front stairs. Instead of going up from just inside the front door, would it not be better to reverse the positions of the upstairs and downstairs landing, so as to turn the angle to the right instead of the left in going up? Again, we see no advantage, but considerable disadvantage, in having a door directly between the kitchen and parlor. Probably other changes could be made to improve the plan, but these we have referred to appear to us of real importance.—ED. F. A.]

A Reviewing Letter.

To the Editor FARMER'S ADVOCATE:

SIR:—Fair Attractions. I have carefully read your precious editorial, "After the Fairs," and am greatly pleased that there is a publication whose editor dare to speak out so fearlessly. I am also delighted at the fact that so many correspondents have ventured to sustain you in your position against certain "attractions," so called. Surely the fair managers will take the hint and reform some of these things. If not, they will soon awaken to the fact that our great fairs—once so creditable to the managers and the country—have degenerated into sluice-gates to the sewer canals of vice and iniquity. That this is the tendency of the so-called attraction features is patent to every observing person. Very much to be seen in broad daylight this fall was most disgusting to men of pure tastes and refined feelings. We do not wish our children to be educated along any such lines.

Law-makers Scored.—Then, again, there were some very important remarks made by a writer on the sheep-killing dog, not the least among which was his declaration that, had he the power, he would ship our law-makers to Paul Kruger; but he should have added to his list of transports those preachers who have been clamoring so for war, asserting that it has a "civilizing tendency," together with a few of our law administrators. Take as an example of what I mean here: A little



UPSTAIRS PLAN OF FARMHOUSE.
PREPARED BY W. J. ANDERSON, BEETON, ONT.

boy stole three cigars, and was awarded three years in a reformatory, while a young man who had committed an indecent assault upon a little girl was given only two months in the common jail. Thus, in this highly civilized and christianized

country, under the British flag and during the reign of Her Most Gracious Majesty, and in the latter end of the 19th century of the Christian era, we have it declared by our courts that the virtue, purity, chastity and nobility of girlhood are but *one-eighteenth* as valuable and sacred heritages as the vested right in three filthy cigars. Does not this fact alone leave ample room to question whether the world of mankind is growing better or worse?

Eradicating Horse-radish.—Next, a correspondent asks how to eradicate horse-radish. If he will



SHROPSHIRE RAM OVER TWO YEARS.

Second prize at Toronto Industrial, 1900; first prize at Western Fair, London, same competition, and head of first-prize flock.

OWNED BY D. G. & J. G. HANMER, MT. VERNON, ONT.

take a tile spade and cut the plant off three or four inches below the crown, tossing this portion up to the action of sun and weather, I think he will experience but little further trouble with the plant. At least, such has been my experience and observation. And the same holds good as to burdock and wild lettuce plants. The latter plant first made its appearance in this neighborhood three or four years ago, travelling apparently from north to south or from the R. R. lines into the country, and it now infests most of our sod lands as well as our cultivated fields. And it is an absurd waste of time for a man to try to keep it down while his neighbors permit it to flourish. I have tried this, to my utter disgust. When cut off above the ground during the early stages of its growth, it will throw out a multitude of young shoots, the same as burdock will under like circumstances.

Fall Wheat and Chess.—Further, one of your correspondents claims that fall wheat turns to chess, or cheat. We, in this section, do not all believe such doctrine. We believe that like produces like, or the likeness of some ancestor. Was chess the ancestor of wheat, and is it simply a clear case of atavism? If so, why cannot chess, by means of a careful and high system of cultivation, be brought into the same or some new variety of wheat or some other useful agricultural plant or seed? Yet we admit that in low, wet places, where wheat winter-kills, there is usually an abundant crop of chess. Moreover, I had a field seeded to grass along with the wheat (Red Clawson), and when harvesting I noticed considerable shelled wheat on the ground. The next season that field had a heavy stand of chess on it. On other occasions, however, I have observed that I had some first-class wheat of other kinds in my first cutting of hay after a wheat crop. This second crop of wheat must have propagated itself from grain shelled while handling the previous crop.

But further, I have noticed that on our land here where fire has burned the soil to several inches in depth, the next season there springs up a rank growth of rag or other weeds in the fire beds. How are we to account for these growths? To say that after the fire the weed seeds had been distributed over the ash beds will scarcely prove satisfactory under all conditions.

E. J. YORKE.

Experience with Chess.

Many farmers believe that under certain conditions wheat will turn to chess. Others are of the opinion that the whole of living nature contradicts any such assumption. As a matter of fact, nature does not work according to the beliefs or opinions of men, but according to fixed laws implanted by the Creator of all things. Forty-one years ago my father began to raise wheat among the stumps on this farm. He believed that like produced like, so was always careful to remove all chess seeds from his seed wheat, and he always raised wheat without chess, no matter how badly winter or spring killed. For the last seventeen years I have followed his example, and have raised no chess. I always put wheat for seed through the fanning mill twice, cleaning the first time as I would for market. All sieves are then removed, the mill turned fast and the wheat fed slowly through. Most of the light wheat, some good wheat, and practically all of the chess go over behind the mill. If I buy seed wheat of a neighbor, I give it this

second cleaning. This fall I bought twenty-four bushels of very fine wheat for seed.

I gave my neighbor five cents per bushel extra, because he had "cleaned it for seed," and he was proud of the nice clean seed he was giving me. I brought it home and blew out about three bushels. Nearly two bushels of that was fairly good marketable wheat. The remaining portion was light, imperfect wheat with about three or four quarts of chess in it. The remaining twenty-one bushels was practically free from light, imperfect wheat, and chess, and a very fine sample of seed wheat it was.

Two years ago the wheat was very badly killed out in this section. An adjoining neighbor had a piece of wheat nearly all killed out, and a heavy crop of chess came instead. I had a field as badly killed and there was no chess came up.

I do not expect to gather figs from the thorn-apple trees down the lane next year, nor do I expect to reap chess where I have sown wheat this fall.

Elgin Co.

H. PETTIT.

DAIRY.

Long Churnings.

A common fault in cream, and one which may arise from a variety of causes, is that of refusing to churn into butter. It is possible to get cream in which the butter-fat globules will not separate out, simply because they are so small that they will neither solidify nor coalesce; such a thing, however, is comparatively rare, and cannot be overcome any more than cream or butter can be obtained from milk which has absolutely no butter-fat in its composition at all. This phenomenon sometimes occurs in milk coming from a diseased cow whose system cannot elaborate the fat.

Cream which refuses to give butter, or "goes to sleep," gets "frothy," "puffy," or "hove" in the churn, may, in the first place, have derived this property from the fact that it is being churned at a wrong temperature. If the cream is put into the churn at a much lower temperature than is advisable, it will often be found that it thickens, becomes viscid, and hangs to the inside of the churn, so that unless steps are taken to remedy the defect, churning is prolonged indefinitely. On the other hand, if churning is begun at a higher temperature than it should be, the cream will sometimes get frothy and swell to a tremendous extent; again churning is delayed until the cream has been cooled and thinned down.

There is no set rule as to the temperature at which cream should be churned according to the surrounding conditions; it can only be stated roughly that for every five degrees Fahr. of difference between the air of the dairy and the normal working temperature (57 deg. Fahr.), the cream should be raised or lowered one degree in the opposite direction. Only practice and experience tell one how this rule may be departed from.

In the early stages of churning there is expelled from the cream a quantity of gas which, being generated by the ripening ferments, and dissolving in the cream as it forms, is thrown out of solution by the concussion to which the cream is subjected in the churn. If this gas is not removed by frequent use of the vent, it is forced into the cream, and hence arises the heaving or frothy state.

Cream from the milk of stale cows—i. e., those which are going dry—is a frequent cause of bother in this respect. If such a thing is suspected, it is well to be assured of it by keeping such milk apart from the rest, and churning the cream obtained from it separately. By careful attention to all the details of ripening and churning, raising the temperature so that it stands at 70° Fahr. in the churn, this difficulty may be overcome.

Too much acidity in the cream is also said to result very frequently in a difficulty in bringing the butter. The remedy, if the cream must be left till it has reached such a state of over-ripeness, is to ventilate very frequently indeed, for, say, the first five or six minutes of churning, as such cream throws off an enormous quantity of gas.

Winter feeding is sometimes responsible, as at a time when the cow is denied her natural food and a ration of oil cakes and other feeding stuffs is given her the milk is naturally affected to a considerable extent and rendered liable to develop abnormal properties.

Remedy During Churning.—If the cream is found to go to sleep in the churn, the churn should be stopped, opened, and the temperature of the cream tested; if it has fallen or risen it must be

brought back to the correct churning temperature by the addition of a quart or so of strained water. Churning may then be resumed, slowly at first, being careful that at each revolution the cream is heard and felt to "drop." As the cream appears to be regaining its normal condition, full churning speed may again be resorted to, until the butter breaks.

If the fault threatens to become chronic, all the points under discussion must be looked into, everything used in connection with the milk and cream must be kept scrupulously clean; the cream should be stirred almost continuously during the ripening period, and then the last resource is to pasteurize the cream immediately it comes from the separator, cool it, and add a "starter," so as to ensure a healthy and normal ripening of the cream.—L. J. Lord, in *Agricultural Gazette (Eng.)*.

Milking and the Care of Milk.

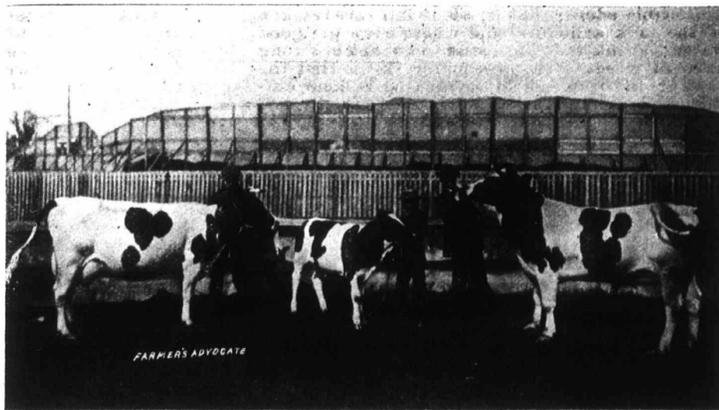
Comparatively few dairymen appear to realize that milking is a trade. Kindness, neatness and regularity must be observed, and all the milk must be secured. The cow must be kindly treated at all times. She cancels a part of her debts to her owner every twenty-four hours. When she is well treated and furnished a plenty of palatable food and pure water and made comfortable, generally she does her best, but when she is abused in any way, she cannot do her best, and I have sometimes thought she acted as though she would not if she could. She may have less resentment than humanity, but I doubt it. I know that she does poor work when poorly treated.

The dog or the boy on horseback after the cows is, as a rule, a mistake, to say the least. The cows should have no fear of the persons caring for them. When I find my cows are afraid of a man after he has been about them a sufficient time for them to become acquainted with him, I know there is something wrong and that a change of some kind is necessary, and if no other change remedies the trouble, a change of the man does. This point should be insisted on rigidly.

The cow must be kept clean. When it is necessary to wash the udder and teats before milking, do so. Each milker should have a pail for this purpose, and be given to understand that it is to be used when there is need of it. This requires but little time, and is a necessity if we are to have clean milk. The filthiness connected with much of the milking is sickening to a person who sees the work, and many times it is to the person consuming the milk fifty miles away from where it is produced. I was much interested and somewhat surprised a while ago in reading a report of investigations made by Dr. Backhaus, of the milk supply of Berlin, in which he made a statement that the city of Berlin consumed with its daily milk three hundred-weight of cow dung. Is it probable that we are doing any higher grade of work?

Promiscuous milking should not be allowed. Each milker should have his regular cows to milk. The cows will do much better for it. My cows are milked in the cowhouse summer and winter; in fact, this is a general rule in the dairy sections. There is a great difference in milkers; some do not try to do good work, and others cannot when they do try. I have found difference sufficient between the work of milkers to pay a man's wages if he milked fifteen cows.

This is not guesswork, but a matter of calculation on hard facts, and proves that we need to look after the milkers. There should be regularity in



PRIZEWINNING HOLSTEINS.

Cow, Empress Josephine of Brookside, 5 years old, second prize; heifer calf, Myrtle Pearl, first prize under 6 months; yearling bull, Emperor Joseph, first prize, Ottawa Exhibition, 1900.

PROPERTY OF W. W. BROWN, LYN, ONT.

time of milking. The cows know the time of day, and are uneasy when not milked at the usual time. Have patience with a kicking cow; she is hurt or frightened or has been abused in ninety-nine cases out of a hundred. I lose confidence in a milker when he has trouble with cows kicking. Almost invariably, a cause can be found for cows kicking when being milked. If a cause cannot be found and removed, it is best to dispose of the cow, as we

cannot afford to have a confirmed kicker in the herd; it has a bad influence.

When milking, make a business of it, and allow no other business to interfere with it; much and loud talking should not be allowed. Always milk with dry hands; milking with wet hands is filthy. It is best to milk at the same hour morning and night, so as to have the time between milkings uniform.

The best results are secured in this way, or at least better results are secured when the time between is twelve hours than when it is eight to sixteen hours.

One of the facts that should be kept in view at milking time is that the quality of milk is, so to speak, dependent more or less upon the conditions that surround the cow. If a cow is moved into new quarters, or if there is anything of a disturbing nature, the Babcock test will show a loss in yield of fat. A certain dairyman who had made a success of the business enforced a rule that there should be absolutely no conversation in the "mistle" at milking time, and while this may have been going too far, still a quiet cowhouse is a necessity for the best performance of the cow. It is supposed that the production of milk is more or less a result of expenditure of nervous force, and if in any way this nervous force is diverted, the milk will show a loss, because the cow has only so much nervous force, and as she had to supply some of it to whatever was disturbing her, she had not her usual amount to bestow on the operation of producing milk.

No man who makes dairying his business can afford to be much away from the cowhouse at milking time unless he has a man on whom he can safely rely for the right treatment of the cows at that time. It is of equal importance, if not greater, to see that the cows are milked properly as they are fed properly, for while poor feeding will hurt the yield, it will not necessarily hurt the cow, as most assuredly poor milking will do.

It is surprising the total unfitness that the majority of men have for handling animals. Go to any large city and watch the drivers of various teams, and probably the majority of them have only one resource for any and all failings on the part of the horse to do as they wish, and that is the whip supplemented in most cases with profanity.

Such a man should not be allowed to even pass by a cowhouse, much less go in to it. A milker that is a thoroughly good one is worth his wages if he does nothing else on the farm save milk. They are rare, and it is still rarer to find one out of a job, for when a dairyman gets hold of one he generally obeys the Scriptural injunction to "hold fast to that which is good."

One of the most common failings of milkers is in not getting all the milk. It is important to get the last drop, for two reasons: the last milk is the richest in butter-fat, and if the last drop is not drawn from the cow, at the next milking the cow is apt to supplement the milker's failure in getting the last drop by keeping another last drop on her own account.

The giving of milk by a cow for so long a period as the average cow now does is entirely an abnormal proceeding, and one that needs to be encouraged, and if it is not, the cow will be very apt to go back to the natural way and give milk for a shorter period, as she was accustomed to do in her native state.—*Rusticus, in Bibby's Quarterly.*

Care of Milk for the Creamery in Fall and Winter.

The milk in summer is usually free from very objectionable odors; that is, where fair care is taken of the milk and cows, and where cows get good water to drink and gain access to no rank or strong flavored weeds. The reason for this is that the cows are in the open field the milking is done outside, and the cans when washed are usually left where the sun and fresh air can work their part of cleaning, for where there is a good amount of sunlight, objectionable germ life is very low. But in the fall when the cows are beginning to be housed and when cans, pails and strainers are kept in the kitchen or outhouse, then extra care must be taken of the milk, for it must not be forgotten how very easily milk absorbs odors, and milk off flavor makes poor butter, and poor butter is an unprofitable product.

We assume the fact that the cans have been washed in lukewarm water, with a good brush, and then scalded. They should then be placed where the pure air can blow in and around them continually, and every care should be taken that no breeze from the barnyard, hog-pen or other infectious source be allowed to pass over them.

At milking time in the stable, very many should turn over a new leaf. When the animals are in the stable, the udders, whether they appear clean or otherwise, should be wiped well; then the milker should put on a pair of clean overalls or an apron, wash the hands and commence to milk. This may seem a lot of needless trouble, to those not accustomed to it, but habit, along with a desire to improve, will overcome the objection in a remarkably short time.

Never, under any consideration, take the cans inside the cow stable for milking. Leave them outside the door, and as quickly as one is full carry it to the milk house and bring back another, and so on until the milking is done. As soon as through milking, stir each can quite frequently until the milk is quite cool, and never place a cover tightly on the cans while the milk is cooling, or the animal

odor will be retained, and that gives it that stuffy, musty, and sickening smell.

If there is not a proper milk house, make a determined effort to have one, for kitchen and cooking taints on milk give no end of trouble to the buttermaker. Most of the farmers know what foods impart flavors to milk, and these in every case should be avoided, and the purest of water should be furnished the cows to drink at all times.

Great Dairy Cows.

The unregistered Shorthorn cow, Cherry, which created such a sensation at the milking trials at Tring in August, where she yielded 67 lbs. 10 ozs. of milk in the day and produced over 4 lbs. of butter, was entered for competition in the milking trials held in conjunction with the London Dairy Show at Islington in October. At the latter fixture, 104 days after calving, her yield of milk for the 24 hours was 55 lbs. 2 ozs., but her butter yield worked out to only 2 lbs. 5½ ozs.; so that it took a little over 2½ gallons of her milk to produce 1 lb. of butter. At the Tring trials the milk produced by this cow was so rich in butter-fat that every 1½ gallons of it produced 1 lb. of butter. How is this difference in richness and butter product accounted for?

At the London trial another unregistered Shorthorn cow, 34 days in milk, gave 72 lbs. 7 ozs. of milk, which yielded 2.10½ ozs. butter, which shows her milk lower in quality than the other, which may possibly be accounted for by the difference in the time she had been giving milk since producing her last calf.

Clean Udders.

One important feature in securing cleanliness in milk is the cleansing of the udders of the cows before milking. A clean, wet towel, though not so wet as to drip, is probably the best and most convenient means of cleansing the udder. When this is not done, germ-laden dust falls into the milk pails continually during milking-time, and in any weather, but in summer weather especially, the germs multiply by the million, and seriously injure the milk as a fit raw material for the manufacturing of prime butter. This plan of cleansing the udders before milking now prevails in all really well-regulated milking herds, where care with milk is regarded as a religious duty. When first proposed, there were some theorists who objected to it, on the ground that it was likely to stimulate the secretion of milk before the milker was prepared to take it, but repeated experiments where dairy problems are given greatest attention have shown that there is nothing whatever in the theory. There is only one objection to it, and that is to be found in the words, "I'm too lazy."

Stripping Cows Clean.

Carefully-conducted experiments, as well as the everyday experiences of stock-owners, go to show that clean milking exercises a very material influence, not only upon the quality of the milk and butter produced by cows. It is well known that in the hands of careless milkers, cows which would otherwise continue giving a good flow of milk for seven or eight months after calving are often run dry within four or five months of having produced their young. The great cause of trouble on this score is incomplete stripping. The necessity for the thorough removal of all milk in the udder is rendered of special importance by the fact that it not alone induces a cow to continue longer in milk than she would otherwise do, but that it also ensures a considerable improvement in the yield of butter obtained from the milk produced. The last milk to leave the udder is, as is well known, many times richer in butter-fat than that which is first drawn. Too much emphasis cannot, therefore, be laid upon the necessity of thoroughly stripping dairy cows at all seasons of the year.

POULTRY.

Canadian Eggs.

One shipment of an article of inferior quality will sometimes do more injury to the reputation of producers than can be remedied by several successive shipments of good quality. On more than one occasion, we have referred to the carelessness with which some of our country merchants and others are accustomed to forward eggs to the markets; the result being that the number which have to be thrown out as unfit for food is simply astounding.

Now the natural sequel to this unbusinesslike method is being told in the receipt of letters from importers in Great Britain complaining of the quality of the eggs received from this country. One firm in England says that the price now being paid for Canadian eggs is ridiculous, but not more so than the quality of the same. Several lots have been sold at prices which will not pay for more than their freight charges. Needless to say, the shipping of eggs from Canada which are not strictly fresh-gathered will injuriously affect the sale of even such as are truly fresh; the reputation of the whole body of producers will suffer for the sin or the carelessness of some amongst them.

No doubt, much of the state of things complained of is due to a combination of unfortunate circumstances. The eggs probably were gathered during the extremely hot spell; or they were put on the market at a time when large quantities were arriving from other places. The fact remains,

however, that the chief cause for the low prices which Canadian eggs have been fetching lately in the British market is the poorness of the quality of many of them. It is a known fact that several lots have been shipped by parties who did not know how to handle the business wisely, and who did not take the necessary precautions to see that the eggs had been properly candled.

It is the hardest thing in the world to establish a reputation for our goods in the face of such unbusinesslike methods as these mentioned. As we said before, to a large extent all must suffer for the sins of the few. If the small shippers would think a moment, however, and would realize what large possibilities lie in this business, properly managed, they would also realize how largely their own interests would be served by a rigid adherence to honesty and a system of the most careful selection in packing. Only in this way can a great Canadian egg industry be built up.—*Monetary Times.*

Practical Essentials in Successful Poultry Raising.

When the Jersey cattle fever first became epidemic in this country the rage was all for "solid color." A cow that would bring fifteen hundred dollars if possessed of a solid color and other required "points," would be worth no more than a hundred or so if she had a little white mixed with the other color of her hair. This condition of affairs prevailed for many years, but is decidedly changed at the present day. Now the fancier of Jersey cattle is more concerned with the amount of butter he can secure from his cows than with any other feature connected with them. He still tries to get a solid colored animal if he can, and one that excels in other desired characteristics, but the yield of butter is the paramount interest in his breeding. He has made it one of the "fancy points" of his work. The millionaire breeder of Jerseys is not anxious to secure an added yield of butter because he will thereby get more money from his herd, but he is after the satisfaction of securing a greater and still greater yield of butter by judicious breeding. To breed a Jersey cow that shall make a yearly test of a thousand pounds of butter in one year is an honor eagerly sought by men to whom the value of a thousand pounds of butter is of no moment whatever. It is the incentive of securing greater production than others can secure that urges on their efforts, and the result is greatly increased value in the race of Jersey cattle.

It seems to me that the same interest could well be applied to poultry breeding. I have always contended that there need be no antagonism between the fancy and the practical in poultry culture, and I am of the same opinion still. I believe that the beautifully formed Plymouth Rock or Wyandotte, from a fancier's standpoint, is the most profitable bird from the market poultryman's standpoint. The Leghorn of the most characteristic, sprightly shape is the bird that will make the egg basket overflow the quickest. The fancier has made our poultry what it is to-day—a steady improvement, both in the fancy and practical side, to the poultry of the past. But this has come about, not so much because the fancier cared particularly whether the practical side were benefited or not, but because, as I have said, there is no real antagonism between the fancy and the practical, so that in aiming for excellence in fancy points, the practical side has been added to.

But when it comes to increased egg-production, a distinct effort must be made outside of mating for fancy points. There must be a mating here for larger results, just as there is a mating for larger results in the dairy world, and it can be done while attending carefully to standard points. Now, it seems to me that this striving to reach a large egg yield ought to give an added zest to the fancier's work. He will have all the pleasure that he has ever had in breeding for points, and in addition can have the same keen satisfaction that a Jersey breeder experiences in breeding so skillfully as to secure large production. The Jersey cow that has made fourteen pounds of butter in one week is called a "tested" cow, and she and her descendants thus acquire distinction above their fellows. Why may we not set the "tested" mark for the hen at two hundred eggs per annum?

All credit to the fancier for what he has done for American poultry—he has made it what it is. It now remains for him to put another element of great value into his work by increasing the egg-production of the fine specimens he sends out, and in the case of some varieties, by increasing the size of the egg. It seems to me that these points ought to appeal to a thorough fancier spirit. Breeding for them requires skill, judgment and patience, and these give zest to the fancier's work.

[NOTE.—The above article, written by Webb Donnell for *Reliable Poultry Journal*, indicates with considerable clearness the necessity for earnest personal study and effort in poultry-raising in order to conduct a really successful business. It is not enough to get good foundation stock and a good pen, and then determine to follow the best obtainable rules, but in order to go to the top, or even to reap a good profit, one must exercise considerable mental effort in the direction of improvement all the way along. The tendency in all classes of stock is towards deterioration, so that testing, weeding and developing must be constantly aimed at in order to keep up to the present standard. In poultry-raising, as in any other vocation, there is always room and profit at the top. —Ed. F. A.]

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.

COWS AND SHEEP WITH COUGH.

W. A. R., Quebec, Que.:—"Will you please favor me with a treatment to cure cows and sheep from coughing and bad colds in their heads?"

[Science has not as yet discovered a cure such as you ask for, some coughs being incurable. Any irritation to the nostrils, throat, bronchial tubes or lungs will cause an animal to cough. If the trouble be tubercular, it is practically incurable in either cattle or sheep. If caused in sheep by grub in the head, it is also very hard to treat, but that is not likely to occur at this season. If due to a common cold, such as you evidently suspect, a cure can be effected by good care, keeping animals in comfortable quarters, excluding from drafts, etc., feeding soft, easily digested food, and holding the head over a pot of boiling water, causing the patient to inhale steam. If the throat be sore, give chlorate of potash three times daily, 2-dr. doses for cows and 20-gr. doses for sheep. Not much medicine is required; good care will effect a cure.]

J. H. REED.]

SALIVATION IN COW.

A SUBSCRIBER, Glengarry Co., Ont.:—"Kindly answer through the columns of your paper the cause of cow frothing at the mouth, sometimes passes matter also, losing in flesh, and not so good in milk as she was; seems dull. She is a 3-year-old."

[Salivation in cattle occurs from different causes, such as irregularities of the molar teeth, eruptions in the mouth, called apthia; an abscess or abscesses in the mouth, wounds in tongue or cheeks, a condition called wooden tongue, etc., etc. Have her mouth carefully examined; the fact that sometimes matter escapes indicates an abscess; if one or more exist, make a good free opening into each and allow the pus to escape; no dressing will be required. If the teeth are the cause, have them dressed. If little ulcers are noticed, touch each once daily with a pencil of the nitrate of silver or with butter of antimony applied with a feather. If the wooden tongue, the organ will be felt to be hard and unyielding and enlarged; there is no cure for this.]

J. H. REED, V. S.]

COW FAILING TO BREED.

JERSEY, Lanark Co., Ont.:—"I have a thoroughbred Jersey cow that I can't get with calf. She has been milking now three years, and is perhaps too fat, as she is in good condition. She comes round with great regularity every 18 or 20 days. Sometimes I leave her with the bull all day, and again tie her up after she is served, but it is all the same. I have had her washed out with bicarb. soda and water, before service, too, and now an old farmer and stock breeder here tells me to tie up the cow after service and open the orifice, and I would find a little wrinkle at the lower corner, and to just give this a slight nick with a sharp knife, so that a few drops of blood would come, and that she would be sure then to be with calf. Now, I don't want to do anything like that without knowing something of the reason for it, and as there is no veterinary near here, I appeal to you for your opinion on this plan or one of your own, if you can recommend one. If I should be able to get her with calf, would her offspring be liable to inherit her condition. She is only 7 years old, and I have but one heifer from her, and it is the best cow on the place, and has apparently none of her mother's trouble at all. Would a bull from her be liable to be unsure?"

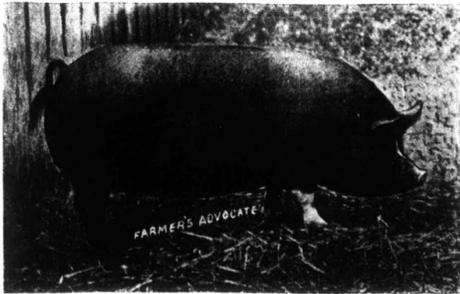
[Sterility in cows and other domestic animals is due to various causes, both physical and organic. Some of the causes are removable, while others produce permanent impotence. Animals suffering from tuberculosis or other seriously-diseased state of the system, especially when the sexual organs are involved, are very often sterile. Occasionally the male animal used is at fault, and when that is suspected, it is advisable to make a change. It would be well also to insert the hand into the vagina, and learn if the entrance to the womb is open. Occasionally it becomes closed and caloused, and requires to be opened mechanically. By pressure with the hand, commencing with one finger, an opening can usually be effected. If this is found to be the trouble, apply to the opening, three successive days before service, equal parts of belladonna and Venice turpentine. There is no reason to believe that the cow's offspring, either male or female, will inherit her tendency to barrenness. Nor is there anything in the operation recommended by the old farmer. That is an old notion long ago exploded by veterinary science, and is akin to that of splitting the tail for the cure of "hollow horn." Sometimes bleeding a cow in high condition has value, but five or six quarts of blood should be taken in such a case in order to do any good.]

CRIBBING HORSE.

C. A. A., Illinois, U. S. A.:—"I have taken your valuable paper for a long time, and could hardly afford to do without it. I have a fast pacing horse, 8 years old; that has been cribbing at the manger

for about a year. He is not very bad. Can you please tell me how to cure him?"

[It is unfortunate that cribbing has been allowed to continue so long without adopting measures to stop it. When first noticed, the horse should have been put in a box stall without manger or any projection for him to press his teeth against. His hay should have been given on the floor, and his grain in a pail, that should have been removed as soon as the animal had finished eating. The chances are he will be difficult to cure, as the habit will have become pretty firmly fixed. In such a case, get a muzzle for him, and leave it off only while he is eating. A strap buckled tightly around the throat is a treatment often given, and renders the horse incapable of filling himself with wind as is done in cribbing.]



LADY SHIELDS.

Berkshire sow, first prize in class over 6 and under 12 months, at Toronto and Ottawa.

OWNED BY SNELL & LYONS, SNELGROVE, ONT.

HORSE LAME IN HOCK.

C. R., Addington Co., Ont.:—"I had a thoroughbred gelding kicked in front of hock by a horse sharp shod. The cut closed up, but swelled very large, and I lanced it on the inside of leg above spavin, and considerable thin yellowish fluid ran out. He was on three legs for two months. Have blistered several times with mercury and cantharides; is still lame and a little stiff. How can I relieve the lameness?"

[There is probably ankylosis (the union of two or more bones) of some of the bones of the joint. If so, and they be those involved in the gliding articulations (the lower part of hock), the lameness will disappear as soon as the inflammation has entirely subsided. If the true hock is involved, lameness will be permanent. Ankylosis of this part of joint is not likely to take place, but the articular cartilage may be diseased. Injuries such as described are liable to leave permanent enlargements and sometimes permanent lameness. The treatment you have adopted is the best you can use, unless you get a veterinarian to fire and blister, which I think would be your better plan.]

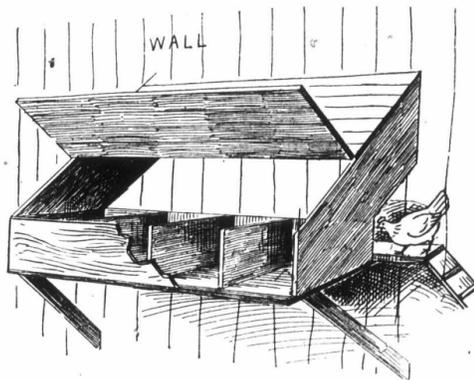
J. H. REED, V. S.]

Miscellaneous.

NEST BOX - POULTRY BOOK.

L. K., Grey Co., Ont.:—"Will you please show in your next paper the latest style of a hen's nest to prevent them from eating eggs? Let me know where one of the best poultry books is to be got."

[To prevent hens eating eggs, give plenty of meat, grit and lime, and provide dark nests, constructed similar to the one illustrated beneath. We have presented this cut before, but believe it to be a good one and well worth repeating for the benefit of those who have not seen it. This box,



NEST BOX TO PREVENT EGG-EATING.

which extends along the wall of the house, is shown open at back, that its construction may be understood. The hinged lid is in sections, each covering three or four nests, and can be raised to remove the eggs. When the lid is down the nests are quite dark, and therefore good for preventing egg-eating. In fact, it is a good sort of nest box from any standpoint.

One of the best poultry books we have knowledge of is "The Practical Poultry Keeper," by Lewis

Wright. It is a new edition issued last year, price \$2. It can be had through this office at the regular price, or for obtaining four new yearly subscribers, at \$1 each, to the FARMER'S ADVOCATE.]

PROPAGATING FRUIT TREES.

C. E. B., Yale Co., B. C.:—"Will you kindly answer the following questions from an amateur horticulturist, who has derived some benefit from reading your answers to other correspondents:

"1. I wish to dig up a plum thicket of suckers, which has grown up from the roots of plum trees, and, if possible, to make some use of the young trees, which are from one-eighth of an inch to two inches in diameter, and from one to ten feet high. Can these be dug and stored in cellar and grafted with plum scions, following the same process as in grafting apple seedlings, with any chance of success? Could the larger ones have all the tops cut off before storing, or should I leave them whole until grafting time? Is there any other way I could handle these young trees to make good plum trees of them?"

"2. Is grafting the apple, pear, plum and cherry considered to be as good a process of propagation as budding by up-to-date horticulturists of Canada?"

"3. In budding this year's seedlings, should the bud be set near the surface of the soil, or would it be equally as good to put the bud in a foot or two up the stem of the seedling, and when should the stem be cut above the bud? Is there any process of storing buds and roots in the cellar and budding on the same principles as grafting, in the winter months; and can buds be kept over winter and inserted in the spring successfully? If so, describe the process."

"4. What do you consider a fair average growth for grape cuttings the first year, and should they be allowed to bear any fruit the second year? Would you recommend the putting of coal cinders from locomotives between the rows of grapevines to keep down weeds, and would the cinders have any value as fertilizers?"

"5. Do any varieties of apples come true from seed? If so, please name varieties."

"6. How should peach seed be treated? I have a lot of peach seed, which I want to plant for seedlings; also, plum and cherry seed. Would the seedlings from this seed be good for budding or grafting out? Everything is grown by irrigation here, and I have seen beautiful plum trees from grafts inserted in clefts three feet from the ground, two scions being used. But I notice in some of the papers grafting the stone fruits is not considered as good as budding. Grafting appears to have been more successful here."

[1. The plum suckers could be taken up carefully this autumn, after the wood has ripened well, and sorted. The smallest ones—say from one-eighth to one-fourth inch—could be heeled in and re-planted in nursery rows next spring, and they could then, after growing a season, either be used for budding or grafting. The larger ones should be kept in a cool place where they would be available any time during the winter. It would not injure the trees if they were cut back when being stored away, provided the wood was thoroughly ripe. These trees could be grafted with plum scions. Better success would probably be obtained if the scions were grafted at the collar, and not on the root itself, as plums and cherries do not unite as readily on roots as apples do.

2. Although budding apples is becoming more popular than it once was, and is a very good method, grafting gives very satisfactory results, and can be employed, if more convenient. Pears are not grafted as much as apples; and plums and cherries are nearly always budded.

3. If budding were performed on this year's seedlings, the buds should be set near the surface of the soil. The reason it is better to do this than to put them higher up is that when the tree is planted in its permanent position the union will be below the ground, as there is often a crook in the tree where the union was made. If the trees are budded in the autumn, the stock should be cut off above the bud the following spring after growth has begun. Budding could not be done satisfactorily during the winter months, as there would not be enough sap to make the bark slip easily. Buds can be kept over winter and inserted in the spring successfully, but in doing this it is absolutely necessary that they be kept perfectly dormant, and this can only be done by putting them in cold storage.

4. It would be difficult to tell what an average growth from a grape cutting would be the first year, as it depends on the season and locality. An average growth is 2 feet here. I would not recommend putting coal cinders between the rows of grapevines. They would not amount to much as a fertilizer, and the vines would do better if the weeds were kept down by surface cultivation of the soil.

5. No varieties of apples come true from seed.

6. Peach stones should be spread in a shallow heap on the ground in the autumn and covered with a light covering of soil, the object being to keep them moist and to permit of them being acted upon by frost. In the spring they should be planted out in nursery rows. Seedlings from the stones mentioned should be quite satisfactory for budding or grafting on. The plum and cherry stones could be treated the same way.

W. T. MACOUN, Horticulturist, Central Ex. Farm, Ottawa.]

UNTHRIFTY BULL.

G. L., Halton Co., Ont.:—"I have a 2-year-old Durham bull that has never done well, but is getting worse; is failing very fast, and will not eat or drink enough to keep alive. He stands tied on a cement floor, and is fed on hay and barley chop. Would you advise feeding potatoes, and how many at a feed? Which is the most fattening, clover or timothy hay, and which is the best for calves?"

"I have taken the FARMER'S ADVOCATE for many years. It is the best paper I know of." [If the animal has never done well, we should be suspicious that he was diseased, and if so, he is unsafe to breed from; and anyway, we should fear his offspring would not be thrifty, and the sooner he is disposed of the better. His unthriftiness may be owing to improper feeding when he was young, causing permanent injury to the digestive organs. If the object is to fatten him, we would advise feeding a moderate quantity of roots, turnips preferred, mangels next. Potatoes are not often fed to cattle, but may be fed in moderation to advantage, say 3 quarts at a feed, twice a day, sliced by running through a root slicer. There is danger of choking when fed whole. A mixture of bran and chopped oats or barley (two quarts of the mixture twice a day, fed on the sliced roots) would be good and sufficient for an animal that is not in vigorous health. Clover hay, cut before too ripe and well cured, is far more nutritious than timothy, and is certainly best for calves or unthrifty animals, and just as certainly best for thrifty ones too. We would advise an examination of the animal's mouth to see if his teeth are in proper condition.]

WINTERING BULBS—BINDWEED—SICK LAMB.

SUBSCRIBER, Huron Co., Ont.:—"Please give instructions in your paper about: 1. Wintering gladioli bulbs—the right time to lift, and the best method of wintering.

"2. What is the best time to plant currant and gooseberry slips?"

"3. I enclose a slip of a weed which a friend showed me, and which he claimed is a great pest, and he cannot kill it by any means of cultivation he has yet tried. It is a creeping plant, and grows up around any stalk that it reaches. What is it, and what means could be taken to eradicate it?"

"4. We have a ewe lamb that has been unwell all summer, since she was about a month old. She seems to be pained at times, lies down and turns on one side; when it rises up, it will stretch itself till its body nearly touches the ground. It does not thrive, and seems to eat pretty well. What is the matter? Do you think it can be tapeworm? What treatment would you advise?"

1. On page 630, Nov. 1st issue, appears instructions for wintering gladioli and other bulbs.

2. Currant or gooseberry slips or cuttings are made at any time from late summer to spring. It is advisable to make them in the fall, in order to allow them to callous before the spring planting season. They may be planted immediately and be allowed to callous where they stand, or they may be stored in moss, sand or sawdust in a cellar until spring. Currant and gooseberry cuttings should bear from six to ten buds. If the cuttings are planted in the fall, the beds should be mulched to prevent heaving; but spring planting is much more generally followed.

3. The weed enclosed is bindweed (*Convolvulus arvensis*), a description of which and means of eradication is given on page 575, Oct. 1st, 1900, issue.

4. From symptoms given, I suspect the lamb has a wool ball in the fourth stomach, formed by the lamb sucking the dam's fleece when young, a few fibers being swallowed at a time and collecting in the fourth stomach, forming a ball. The said ball insinuates itself in the opening into the intestines, and causes pain, expressed in the manner stated. The lamb turning over is liable to displace the ball, when she will get relief for a variable time. If this be the case, nothing can be done, and the lamb will in all probability die. The symptoms do not indicate tapeworm, but if such be present, they can be removed by giving (after 12 hours' fast) three or four ounces of sixteen parts sweet milk and one part oil of turpentine; starve for eight or ten hours after giving, and repeat dose in a week.

J. H. REED.

MILKING WITH WET OR DRY HANDS—TACKLE FOR A KICKER.

SUBSCRIBER, Montreal, Que.:—"I would like to know, through the ADVOCATE, which is the proper way to milk a cow, to wet the teats with milk and keep them moist while milking, or to milk with the teats dry?"

"I have a cow that kicked continuously while milking; I tried all ways neighbors suggested, and finally I arrived at an idea which worked well. I inserted a 'humbug' ring in her nose; to this I attached a small rope run up to a pulley above her head and then back through a pulley behind cow, then down through pulley at floor behind her, and then fastened to her right hind foot. The rope is fastened sufficiently tight that when she lifts her foot forward, her nose is drawn up to the pulley above."

[There is considerable difference of opinion, even among experts, as to whether milking should be done with wet or dry hands. If nature is to be the guide, taking the calf as the model, then the wet method must be chosen; but unless the cow's udder is thoroughly cleaned, and the hands washed after milking each cow, milking with wet hands is far from being a clean method. We have frequently seen brown filth dripping into the pail from the

hands of a wet milker, even among people who take some pride in being considered cleanly in their habits. In any case, the udder should be thoroughly brushed and wiped before commencing to milk. When this is done, there can be no serious objection to milking with slightly moistened hands, using a dab of the foam to lubricate the teat. Where one can do as well with dry hands, perhaps that method should be chosen, as, ordinarily, it is more cleanly.

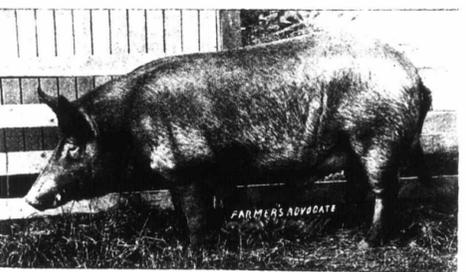
2. No doubt the prescribed method for kicking cow would prevent kicking, but it appears just a little heroic for the good of all concerned. We would not expect the cow to give much milk, wearing such a tackle.]

MARKETS.

Mr. R. M. Ballantyne, the well-known cheese dealer, of Stratford, Ont., has been made a partner in the Canadian business of Lovell & Christmas, London, Eng., one of the largest dealers in dairy produce in the world. He will remove to Montreal and be manager of the Canadian business of the firm.

Cattlemen of Washington County, Kansas, recently shipped 406 fat cattle direct to Glasgow, Scotland, where they were sold at 13c. a pound, estimated dressed weight, three hours after landing. The percentage was fixed at 63, cattle averaged 1,338 lbs., proceeds arrived at by taking 63 per cent. of total weight at 13c., or by American plan \$8.50 per 100 lbs. live weight. Expenses were heavy; ocean freight, \$12.50 per head; freight to Boston, insurance, commission, etc., about \$25.

Mr. R. R. Elliott, Staten Island, N. Y., writes the FARMER'S ADVOCATE: "I notice in your issue of October 1st an editorial dealing with the 'causes for the deterioration of Canadian beef.' Three very important reasons were given, viz., use of mature sires, the introduction of more or less dairy blood, and the use of the scrub sire. These all have a very important bearing, and are largely responsible for the inferior feeding steers to be seen all over the country. Another reason has been forced upon me recently, during frequent visits to the Union Stock Yards in New York City. A few days ago I was surprised and pleased to see unloaded at the yards several carloads of very fine 2- to 3-year-old steers of the thick, blocky, 'meaty' type. Two cars were loaded with high-grade Herefords, all alike in color and all dehorned, and would average about 1,400 lbs. The others were choice high-grade Shorthorns and Herefords mixed; also all dehorned, and showing breeding on the part of both sire and dam, and all were well finished. New York is much behind Chicago as a stock market, and I can readily understand why from 6 to 7 cents, and even more, has been paid there for choice steers. It is the



TAMWORTH BOAR UNDER ONE YEAR.

First prize, Toronto and London, 1900.

PROPERTY OF JOHN C. NICHOL, HURREY, ONT.

large number of high-grade beef cattle that can be secured in the States that tends to keep up the prices. In Canada, while I have seen a few steers equal to anything on this side, still the great majority of the shipping cattle, while they may be well finished, are not uniform in size, shape or color, showing very mixed breeding, and in a great many cases too much tendency to the dairy type."

Chatty Stock Letter from Chicago.

FROM OUR OWN CORRESPONDENT.

Following table shows current and comparative live stock prices:

Beef cattle.	Extreme prices now.	Top Prices	
		Two weeks ago.	1899
1500 lbs. up.	\$5 25 to 6 00	\$6 00	\$5 70
1200 to 1500 lbs.	4 85 to 6 00	5 30	5 60
1050 to 1200 lbs.	4 50 to 5 85	5 00	5 70
900 to 1050 lbs.	4 25 to 5 75	5 00	5 45
Fed Westerns	4 10 to 5 65	5 87	5 55
Stillers	4 90 to 5 75	5 80	6 10
Stockers and feeders.	5 20 to 5 40	4 15	5 55
	2 25 to 4 65	4 35	4 60
Hogs.			
Mixed	4 45 to 4 95	4 92	4 30
Heavy	4 40 to 4 95	4 90	4 30
Light	4 35 to 4 90	4 50	4 25
Pigs	3 25 to 4 75	4 15	4 15
Sheep.			
Natives	3 00 to 4 25	4 15	4 75
Western	3 50 to 4 30	4 25	4 50
Yearlings	3 90 to 4 40	5 65	4 85
Native lambs	3 65 to 5 75	5 40	5 75
Western lambs	3 75 to 5 10	3 85	5 15
Feeding sheep	3 50 to 3 90	4 70	3 90
Feeding lambs	3 75 to 4 90	4 80	4 75

The supply of fat cattle of good heavy weights has been larger of late, and the heavy weights not of prime quality have met with but light demand. The choice to extra cattle, of all weights, however, have not been very plentiful, and the prospects are that they will be plentiful. However, prices for the very best cattle are fully 50c. per 100 lbs. lower than a year ago, while the low grades do not show so much difference. This simply means that the proportion of good to choice cattle, which was very small a year ago, has been decidedly larger this fall. Consequently, feeders are not making so much money, and the number of cattle being put on feed is decidedly less than a year ago. The price of young cattle is lower, but not as much in proportion as the price of fat cattle is lower. Then, the price of corn is considerably higher.

The following table gives the average weight of hogs at three markets for the months mentioned:

	Oct. 1900.	Sept. 1900.	Oct. 1899.	Oct. 1898.	Oct. 1897.
Chicago	231	217	240	236	214
Kansas City	213	214	215	215	210
Omaha	215	219	259	271	288

Average weight of hogs the first ten months of this year: 232 lbs. at Chicago, 214 lbs. at Kansas City, and 241 lbs. at Omaha. All Western markets have been getting an unusual number of 70 to 130 lb. pigs of late, which were crowded in on account of sickness and high-priced corn.

Chicago had 72,467 of the 96,779 increase in hog receipts at the four Western markets during October. Western range cattle receipts for the year so far about 145,000, against 170,000 a year ago and 195,000 two years ago. Chicago's receipts of Texas cattle were the largest for October since 1895.

Chicago's total number of cars was 3,034 larger than in October, 1899, being the largest month's total in five years.

Chicago's receipts of cattle increased 39,303, while combined receipts at Kansas City, Omaha and St. Louis decreased 6,000, compared with October, 1899.

Toronto Markets.

The abundance of poor-grade cattle may be assigned as one of the reasons for the low prices. The mild weather of the last few weeks has made butchers indifferent as to loading up with any quantity of poor-quality stock.

Export Cattle.—Trade very dull. Exporters are not anxious to embark any more money in the business this season, which all say is the worst on record. Only a few on offer. Prices quoted at \$1.40 to \$1.60 per cwt. Not wanted. Light export cattle sold at from \$1.00 to \$1.25. Messrs. Brown & Snell bought two loads of export cattle, 1,300 lbs. each, at \$1.60 per cwt. Mr. Joseph Gould bought two loads of export cattle at \$1.00; average 1,300 lbs. each. Mr. Wm. McClelland bought five cattle, average 1,650 lbs. each, at \$1.50 per head.

Butchers' Cattle.—About 400 cattle on offer, but the quality not very good. Choice lots would sell, but not many on offer. Prices, \$3.60 to \$3.80; for the very best, \$4.20 per cwt. Medium cattle sold well at the price—\$3.00 to \$3.50. Common butchers' cows sold down to \$2.50 per cwt. Mr. S. Levack bought 20 butchers' cattle, average 1,650 lbs. each, at \$4.00 per cwt. Mr. R. Pugsley bought seven heifers, 800 lbs. average, at \$2.25 per cwt.

Bulls.—Prices were lower on all bulls offered. Heavy export class at \$3.50 to \$4.00 per cwt. Light bulls were quoted at from \$3.00 to \$3.50 per cwt. Mr. Joseph Gould bought one load of bulls, 1,600 lbs. average, at \$3.50 up to \$1.00 per cwt. Mr. Heise, of Creemore, sold a very choice, heavy bull, 2,350 lbs., at \$5.00 per cwt., to Messrs. Crawford & Hunisett.

Feeders were plentiful. As most of the feeders at the byres are stock, prices weakened. Short-keep feeders met the best sale, at \$3.00 to \$4.00 per cwt. Heavy feeders sold down to \$3.25 per cwt.; light feeders at from \$2.50 to \$3.50. A few short-keep feeders, 1,150 lbs. average, met ready sale. Good steers, weighing 1,168 lbs., in request at \$3.50 per cwt.

Stockers were easier, many loads selling down to \$2.25 per cwt. Top price for the day was \$3.00 per cwt. Black and white, all inferior grades, sold down to \$1.75 per cwt. to \$2.25 per cwt., the lowest price for the year. There was a good demand from Buffalo market for all inferior stock. Mr. G. Maybee shipped six carloads of stockers. Mr. A. W. Maybee shipped two loads of stockers and one carload of lambs. Mr. W. Murby shipped three carloads of mixed stock.

Sheep.—Best butchers' sheep sold at from \$3 per head downwards. Best ewes sold at from \$3.25 to \$3.50 per cwt.; bucks at \$2.50 to \$2.75 per cwt. Mr. W. B. Levack bought thirty sheep at \$3.40 per cwt.

Lambs were in good demand, and sold well at from \$2.50 to \$2.30 per head, and at from \$3.50 to \$4.00 per cwt. Not many on offer, and wanted.

Cows.—Very few on offer, at various prices from \$2.00 to \$8.00 per head for choice. Poor, half-starved, skim-milk dairy wasters are not wanted.

Milk Cows.—All quality in milk cows was easily sold. One good Ayrshire cow fetched \$55.00 without calf. Prices range from \$25 to \$50 per head for choice milkers. Fifteen on offer, and wanted.

Hogs.—As foretold in my last report, hogs went down with a slump, and we fear have not yet reached bottom. One dollar per cwt. is very severe for a single fall, but our readers must remember that we have forewarned them for the last month what to expect as soon as the Old Country demand fell off. While we were asking for supplies at the high figures, very few offered; but now 8,000 in one week is just a few more than we can conveniently manage, and look for \$1.62 per cwt. next week. Most of these were overweight; that is, above 200 lbs. Many of the hogs offered have been kept from three weeks to one month longer than necessary to fetch top prices. Long, lean bacon hogs—not above 200 lbs., nor below 160 lbs. is the weight wanted off cars. Best choice hogs are to-day quoted at \$1.75 per cwt. All others are culled down to \$1.25 per cwt.; sows at \$3.50 per cwt.; stags at \$2.00 per cwt. The market is too uncertain to foretell what the prices will be until bottom is reached, which is likely to be \$1.50 for choice. After that, a gradual rise may be expected and a steady market.

	Comparative prices to-day.		Same date last year.
	Nov. 9, 1900.	Oct. 26, 1900.	
Export cattle	\$ 4 00	\$ 4 50	\$ 4 80
Butchers' cattle	4 10	4 40	4 70
Bulls	3 25	4 25	4 12
Stockers	3 00	3 60	2 75
Feeders	3 90	3 80	4 00
Sheep	3 50	3 44	3 40
Hogs	4 75	4 75	4 12
Lambs, each	3 25	3 30	3 30
Milk cows, each	50 00	50 00	50 00

Grain Market.—Owing to bad roads and continued inclement weather, the street market has been very small.

Wheat.—One hundred bushels of white sold steady at 68c. per bushel; one hundred bushels of red sold at 68c. per bushel. Two hundred bushels of goose sold at 60c. per bushel.

Hay.—The supply liberal; prices a little easier. Ten loads sold 50c. lower than last week; now quoted at \$13 to \$14.50 per ton in farmers' loads of loose hay.

Baled Hay.—Market quiet and prices easier, at \$9.00 to \$9.50 on track.

Straw.—Two loads on offer at \$12.00 per ton.

Baled Straw.—In ear lots on track, \$5.00 per ton.

Dressed Hogs.—Very few dressed hogs coming forward; good demand; prices firm at \$7.00 to \$7.25 per cwt. for all choice stock. Market steady and a little firmer, in sympathy with live hog prices.

Hides and Wool.—Hides, No. 1 green, 7c. per lb.; hides, No. 1 steers, 8c. per lb.; hides, cured, 6c. per lb.; calf-skins, 8c. per lb.; lamb-skins and pelts, 7c. per lb. Wool, fleece, unwashed, 3c. per lb.; wool, pulled super, 17c. per lb.; wool, pulled, extra, 21c. per lb.

Butter.—The trade quiet. Extra choice dairy rolls in good demand at from 18c. to 21c. per lb. There is a demand for choice butter in small lots, suitable for hotels and boarding-houses in this city, and why some of our creameries do not seek to cultivate this trade is not quite apparent.

Eggs.—Choice new-laid eggs range from 19c. to 22c. per doz. Strictly new-laid will fetch a trifle more for domestic consumption.

Poultry.—There is no change in the market. The offerings are liberal. The Toronto Produce Co. have removed to larger premises, on Front street, and now offer 7c. per lb. on live birds. Chickens, per pair, 30c. to 35c. for choice birds. Messrs. A. Gunn Bros. will ship dressed turkeys to the Christmas market in the Old Country. They expect to take 30,000 this year, and will pay 7c. per lb. on all choice birds from 9 lbs. upwards in weight. They have made arrangement with the railway companies to have their largest-sized cars, 20,000 lbs., and place four decks in each. They have experienced a difficulty in obtaining poultry-shipping cars, as our railways do not cater for the trade, and refuse to build any. At present it costs \$10 and upwards to fill the cars, which is money wasted, as the lumber used is unfit for any other purpose than kindling. All poultry for shipping is directed to be billed, Messrs. Harris's Abattoir, Western Cattle Market, Toronto, to arrive not later than December 1st. Oct. 9th, 1900.



A MESSAGE TO GARCIA.

BY ELBERT HUBBARD.

In all this Cuban business there is one man stands out on the horizon of my memory like Mars at perihelion.

When war broke out between Spain and the United States, it was very necessary to communicate quickly with the leader of the Insurgents. Garcia was somewhere in the mountain fastnesses of Cuba—no one knew where. No mail nor telegraph message could reach him. The President must secure his co-operation, and quickly.

What to do? Some one said to the President, "There's a fellow by the name of Rowan will find Garcia for you, if anybody can."

Rowan was sent for and given a letter to be delivered to Garcia. How "the fellow by the name of Rowan" took the letter, sealed it up in an oil-skin pouch, strapped it over his heart, in four days landed by night off the coast of Cuba from an open boat, disappeared into the jungle and in three weeks came out on the other side of the Island, having traversed a hostile country on foot, and delivered his letter to Garcia, are things I have no special desire now to tell in detail.

The point I wish to make is this: McKinley gave Rowan a letter to be delivered to Garcia; Rowan took the letter and did not ask, "Where is he at?" By the Eternal! there is a man whose form should be cast in deathless bronze and the statue placed in every college of the land. It is not book-learning young men need, nor instruction about this and that, but a stiffening of the vertebrae which will cause them to be loyal to a trust, to act promptly, concentrate their energies; do the thing—"Carry a message to Garcia!"

General Garcia is dead now, but there are other Garcias. No man, who has endeavored to carry out an enterprise where many hands were needed, but has been well-high appalled at times by the imbecility of the average man—the inability or unwillingness to concentrate on a thing and do it.

Slipshod assistance, foolish inattention, dowdy indifference, and half-hearted work seem the rule; and no man succeeds unless by hook or crook, or threat, he forces or bribes other men to assist him; or mayhap, God in his goodness performs a miracle, and sends him an Angel of Light for an assistant. You, reader, put this matter to a test: You are sitting now in your office—six clerks are within call. Summon any one and make this request: "Please look in the encyclopedia and make a brief memorandum for me concerning the life of Correggio."

Will the clerk quietly say, "Yes, sir," and go do the task? Or will he say, "He will look at you out of a fishy eye and ask one or more of the following questions:

Who was he? Which encyclopedia? Where is the encyclopedia? Was I hired for that? Don't you mean Bismarck? What's the matter with Charlie doing it? Is he dead? Is there any hurry? Shant I bring you the book and let you look it up yourself? What do you want to know for?

And I will lay you ten to one that after you have answered the questions, and explained how to find the information, and why you want it, the clerk will go off and get one of the other clerks to help him try to find Garcia—and then come back and tell you there is no such man. Of course I may lose my bet, but according to the Law of Average, I will not.

Now if you are wise you will not bother to explain to your "assistant" that Correggio is indexed under the C's, not in the K's, but you will smile sweetly and say, "Never mind," and go look it up yourself.

And this incapacity for independent action, this moral stupidity, this infirmity of the will, this unwillingness to cheerfully catch hold and lift, are the things that put pure Socialism so far into the future. If men will not act for themselves, what will they do when the benefit of their effort is for all? A first-mate with knotted club seems necessary; and the dread of getting "the bounce" Saturday night holds many a worker to his place.

Advertise for a stenographer, and nine out of ten who apply can neither spell nor punctuate—and do not think it necessary to.

Can such a one write a letter to Garcia? "You see that bookkeeper," said the foreman to me in a large factory.

"Yes; what about him?" "Well, he's a fine accountant; but if I'd send him up town on an errand, he might accomplish the errand all right, and, on the other hand, might stop at four saloons on the way, and when he got to Main Street, would forget what he had been sent for."

Can such a man be entrusted to carry a message to Garcia? We have recently been hearing much maudlin sympathy expressed for the "down-trodden denizen of the sweat-shop" and the "homeless wanderer searching for honest employment," and with it all often go many hard words for the men in power.

Nothing is said about the employer who grows old before his time in a vain attempt to get frowny ne'er-do-wells to do intelligent work, and his long patient striving with "help" that does nothing but loaf when his back is turned. In every store and factory there is a constant weeding-out process going on. The employer is constantly sending away "help" that have shown their incapacity to further the interests of the business, and others are being taken on. No matter how good times are, this sorting continues, only if times are hard and work scarce, the sorting is done finer—but out and forever out, the incompetent and unworthy go. It is the survival of the fittest. Self-interest prompts every employer to keep the best—those who can carry a message to Garcia.

I know one man of really brilliant parts who has not the ability to manage a business of his own, and yet who is absolutely worthless to any one else, because he carries with him constantly the insane suspicion that his employer is oppressing or intending to oppress him. He cannot give orders; and he will not receive them. Should a message be given him to take to Garcia, his answer would probably be, "Take it yourself, and be damned!"

To-night this man walks the streets looking for work, the wind whistling through his threadbare coat. No one who knows him dare employ him, for he is a regular fire-brand of discontent. He is impervious to reason, and the only thing that can impress him is the toe of a thick-soled No. 9 boot.

Of course I know that one so morally deformed is no less to be pitied than a physical cripple; but in our pitying, let us drop a tear too for the men who are striving to carry on a great enterprise, whose working hours are not limited by the whistle, and whose hair is fast turning white through the struggle to hold a line dowdy indifference, slipshod imbecility, and the heartless ingratitude, which, but for their enterprise, would be both hungry and homeless.

Have I put the matter too strongly? Possibly I have; but when all the world has gone a-slumming I wish to speak a word of sympathy for the man who succeeds—the

man who, against great odds, has directed the efforts of others, and having succeeded, finds there's nothing in it; nothing but bare board and clothes.

I have carried a dinner-pail and worked for day's wages, and I have also been an employer of labor, and I know there is something to be said on both sides. There is no excellence, per se, in poverty; rags are no recommendation; and all employers are not rapacious and high-handed, any more than all poor men are virtuous.

My heart goes out to the man who does his work when the "boss" is away, as well as when he is at home. And the man who, when given a letter for Garcia, quietly takes the message, without asking any idiotic questions, and with no lurking intention of chucking it into the nearest sewer, or of doing aught else but deliver it, never gets "laid off," nor has to go on a strike for higher wages. Civilization is one long anxious search for just such individuals. Anything such a man asks shall be granted; his kind is so rare that no employer can afford to let him go. He is wanted in every city, town and village—in every office, shop, store and factory. The world cries out for such: he is needed, and needed badly—the man who can carry a message to Garcia.

The Problem of Domestic Service.

A request has come to the Home Department of the FARMER'S ADVOCATE that some of its space might be occasionally devoted to one of the ever-recurring problems of the day, that of domestic service. We gladly comply with this request, and if through our columns can be established a closer relationship between a great need and its supply, the ADVOCATE will have the satisfaction of feeling that once more, and in still another direction, it will have endeavored to serve its day and generation. To every question there are at least two sides: our side and your side; our point of view and your point of view; whilst there seldom can be found a rule which applies with equal fitness to both. To this the subject of domestic help is no exception. It is one of mutual dependence and of mutual obligation. It is made up of both give and take, of bear and forbear, and on either side it calls for a full measure of faith and patience, two excellent qualities, which, if persevered in, always bring with them a rich reward. Given both of these, and add to them a determination to face things as they are and not as they were, nor, perhaps, even as we think that they should be, thus recognizing the changed conditions under which we live and the necessity for us to adapt ourselves to them, then, we take it, we are not very far from a solution of the problem. At its present stage, from one side comes the cry of the worried and harassed house-keeper: "Where, and oh! where are our household helpers gone?" And from the other side comes the reply: "To the factories and to the stores, where, if our positions are not always of certain tenure, and our salaries leave something to be desired by way of margin after our board bills are paid, yet, oh! glorious privilege, we are, after business hours, our own mistresses, and we can go to theatres and band concerts, to big balls and little 'hops,' with Jack to-day and Tom to-morrow, and who shall say us 'nay'?" So speaks unthinking youth, not realizing that in this very liberty lurks positive peril, for they are few indeed to whom such freedom of choice can with safety be entrusted. There is sound philosophy in the old doggerel lines:

"For every evil under the sun There is a remedy, or there is none. If there is one, be sure you find it; If there is none, never mind it."

Now, we venture to think that for this evil there certainly is a remedy, if we only set about looking for it in a reasonable way. We would submit that, while at its present state anyway, it is hardly a case for arbitration as a whole, yet many an individual case could be covered by a meeting of both sides, a concession from one, a little stiff-backedness from the other, and a more thorough, all-round comprehension of the first claims of each. The mistresses of to-day have learnt in the school of experience that if they are to get the help they need in the carrying out of their household duties, they must yield some points which were never asked of mistresses in the old days. They must give their handmaidens more liberty, and they must undertake many tasks themselves, which, in affording this liberty, would otherwise be left undone. All this has been long recognized as part of the new order of things. Girls who are not too proud to undertake domestic work do get a large share of liberty. They have their outings, and, according to arrangement, certain afternoons or evenings "out," but naturally they are expected to be in the shelter of their adopted homes within a reasonable limit of time, for their employers, even while granting them this freedom, realize, or should realize, the personal responsibility of their guardianship. In the case of domestic service, then, there is no denial of a wholesome amount of variety in a girl's life, but with it she has a sense of protection and the comfortable assurance that she is one of a household, a member of a family, not a mere boarder, that her comfort and convenience will be duly considered, and her faithful performance of the duties she has engaged to perform recognized and remunerated. There will be many swings of the pendulum before every moving wheel of Time's telltale clock is fittingly adjusted. The feverish rush after change and excitement amongst our girl wage-earners will have abated. They will have learnt their lesson that "all is not gold that glitters"; that the freedom they so eagerly sought was but as dead sea fruit after all; that the Jack, the Tom and the Dick with whom they laughed and larked have either sought out as the wives of their staidier days girls who had some idea of homemaking and homekeeping, or having married them and learned how their previous

training had unfitted them for the duties of wifehood and motherhood, were changed from the genial, jolly young fellows their fancy had painted them, into the cross-grained, fault-finding husbands, with a right to grumble at the wasteful spending of their earnings and the indigestible food in consequence placed upon their tables. We predict that the lesson will not be learnt in vain, and before the next swing of the pendulum these will be the very parents most anxious to see their children take advantage of the training in housewifery now being offered in nearly all our larger centers, as well as of the subsequent practical application of such knowledge, first of all as paid assistants in the homes of others, and then in the homes of which they themselves will become the happy mistresses. The trend of present-day teaching being to elevate domestic service and to remove from it the old, mistaken idea that it is a step lower in the social scale than employment on other lines—a mistake which is at the bottom of nearly all the trouble—we can afford to leave the future to take care of itself, as it assuredly will; but it nevertheless behooves us to seek for a present remedy for a self-evident present evil. Our housewives do ask for help, and they are sorely in need of help, but they are not likely to ask it from girls who, by their deliberate choice of the kind of freedom afforded by employment in the box and cigar factories of the cities, prove themselves wholly unfitted for any home work at all, and it is claimed that just here the FARMER'S ADVOCATE could help its readers, both of the city and of the country, by inviting thoughtful suggestions from those who would naturally look upon this question from two opposite points of view. The mistress of the city home asks us to give her message to the self-respecting farmers' daughters of the Dominion. "Tell them," she says, "that there are good positions, at fair rates of payment, awaiting them in return for work certainly not more, and probably much less, arduous than that which falls to their share in their own homes. The \$8 or \$10 monthly they would earn, according to their capacity, would be clear profit, nothing, as in the case of the employee in store or factory, having to be deducted for board and lodging. They would bring variety into their lives, and would have many opportunities for mental culture. They would thus not only be laying up a little store of money, but also a store of knowledge and experience beyond all price. It is a well-known fact that when once the girl from the country has overcome her homesickness and has mastered the details of her work, no employee is so valued as herself. She is slower to form unwise intimacies, and is too self-respecting to admit into friendship those for whom she knows her parents could have no respect, and for this, as well as for her intelligence, we ask her services. Will she come over and help us?"

And what says the mistress of the farm—the mother of these girls? "Yes, dear city madam, our daughters, thank God, do deserve the praise you give them; they are self-respecting and self-reliant; they are ready and willing to put their hands to anything and everything to lighten the toil on the homestead, and therefore it is that we need them at home, and that is why we cannot spare them to you. There are some of us who are without daughters, and who have only our own pair of hands wherewith to do our daily work. We would gladly pay for help if only we could get it, but that is just what we cannot do, and so the problem of domestic service is as much a problem to us as to you."

Perhaps the idea that housework is degrading and fitted only for those who have not the brains for any other occupation may be converted to a different view by the opinion of a well-known writer and thinker, who says:

"After much meditation and experience, I have divined that it takes as much sense and refinement to cook a dinner, wash and wipe a dish, make a bed as it should be made, dust a room as it should be dusted, as goes to writing a novel or shining in high society." H. A. B.

Recipes.

GOOD PLAIN CHRISTMAS CAKE.

Mix 1 1/2 lbs. raisins with the same of currants; add 1/2 lb. mixed peels; sprinkle over 1/2 lb. flour, and stir thoroughly. Beat 1 lb. of butter to a cream, adding 1 lb. of brown sugar. Beat ten eggs light, and sift 1 lb. of flour, and add the eggs and flour alternately to the butter and sugar, and beat well. Add 1 tablespoon of mixed spices, and add the fruit last. Bake slowly four hours.

PLAIN PLUM PUDDING.

One pint bread crumbs, 1 cup brown sugar, 1 teaspoon cinnamon, half a grated nutmeg and 1/2 lb. suet, 1/2 lb. raisins, 1/2 lb. currants, 1/2 lb. mixed peels. Dissolve 1/2 teaspoonful soda in a tablespoon warm water; add 1 cup molasses, and 3 eggs well beaten, and mix well. Steam four hours.

INDIAN PUDDING.

Into one pint of boiling water stir enough corn meal to make a thick batter or "mush," taking care to have it free from lumps and not scorch. When cold, add salt 1/4 teaspoonful, a 1/2 tablespoonful of butter, 1/2 teaspoonful allspice; sweeten to taste with molasses or sugar; stir in yolks and whites of four eggs, and add one pint of milk. Bake until brown on top, and until it "whys." To be eaten hot or cold. If left until cold, the "wey" jellies and is delicious.

THE CHILDREN'S CORNER.

We think that all the little girls and boys for whom our children's column in the *Advocate* is written would like Lord Strathcona to know that they are just as loyal, just as proud of their country, and just as well able to appreciate what he has done, and is doing for it, as were those other children of Toronto who presented to him the beautiful little address written for the occasion by Mr. Hughes, which we print for them below.

The presentation was made with some ceremony at the banquet given to Lord Strathcona in Toronto on Monday evening, 21st October. The little girl who conveyed the message was escorted by a company of the Strathcona cadets, sixteen strong, dressed in complete khaki suits, who halted and faced about before the guest of the evening. After presenting her bouquet of beautiful roses, this is what she said:—

"Dear Lord Strathcona: The girls and boys of Toronto welcome you to our city. We are proud of our city, because so many of our soldier boys were ready to go to Africa to assist our motherland when the call to duty came. We are glad to be Canadians, because we have so great, so fertile and so free a land. But we know that the future of our country depends on the truthfulness of the boys and girls, who will so soon be men and women. We rejoice to know that we have so many brave and true and loyal men and women in Canada, whose splendid characters and great achievements arouse in us higher ideals, and inspire us to grander efforts; and among the greatest of them all, your Lordship stands pre-eminent as a model for young Canadians. Your long and most successful business career, your able public life in Parliament, your honorable diplomatic service in England, and especially your unequalled patriotism, have won for you our highest esteem and our deepest affection. All Canadian boys and girls love you, and we shall be better men and women because you have been so great and so true."

The Lookout Regiment.

The winners in the child-hero competition are: Class I.—Hilda Beaumont, Alport school, near Bracebridge, Ont. Class II.—J. H. Pilkey, Wexford, Ont. Class III.—Lida Bowman, West Montrose, Ont.

Ontario came out ahead this time, didn't it? It is rather strange that the winner of first prize in our last competition should be Hilda Bowman. The name seems to be a lucky one. You two Hilda champions ought to correspond with each other.

I will announce another competition next month—a nice easy one—so you had better be on the lookout for it.

Edith Bowman has been chosen captain of the "A" Company in West Montrose. I hope you will correspond with the war office sometimes, Edith, and report progress. One of the soldiers writes:

"I am taking great interest in the Lookout Regiment now. Does the second rule mean that one is to look for good qualities in everyone that one knows? I am trying to keep the rules."

Yes, my dear, that is just what it does mean. If you were in a garden of roses you would not spend your time in looking at the thorns. What would you think of a person who was in a picture gallery, full of lovely pictures, and yet never looked at them, but examined every little stain on the walls and floor with a magnifying glass. Everybody has something nice in his make-up; if we only see the defects, it is our own fault. This habit of using a magnifying glass in an improper manner is apt to grow if it is not checked in time. A cynical, critical person is generally quite satisfied if he can find fault with other people's work. He never waits to see whether he could do it any better himself. The sketches sent in for the child-hero competition are given below. I have been obliged to shorten the first one a little.

COUSIN DOROTHY.

A True Story of an Heroic Deed.

BY HILDA BEAUMONT.

"Farewell, sweet Maykin, farewell. God be with thee to thy journey's end," said Aunt Hanna as Maykin Hasselayer stood on the ramparts of the besieged city with a parcel of bread (almost the last to be had in the city), and a rope tied about her dainty figure. She was carefully lowered over the wall and left to carry out her mission, with her enemies close beside her. Maykin's mission was to carry a letter to their prince, who lived a great distance from them. The letter was written in red ink, as a token of the blood which was being shed. To get to him, Maykin had to go round a lake and pass the Spanish outpost. It was midnight when she began her journey. She had not proceeded far when a hand was laid on her shoulder. Her pursuer took a spear from his neck and tried to tie her hands, but she sprang away. At the same time the sound of a shot rang through the air, followed by a scream from her persecutor. Maykin ran to the

lake only just in time, for a number of Spaniards were already on the spot asking questions of the wounded man. Presently some men came to the shore to search. Maykin waded out to her neck, and just while one held up his torch, she ducked her head under. She safely accomplished her mission, in spite of the dangers in her path, and put the letter in the prince's hands.

The letter only contained two words—"Help us"—but they roused the loyal people to one more desperate effort. Maykin was but a child in years, but her brave deed exalted her far above the level of some men.

A Boy Hero.

BY J. H. PILKEY.

A long time ago a boy, about 12 years old, who lived in Holland, was coming home one night. While he passed the many dyke gates he heard water trickling out of a hole. He stopped to listen and hear where it was, because it was dark and he couldn't see. He found that it had washed a way out. It was not a very big hole, but it would not take it long to wash to a big one. He wondered if he had better go and tell someone, or stay there. He thought he had better stay, so he sat down and put his hand over the hole. He stayed there all night, and in the morning the people wondered what was the matter with him; but when they found him, he was so sick that they had to carry him home. I think that boy deserves the name of hero.



"KEEPING TRYST AMONGST THE ROSES."

A Brave Boy.

BY LIDA BOWMAN.

The subject I have chosen for the "prize competition" is about my Cousin Clayton, who had his arm crushed when he was about 8 years old. My uncle was cutting corn, and Clayton was helping him with the corn, and he got his arm in some part of the machine and had it crushed as far as the elbow. Then he was taken to the house, and the doctor was called. My uncle held his arm while the doctor took it off. Clayton didn't cry while the doctor was fixing it. It was his right arm, and now he can do anything with his left arm. He can write very well with his left hand. It didn't seem to take him long to learn how.

The Bissickle Bird.

The bissickle bird is a wonderful fowl
That is found where the ponds are green;
With scarcely a sound it saunters o'er the ground,
And oil is its principal food.
It utters a sad and peculiar cry
Which sounds like "Punk, punk, punk!"
And sobs till its throat when it raises this note,
As those who have heard it feel sure.
It's fond of a hill, but it likes to go down,
Not up, for it's tired from its birth;
With one flashing eye it blinks rapidly,
When darkness is over the earth.
It rests against railings, but it never goes to sleep,
In trees that would shelter it, which
Shows singular taste, but it sometimes is haste
Will seek its repose in a ditch.

The bissickle bird makes an excellent pet—
When tame, it has scarcely its match;
But 'tis, I must add, for a girl or a lad,
A troublesome creature to catch!

—Felix Leigh.

The Rest Cure.

At the nursing homes and private hospitals in many large towns the rest cure is a very expensive remedy in which to indulge. Any woman with sufficient strength of mind can, however, conduct it on her own behalf without leaving her home. It is done in this way: There must be complete isolation from friends and relations; no letters are to be written, and those that are received are to be put aside unopened. Only the lightest of literature is to be read, and it must be of a sensible and non-exciting character. For the length of time that a patient feels she requires complete rest she must stay in bed—say for a fortnight or three weeks. She must not neglect her meals during this period; indeed, the more nourishment she can take the more complete her cure will be. Milk is by far the most important item of her daily food. She ought to begin by drinking a glass of it even before she has finished her night's sleep that is to say, if she happens to wake up early. Then she takes another glass with her breakfast and another at noon. Her 5-o'clock tea consists of milk, for tea and coffee are both forbidden her. Last thing at night she has another glass of this exceedingly nutritious beverage. It stands to reason that her cure cannot be a success unless she banishes from her mind every worrying thought, and this she will find a very difficult task to do. She must drink no wine nor spirits, and when she feels that she can come back to the world with strength and nerves, she must not do so suddenly. Instead, she must get up for a short time each day, and return to her usual duties by degrees.

The Message to Garcia.

We call the attention of our readers to this article in this issue as being well worthy of note; this training in loyalty to the duty nearest at hand, and doing the work honestly and faithfully, instead of the dowdy, slipshod and indifferent manner in which nowadays much work is done. To some people faithfulness to duty comes as an inheritance from the past. Many of us have yet to learn it, but it grows amazingly when one determines to be constantly faithful in performing the least duty as well as the greatest. Nothing is small in the making of character.

A quality like this is better worth possessing than material wealth, because it is a capacity which tends to bring all other good things in its train.

"Keeping Tryst Amongst the Roses."

With Frank Smedley may we not say of both girl and roses alike:

"Behold how brightly seeming!
All Nature shows
In golden sunlight leaming,
Blushes the rose,
How very happy things must be
That are so bright and fair to see."

But whence, then, comes that wistful look upon the face of our Sweet Maiden Rose as she awaits the coming of her lover at their trysting place? It is a look as of one not quite sure that the half-blown flower she is about to pluck and place in her bodice will be claimed from her dainty fingers presently. But she knows, for her heart tells her so, that if he does not keep tryst to-day it is because he cannot do so, not because he will not, and there is always to-morrow, and to-morrow we shall surely find her, fresh blossoms in hand, smiling and bright, awaiting him amongst the roses. H. A. B.

An Irishman, fond of expressing his views on things in general, had the habit, when he had no listeners, of talking to himself. A countryman of his, meeting him one day, said to him: "Pat, does it never occur to you that your constant muttering to yourself is a great annoyance to people who happen to be about? Why do you talk so to yourself?" "Shure, sor, I have two reasons for that." "And what are they, pray?" "Weel, wan of them," replied Pat, "is that I like to talk to a sensible man, an' the other is I like to hear a sensible man talk."

Curate—"Oh—er—by the way, Mr. Bloggs, I was wondering whether you would give me a small subscription for a most excellent object. I mean the repairing of the cemetery wall." Wealthy Parvenu—"Not me, sir. The cemetery wall don't need any repairing. Them as is inside can't get out; an' them as is outside don't want to get in. Good mornin'."

THE QUIET HOUR.

The Duty of Praise.

"Thou hast done well, perhaps, To lift the bright disguise And lay the bitter truth Before our shrinking eyes. When evil crawls below What seems so bright and fair, Thine eyes are keen and true To find the serpent there: And yet - I turn away - Thy task is not divine. The evil angels look On earth with eyes like thine. Thou hast done well, perhaps, To show how closely wound Dark threads of sin and Self With our best deeds are found: How great and noble hearts, Striving for lofty aims, Have still some earthly chord A meaner spirit claims: And yet - although thy task Is well and fairly done, Methinks for such as thou There is a holier one."

Why is it that a whisper of wrong-doing is passed from mouth to mouth, increasing like a snowball as it rolls along? Why do we eagerly retail the faults of our neighbors, while their virtues are unnoticed and seldom mentioned? A few kind individuals, indeed, run to the other extreme and praise everything and everybody. Such indiscriminate praise is worth very little: it is altogether too cheap and too easily won. If it is not true, if it is undeserved, then it has degenerated into flattery, and flattery is very harmful. Some people take great pleasure in giving others "a piece of their mind," as they say. When the visible supply of faults runs short they hunt eagerly for more material, and we generally find what we seek for.

Most of us belong to neither of these classes. We are not given to praising overmuch, and we are not bold enough to tell a man of his faults face to face. No, our forte lies rather in cheerfully and pleasantly discussing them behind his back. Of course, as soon as our backs are turned the rest of the company begin to pull our characters to pieces in the same friendly fashion. To be quick to detect flaws is not a mark of genius, nor a proof that we ourselves are above criticism, it is rather a sign of spiritual pride. Our fault-finding is an admission that we consider ourselves to be better, in these respects at least, than the persons criticised. Praise which is just and well-merited is a grand thing with which to help our comrades along. Many are toiling day after day at wearisome duties, without a word of cheer and encouragement from those who love them best. Do you ever dream of praising a well-cooked dinner, or a nicely-kept house? Do you tell the children you are pleased with them when they are well-behaved and obedient? Do you ever give a few words of encouraging praise to those who are hired to do your work? I don't think it would do us any harm to join the children's "Lookout Regiment," and try to be on the lookout for good qualities in everybody we meet, instead of being on the alert to detect faults. Love is not blind, for God is Love and He knows us through and through, but it is our virtues that He specially watches for and encourages. He never quenches the smoking flax, but rather fans it into a brighter flame. How beautifully this is shown in the parable of the prodigal son. The father does not question the motives which brought his son to him again. Fear of starvation was not a very worthy motive, but such a loving reception of one who knew himself to be so unworthy would surely stir up more genuine sorrow for sin than a cold, critical investigation of motives and reasons which would have had the effect of making the son try to justify himself.

An oriental fable describes a crowd of idlers, thronging the market-place of a Syrian city, and looking contemptuously upon a dead dog, with a halter around his neck, by which he had been dragged through the dirt. "It pollutes the air," said one, holding his nose. "Look at his torn hide," said another; "one could not even cut sandals out of it." A fourth spoke of his ears, dragged and bloody; a fifth declared "he had no doubt been hanged for thieving." But there stood among the throng a stranger, who had, as they flung their jeers at the dead dog, drawn near. There was a strange light about his face, and in his manner a strange dignity and grace. Looking down compassionately upon the dead animal, he said: "Pearls are not equal to the whiteness of his teeth." Then the people said among themselves: "Who is this? This must be Jesus of Nazareth, for only He could find something to pity and approve even in a dead dog," and in shame they bowed their heads and went each on his way.

This fable is a vivid representation of a great truth, viz., that God will never overlook the smallest trace of good in any of His creatures. Small things are not to be despised, they may grow. Germs which are invisible to the naked eye are treated with respect nowadays—physical germs at least—and spiritual germs should not be despised either. As George MacDonald has said: "The Father of Lights is the Father of every weakest little baby of a good thought in us, as well as of the highest devotion of martyrdom." It is Satan's business to look out for evil—or at least he has made it his business—the very word "devil" means an accuser. We don't want to be

his assistants, do we? Let us rather take up the divine task of pleading for our brethren, and encouraging them to fresh efforts.

Actors know well the necessity of a little applause to help them in playing their part well. In an American theatre a celebrated actor came to the manager when the play was half over, and said: "I can't go on the stage again if the pit keeps its hands in its pockets. Such an audience would extinguish Aëna." The manager at once told the audience that Mr. Kean mistook their silent attention for disappointment, and that if they did not applaud him as he was accustomed to be applauded, they could not see him act as he was accustomed to act. The audience took the hint and their hearty applause roused the genius of the actor. It is exactly the same on the stage of life, no one can act his part enthusiastically and heartily if he is treated always with cold and chilling disapproval, or constantly discouraged by scolding and nagging. If it is true, as Sidney Smith has said, that among the minor duties of life nothing is more important than that of not praising where praise is not due, it is surely even more true that one of the duties of life is to praise where praise is due. "The world is full of men and women who are living unhappily and rusting in comparative inactivity, or doing but a tithe of the good they might do, for want of a little judicious praise."

HOPE.

OUR BOYS AND GIRLS' DEPARTMENT.

MY DEAR BOYS AND GIRLS,—

Quite a number of very good essays have been sent in in response to our first contest, and I am much pleased with the sentiments of patriotism and pride that permeate one and all. Those were the very sentiments I desired to evoke when I called for this particular essay. I have often felt that we Canadians do not do enough to foster this spirit, which is so essential to the building up of heroes for the future, the material for which we



find in our youth of to-day. Individually we may not be able to accomplish much, but by each doing his or her best to place our noble country where she should be, the equal of the proudest, what a powerful total we shall make!

What constitutes a state?

Men who their duties know, But know their rights, and knowing, dare maintain, Prevent the long-aim'd blow, And crush the tyrant while they rend the chain: These constitute a state."

The prize in Class III. of this competition has been awarded to Verne Rowell, Bryanston, Ont., whose contribution appears in this issue. The judging in the higher classes is not yet completed, but final results will appear next issue. Only a few days remain till the close of our Christmas poem contest—just time enough for a few more of the cousins to get in their work.

COMPETITION IV.

Which do you consider the ten best novels? We offer three prizes for the three best lists, the winners to be determined in the following manner: Every mention of a book will be equivalent to a vote, and the ten books having the most votes will be taken as a model, and the lists most nearly corresponding to this model will win the prizes. This is an easy contest, is open to all, and costs nothing to try, so I hope a great many will enter. It will be interesting to know just what works our fellow-readers most enjoy and to compare them with those of our choice. This contest will close December 5th. Address, as before, Miss Armand, Pakenham, Ont. Come one, come all.

ADA ARMAND.

PRIZE ESSAY—CLASS III.

BY VERNE ROWELL, BRYANSTON, ONT.

Canada—Why Do We Love Her?

The brilliant victories of our brave Canadian boys on the burning plains of South Africa, the celebrations of these victories and patriotic poems which flow so freely from our poets' pens, all tend to show the love of Canadians for their country. But soldiers, poets, and all have good reasons for their love and loyalty.

Canada is our homeland, the home of our noble ancestors, who so gallantly and freely shed their life-blood for their native land. Their brave deeds

at Queenston Heights and Lady's Lane rank among the bravest deeds of history and shine among the brightest on the scroll of fame. It is, then, but a duty to love our fair "Lady of the Snows," and to uphold the honor of our fathers.

Canada (and how dear to the heart of each loyal Canadian is ever the name), though "the youngest of the nations," stands seventh in commerce among the vast number of countries in the world. Her ships ride safely over the "mountain wave" to mother England, to distant India and Australia, and to all parts of the civilized earth. She controls many of the railways in the United States, besides her own. She has one of the best systems of government, and the best of educational systems; a happy present and the brightest of futures. Why should we not love such a country and endeavor to lift her to a still higher position among the nations of the earth?

No country has more beautiful scenery than Canada. The Niagara Falls annually attracts thousands from Europe, United States, and elsewhere. All Europeans admire our Canadian woods in their autumnal glory. The stranger is charmed with the exquisite beauty of our Canadian lakes. Travellers gaze with astonishment and admiration at the grandeur of the Rocky Mountains; the mind is completely lost to other thoughts as the glance of the spectator rests on their snow-clad peaks, rising far into the clouds, or the green plain below.

So it is no great wonder that Canadians are proud of and therefore love such a fair homeland as this Canada of ours.

Fair Canada, my native land, For thee I'll ever take my stand Against all subtle foes, For the land of the thistle, the Shamrock and rose, The land of the maple tree; The land of the brave and the land of the free— Sweet land of Liberty!

Continually Fizzing.

A man who stammered very much was taken up at a Police Court the other morning on a charge of being drunk and incapable. His name was Sissons. When asked his name, he began—"Ss-ss-ss-ss-ss-ss-ss—" The Bailie turned around, and said—"Stop that noise, and tell your name at once." The man again began—"Ss-ss-ss-ss-ss-ss-ss—" The Bailie very angrily turned to the prisoner and said—"I command you to stop that noise, and tell your name." The man began as before—"Ss-ss-ss-ss-ss-ss-ss—" This was more than the Bailie could stand. Turning to the Policeman, he angrily exclaimed—"What is this man charged with?" "I should say, yer Honor, that he is charged with soda water."

A Grand Offer.

The FARMER'S ADVOCATE, which always gives such excellent prizes, has this year something especially attractive to offer to its young lady readers, or to any one who would like to present to a young lady friend a pretty and significant Christmas gift. Our offer is this: For the names of two new paid-up subscribers a handsome curb link silver bracelet, with padlock and key, as shown in the above engraving. For each additional subscriber two sterling silver friendship hearts, upon which can be engraved the initials of the giver or recipient, there being room upon the several links of these bracelets for one to thirteen of these hearts. Thus, for three new subscriptions will be sent the bracelet with two hearts; for four subscriptions, the bracelet and four hearts; and so on in due proportion. These bracelets are all the rage just now. Every young girl longs to own and wear one, and the ADVOCATE wishes to help them to realize their very natural desire. To make the little task it sets them easy and pleasant, it authorizes them to promise, for one dollar, the ADVOCATE for the balance of this year, including the handsome Christmas number, up to December 15th, 1901. The ADVOCATE should be on the table of the family living-room in every Canadian home, and with a very little effort upon the part of our girl readers, who can have their own share of the pleasure and profit its varied pages afford, as well as the pretty bracelet full of love tokens upon their wrists, there is no reason why such a desirable state of things should not be arrived at before the present year comes to its close. At the same time we would call your attention to the beautiful watches offered on page 662. These are splendid watches and give perfect satisfaction. Remember, new subscribers (those not already taking the ADVOCATE). Write the address plainly. One dollar to accompany each name.

The cross-examiner was a smart man. "What did you say your name was?" was the first question. "Michael Doherty," "Michael Doherty, eh? Now, Doherty, answer me this question carefully—Are you a married man?" "Oj think so; Oj was married." "So you think because you got married that you are a married man, do you? Now tell me whom you married?" "Who Oj married? Oj married a woman." "Now don't you know better than to trifle with the Court? Of course you married a woman; did you ever hear of any one marrying a man?" "Yes, Moi sister did."

Our **Farmer's Library**

A RECENT bulletin prepared by Prof. J. B. Reynolds, of the Ontario Agricultural College, gives a list of meritorious books on Agriculture, Live Stock, Dairying, and Fruit Growing, from which we have made a selection and added a few others. How to obtain, see below:

SOIL AND CROP.

- THE FERTILITY OF THE LAND.—*Roberts*. 372 pages. \$1.25.
- A BOOK ON SILAGE.—*Woll*. 185 pages. \$1.00.
- SOILS AND CROPS.—*Morrow & Hunt*. \$1.00.
- FORAGE CROPS.—*Thos. Shaw*. \$1.00.
- SOILING, ENSILAGE, AND BARN CONSTRUCTION.—*F. S. Peer*. 247 pages. \$1.00.

LIVE STOCK.

- THE STUDY OF BREEDS (CATTLE, SHEEP, AND SWINE).—*Prof. Shaw*. 400 pages; 60 engravings. \$1.50.
- HORSE BREEDING.—*Sanders*. 422 pages. \$1.50.
- LIGHT HORSES—BREEDS AND MANAGEMENT. 226 pages. \$1.00.
- HEAVY HORSES—BREEDS AND MANAGEMENT. 219 pages. \$1.00.
- CATTLE—BREEDS AND MANAGEMENT. 270 pages. \$1.00.
- SHEEP—BREEDS AND MANAGEMENT. 232 pages. \$1.00.
- CATTLE BREEDING.—*Warfield*. 386 pages. \$2.00.
- THE DOMESTIC SHEEP.—*Stewart*. 371 pages. \$1.75.
- THE SHEEP.—*Rushworth*. 496 pages. \$1.50.
- PIGS—BREEDS AND MANAGEMENT.—*Sanders Spencer*. 175 pages. \$1.00.
- FEEDS AND FEEDING.—*Henry*. 600 pages. \$2.00.

GENERAL AGRICULTURE.

- AGRICULTURE.—*C. C. James*. 200 pages. 30 cents.
- FIRST PRINCIPLES OF AGRICULTURE.—*Voorhees*. 207 pages. \$1.00.
- AGRICULTURE.—*Storer*. 1,875 pages, in three volumes. \$5.00.
- CHEMISTRY OF THE FARM.—*Warrington*. 183 pages. 90 cents.
- FARMYARD MANURE.—*Aikman*. 65 pages. 50 cents.
- BARN BUILDING.—*Sanders*. 280 pages. \$2.00.
- IRRIGATION AND DRAINAGE.—*King*. 502 pages. \$1.50.
- IRRIGATION FOR THE FARM GARDEN AND ORCHARD.—*Henry Stewart*. \$1.00.
- SUCCESSFUL FARMING.—*Rennie*. 300 pages. \$1.50, postpaid.

DAIRYING.

- AMERICAN DAIRYING.—*H. B. Gurler*. 252 pages. \$1.00.
- THE BOOK OF THE DAIRY.—*Fleischmann*. 330 pages. \$2.75.
- MILK AND ITS PRODUCTS.—*Wing*. 230 pages. \$1.00.
- TESTING MILK AND ITS PRODUCTS.—*Farrington & Woll*. 255 pages. \$1.00.
- DAIRYING FOR PROFIT.—*Mrs. E. M. Jones*. 50 cents.

POULTRY.

- ARTIFICIAL INCUBATING AND BROODING.—*Cypher*. 146 pages. 50 cents.
- PRACTICAL POULTRY-KEEPER.—*Wright*. \$2.00.

APIARY.

- THE HONEYBEE.—*Langstroth*. 521 pages. \$1.40.

FRUIT, FLOWERS, AND VEGETABLES.

- VEGETABLE GARDENING.—*Green*. 224 pages. \$1.25.
- FLOWERS AND HOW TO GROW THEM.—*Rexford*. 175 pages. 50 cents.
- THE PRINCIPLES OF FRUIT-GROWING.—*Bailey*. 514 pages. \$1.25.
- BUSH FRUITS.—*Card*. 537 pages. \$1.50.
- HORTICULTURIST'S RULE BOOK.—*Bailey*. 312 pages. 75 cents.
- SPRAYING OF PLANTS.—*Lodeman*. 339 pages. \$1.00.
- THE NURSERY BOOK.—*Bailey*. 365 pages; 152 illustrations. \$1.00.
- AMATEUR FRUIT-GROWING.—*Samuel B. Green*. 5x7 inches; 134 pages, with numerous fly leaves for notes; bound in cloth, and illustrated. 50 cents.

PLANT AND ANIMAL LIFE.

- THE STORY OF THE PLANTS.—*Grant Allen*. 213 pages. 40 cents.
- THE STUDY OF ANIMAL LIFE.—*J. A. Thomson*. 375 pages. \$1.75.
- INSECTS INJURIOUS TO FRUITS.—*Saunders*. 436 pages. \$2.00.

HOW TO OBTAIN THESE BOOKS:

We will furnish present subscribers any of the above books as premiums for obtaining new yearly subscribers to the FARMER'S ADVOCATE, at \$1.00 each, according to the following scale:

Books valued at from \$0.30 to \$0.65, for 1 new subscriber.	
.. .. .90 to 1.25, for 2 ..	
.. .. 1.50 to 1.75, for 3 ..	
.. .. 2.00 to 2.50, for 4 ..	
.. .. 2.75 for 5 ..	
.. .. 5.00 for 9 ..	

We can furnish any of the above books at the regular retail price, which is given opposite the title of the book. By a careful study of the above list, any farmer can choose a select list of books suited to his needs, and for a small outlay in cash, or effort in obtaining new subscribers for the ADVOCATE, secure the nucleus of a useful library.

Cash to accompany names in every case. \$1.00 pays each new subscription from now to end of 1901.

The WILLIAM WELD CO., Ltd., LONDON, ONT.

Want a Good Watch?

WE have succeeded in procuring from one of the most reliable jewelers in Canada a complete list of Gents' and Ladies' Watches of sufficient variety to suit every one, and have no hesitation in recommending them to our readers as premiums worthy of an effort to secure. These are not by any means the same class of goods as are hawked around fair grounds, but first-class in every particular, and we assure you that you will be pleased with whatever of the above premiums you may obtain. Let us hear from you at an early date with a good list of new subscribers accompanied by the cash, and take your choice.

Gents' Watches.

Ladies' Watches.

No.	Description	New Subscribers.	No.	Description	New Subscribers.
No. 1.	Yankee Nickel Watch.....	2	No. 15.	Gun Metal Swiss Chatelaine.....	4
No. 2.	Trump Nickel Watch.....	4	No. 16.	Sterling Silver Swiss Chatelaine.....	5
No. 3.	Trump Gun Metal Watch....	5	No. 17.	Nickel American O. F., large size.....	5
No. 4.	No. 14 Silver Watch.....	8	No. 18.	Gun Metal American O. F., large size.....	5
No. 5.	7 Jeweled Gent's Elgin in 3 oz. Nickel Case.....	10	No. 19.	Nickel, small size.....	9
No. 6.	7 Jeweled Gent's Elgin in Gun Metal Case.....	11	No. 20.	Gun Metal, small size.....	10
No. 7.	7 Jeweled Gent's Elgin in Sterling Silver Case.....	14	No. 21.	Sterling Silver, small size.....	10
No. 8.	7 Jeweled Gent's Elgin in 20-year Filled Case.....	18	No. 22.	7 Jeweled Elgin in 20-year Filled Hunting Case.....	20
No. 9.	7 Jeweled Gent's Elgin in 25-year Filled Case.....	21	No. 23.	7 Jeweled Elgin in 25-year Filled Hunting Case.....	22
No. 10.	15 Jeweled Gent's Elgin in 3 oz. Nickel Case.....	15	No. 24.	15 Jeweled Elgin in 20-year Filled Hunting Case.....	23
No. 11.	15 Jeweled Gent's Elgin in Gun Metal Case.....	15	No. 25.	15 Jeweled Elgin in 25-year Filled Hunting Case.....	25
No. 12.	15 Jeweled Gent's Elgin in Sterling Silver Case.....	18			
No. 13.	15 Jeweled Gent's Elgin in 20-year Filled Case.....	21			
No. 14.	15 Jeweled Gent's Elgin in 25-year Filled Case.....	25			

Description of Watches.

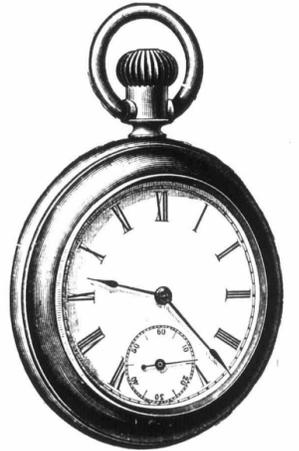
The accompanying cuts fairly well represent all the Ladies' and Gents' Watches, and a description of each as numbered is as follows:

No. 1. American Nickel Key-wind Boy's Watch that is absolutely guaranteed to keep good time and give satisfaction.

No. 2. Gent's Nickel American O. F. Watch; stem wind, and push-in stem and turn to set hands. This is a very strong, reliable Watch.

No. 3. Same as No. 2, excepting that it has Gun Metal case instead of Nickel case.

No. 4. Is a smaller-sized Gent's Watch, has sterling silver case, O. F. Screw Back and Bezel; stem wind, and push-in stem and turn to set hands. This is the lowest-priced and most reliable Boy's or small Gent's Silver Watch that is on the market.



No. 5. Is fitted with 7-Jeweled Nickel, first-quality Elgin movement. The case is a 3-oz. O. F. Nickel case; stem wind and set, screw back and bezel case.

No. 6. Same movement in Gun Metal or Black Steel screw back and bezel case.

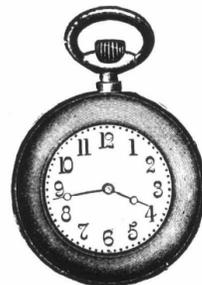
No. 7. Same movement with Sterling Silver O. F. screw back and bezel case.

No. 8. Same movement in 20-year guaranteed Gold Filled O. F. screw back and bezel case.

No. 9. Same movement in 25-year guaranteed Gold Filled O. F. screw back and bezel case.

Nos. 10, 11, 12, 13 and 14 are fitted in the same style of cases as Nos. 5, 6, 7, 8 and 9; the difference is in the movement, and the movement is 15-Jeweled Nickel, first-quality Elgin movement.

No. 15. Is a small-sized Swiss O. F. Gun Metal Chatelaine Watch.



No. 16. Is the same, only with Sterling Silver case, which can be had nicely engraved.

Nos. 17 and 18 are a good-quality American Watch, O. F. stem wind, and push-in stem and turn to set hands. These are a little larger than the usual Ladies' Watches, and are smaller than the usual Boys' Watches, though can be used for either Boys, Girls or Young Ladies.

Nos. 19, 20 and 21 are small sized; in fact, are the exact size of cut. These are American Watches, O. F. stem wind, and push-in stem and turn to set hands, and are first-class timekeepers. Will give perfect satisfaction.

If a nice leather wrist case is desired with these watches, send two extra subscribers.

Nos. 22, 23, 24 and 25 are similar to the accompanying cut. These are regular Ladies' Hunting Watches. Nos. 22 and 24 are fitted in 20-year guaranteed Gold Filled cases, nicely ornamented, or to be had in plain or plain engine turned, and the same applies to Nos. 23 and 25, excepting that they are fitted in 25-year guaranteed Gold Filled cases, and 14K Gold Filled; 22 and 23 are fitted with 7-Jeweled Nickel, first-quality Elgin movements. Nos. 24 and 25 are fitted with 15-Jeweled Nickel, first-quality Elgin movements.

When making your choice of Watch as premium, be sure to mention its number as given in premium list, also whether Lady's or Gent's.



THE WILLIAM WELD CO., LTD., LONDON, ONT.

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- New Subscribers.
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- Chate- 5
- Large 5
- O. F. 5
- 9
- 10
- 10
- 20-year 20
- 25-year 22
- 20-year 23
- 25-year 25



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WANTED:
An experienced shepherd, single. Apply, with references, to W. H. Gibson, Beaconsfield, Ontario, Pointe Claire, P. Q.

GOSSIP.

THE DISPERSION SALE OF MR. JOHN ISAAC'S GREAT HERD OF SHORTHORNS.

The catalogue of Mr. Isaac's fine herd of Shorthorn cattle to be sold at Kinellar Lodge farm, Markham, Ont., on Dec. 18th, is out and ready for mailing on application, as per his advertisement. The catalogue embraces the pedigrees of 33 head of high-class cattle, 14 of which were imported directly from Scotland, besides several young calves born recently and not included in the list, but which also rank as imported animals, while the balance are nearly all bred from imported sires and dams. These cattle were selected for Mr. Isaac by his cousin, Mr. Campbell, late of Kinellar, and were intended for a foundation for a larger Canadian Kinellar Lodge herd than has been, the farm having been enlarged this year by the purchase of an adjoining 100 acres of land; but the critical state of Mr. Isaac's health has led to the determination to retire from business and seek a change of surroundings, and having no sons to take up the business, he has rented the farm for a term of years, and reluctantly relinquishes a herd of cattle which any man might well be proud to own. The dispersion of this herd at this time, while regrettable on account of the circumstances which render it necessary, affords an opportunity such as has seldom, if ever, been offered to the breeders and farmers of Canada to secure superior foundation stock for herds or families, or for replenishing herds which have been depleted by sales, the result of the growing demand for Shorthorns in the last few years. Having been selected from a large number of herds, though mostly identified with well-known popular families of Aberdeenshire Shorthorns, there has been no close inbreeding, but high-class bulls strong in individual merit have contributed to producing the robust, fleshy animals which make up the sale list. The great majority of the 45 females are in calf to noted sires in Scotland, and several have very promising young calves at foot, while others are being bred to the excellent imported Kinellar-bred bull, *Nonpareil (5574)*, of the favorite family of that name, a son of Emancipator, sire of many good ones, including Golden Fame, sold at Mr. Platt's Chicago sale in August for \$1,450.

So uniform in size and character are the 16 big-bodied, broad-backed cows, standing well on short legs, that it would seem ridiculous to make any distinctions as to which are likely to be favorites at the sale, but close up amongst the best will probably be rated the wealthy-fleshed red Wimple cow, *Glad Welcome 2nd*, by the Sittytou Secret sire, Sovereign (by the Brawith Bud bull, Gondomar), and her dam, Mr. Duthie's Glad Welcome, by the Nonpareil bull, Norseman. She is of the most popular pattern, round ribbed yet deep-bodied, with a thickly-fleshed back and handsome head and horns, just the kind a cow one would like to breed a bull from. The red Kinellar Rosebud cow, Golden Belle, by Mr. Bruce's Moonstone, of his magnificent Mayflower family, is another of the matrons combining size and quality in high degree, and with a deep milker, carry a fine udder and a milk mirror that would excite the envy of a dairyman. She is an outstanding instance of the dual-purpose cow, of which we would there were more. Another of the dual-purpose sort, and a grandly good one, is the roan *Mil 138*, by the Duthie-bred *Spicebox*, with Gravesend for sire, and descended from that fine old family so long a favorite in the herds of Captain Barclay and the Duke of Richmond. She is said to give milk enough to raise two calves well, and she looks it every inch. *Damsel 3rd*, a red 4-year-old daughter of the Collynie-bred Prince of Fashion, by Scottish Archer, sire of the Royal champion, *Marengo*, and of many other noted animals, is a capital representative of the excellent Dainty tribe that has done so well for a long time in the hands of Mr. Marr, of Cairnbrogie, and Mr. Wilson, of Pieriesmill. She is long, low and level, and looks like breeding well. *Lady Dorothy 1st*, another red cow, in her 6-year-old form, sired by Redstart, a son of the great Star of Morning, whose name adds value to the pedigree of any Shorthorn in which it occurs, is of similar type as the last-named pair, while the *Ury* quartette, all reds and of uniform excellence, well represent that favorite tribe so long bred at Kinellar, and which has produced many prizewinning and high-selling cattle in this country. The Killean Beauty cow, *Elsie 2nd*, by the splendid Star of Morning, dam by Touchstone, sire of the champion Corner Stone, will be well worth looking after. *Rosebud 2nd*, a red 3-year-old, of the choice Kinellar tribe of that name, is a sweet young cow, a daughter of the Clan Alpine by Gondomar, and of the Princess Royal family, and has at her side a young bull calf of extraordinary promise, a son of the Lancaster bull, Prince Louis. This youngster has evidently all the elements of a champion in his composition, and will doubtless be a drawing card at the sale. Space will not admit of individual mention of all the cows in the list, and detailed reference to the strongest feature in the herd, the great group of 15-in-calf 2-year-old heifers, will have to stand over for our next issue. Suffice it now to say that we believe it is safe to state that never before has an equal number of such quality and character been offered at one sale in the Dominion. What a foundation they would make for a herd! "Big on short legs," only half expresses the description. For fine bred type and the best of Scotch pattern, for wealth of flesh and hair, depth and spring of ribs, straight lines and broad chests, their equal would indeed be hard to find. There is show-yard material, and lots of it, in this contingent, and the plums are in it. Send for the catalogue and study the pedigrees of the trio of Claretts, No. 12 and the twin sisters, then imagine something as good or better in the flesh than what you see on paper, and don't expect to be disappointed. Among the dozen yearling heifers will be found some which it will not be surprising to see selling for nearly if not quite as much money as anything in the list. Keep your eye on that Lavender heifer, No. 25 in catalogue, and on the winsome Watercress, No. 11, and be prepared to see something good for weak eyes. Look for further reference in next issue.

PLEASE MENTION FARMER'S ADVOCATE.

Has No Competitor.

One Patent Medicine Which Has the Field to Itself.

A prominent physician was recently asked why it was there are so many "blood purifiers," "nerve tonics," and medicines for every ill except one of the most common and annoying diseases, viz., piles. He replied, there are two principal reasons: First, physicians and people in general have thought for years that the only permanent cure for piles was a surgical operation, and that medicinal preparations were simply palliatives and not a cure for the trouble. Another reason is that piles, unlike many other diseases, is in no sense an imaginary trouble. A sufferer from piles is very much aware of the fact, and for this reason the few pile salves and ointments, etc., have been short-lived because the patient very soon discarded their worthlessness. He continues: However, there is a new pile remedy which, judging from its popularity and extent of its sale, will soon take the place of all other treatments for piles. It has certainly made thousands of cures in this obstinate disease, and its merit, repeatedly tested, has made it famous among physicians and wherever introduced. The remedy is sold by druggists everywhere under name of Pyramid Pile Cure. It is in convenient, suppository form, composed of harmless astringents and healing oils, gives immediate relief in all forms of piles and a radical cure without resort to the knife, and without pain or interference with daily occupation. One strong recommendation for the remedy is that it contains no cocaine nor opium, and is absolutely safe to use at any time. One of the suppositories is applied at night, is absorbed, and the cure is natural and painless. It permanently cures itching, bleeding or protruding piles, and is the only remedy, except a dangerous surgical operation, that will do so. All druggists sell a complete treatment of the suppositories for 50 cents, and the Pyramid Drug Co., of Marshall, Mich., will mail free to any address a little book on cause and cure of piles, which may be of assistance in chronic cases.—Adv't.

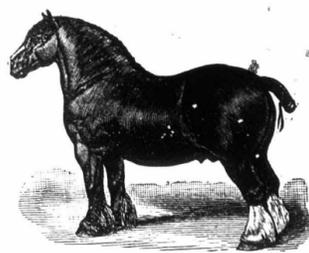
GOSSIP.
MR. W. R. ELLIOT'S SALE OF SHORTHORNS AND OXFORD DOWNS.

The dispersion sale of the entire herd of Shorthorn cattle and flock of Oxford Down sheep, the property of Mr. W. R. Elliot, of Hespeler, Ont., to take place on Nov. 28th, as announced in our advertising columns, will afford farmers an opportunity to secure registered stock of excellent quality and breeding, as Mr. Elliot has been a careful breeder and a judicious feeder. His stock has been successful in winning many first prizes at the Guelph Central and surrounding county fairs, including the first herd prize at Guelph. A review of the catalogue of the 33 head of Shorthorns to be sold shows that the cattle are mostly young or in the prime of life, and that the pedigrees represent a number of excellent families, some of which rank high as good sires as well as good feeders, and all having the benefit of the blood of a long list of richly-bred sires. All the females of suitable age are either suckling calves or safe in calf to the high-class 2-year-old imported Kinellar Claret bull, *Masterpiece 28870*, now at the head of the herd and to be included in the sale, and the red Cruickshank Clipper bull, *Clan Alpine*, admitted to be one of the best sires in Scotland. Four strong, sappy yearling bulls of grand quality are in the sale, one of which is a son of the high-class bull, *Robert the Bruce 22635*, bred from imported sire and dam, used for two seasons in the herd, and sold for a big price to go to Nova Scotia, where he won the sweepstakes at the Provincial Fair this year. He is a massive bull of grand quality, and is illustrated in the famous FARMER'S ADVOCATE picture, "Canada's Ideal." Three are red and roan sons of Prince Lincoln, by Golden Robe, a son of the Cruickshank Clipper bull, Knight of St. John, a first-prize sire of the great English show cow, *Lady Isabel*, first-prize winner at Provincial and State fairs, and perhaps individually the best cow ever seen in a Canadian showing. A number of others trace to imported Beauty, whose descendants are numerous and generally of excellent feeding quality, as well as deep milkers, and all have the advantage of top crosses of good bulls, and richly-bred ones; four are daughters of the champion "Robert the Bruce." The cattle are in good, thrifty, healthy condition, and should attract a large company of buyers. The location is easy of access, being on the branch of the G. T. R. between Guelph and Harrisburg, and only 6 1/2 miles from Guelph, and the date is a time which finds farmers not over-busy. The flock of Oxford Downs are all registered and are said to be of good quality, and should readily find buyers, considering the active demand for sheep now prevailing. Parties interested will do well to apply for the catalogue and attend the sale.

Young Berkshire boars and sows, bred straight from Snell's stock, are advertised in this number by J. L. Newlove, Brampton, Ont., who secured his original stock from the Snellgrove herds, and has since the best sires in those herds for many years. Write him for prices, etc.

NOTICE.
Railway Rates to Ontario Provincial Winter Fair.—The rates to the Provincial Winter Fair at Guelph will be single fare for the round trip, Kingston, Sharbot Lake and west, good going December 10th to 11th, inclusive, returning until the 15th. For exhibitors and judges, on presentation of certificate, the rate will be single fare for the round trip, Dec. 7th to 11th, inclusive, in Ontario and Quebec, Montreal and west.

CLYDESDALE STALLIONS FOR SALE.



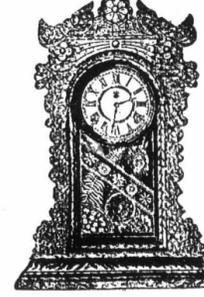
Second consignment just landed, per SS. Marina, from Glasgow.

A High-class Lot, of Good Size and Quality, and of Most Fashionable Breeding.

Parties desirous of securing high-class horses will do well to see these or write us before purchasing.

Dalgety Bros., 463 King St., LONDON, ONT.

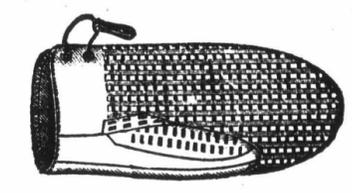
Send for Illustrated Price List.



Sawset.—The sawset shown here is without doubt one of the best sawsets made. These sets are usually sold at 60c. each, but on account of making a large purchase at close spot-cash prices we are enabled to sell them while they last at 35c. each, or 50c. postpaid.

Eight-day Clock.—Fully guaranteed, strikes the hours and half-hours, only \$3.50.

Mouth Organs at 25c. and 50c., postpaid. We sell a beautiful celluloid one for 50c., postpaid.



Horse Blankets—Fully lined, at \$1.00, \$1.25 and \$1.50 each. We have a beautiful heavy blanket, which gives the best of satisfaction, for \$1.50 each.

Head Light Lance Tooth crosscut saw is one of the fastest crosscut saws made; is 4 gauges thinner on the back than the front, enabling it to do its work faster, quicker and easier than any crosscut saw made. This saw is fully guaranteed. Only 30c. per foot.

Crosscut Saw Handles, 25c. per pair.

Crosscut Saw Gauge.—This ought to be in the hands of every person owning crosscut saws. Will save its cost over and over again. Only 25c., or 35c., postpaid.

WILKINS & CO., 166 AND 168 KING ST. EAST, TORONTO.

UNRESERVED AUCTION SALE OF REGISTERED SHROPSHIRE SHEEP.

Aged ewes, shearing ewes, ewe lambs and ram lambs; also grade Galloway cattle. At "The Oaks," Burford, one mile east of the Village of Burford, on the Tilsonburg branch of G. T. R. On Thursday, November 22nd. Sale beginning at 1.30 p.m.

THOS. LLOYD-JONES, Unreserved Auction Sale of 18 Shorthorns. All registered; 23 high-grade cattle, 27 high-grade Lincoln ewes, imported ram. On THURSDAY, NOVEMBER 29TH, 1900. Three miles east of Fergus. Catalogue on application. Sale at 1 o'clock.

THOS. INGRAM, JAS. S. ARMSTRONG, Auctioneer, Fergus P.O., Ont.

SHORTHORNS FOR SALE.

Two young bulls and a few young females, carrying Isabella, Parklevington and Kinellar strains. All in good form and health. JAS. S. FLEMING, Gill, Ont.

NOTICES.

Read the advt. offering a free 7-lb. sample of Bibby's famous "Cream Equivalent for Calves."

Western Dairy School.—As announced in our advertising columns, the Western Dairy School at Strathroy, Ont., will reopen on Dec. 3rd, and continue till March 22nd. This school, under the able superintendence of Mr. Archibald Smith, assisted by a competent staff of instructors, has been eminently successful, and the course in cheese and butter making is very complete. The school was well attended last session, and the students were well pleased with the thorough nature of the training received. Those interested should send for the circular issued by the superintendent.

FOR SALE—3 Berkshire boars and 1 sow, all 7 months old, bred from Snell's stock; large, and excellent quality. Also some suckers. J. L. NEWLOVE, Brampton, Ont.

3% ON YOUR MONEY IS NOT VERY ALLURING INTEREST, IS IT?

If you want more, why not try a reasonably safe mining investment—say, "Rob Roy" shares? You can get in at 15 cents on the dollar, with very little more risk of loss than in your own business, where you have to put up 100 cents on the dollar. At 3% your money doubles in about 25 years, while I have put clients into mining shares which have doubled in 3 months, and can do it again—now. My clients have done well the last year, and things have been very dull. They will do better still, now the War is over. If you have a little money open for investment, let me advise you. It won't cost you anything; and another thing, I get no "take off" on these shares—the company pays me and pays for this "ad.," so my advice is not given for what I can make out of you. I can give you clean advice. A thousand shares of mining stock have made many a man rich, and never made one poor. Why not look into this? Drop me a line and I will cheerfully serve you. A. E. WELCH, LONDON, ONT.

PLEASE MENTION FARMER'S ADVOCATE.

HOW TO GET A FIRST-CLASS COLLIE

Twelve
New
Subscribers



Twelve
New
Subscribers

TO ANY SUBSCRIBER sending us the names of 12 NEW yearly paid-up Subscribers we offer a young COLLIE, six weeks old or over, eligible for registration, and bred by Mr. R. McEwen, Byron, Ont., whose stock has been so successful in the leading shows in Canada and the United States.

THE BIG FOUR.

Great Premium Picture Offer

For obtaining new subscribers to the FARMER'S ADVOCATE at \$1.00 per year.

"Canada's Ideal"—Admitted by judges, breeders and artists to be the most magnificent engraving of high-class modern Shorthorns ever issued in any country. 24 x 36 inches. Twelve animals.

"Canada's Pride"—Nine celebrated draft horses.

"Canada's Glory"—Eleven celebrated light horses.

"Canada's Columbian Victors"—13 celebrated Ayrshire cattle.

Your choice of any one of the above for ONE new subscriber, or all four beautiful pictures for only three new subscribers.

Our Self-Binder, HANDY, DURABLE and ATTRACTIVE.

Made to contain the 24 issues of the year. We will forward this Binder, postpaid, to anyone sending us the names of two NEW subscribers and \$2.00.

Bagster's NEW COMPREHENSIVE Teacher's Bible,

Containing the Old and New Testaments, according to the authorized version, together with new and revised helps to Bible study—a new Concordance and an indexed Bible Atlas, with SIXTEEN FULL-PAGE ILLUSTRATIONS, PRINTED IN GOLD AND COLOR.

HOW TO OBTAIN IT—

Would retail at from \$3 to \$4. We will send (carefully packed, post prepaid) this Bible to anyone sending us the names of two NEW SUBSCRIBERS to the FARMER'S ADVOCATE at \$1.00 each.

The BALANCE of this year's issues given FREE to all NEW SUBSCRIBERS for 1901.

Write for a sample copy of the Farmer's Advocate, and begin to work for these premiums right away. In every case cash must accompany the new names.

ADDRESS

The Wm. Weld Co., Ltd., London, Ont.

GOSSIP.

"Bibby's Cream Equivalent" is a household word with British feeders and breeders. Try it free as per advt.

Six registered Shorthorn bull calves, 8 to 15 months old, are advertised in this number by A. J. Watson, Castlederg, who has a useful herd, of excellent breeding, and also ranks high as an importer, breeder and prizewinner in Cotswold sheep. See his ad., and write him for prices.

Messrs. Henry Stevens & Sons, Lacona, N. Y., whose great herd of Holstein cattle made such a sensation at Toronto Exhibition in 1897, winning the herd and sweepstakes prizes, advertise some very attractive stock in this issue. They have a great herd, great in records of milk and butter production, and also in quality and character of individual animals. Parties wanting high-class dairy stock will do well to correspond with them.

Wm. R. McDonald, box 51, Ridgetown, Ont., advertises pure-bred Tamworth hogs, bred straight from imported and prizewinning stock. The Tamworths have made an excellent reputation in producing the approved type of bacon hogs, either pure-bred or when crossed on other breeds or grades. Write Mr. McDonald for prices and particulars.

SALE OF A GREAT JERSEY COW.

Mrs. E. M. Jones, Brockville, Ont., writes: Domestic cares occupy me too fully to leave time for writing, but I have just sold two cows that are a loss indeed to the whole Dominion. Such animals should never leave Canada, but Mr. Matthews, of Sefanton, Pa., is the fortunate purchaser. One is Louise of H, five years old, golden fawn color, and enormous udder; and I consider her the greatest show cow in Canada. As a four-year-old, her yield was, in nine months and ten days, 7,853 pounds milk—on some days she gave 46 pounds a day. Also in nine months and ten days, although 900 lbs. of her milk was sold and used in house, from the remainder was actually churned 316 lbs. splendid butter, besides raising her calf. I have not had time to foot up the rest of her year, but, as she was still milking 15 pounds a day when I got this far, you may guess the sort of cow she is. And the best of it is, that her whole year's feed, including \$7 for pasture, was only \$38.60. Truly, this cow means to her owner, "dairying for profit." I will send you synopsis of her whole year's work when I get time. As Louise is due to calve again the end of next July, what a show she will make!

With Louise went her full sister in blood, Bella of H, four years old, that, from trials I have made of her, I expect will nearly, perhaps fully, equal Louise. I only bought her last spring, and she had received such bad care it was a disgrace, yet in worst heat of summer on common herd, she was making over 12 pounds splendid butter a week. Both these cows are rich in the blood of Jersey Belle of Scituate, and, in my opinion, the three greatest Jersey cows ever known in America were Jersey Belle of Scituate, owned by Mr. Ellins; Ida Marigold, owned by Mr. Sweet; and Massena, owned by me. I do not know what Jersey Belle and old Massena made more butter and of finer quality, and from less food, than any cows I ever heard of. And, strange to say, all three were broken color, and all three would have passed for sisters, so similar was their form and color.

THE SEVENTEENTH ANNUAL ONTARIO Provincial Winter Fair

(Including the Ontario Provincial Fat Stock and Dairy Show and the Ontario Poultry Show)

WILL BE HELD IN THE CITY OF GUELPH, ONTARIO, DECEMBER 11 TO 14, 1900.

Over \$7,000 offered in prizes.

SPECIAL PRIZES are offered by the Dominion Cattle, Sheep and Swine Breeders' Associations, and by prominent manufacturers.

LECTURES will be delivered by experts in the different departments during the time of the show, which will prove interesting and instructive.

ENTRIES in the cattle, sheep and swine departments close on December 1st; in the poultry department, December 3rd.

Reduced passenger and freight rates on all railroads.

For prize lists and particulars, apply to

JOHN I. HOBSON, A. P. WESTERVELT,
President, Secretary,
GUELPH, ONT. o TORONTO, ONT.

Eureka Veterinary CAUSTIC BALSAM.



A reliable and speedy remedy for Cuts, Splints, Spavins, Sweeney, etc., etc., in Horses, and Lump Jaw in Cattle. See pamphlet which accompanies every bottle, giving scientific treatment in the various diseases. It can be used in every case of veterinary practice where stimulating applications and blisters are prescribed. It has no superior. Every bottle sold is guaranteed to give satisfaction. Price 25¢ per bottle. Sold by all druggists. Guaranteed remedy for sterility in cows, with full instructions. Price, \$2. Prepared by THE EUREKA VETERINARY MEDICINE COMPANY, London, Ont.

HORSEMEN! THE ONLY GENUINE IS

COMBAULT'S CAUSTIC BALSAM.

None genuine without the signature of The Lawrence, Williams & Co. Sole Importers & Proprietors for the U.S. & CANADA. CLEVELAND, O.

The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Bleaches from Horses and Cattle. SUPERSEDES ALL CAUSTIC or FIRING. Impossible to produce scar or bluish. Every bottle 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 free descriptive circulars. THE LAWRENCE-WILLIAMS CO., Toronto, Ont.

For Sale.

The Samuel Hanna Estate, at Griswold.

As this estate must be closed out, it has been decided to offer for sale all those splendid farms owned by the late Samuel Hanna, and comprising about seventeen hundred acres within a few miles of Griswold. The land will be sold in parcels. It is highly improved with buildings, fences, and cultivation.

A great opportunity is here offered to any one desiring a first-class farm.

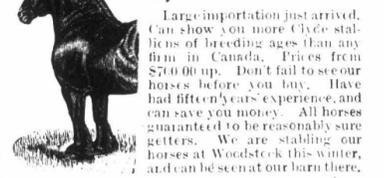
For particulars apply to

Or to Edmund W. Hanna, Coldwell & Coleman, Box 243, Barristers, GRISWOLD, Brandon.

HOGATE & CO.,

OF TORONTO, ONT.

IMPORTERS OF Clyde and Shire Stallions.



Large importation just arrived. Can show you more Clyde stallions of breeding ages than any firm in Canada. Prices from \$700.00 up. Don't fail to see our horses before you buy. Have had fifteen years' experience, and can save you money. All horses guaranteed to be reasonably sure getters. We are stabling our horses at Woodstock this winter, and can be seen at our barn there.

FOR FURTHER PARTICULARS WRITE TO E. R. HOGATE, WOODSTOCK, ONT.

THORNCLIFFE Stock Farm

The largest stud of Clydesdales in Canada, headed by the Champion Stallion of all ages,

"LYON MACGREGOR."



Stallions and Colts

From the best blood in Scotland and Canada. Ayrshire bulls and heifers from imported stock. Jersey heifers and bull calves, sired by the prize-winning bull, Distinction's Golden. Best milking strains, with good teats. Terms reasonable. A visit to Thorncliffe will well repay you.

ROBT. DAVIES, Thorncliffe Stock Farm, TORONTO.

A public auction sale of pure-bred registered Shorthorn cattle is advertised in this issue to take place on November 21st, at the Red Gate farm of Messrs. H. Golding & Son, at Thamesford, Ont. Seventeen females of various ages, mostly young cows and heifers, and six young bulls, all of good useful families, tracing to imported ancestry, are catalogued. A number of pure-bred pigs of the Tamworth and Chester White breeds, and a few Shropshire ewe lambs and other stock, are also included in the sale.

Mr. T. Lloyd-Jones, of Burford, Ont., advertises an unreserved auction sale on Nov. 22nd, at his farm, near the village of Burford, of registered Shropshire sheep and grade Gallo way cattle. Look up the advertisement and note the offering.

GENUINE IS
L.T.S.
L.S.A.M.

A Souvenir of the 20th Century.

The work on our 20th century Christmas number is now sufficiently advanced that we can assure our readers of a magnificent treat, both in wealth of literary and pictorial matter. Send a year's renewal for 1901 now and avoid the December rush. Do you desire the FARMER'S ADVOCATE FREE for 1901? You can secure it by sending us the names and P. O. addresses of two new subscribers and \$2.00. You may offer them the remainder of the copies of this year (1900) and the Christmas number in addition to all the copies of 1901.



"Look at This."

I have received instructions from Geo. Claxton to sell the following farms:
One section, all fenced, as follows: W. 1/2 30, 15, 12; frame buildings and painted; stable, 10x80; stable, 16x30; granary, 20x32; machine shed, 16x30; hog house, 16x60; shed frame to hold 100 head cattle. Frame house, stone cellar; full-size house, 18x34; kitchen, with upstairs, 16x18. This house cost \$1,800. The above buildings cost \$1,000.
The E. 1/2 19, 15, 12; 300 acres cultivated on section, and more to break; price, only \$9,000. 4 miles from Keyes.
Also N.-E. 1/2 15, 15, 12; good rich land; 80 acres broke; fenced; and only \$1,200.
Also 1/2 section, north of Plumas; uncultivated; good land; N. 1/2 10, 18, 12. This is situated in one of the best mixed-farming districts in Manitoba. Easy terms and fair treatment to good farmer. "It is a bargain." Apply to or call on

H. R. KEYES, Keyes, Man.

Rosedale Stock Farm.

CLYDE AND SHIRE HORSES.
SCOTCH SHORTHORNS.
LEICESTER SHEEP.
A choice lot of Leicester ewes and rams with superior quality and as good blood as is obtainable. My motto, "The best is none too good."
J. M. GARDHOUSE, Highfield P. O.
Malton Sta., G.T.R. om Weston Sta., C.P.R.

HACKNEYS



I HAVE on hand, and FOR SALE, two 3-year-old Hackney fillies (prizewinners), broken to harness and stunted to Royal Oak 78, C. H. S. B.; one Hackney stallion, and also one brood mare which should be in foal.
The above horses are offered at reduced prices in order to make room for others. Now is the time to buy cheap horses, before winter sets in.

HORACE N. CROSSLEY,
"SANDY BAY FARM,"
DIST. OF PARRY SO. ND. ROSSEAU.

Clydesdales--Hackneys.



WE IMPORT, breed, and develop the highest class of stock from the best studs in Scotland, Canada, and the United States.
Clydesdales headed by Lord Charming and Prince Delectable; Hackneys headed by Square Shot.
A Few Choice Yearlings of Either Breed can be spared.

D. & O. SORBY,
GUELPH, ONT.

FOR SALE.
CLYDESDALE stallions, mares and fillies, representing the best blood in Scotland—Prince of Wales, Darnly, Macgregor and Lord Lyon—including the great sweepstakes winner, The Marquis (1892), a grandson of Prince of Wales and Macgregor; also the first-prize 3-year-old at Ottawa this season.
THOS. GOOD,
Richmond P. O., Ont.
E. R. Station, Stittsville, C.P.R. om

NOTICES.

An unreserved auction sale of 18 registered Shorthorn cattle, 23 high-grade cattle, and 27 high-grade Lincoln ewes, the property of Jas. S. Armstrong, Fergus, Ont., is advertised in this issue to take place on Nov. 29th, 3 miles from Fergus station on G. T. R. and C. P. R. Catalogues will be sent on application.

Business Education.—A school that meets all the requirements for a good practical business training is the Central Business College, Toronto. With its splendid equipment and large staff of skilled teachers it is proving worthy of the extensive patronage it enjoys from year to year. It is well worth while for any one interested in education to write for the circulars of this school. See card in this issue.

Sprayers and Cookers.—We are very pleased to call the attention of our readers to the advertisement of the Rippley Hardware Co., of Grafton, Ill., who have now opened a branch office at London, Ont., as intimated in their announcement. This firm intimate they are now on a deal to have all their goods made in Canada. Their Reliable Cooker is well-known to our readers, and is used by some of the largest fancy-stock breeders and farmers in Canada, and we have our first complaint to receive from a party stating that they failed to meet any of the claims made by this company. Their cooker was exhibited at Toronto and London Fairs, where it attracted much attention and received highest honors, being awarded diploma of merit. They also received diploma on their sprayers. Their cooker is one of the finest machines on the market for cooking all kinds of grains, roots, vegetables, heating water in stock tanks, and for scalding hogs, heating sheep dip to a given temperature, and for heating hog and poultry houses. This firm is pushing out and gives promise of winning new laurels for their sprayers, which are adapted to such a variety of uses besides the spraying of fruit trees, garden stuff and potatoes, such as whitewashing, distributing disinfectants, syringing, etc. Readers interested will do well to write their branch office, or direct to them, and secure their catalogue of fancy breeders and farmers' supplies, and prices.

GOSSIP.

A solid colored, pure St. Lambert registered Jersey bull calf is advertised for sale in this issue. See the announcement and write for price and particulars.

H. Bennett & Son, St. Williams, Ont., write: "We have had splendid season for sales. The Leicesters we offer are all first-class sheep, and our sheep won a good share of prizes where shown. The B. P. Rocks are a fine lot, barred right, and of the proper color. Our B. P. Rocks won at every show exhibited, and in some cases 1st and 2nd at the same show."

F. Martindale, York, Ont., writes:—"I was very successful with my Shorthorn herd at Cayuga and Caledonia fall fairs this year, winning first prize in almost every class, sweepstakes at both fairs on herd, special given for female, any age, at Cayuga, and with Kinellar of York =24504= and three of his get, I won special at Caledonia for best bull and three of his offspring. He is now for sale, is four years old, quite active, and has been sired by Kinellar Sort (imp.). The young bulls I am offering for sale in my advertisement are the best lot I ever had, of both Scotch and Bates families. Two of these were sired by Baron Missie =31478=, dam Missie of Neidpath 10th, sold at W. D. Flatt's Chicago sale for \$753."

W. G. Pettit & Son, of Freeman, Ont., report the following sales of Shorthorns: To Mr. Andrew Chrystal, Marshall, Mich., the young (imp.) bull, Ury Prince, of the popular Ury family, bred by Robert Bruce, Heatherwick, Scotland, got by Prince of Archers (71240), half-brother to Marengo, Brave Archer, and many other good ones. His dam, My Star 2nd, was by Emancipator. Mr. Chrystal also purchased from us Susanna 2nd (imported in dam), a beautiful young heifer of the Cruickshank Secret family, and 15 young cows and heifers, all home-bred. Nine of the heifers were by Indian Statesman, a Duchess of Gloster bull, by (imp.) Indian Chief. To Mr. H. S. Keck, of Rochelle, Ill., the 11-months-old bull calf, Master of Arts, by Indian Statesman, out of Gwendolyn, by Earl of Moray, the sire of Nonpareil, sweepstakes winner at Toronto, 1897, and Omaha, 1898. Mr. Pettit reports a great inquiry for Shorthorns, and expects a great many to change ownership in the next two months. Our young imported bulls are doing exceedingly well since they came home from quarantine. Several of them look like making showyard candidates.

Mr. J. M. Gardhouse, Highfield, Ont., who made an exceedingly creditable record in prize-winning with his Leicester sheep at the leading Canadian shows this fall, carrying off the first prize for Canadian-bred flock at Toronto, and the first at Ottawa for best flock, open to all, has decided to exhibit selections of his stock at the International Live Stock Show at Chicago next month. It requires some courage to enter the lists for such competition as is sure to be met at the Chicago Exposition, but such stock as Mr. Gardhouse shows will do credit to the flock and the country they came from, and will not be easily downed in any company they are likely to meet on this side of the sea. Leicesters in Canada have been kept up to a high standard of quality and usefulness, and have a host of friends in this country, whose faith in them never fails. Mr. Gardhouse has also a strong herd of Shorthorn cattle, at the head of which is the imported Scotch-bred bull, Guardsman, sire of the champion St. Valentine, and the herd is made up of representatives of several excellent families of Scotch-bred cattle, upon which high-class imported bulls have been used with excellent results. Animals sold from this herd have given good satisfaction as breeders, and have taken high rank in the showing as well. Mr. Gardhouse also breeds Clydesdale and Shire horses, and owns the 1st prize imported 3-year-old stallion at the Toronto Industrial, a horse of great size and good quality, which is likely to make his mark as one of the very best in the country.

FOR SALE OR TO LET, a well-equipped henery, with 10 acres of land, dwelling house and barn. Apply to A. Gray Farrell, Smith's Falls, Ont.

DISPERSION BY AUCTION OF A HIGH-CLASS HERD OF SCOTCH SHORTHORNS AT MARKHAM, ONTARIO, TUESDAY, DEC. 18TH,

Being the entire Kinellar Lodge herd of MR. JOHN ISAAC, who is retiring from farming, and will sell without reserve.

This offering of 53 head includes:

- 16 Cows
- 15 2-year-old heifers
- 11 Yearling heifers
- 6 Imported bulls
- 2 Home-bred bulls
- 3 Heifer calves.

FORTY-FOUR are imported animals, selected from first-class Scotch herds, and strong in breeding and individual merit, and are representatives of the Ury, Claret, Golden Drop, Lavender, Wimple, Rosebud, Broadbooks, Rosemary, Mina, Jilt, and Lady Dorothy tribes.

The farm is 1 1/2 miles from Markham Station, G. T. R.; 2 1/2 miles from Locust Hill, C. P. R., and 20 miles from Toronto.

Catalogues will be mailed on application to
JOHN ISAAC,
MARKHAM, ONT.

on
AUCTIONEERS:
COL. CAREY M. JONES, JOHN SMITH, M. L. A., CAPT. T. E. ROBSON, M. L. A.,
Davenport, Iowa. Brampton, Ont. Ilderton, Ont.

IMPORTANT AUCTION SALE OF Shorthorn Cattle and Oxford Down Sheep, the property of Wm. R. Elliott, 1 1/2 miles north of Hespeler and 6 1/2 miles south of Guelph, on WEDNESDAY, NOV. 28TH, 1900,

at 1 p. m.: 33 head of high-class registered Shorthorns—25 females and 8 young bulls; 22 breeding ewes, 16 ewe lambs, and 11 ram lambs—all registered. Positively no reserve. Catalogues on application. Terms of sale: 10 months' credit on approved notes, or 5 per cent. per annum discount for cash. Trains will be met at Hespeler on day of sale.

WM. R. ELLIOTT, Hespeler. THOS. INGRAM, Auctioneer, Guelph.

W. G. Pettit & Son,
FREEMAN, ONT.
OFFER FOR SALE:
20 Imp. bulls.
40 Imp. cows and heifers.
6 Home-bred bulls.
30 Choice Home-bred heifers—1, 2 and 3 years old.
25 Ewe lambs.
Burlington Junction Station, Telegraph and Telephone Offices, within half a mile of farm.

DISPERSION SALE OF DURHAM CATTLE, Tamworth and Chester White Swine and Shropshire Sheep.

Capt. T. Robson has received instructions from H. Golding & Son to sell by public auction, on their premises, RED GATE STOCK FARM, 1 mile south of Thamesford, on Ingersoll Gravel Road, on
WEDNESDAY, NOV. 21, 1900, at one o'clock, sharp, the following valuable stock:
17 Durham cows and heifers; 6 Durham bulls; 3 breeding Tamworth sows; 1 Tamworth sow, 5 months old; 1 Tamworth pig, both sexes, from 6 to 8 weeks old; 1 breeding Chester White sow; 1 Chester White pig, 5 months old; 3 Shropshire ewe lambs; 2 dairy cows; 2 3-year-old steers; 1 2-year-old steer; 1 2-year-old calf, from Graf Bremner; 1 brood mare, 10 years old.
TERMS:—Sums of \$10 and under, cash; over that amount, 12 months' credit on furnishing approved notes. Four per cent. per annum off for cash on credit amounts. All stock sold and not settled for will be re-sold, the loss, if any, to fall on the defaulter. The decision of the auctioneer to be final in all cases of dispute. Catalogues had on application to
CAPT. T. ROBSON & ALEX. ROSE, H. GOLDING & SON, or H. GOLDING,
Auctioneers. THAMESFORD, INGERSOLL.

GOSSIP.
Test a free 7-lb. sample of Bibby's famous "Cream Equivalent" for calf-rearing. See advt.
IMPORTED CLYDESDALES.
Messrs. Dalgely Bros., London, Ont., advertise in this number a new importation of Clydesdale stallions just landed. These horses are well spoken of by the Scottish papers as being up to a big size and of excellent quality. See the advt. and write for particulars.

THE AMERICAN ABERDEEN-ANGUS BREEDERS' ASSOCIATION.
The regular annual meeting of the American Aberdeen-Angus Breeders' Association was held at the Palmer House, Chicago, Ill., Nov. 7th, 1900, with an excellent attendance of breeders and others interested in Angus cattle. The following general officers were elected for the year 1900-1901: W. F. Dickinson, Minn., President; L. H. Kerrick, Ill., Vice-President; Thos. McFarlane, Ill., Secretary-Treasurer. And the following gentlemen were chosen as Directors for the ensuing three years: W. A. McHenry, Iowa; O. E. Bradfute, Ohio; L. H. Kerrick, Ill.
High-class Shorthorns and Yorkshire Pigs.
One very superior bull, about 17 months old; three bulls about 5 months old, from imp. stock; cows and heifers due to calve this fall. Forty Yorkshire pigs, 2 months old, from imp. stock; imp. boar, 2 years old, and sows due to farrow soon. Write, or come and see us.
JAS. McARTHUR, GOBLE'S, ONT.
Goble's Station, G. T. R., 10 miles east of Woodstock, 2 miles from farm. Visitors met at station.

KENDALL'S

SPAVIN CURE



The old reliable remedy for Spavins, Ringbones, Splints, Curbs and all forms of Lameness. It cures without a blister because it does not blister.

North Postage, Ont., Feb. 10, '98.

Dr. B. J. Kendall Co.

Dear Sirs:—Will you please give me a remedy for spavins, I have a mare that is afflicted. I take pleasure in stating that I have cured a curb of four years' standing with your Kendall's Blister, by using it only once and then applying your Spavin Cure. As long as I have horses, I will not be without Kendall's Spavin Cure and Kendall's Blister in my stable.

Very truly yours,
ADOLPHUS GAUTHIER.

Price \$1. Six for \$5. As a liniment for family use it has no equal. Ask your druggist for Kendall's Spavin Cure, also "A Treatise on the Horse," the book free, or address
DR. B. J. KENDALL CO., ENOSBURG FALLS, VT.

NEW IMPORTATION

Just arrived. Personally selected from the best studs in England and Scotland.

CLYDESDALES

By the champion winners, Baron's Pride, McGregor, Flashwood, Prince Alexander, Prince of Carruchan, etc.

Shires, Suffolks, Percherons and Hackneys

By the leading sires of the day, all combining size, color, quality and action.

Fourteen first prizes and six second prizes won at the recent State Fairs of Illinois, Iowa, and Wisconsin, in the very hottest competition. Inspection cordially invited.

ALEX. GALBRAITH, Janesville, Wis.

W. D. FLATT

Hamilton, Ont., Can.,

IMPORTER AND BREEDER OF

Shorthorn Cattle.

My herd is one of the largest in America, both imported and Canadian-bred. A very choice importation of 27 head now in quarantine and due out Oct. 11. New catalogue of the herd ready for distribution Oct. 1. Address all communications to

James Smith, Mgr.,

MILLGROVE, ONT.

R. R. Station and Telegraph, Hamilton, on main line Grand Trunk R. R.

SPRING GROVE STOCK FARM

Shorthorn Cattle and Lincoln Sheep. Herd prize and sweepstake at Toronto Industrial Exhibition, 1897 and 1898. Herd headed by Topsman = 17847, champion at Winnipeg, Toronto, London and Ottawa, 1896. High-class Shorthorns of all ages for sale. Also prize-winning Lincolns. Apply



T. E. ROBSON, Ilderton, Ont.

ASHTON FRONT VIEW STOCK FARM.

Six Shorthorn Bulls for sale, from 8 to 15 months of age, all of them breeding. Also a lot of all ages for sale at all times. Visitors welcome. A. J. WATSON, Cashier, Ont. C. P. R. Station and Telegraph, Bolton, or G. T. R. Station, 1898.

PLEASE MENTION FARMER'S ADVOCATE.

HAWTHORN HERD OF DEEP-MILKING SHORTHORNS.

We are offering 5 young bulls for sale, of first-class quality, and A1 breeding.

Wm. Grainger & Son, - Londonboro, Ont.

SPRINGHURST SHORTHORNS.

The herd is largely of Cruickshank and other Scotch sorts, and is headed by the Inverquherry-bred bull, Knuckle Duster (imported) (72733). Herd has furnished the Fat Stock Show champion three times in the last five years.

Choice young stock (both sexes) FOR SALE.

H. SMITH, - HAY, ONT.

Exeter Station on G. T. R., half a mile from farm.

Pure Scotch Shorthorns for Sale. Two bulls thirteen and fifteen months old, and three two-year-old and two one-year-old heifers. All right. Good ones. Meadowdale station, C. P. R. S. J. PEARSON & SON, Meadowdale.

Shorthorn

Cows and heifers (also a November bull calf), including the imported cow, Northern Empress, and her 3 mths. daughter (imported in dam). A. P. ALTON & SON, Appleby, Ont.

BARRED PLYMOUTH ROCKS and GOLDEN WYANDOTTES.

For sale: Fine young birds of above varieties—cockerels and pullets. Being short of room, will sell very reasonably to quick buyers. Satisfaction guaranteed. Write JAMES ROW, Avon, Ont.

For sale

10 Shorthorn bulls, 20 Leicester and South-down rams. A lot of Berkshires. All choice. Send for catalogue.

E. JEFFES & SONS, BOND HEAD.

Shorthorns for Sale.

Of the Fashion and Lavender tribes; well-developed, healthy, and thick-fleshed; red and roan animals. Golden Robe now heads the herd.

WM. G. HOWDEN, Columbus, Ont.

JOHN DRYDEN,

BROOKLIN, ONTARIO,

OFFERS SIX YOUNG SHORTHORN BULLS,

ready for service, at reasonable prices. Strong, active, masculine.

GOOD QUALITY AND CHOICE BREEDING FOR SALE.

FIFTEEN OR TWENTY young Scotch Shorthorn cows and heifers. Also 10 bulls, 6 to 24 months; good ones at right prices.

DAVID MILNE, ETHEL, ONT.

Good Young Bulls

Of best Scotch breeding, and a desirable lot of HEIFERS

of the low-down, blocky type. Royal Prince = 31241 = (bred by J. & W. B. Watt), a worthy son of Imp. Royal Sailor = 18359 =, heads the herd.

H. K. FAIRBAIRN, Theford P. O. and Station, Ont.

Shorthorns and Shropshires FOR SALE.

Am offering a few young bulls and heifers from imported Rosbud and Countess females, upon which have been employed imported sires from Duthie, Campbell, and Cruickshank herds. Shrop. ram and ewe lambs.

WM. D. DYER, COLUMBUS, ONT.

8 Scotch-topped SHORTHORN BULLS 8

And a few females, sired by Revenue and Bonnie Lad, a son of (imp.) Blue Ribbon.

ROBT. DUFF, G. T. R. and C. P. R. - Myrtle, Ont.

Bonnie Burn Stock Farm

Forty rods north of Stouffville station, Ont., offers 5 Shorthorn bulls and some heifers, 30 Shropshire rams and ewes from Imp. and Canadian-bred sires, at reduced prices.

D. H. RUSSELL, Stouffville, Ont.

Shorthorns FOR SALE:

12 young bulls.

10 yearling heifers and heifer calves.

16 2-year-old heifers and young cows,

several well advanced in calf to Precious Stone (imp.). Prices moderate. Write for particulars.

G. A. BRODIE, Stouffville Station, Bethesda, Ont.

8 BULLS, from 6 to 18 months old. Also

cow and heifers of good milking strains. Prices right.

F. MARTINDALE, York, Ont.

SHORTHORNS FOR SALE, bred from im-

ported 13 milks and Barrington mounted on, upon which have been employed such sires as Janitor 21385, Scarlet Velvet 2146, and Chief of Clan 31123. Young bulls for sale, from 7 to 15 mos. old. Also a few choice young females, reds and roans.

JAS. SMITH & SON, INGLIS FALLS, ONT.

GOSSIP.

William Hodson, Myrtle, Ont., advertises in this issue Bronze Turkeys, Toulouse geese, Cayuga ducks, colored Dorking and Plymouth Rock fowls.

JAS. SMITH & SONS' SHORTHORNS.

Twenty years of steady and persistent progress along one line, with unusually favorable surroundings for the breeding and rearing of Shorthorn cattle, in a large measure accounts for the comfortable home surroundings of Messrs. Jas. Smith & Son, at Inglis Falls, near Owen Sound, Ont. Possessed of a liberal education and a large fund of good common sense, the senior member of the firm has been called upon to shoulder the responsibility of numerous offices in church and state, which he has ably and creditably filled to the advantage of the community. The same wise judgment has been given to the breeding and care of his herd, only the most approved sires in breeding and quality having been used in the herd all along the line of its history. In examining the pedigrees of the two previous and present bulls, which form an important feature in the breeding of the younger matrons, we found that the bull, Janitor 21385, by Duke of Lavender (imp.), and out of Julia (imp.), a member of the Jilt tribe, which John Miller & Sons imported, did valued service during his few years in the herd. Then came the Scotch-bred Scarlet Velvet 2146, by Golden Crown, and out of imported Selina, of the Kinellar Claret tribe. Following him is the present sire, Chief of the Clan 31123, by Clan Campbell (imp.), and out of Crimson Fuchsia 5th, with the imported sires Indian Chief, Premier Earl, Louis Arundel, and Scotsman 2nd uppermost. In his pedigree, such an array of imported top crosses as is seldom found in one pedigree. In Chief of the Clan we found a bull of even proportions, thick-fleshed and on short legs, possessing excellent character and type, and likely to make an impressive sire. Of the young things sired by him their owners feel justly proud.

The female portion of the herd, which now numbers about 20 animals, trace their origin to the Barrington and Lavinia tribes, the latter having the Erildoune cross, while the former carry such blood lines as Vice Consul (imp.) and Victor Strathallan. They are a useful lot, of mostly red cows, in good breeding condition. A few choice young bulls, in good growing form, were shown us when we called, which, together with a limited number of young females, are included in Messrs. Smith's offerings.

HEREFORD SHOW AND SALE AT KANSAS CITY.

The Hereford breeders made a mighty showing of their cattle at the great Kansas City Show, Oct. 22nd to 26th, the entries in most sections of the show being very large, in some running from 30 to 50 animals. The awards throughout the class were made by a jury of three, two of whom served as judges and the third as a referee, each member alternately serving as referee for a section. Judging from the criticism of onlookers, as expressed through the press, the decisions in many instances did not meet with popular approval. Following is the list of awards in the different sections, the judges being Messrs. W. S. Powell, Channing, Tex.; W. A. Morgan, Topeka, Kan.; and W. M. Atkinson, Roswell, New Mexico:

Bull, 3 years—1 W. S. Van Natta, Independence, Mo.; Dandy Rex = 2 T. F. B. Sotham, Chillicothe, Mo.; Improver; 3 Clem Graves, Bunker Hill, Ind., Dale. Two years—1 C. G. Comstock, Albany, Mo.; Gentry Lars; 2 J. Hooker, New London, Mo.; Mark Hanna; 3 E. A. Bayless, Des Moines, Iowa, Dale 3rd. One year—1 Thos. Clark, Bercher, Ill.; Perfection; 2 S. J. Gabbert, Platte, Mo.; Columbus Chief 19th; 3 E. Corken, Bethany, Mo.; Lomax, Calif—1 T. F. B. Sotham, Thickflesh; 2 Lancaster & Son, Liberty, Mo.; Anxious Lad; 3 W. S. Van Natta, Fowler, Ind., March On 12th. Cow, 3 years—1 W. S. Van Natta, Columbine; 2 Clem Graves, Dolly 5th; 3 T. F. B. Sotham, Benison. Two years—1 Gudgegill & Simpson, Blanche 13th; 2 O. Harris, Harris, Mo.; Betty 2nd; 3 Thos. Clark, Peerless 5th. Eighteen months—1 W. S. Van Natta, Miss March On; 2 T. F. B. Sotham, Golden Lassie; 3 Gudgegill & Simpson, Mischief Maker; 4 W. S. Van Natta, Lady Ellen; 3 Thos. Clark, Joqueline.

Heifer calf, six months and under a year—1 O. Harris, Lady Dewdrop 2nd; 2 Stewart & Hutcheon, Queenly; 3 Gudgegill & Simpson, Honora 2nd; 4 T. F. B. Sotham, Nanette. Under six months—1 Van Natta & Sons, Nella March On; 2 and 3 Stewart & Hutcheon, Matilda and Tempter's Queen.

A new jury, composed of John Sparks, Reno, Nev.; W. S. Icard, Henrietta, Texas, and Tom Smith, Crete, Ill., made the sweepstakes awards, as follows:

Senior sweepstakes bull, over 2 years old—1 Clem Graves, Dale, Junior sweepstakes, under 2 years—1 Thomas Clark, Perfection, son of Dale, dam Milly May. Senior sweepstakes female, 2 years or over—1 Clem Graves, Dolly 5th. Intermediate sweepstakes for yearling heifers—1 Gudgegill & Simpson, Mischief Maker. Junior sweepstakes heifer, under one year—1 O. Harris, Lady Dewdrop 2nd.

For the Armour championship cup for best Hereford bull, any age, Messrs. Morgan and Atkinson being the judges, Tom Clark's yearling, Perfection, was crowned king.

The Sotham special, for best female any age, went to Gudgegill & Simpson's yearling, Mischief Maker.

Graded Herds. The awards for graded herds—that is, for bull over 2 years, cow over 3 years, 2-year-old heifer, yearling heifer and heifer calf—were: 1 Gudgegill & Simpson, on Dandy Rex, Mischief-cow, Blanche 13th, Mischief Maker and Honora 2nd; 2 Clem Graves, on Dale, Dolly 5th, Lady Help, Candace and Rosamond; 3 T. F. B. Sotham, on Improver, Benison, Pure Gold, Golden Lassie, and Nanette. Young herd, under 2 years old—1 Gudgegill & Simpson; 2 T. F. B. Sotham; 3 Van Natta & Sons.

The Sale of Herefords.—At the combination auction sale at the close of the show, 185 Herefords of the 25 catalogued were sold at an average of \$224.15; 87 females averaged \$208.79, and 98 bulls, \$239.85. The highest price for a bull was \$535.00, for the yearling Columbus 17th, bred and offered by Benton Gabbert, Dearborn, Mo., sold by Columbus 51875, and sold to Frank Bockefeller, Belvidere, Kansas. Two other bulls and one cow sold for \$1,000 to \$1,030, and the highest price for a female was for the 2-year-old Mischief-cow, bred and owned by R. B. Armour, Kansas City, Mo., and sold for \$1,025 to G. B. Smith, Fayette, Mo.

EPPS'S COCOA

GRATEFUL COMFORTING Distinguished everywhere for Delicacy of Flavour, Superior Quality, and Highly Nutritive Properties. Specially grateful and comforting to the nervous and dyspeptic. Sold only in 1-lb. tins labeled JAMES EPPS & CO., Ltd., Homoeopathic Chemists, London, England.

BREAKFAST SUPPER

EPPS'S COCOA

SHORTHORNS FOR SALE, or will exchange my 4-year-old stock bull, Olmedo 2430, having 4 excellent Scotch top crosses on a Crimson Flower dam, for one equally well bred. Young bulls and heifers and Shropshires for sale.

GEO. RAIKES, BARRIE, ONT.

SHORTHORNS FOR SALE

Young stock of both sexes, reds and roans.

JOHN R. HARVIE, ORILLIA, ONT.

SHORTHORN BULLS FOR SALE

We have Cruickshank Lovely, Fashions and Stamford females, with Lovely Victor 22170 at the head.

T. MERCER, MARKDALE, ONT.

JAS. DORRANCE,

SEAFORTH, ONTARIO,

BREEDER OF

Shorthorn Cattle and Berkshire Pigs

Young stock always for sale.

R. MITCHELL & SON,

Burlington Jct. Station, Nelson, Ontario,

Breeders and importers of

SCOTCH SHORTHORNS,

Offer for sale:

12 Canadian-bred females.

11 Imported females.

4 Imported bulls.

7 Canadian-bred bulls.

R. & S. NICHOLSON

SYLVAN P. O., PARKHILL STATION.

Scotch Shorthorns, imp. and home-bred.

The Imp. Clipper bull, Chief of Stars, heads the herd. Nine bull calves for sale, 8 to 10 mos. old (extra good ones), sired by Royal Standard. Inspection invited.

SHORTHORN CATTLE AND LINCOLN SHEEP.

Imp. Prime Minister at head of herd. Seven young bulls for sale—good ones. Also a few females. Stud rams all imported from H. Dudding, Esq.; the same blood as the 1000-guinea ram.

J. T. GIBSON, DENFIELD, ONT.

SPRINGBANK FARM.

Shorthorn Cattle, Oxford Sheep, and Bronze Turkeys. Young bulls for sale.

JAS. TOLTON, WALKERTON, ONT.

SCOTCH SHORTHORNS.

100 head to select from.

Imp. Diamond Jubilee = 28861 = at the head of the herd. 25 grand young bulls, and cows and heifers of all ages, of the most approved breeding.

T. DOUGLAS & SONS, Strathroy Station and P. O. Farm 1 mile north of the town.

Shorthorns and Leicesters.

Herd Established 1855.

A number of young bulls, cows and heifers for sale. Herd headed by imported Christopher 28859, and Duncan Stanley = 16364 =. Grand milking cows in herd. Also a number of Leicesters of both sexes, from imported foundation.

JAMES DOUGLAS, CALEDONIA, ONT.

Maple Lodge Stock Farm

ESTABLISHED 1854.

SHORTHORNS—An excellent lot of young

bulls, and a special value in young cows and heifers in calf to our imported Knuckle Duster.

LEICESTERS—Imported and home bred—the best.

ALEX. W. SMITH, MAPLE LODGE P. O., ONT.

For Sale: 2 Young Holstein Bulls 2

Carrying the blood of Aggie, Netherland, Clothilde, and Inka, and sired by Inka 5th = Netherland. Also the 3-year-old daughter of Marguerite 1th (over 1000 lbs., 367, and 410 lbs. butter in season), and 1 calf in milk and in calf.

Thos. B. Carlaw & Son, Walkerton, Ont.

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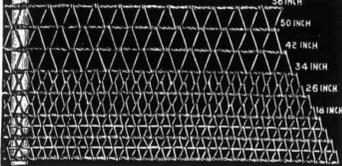
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Ellwood Steel Wire Fences
Six styles—18 to 58 inches—best steel wires, heavily galvanized. Expansion and contraction provided for. Every rod guaranteed. Sold by local agents. If no agent in your town write to the makers.
American Steel & Wire Co., Chicago or New York.



A QUICK, SHARP CUT
hurts much less than a bruise, crush or tear. Done with the **KEYSTONE KNIFE**.
is the safest. Quick, sharp cut. Cuts from four sides at once. Cannot crush bruise or tear. Most humane method of dehorning known. Took highest award World's Fair. Write for free circulars before buying.
Owned and Manufactured by R. H. MCKENNA, V.S., Picton, Ont.
THE LATE A. C. BROSIUS' PATENT.

SCOTCH SHORTHORN BULLS AND HEIFERS
HERD ESTABLISHED IN 1872.
Such sires as imported Royal George and imported Warfare have put us where we are. Imported Blue Ribbon now heads herd.

A. & D. BROWN,
ELGIN COUNTY. -om IONA, ONTARIO.
GUERNSEYS.

This is the dairy breed for ordinary farmers. Large, vigorous, and hardy, giving plenty of rich milk. Several fine young bulls for sale at very reasonable prices. A few heifers can be spared.
Address—**SYDNEY FISHER,**
17-y-o ALVA FARM, KNOWLTON, P. Q.



90 HEAD
High-quality, Early-maturing
Herefords
Prizewinners.
Young bulls, cows, heifers.
The blood of "Corrector," "Eureka," "Ancient Briton," and "Rupert," on an "Anxiety" foundation. Send for illustrated catalogue.
H. D. SMITH, COMPTON, QUE.

HEREFORDS FOR SALE.
THE HERD of upwards of 90 head of registered animals; contains the blood of the best English herds, with imported True Briton and Likely Lad at the head. Stock of both sexes and all ages for sale. Correspondence or a personal visit invited.
A. S. HUNTER,
-om-
DURHAM, ONT.

RIDGEDALE HOLSTEIN-FRIESIANS
Two young bulls of choice breeding for sale; also some heifers. Prices reasonable. Write for particulars, or come and see them. **R. W. WALKER,**
Utica P. O.
Shipping stations: PORT PERRY, G. T. R.; MYRTLE, C. P. R.

Maple Glen Stock Farm.
The home of officially tested, Advanced Registry, dairy test and showing-win- HOLSTEINS. of Carmen Sylva now for sale. Price is in keeping with breeding and performances.
C. J. GILROY & SON,
Brookville, on C.P.R. or G.T.R. Glen Buell, Ont.

WE WANT TO SELL A FEW
Holstein Heifers, coming 2 years old
THEY are of the richest and largest producing strains, fine individuals, and bred to as good bulls as are living. We have a few bull calves and yearling bulls also for sale.
HENRY STEVENS & SONS,
LACONA, OSWEGO CO., N. Y.

Maple Hill Holstein-Friesians
SPECIAL OFFERING.
Bull calf 8 months old, sired by DeKol 2nd's Paul DeKol Duke. Bull calf one week old, sired by Daisy Teake's King. Also several fine females, all ages.
G. W. CLEMENS,
HARRISBURG STN. -om ST. GEORGE P. O., ONT.

BROOKBANK
Is headquarters for Holstein bulls. They are going fast; be quick if you want one. In writing, state age, etc., preferred.
GEO. RICE,
Oxford Co. Currie's Crossing, Ont.

GOSSIP.
Mr. W. Agnew, Langton, Ont., has imported from Scotland a yearling Clydesdale stallion, bred by Mr. James E. Brownlee, East Whiteburn. He was got by Mr. Brownlee's own horse, Keir M. (9926), and his dam was Lady Stanley III. (13369), by Lothian Duke (8782), and descended from the famous Prince of Wales-mare, Lady Stanley, which Mr. Brownlee bought at the Dunmore sale in Glasgow market in 1881. To this race belonged the fine filly, Pansel, with which he gained first prize at the H. and A. S. Show, in the same year.

The raising of high-class beef cattle has not been a noted branch of agriculture in the eastern part of Maine State, but a nice start has been made by Hopkins Bros., Durham Stock Farm, of Fort Fairfield, inasmuch as they have a nucleus of what promises to become a notable Shorthorn herd. At present their herd consists of ten registered cows and heifers, headed by the registered bull, Rattler. Some of these had their origin in Canada, and it is the intention of the firm to make a personal importation from Britain before very long.

F. J. Gallanough, V.S., Thornhill, Ont., writes: "I have been very successful at the fairs this fall with my road mare, Wilkey Belle, being awarded nine first prizes at five fairs, amounting to \$114, as follows: At Toronto—Silver medal by Exhibition Association, and sweepstakes of \$25 by the Canadian Horse Breeders' Association, for best mare of any age. At Newmarket—1st for single roadster, 1st (special) for best gentleman's roadster, and 1st (special) for best gentleman's turnout. At Markham—1st for single roadster in a class of 10; 1st (special) for best gentleman's roadster. At Woodbridge—1st for single roadster. Wilkey Belle, 5 years old, was sired by Wilmot, by Wilton, by George Wilkes; dam by Little Hamilton."

AN INTERCOLLEGIATE LIVE STOCK ASSOCIATION ORGANIZED.
At a meeting called at Chicago, November 1, by Professor John A. Craig, of Iowa, to arrange for an intercollegiate live-stock judging contest, to be held at Chicago during the International Live Stock Exposition, an organization was effected. It was decided to hold such a contest, and tentative rules were adopted governing such contest. Prof. Plumb, of Indiana, was elected President; Prof. Hunt, of Ohio, Vice-President; and Prof. Mumford, of Michigan, Secretary and Treasurer. The Executive Committee to consist of Prof. Plumb, Mumford, Craig and Kennedy.

MORE CLYDESDALES FOR CANADA.
Messrs. Dalgety Bros., London, Canada, have recently purchased from Mr. Geo. Bean, and shipped, two useful Clydesdale stallions, named respectively Rising Prince (10868) and Royal King (10276). Rising Prince was bred by Mr. John Kerr, Colleenan, and is own brother to the fine filly which gained first prize at Kilmarnock some years ago. His sire was the Cawdor cup champion, Prince Alexander (8889), and his dam the noted breeding mare, Norah of Stracathro (3143). Royal King is an extra well-bred horse, got by the prize horse, Mount Royal (1095), and is own brother to the well-known prize mare, Golden Queen (12071), whose dam, Queen of the Lyons (6967), was cup-winner at Aberdeen. These horses are not likely to disappoint their new owners. Mr. Jas. Picken, Torrs, Kirkcubright, has recently sold Katepayer (10422) to Mr. Neil Smith, Brampton, Ont. This horse was foaled in 1896, and got by the dual Cawdor cup champion, Prince of Carruchan (8151), while his dam was by a son of Macgregor, and his grandam by Flashwood. He was bred by Mr. Muir, Barwhannay, Whauphill, and has a long pedigree, his ancestry being all bred for size, color and weight.—*Scottish Farmer.*

SHORTHORN HERD AND SWEEPSTAKE PRIZES AT KANSAS CITY SHOW.
In the Gossip columns of the ADVOCATE of Nov. 1st was given a list of the leading awards at the Kansas City Show, in the Shorthorn class, by ages, except for heifer calves, which are given below, together with the principal herd and sweepstakes awards: Senior heifer calf—1 Robbins & Sons' Sassy Frantic; 2 Tomson & Co.'s Rosalind; 3 Mitchell & Son's My Hannah Lady. Junior heifer calves (under 6 months)—1 Robbins & Sons' Clarissa; 2 Douglas & Sons' Marcia M.; 3 Wornall's Celina 9th. The judges in the individual sections of the class were E. K. Thomas, N. Middleton, Ky.; Prof. Thos. Shaw, St. Anthony Park, Minn.; and Thos. Clark, the Hereford breeder at Beecher, Ill.

Sweepstakes and Herd Awards.—The judges on these classes were Messrs. Jas. A. Funkhouser, Plattsburg, Mo., and W. S. Fall, Albia, Iowa. The senior championship for bulls over 2 years went to the aged bull, Viscount of Anoka, bred by Geo. Harding & Son, Waukesha, Wis., and owned by T. J. Wornall, Mosby, Mo. Junior sweepstakes for bull was awarded to the 1st prize bull calf, Nonpareil of Clover Blossom, shown by Geo. Bothwell, Nettleton, Mo. The senior female championship went to Mr. Wornall's Lady Valentine, the 2nd prize cow in her class. The intermediate sweepstakes for yearling heifers went to Robbins & Sons' Ruberta, and the junior female sweepstakes under a year to Tomson & Sons' Rosalind, who was 2nd in class. The Armour cup for best bull of the breed, any age (the Hereford breeder, Mr. Van Natta, being judge), went to the aged bull, Lavender Vicount, owned by C. E. Leonard, Bell Air, Mo., a bull bred by S. F. Lockridge, and placed fourth in his class, three big bulls having ranked above him.

The sweepstakes special for best female, any age (Mr. Funkhouser being judge), went to Robbins' yearling Ruberta.
Herd Prizes. The graded herd prizes, 1 bull and 1 female over 2 years old, were awarded, 1st to T. J. Wornall, on Viscount of Anoka; Lady Valentine, Nola Ravenswood, Empress and Viscountess of Grassland. This herd has been undefeated this year. Second prize went to E. B. Mitchell & Son, on Prince Armour, Rosebud, Rose Frigate, First Belle, and My Hannah Lady. Third to T. R. Westrop & Son, on Young Abbotsburn 2nd, Sweet Violet 2nd, Mary Lavender, Iowa Lass, and Roan Beauty 3rd. Fourth to George Harding & Son, on Iowa Champion, Dora Stamford, Victoria 14th, Bonnie Lassie, and Princess Maud 3rd. Fifth to E. S. Kelly, on Brave Archer, Bapton Pearl, Roy's Morn, Queen of Louisa, and Mina Lavender. The young herd prizes, all but bull to be bred by exhibitor, went, 1st to Robbins & Sons, 2nd to C. C. Norton, 3rd to Geo. Bothwell, 4th to N. H. Gentry, 5th to Mitchell & Sons.



7-LB. SAMPLE
Bibby's . . . Cream . . . Equivalent
For feeding calves with separator or skimmed milk . . .
FREE, Freight Paid,
To any breeder promising to give it a fair trial. This offer closes 30th Nov.
J. BIBBY & SONS,
10 Bay St.,
TORONTO.

H. CARGILL & SON,
CARGILL, ONTARIO, CANADA.

WE have the largest herd of Cruickshank and Scotch-bred imported cattle in Canada. Herd headed by the Duthie-bred Golden Drop bull, imp. "Golden Drop Victor," assisted by the Marr-bred Princess Royal bull, imp. "Prince Bosquet." The herd was augmented in August last by a fresh importation of fifty-two head, personally selected by Sylvester Campbell, of Kinellar, an expert judge both as to individuality and pedigree. The cattle in this lot will compare very favorably with any lot yet imported. All females of suitable age are bred to the very best bulls obtainable. Correspondence or personal inspection invited. Catalogue and service list upon application.

Cargill Station is on the Farm, Half a Mile from Barns, and 70 Miles North-west of Guelph. See Catalogue for Map.

Isaac Usher & Son, QUEENSTON, ONT.,
Manufacturers of QUEENSTON CEMENT. Proprietors of

Queenston Heights Stock Farm.
Shorthorn Cattle.

Herd headed by Lord Gloster (26905), by Abbotsford. We have for sale seven young bulls, 4 to 20 months; also young cows and heifers. Stock offered for sale sired by or bred to such noted bulls as imp. Guardsman, Royal Standard, Abbotsford, Lord Gloster, Indian Count.

P. O., TELEGRAPH AND TELEPHONE, QUEENSTON, ONT.
FARM 3 MILES NORTH OF NIAGARA FALLS.

The Breed THAT FIRST Hillhurst Famous
MADE THE HIGHEST-PRICED
SHORTHORN FEMALES

Ever sold in Great Britain and the sire and dam of the 4,500-guinea Duke of Connaught were bred at Hillhurst. Today "Joy of Morning," the highest-priced Scotch-bred bull ever imported to Canada, and "Scottish Hero," brother in blood to the Royal champion, "Marengo," are in service in a herd of 63 Scotch and Scotch-topped Shorthorns in a hilly limestone district, where cool summers, green pastures and winter feed more closely approach Aberdeenshire conditions than any other part of the continent. **HAMPSHIRE DOWN and SHROPSHIRE SHEEP.**

M. H. COCHRANE,
HILLHURST STATION. -om COMPTON CO., P. Q.

Please Mention Farmer's Advocate.

NOTICES.

American Shropshire Record.—Vol. 14 of this record is a ponderous book, containing over 1,400 pages and pedigrees of sheep Nos. 11144 to 126899, in all 15,485 animals, an evidence of the extent to which this breed of sheep is bred in the United States and Canada. The front-piece represents a typical Shropshire ram. The volume was well edited and compiled by the secretary, Mortimer Levering, Lafayette, Indiana.

Sowing Crops and the Silo.—Prof. Thomas Shaw, formerly of Guelph Agricultural College, now of Minnesota Experiment Station and College, has just issued a most appropriate companion to his "Forage Crops," published last year. The book is divided into two parts, the first treating of the growing and feeding of all kinds of sowing crops that have been found useful in any part of the United States or Canada. It deals with the climate and all soil conditions to which all these crops are adapted, as well as preparing the land, sowing the crop, cultivating and feeding the same. Part second of the book goes fully into the question of the silo in a simple yet very comprehensive manner. Building silos, crops for the silo, filling and feeding the silage, are wisely and helpfully discussed. The book of 236 pages, bound in cloth, sells for \$1.50, and can be had through this office at the regular price, or for three new subscribers to the FARMER'S ADVOCATE and \$3.

Holstein-Friesian Herdbook.—Two volumes of the Herdbook, Nos. 17 and 18, of the American Holstein-Friesian Association have been issued this year. Vol. 17 contains the pedigrees of bulls 24642 to 23800, and cows Nos. 46435 to 49320; and Vol. 18 contains bulls Nos. 23801 to 27020, and cows Nos. 49321 to 52452. The secretary of the Association is Fred. L. Houghton, Brattleboro, Vt. The books containing Vols. 17 and 18 also contain Vols. 10 and 11 of the Advanced Register, having entries of bulls Nos. 125 to 135 and cows from 1427 to 1594, and bulls Nos. 135 to 148 and cows Nos. 1595 to 1733, respectively. The secretary of Advanced Register is S. Hoxie, Yorkville, N. Y. The books are well bound and edited.

Ponies—Past and Present. is the title of a book fresh from the pen of that noted English horseman, Sir Walter Gilbey. The book was suggested by the increasing attention during the last few years that has been devoted to breeding ponies for various purposes. The volume of 112 pages, and illustrated with eight becoming plates, has eight chapters and an interesting introduction. The breeds of ponies dealt with are the following: New Forest, Welsh, Exmoor and Dartmoor, Cumberland, Westmorland, Connemara, Scotch, and Shetland. The uses and characteristics of the pony, also breeding polo ponies, are each given a chapter. The book is beautifully printed on superior paper, and very tastefully bound in board.

Farms for Sale.—In the FARMER'S ADVOCATE for Oct. 15th were advertised first-class stock and grain farms near to the City of Guelph and the Ontario Agricultural College, which have not yet been sold. The location is one of the best in Canada, and the farms are from 70 to 131 acres in extent. For particulars write to Mr. James McNaughton, Gourrock P. O., Ont., which is near to Guelph.

The McLaughlin Carriage Works.—A little less than a year ago the extensive factory and warerooms of the McLaughlin Carriage Company of Oshawa, Ont., were destroyed by fire, and for a few hours the people of that thriving town felt that they had suffered an irreparable loss; but a business of 30 years' standing, with the excellent reputation the Company had made for itself on the sound basis of the quality and up-to-date character of their carriages, was not to be allowed to decline even under such a serious setback as the destruction of its entire plant, but with indomitable courage rebuilding was at once determined on, and in less than a year a complete set of new buildings, with new and improved machinery, has been installed, and the Company announce in our advertising columns their facilities for turning out even a better class of work than ever before. Such enterprise is worthy of all commendation, and we wish them all success in the work of building up the reputation of Canada as a manufacturing country.

A Long-felt Want in Calf Rearing.—The breeders of Canada and dairy farmers know perfectly well that one of the great secrets of success in rearing high-class and profitable live stock, whether for beef or milk production, lies in raising the calf aright. The foundation of the entire subsequent career of the animal is laid during the first six months or year of its life. The enormous strides of our dairy business, both cheese and butter making, particularly the latter, means that skim milk or separator milk alone is left on which to feed the calf, the natural element of butter-fat having been abstracted. Efforts have been made in a small way in the past to furnish some suitable substitute for this serious deficiency, and the FARMER'S ADVOCATE is very glad to notice that J. Bibby & Sons, a British firm of world-wide reputation, whose Liverpool, Eng., mills have an output capacity of no less than 2,500 tons per week, have at last been attracted to Canada, and have placed their celebrated "Cream Equivalent" upon the market. Their success has been attained by giving the public good value, by good management, and by small profits on a large turnover. What they (Bibby & Co.) ask is simply that farmers and breeders test their product chemically or practically, and against any other offering, and then act as the result dictates. This strikes us as a fair proposition, for the living results in calf stall or calf lot must after all be the final arbiter. Now, in order that our readers may do so to their own satisfaction, they make an exceedingly reasonable and liberal offer to send them a sample, which they will send absolutely free of charge, provided they send an absolutely fresh sample of prepared 7 lb sample of the Cream Equivalent to be tested in calf feeding with skimmed or separator milk. The offer is for a limited time, and the sample will be very generally tested. The writing of a post card will secure the desired sample, and we trust that the result will prove satisfactory to all concerned, knowing as we do the great and growing need there is for such an aid in calf rearing.

PLEASE MENTION FARMER'S ADVOCATE,

NO DUTY TO PAY NOW



ON THE FOLDING SAWING MACHINE. It is made in Essex Centre, Ontario. It saws down trees. Saws any kind of timber on any ground. 9 CORDS BY ONE MAN IN 10 HOURS. Send for free illustrated catalogue showing latest improvements and testimonials from thousands. First order secures agreement. Address: Main Office, Folding Sawing Mach. Co., 55 N. Jefferson St., Chicago, Ill.

CONTAGIOUS ABORTION

HAS BEEN CURED BY WEST'S FLUID

In several of the finest herds of prize stock in the country; but as it would injure the reputation of the breeders, they will not give written testimonials. These statements are facts.

Write for circular on this disease, specially prepared by a V. S. Headquarters for "STANDARD" Sheep Dip. Manufacturers: The West Chemical Company, Agents Wanted, in TORONTO, ONT.

Water Basins



Point 6.—Some of our patrons: Guelph Agricultural College; W. E. H. Massey, Esq., Dentonia Farm; H. Cargill, Esq., Cargill; T. Eaton & Co., Toronto, and up-to-date farmers all over Ontario.

Point 7. (See next issue.)

Ontario Wind Engine & Pump Co. LIMITED.
TORONTO.

DON JERSEY HERD.

Offering choice young Bulls and Heifers by Costa Rica's Son.
DAVID DUNCAN,
DON, ONTARIO.
Nine miles from Toronto Market.

FOR SALE.

6 YEARLING JERSEY BULLS, sired by Braumpton's Monarch (imp.), and from tested cows; also registered and high-grade springers.
B. H. BULL & SON, BRAMPTON, ONT.

GLEN ROUGE JERSEYS.

WILLIAM ROLPH, Markham, Ont., offers twelve Jersey Bulls and Heifers (pure St. Lambert's), out of tested cows. Grand individuals. Prices right.

Butter Jerseys

FOR SALE:
A granddaughter of Louise of 11, the great cow whose yield and cost of feed is reported in this issue, 8 months old; a son of Bella of 11, full sister in blood to Louise, 7 months old; a great-granddaughter of the famous cow, Massena (900 lbs. butter in one year), 19 months old, and in calf.
MRS. E. M. JONES,
Box 324, on BROCKVILLE, ONT.

FOR SALE Registered Jersey bull calf, 1 month old, pure St. Lambert full-color. Apply
BANNER OFFICE, AILSA CRAIG, ONT.

SPRING BURN STOCK FARM
H. J. WHITTEKER & SONS, PROPS.
North Williamsburg, Ontario.

Breeders of Ayrshire cattle, Oxford Down sheep, Berkshire pigs, and Black Java fowls.
For Sale: 1 bull, 18 months old; females, any age; a few choice lambs and young fowls.
Write to: C. P. R., Morrisburg, G. T. R.

AYRSHIRE CATTLE.

KAIRNS BROS., Byron, Ont. (R. R. London), are offering a number of grand young bulls, prize-winners; also a few choice females. Prices right. Important to Breeders and Horsemen.

W. C. Edwards AND COMPANY.
IMPORTERS AND BREEDERS
Laurentian Stock and Dairy Farm,
Pine Grove Stock Farm,
NORTH NATION MILLS, P. Q.
ROCKLAND, ONTARIO.

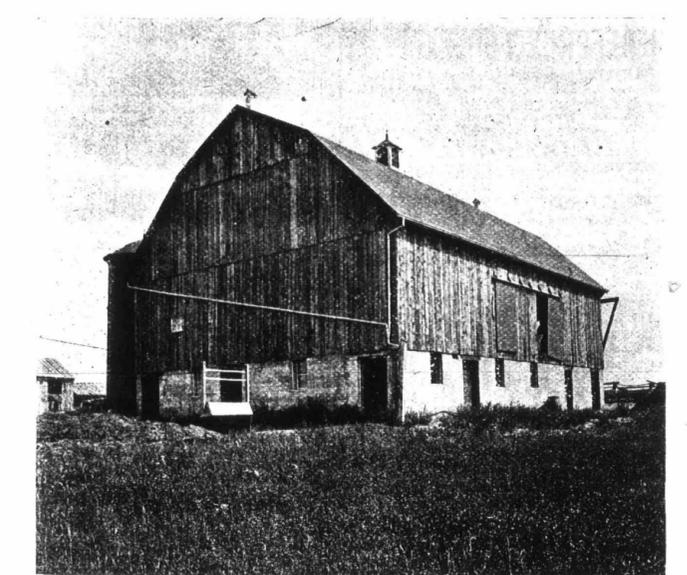
Ayrshires, Jerseys, Shropshires, Berkshires
Our excellent aged herd of Ayrshires is headed by our noted imported bull Cyclone. Tam Glen heads the young herd, and Fawn's Son 2nd of St. Anne's heads the Jerseys. The young stock are all from time-tried dams.
A. E. SCHRYER, Manager.
JOS. W. BARNETT, Manager.
We can be reached either by steamboat, the C. P. R., or C. A. R.; the C. A. R. making connection with the G. T. R. at Coteau Junction. Rockland is our station on all lines.
7-1-y-om—

Ayrshires, Guernseys and Shropshires.
THOSE desirous of purchasing high-class pedigreed stock should write at once for particulars. A few choice Ayrshire and Guernsey bulls now for sale. Address all communications to
ISALEIGH GRANGE FARM, Danville, Quebec.
J. N. GREENSHIELDS, PROP.
WANTED—A reliable and competent herdsman.

Rapids Farm Ayrshires.
REINFORCED BY A RECENT IMPORTATION of 20 cows, 2 bulls, and a number of calves, selected from noted Scotch herds, and including the male and female champions at leading Scottish shows this year. Representatives of this herd won the first herd prize at the exhibitions at—
Toronto, London, and Ottawa, in 1900.
Come and see or write for prices.
Young Bulls and Heifers for Sale, bred from High-class Imported Stock.

Robert Hunter, Manager
for W. W. Ogilvie Co., Lachine Rapids, Quebec.
AN EXTENSIVE BASEMENT BARN built at King, Ontario, by HON. E. J. DAVIS, Commissioner of Crown Lands for Ontario.

Thorold Cement.



Barn of Hon. E. J. Davis, Commissioner of Crown Lands for Ontario. Walls and floors built with THOROLD CEMENT. Size of barn, 50 x 70 feet. Walls 9 feet high.

SEE WHAT HON. E. J. DAVIS SAYS OF BATTLE'S THOROLD CEMENT:
DEPARTMENT OF CROWN LANDS, ONTARIO.
ESTATE OF JOHN BATTLE, Cement Manufacturers, Thorold, Ont.; TORONTO, Feb. 25, 1900.
GENTLEMEN.—During the year 1899, I built a new basement barn at King, Ont., with concrete walls, the size of the barn being 50 x 70 feet, with walls 9 feet high. In the construction of the walls and floors I used two carloads of Battle's Thorold Cement, and I must say that I am well pleased with both the walls and the floors. Everything is working to our entire satisfaction. The work was done under the supervision of my traveling Mr. Ward Hagar.
Yours sincerely,
E. J. DAVIS.

Estate of JOHN BATTLE, Thorold, Ont.

WILLIAM WILLIS, Newmarket, Ontario.
Breeder of St. Lambert Jersey cattle, with Count of Pine Ridge, a grandson of the great Achide of St. Lambert, at head of herd. Also registered Cotswold sheep.
For sale at a bargain, to make room, four choice A. J. C. C. yearling bulls; solid fawn, black points; by St. Lambert of Arkfost and Barou Huzo. Also 50 pure Tamworth pigs from prize stock.
H. E. WILLIAMS,
Sunnylea Farm, KNOWLTON, P. Q.



You Hear!
when you use
Wilson's Common Ear Drums

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

Information and book of letters from many users, free.

WILSON EAR DRUM CO.,
403 Trust Bldg., Louisville, Ky.

Maple Cliff Dairy and Stock Farm.

FOR SALE:
Ayrshires—6 yearling bulls, females any age.
Tamworths—40 boars and sows of different ages.
Berkshires—3 boars, a number of sows.

R. REID & CO., Hintonburg.
Farm 1 mile from Ottawa. Electric cars to farm. om

Ayrshire Bulls: Write to **J. YULL & SONS,** Carleton Place, for special prices on Ayrshire bulls from 14 years to 6 months. Four over 15 months, fit for service, from special milking stock. Sired by prize bull, Jock of Burnside—1684, also females of all ages. Shropshire sheep of all ages; a number of fine ram lambs. Berkshire pigs of either sex, of the best bacon type. B. P. Rocks. om

WM. WYLIE Importer and Breeder of High-class Ayrshires
The winnings of this herd last season (1899) were 37 prizes, 17 of them being firsts; also gold and silver medals at the leading fairs in Canada. The sweepstakes at Toronto, London and Ottawa belong to this herd—one imported bull, 13 imported females and a number of AI home-bred animals. A few choice cows, heifers and calves for sale at moderate prices.
Address—**WM. WYLIE, Howick, P. Q.**

SHOW AYRSHIRES FOR SALE.
As we are not going to show any cattle at the fairs this year, we will sell the imported prizewinning bull, Napoleon of Auchincrain, champion and head of first prize herd at Toronto, 1898. Also first-class 2-year-old bull and three choice bull calves of last fall. These are all fit for the showing, as we kept them for that purpose. For prices and particulars come and see, or write. **James Boden, Mgr., St. Anne de Bellevue, Quebec.**
Farm close to St. Anne Station, Quebec.
G.T.R. & C.P.R., 20 miles west of Montreal. om

EUROPEAN ADVERTISEMENTS.

J. E. CASSWELL, Laughton, Folkingham, Lincolnshire, Lincolnshire.
Breeder of Lincoln Long-wooled Sheep, Flock No. 46. The flock was in the possession of the present owner's great-grandfather in 1785, and has descended direct from father to son without a single dispersion sale. J. E. Casswell made the highest average for 20 rams, at the "Annual Lincoln Ram Sale," 1895 and 1897. The 1896 rams were all sold for exportation. Ram and ewe hoggs and shearlings for sale, also Shire horses, Shorthorns, and Dark Dorking fowls. Telegrams: "Casswell, Folkingham, Eng." Station: Billingham, G. N. R. om

FAMOUS ALL OVER THE WORLD.
ALFRED MANSELL & CO.,
LIVESTOCK AGENTS AND EXPORTERS, SHREWSBURY.

BRITISH STOCK selected and shipped to all parts of the world. Write for prices to **ALFRED MANSELL & CO.,** Shrewsbury, England, or to our American representative, Robert Miller, Stouffville, Ont., Canada.

W. W. Chapman,
Secretary of the National Sheep Breeders' Association, Secretary of the Kent or Romney Marsh Sheep Breeders' Association, and late Secretary of the Southdown Sheep Society.

Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered.
Address: **FITZALAN HOUSE, ARUNDEL ST., STRAND, LONDON W. W.**
Cables—Sheepcote, London. om

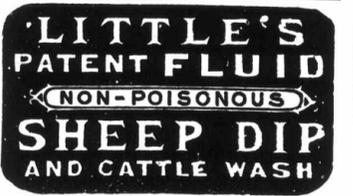
IN WRITING
PLEASE MENTION FARMER'S ADVOCATE.

GOSSIP.

OFFICIAL RECORDS OF HOLSTEIN-FRIESIAN COWS RECEIVED IN SEPTEMBER AND OCTOBER, 1900.

This class of records are made uniformly under supervision of State Experiment Stations, at the homes of the owners of the cows. They are for seven consecutive days, and the fat is determined by the Babcock test. The equivalents of butter are calculated by the Superintendent of Advanced Registry from reports sent him from these stations. During September one report and during October nine reports were received. Summarized, they are as follows: Three full-age cows, average 6 years 11 months 4 days, 36 days after calving—milk 487 lbs., butter-fat 17,514 lbs., equivalent butter 80 per cent. fat 21 lbs. 14.3 ozs., equivalent 85.7 per cent. fat 20 lbs. 6.9 ozs. Two 4-year-olds, average 4 years 3 months 19 days, 43 days after calving—milk 447.5 lbs., butter-fat 13,170 lbs., equivalent butter 80 per cent. fat 16 lbs. 9.4 ozs., equivalent 85.7 per cent. fat 15 lbs. 7.7 ozs. Five classed as 2-year-olds, average 2 years 25 days, 15 days after calving—milk 274.7 lbs., butter-fat 8,337 lbs., equivalent butter 80 per cent. fat 10 lbs. 7.9 ozs., equivalent 85.7 per cent. fat 9 lbs. 12.7 ozs.

The best records by ages were as follows:
Susie DeKol 33688, age 7 yrs. 8 mos. 27 days, 25 days after calving—milk, 499.9 lbs.; butter-fat, 19,216 lbs.; butter, 80 per cent. fat, 24 lbs. 0.3 ozs.; butter, 85.7 per cent. fat, 22 lbs. 6.7 ozs.
Jarie Pauline De Kol 38928, age 5 yrs. 2 mos. 10 days, 42 days after calving—milk, 432.4 lbs.; butter-fat, 16,630 lbs.; butter, 80 per cent. fat, 20 lbs. 12.6 ozs.; butter, 85.7 per cent. fat, 19 lbs. 6.4 ozs.
Dirkie Von Heringen 3rd 35256, age 7 yrs. 11 mos. 5 days, 41 days after calving—milk, 528.6 lbs.; butter-fat, 16,696 lbs.; butter, 80 per cent. fat, 20 lbs. 13.9 ozs.; butter, 85.7 per cent. fat, 19 lbs. 7.7 ozs.
Jesse Artis DeKol 46572, age 2 yrs. 4 mos. 21 days, 16 days after calving—milk, 348.6 lbs.; butter-fat, 9,891 lbs.; butter, 80 per cent. fat, 12 lbs. 5.8 ozs.; butter, 85.7 per cent. fat, 11 lbs. 8.6 ozs.
Aaggie Ideal DeKol 46571, age 2 yrs. 5 mos. 12 days after calving—milk, 306.5 lbs.; butter-fat, 8,676 lbs.; butter, 80 per cent. fat, 10 lbs. 13.5 ozs.; butter, 85.7 per cent. fat, 10 lbs. 12 mos. 10 days after calving—milk, 269 lbs.; butter-fat, 7,768 lbs.; butter, 80 per cent. fat, 9 lbs. 11.4 ozs.; butter, 85.7 per cent. fat, 9 lbs. 1 oz.
Piebe Pauline DeKol 50431, age 1 yr. 7 mos. 29 days, 17 days after calving—milk, 241.5 lbs.; butter-fat, 7,681 lbs.; butter, 80 per cent. fat, 9 lbs. 9.6 ozs.; butter, 85.7 per cent. fat, 8 lbs. 15.4 ozs. S. HOXIE, Supt. of Advanced Registry, Yorkville, N.Y., November 1, 1900.



LITTLE'S PATENT FLUID SHEEP DIP AND CATTLE WASH
THE ORIGINAL
Non-Poisonous Fluid Dip
Still the favorite dip, as proved by the testimony of our Minister of Agriculture and other large breeders.

For sheep.
Kills ticks, maggots; cures scab; heals old sores, wounds, etc., and greatly increases and improves growth of wool.

Cattle, horses, pigs, etc.
Cleanses the skin from all insects, and makes the coat beautifully soft and glossy.

Prevents the attack of Warble Fly.

Heals saddle galls, sore shoulders, ulcers, etc. Keeps animals free from infection.

No danger, safe, cheap, and effective
Beware of imitations.

Sold in large tins at 75 cents. Sufficient in each to make from 25 to 40 gallons of wash, according to strength required. Special terms to breeders, ranchmen, and others requiring large quantities.

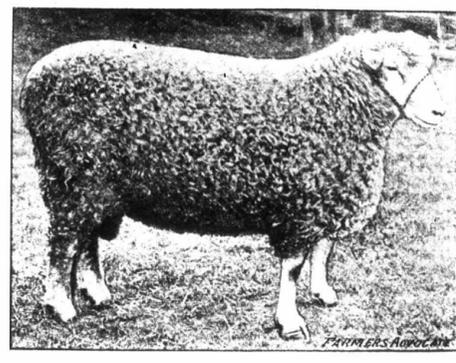
ROBERT WIGHTMAN, DRUGGIST, Owen Sound, Ont.
Sole agent for the Dominion. om

Present Offering:
Dorset lambs (either sex).
Shropshire lambs (either sex).
Chester White pigs (June and Sept. litters) of the bacon type.
For particulars, write to **R. H. HARDING, THORNDALE, ONT.**

Dorset Horn Sheep
PARTIES interested in raising early lambs for Easter market will make no mistake in using this breed. We have two good shearlings and a number of good ram lambs for sale at from twelve to twenty-five dollars—two winners at large shows. Our Polled Angus cattle are doing well.

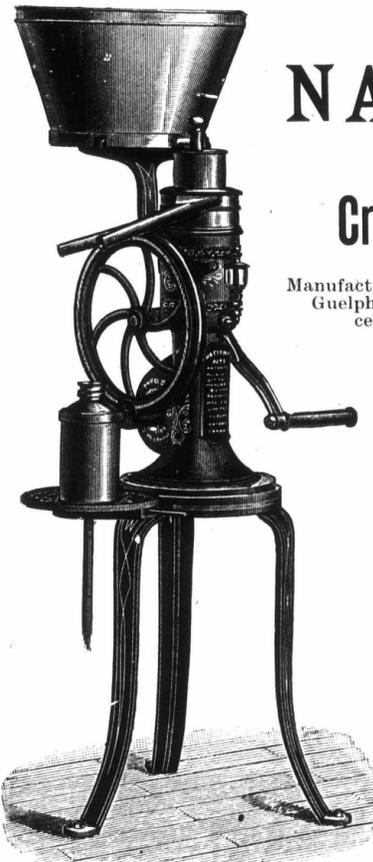
James Bowman, Elm Park, GUELPH, LEICESTER
Rams, ram lambs, ewes. All lambs sired by the first-prize ram at Toronto in '99. Also Shorthorn cattle, Berkshire pigs, and English geese.
MAC CAMPBELL, Northwood. om

..Fairfield Flock of Lincoln Sheep..



THE largest flock of imported Lincolns and the largest number of Royal first-prize winners of the breed in America. Representatives of this flock won the first flock prize at Toronto last year and this, and the championship at London both years. Over 60 imported sheep now in flock, and over 100 field rams and ewes, purchased in England, to follow soon. A large number of yearling rams and ewes, ram lambs and ewe lambs for sale.

Write us for prices, or come and see.
J. H. & E. PATRICK, ILDERTON, ONT.



THE NATIONAL FARM Cream Separator

Manufactured by the Raymond Mfg. Co. of Guelph, Limited, manufacturers of the celebrated Raymond Sewing Machines.

THE National is an up-to-date machine, leading all others in separating cream by centrifugal force. It is the farmers' choice, because it runs easy, skims fast and clean, and makes a perfect cream, containing any per cent. of butter-fat desired. It is also easier to clean than any other. The National is built of the very best material suitable for the construction of a high-speed machine, and with proper care should last a lifetime. The bearings are interchangeable and easily adjusted. Every machine is guaranteed to do good work, and a trial of the "National" is solicited before purchasing any other. The already large sale of the "National," and the growing demand for it, shows how much the Canadian farmers appreciate a Canadian-made machine that does its work so easily and well, and at the same time returns such a large profit on the small investment. Ask for the "National"; try it and buy it.

THE CREAMERY SUPPLY CO., GUELPH, ONT.,
General agents for Ontario.
W. G. GLENN, 469 ONTARIO ST., LONDON, ONT.,
Agent for the Counties of Middlesex and West. om

"NATIONAL" NO. 1 HAND POWER.
Capacity, 330 to 350 lbs. per hour.
The Raymond Mfg. Co'y of Guelph, Ltd.
GUELPH, ONT.

Leicesters
only. Rams and ram lambs, shearing ewes and ewe lambs, having the best blood, with quality and size.
C. & E. WOOD, Freeman, Ont.

Dorset Horn Sheep
THE largest flock in America. The most-celebrated prizewinners at the Columbian Exhibition and Canadian exhibitions. Contains more Royal winners than any other. Awarded 5 out of 8 first prizes at Toronto, London and Ottawa in 1900. Flock of 390. Stock for sale always on hand.
John A. McGillivray, Uxbridge, Ontario.

Oxford Down Sheep.
10 yearling rams, 20 ram lambs, for sale.
LANCELOT TASKER, Harlock, Ont.

LYNDEN FARM.
OXFORDS AND SHORTHORNS.
IMPORTED and home-bred rams. Also, one 10-months bull.
Post and telegraph offices.
R. J. HINE, Dutton, Ont. om

SMITH EVANS, GOUROCK, ONT.,
Breeder and importer of registered Oxford Down Sheep. Selections from some of the best flocks in England. Stock for sale at reasonable prices. Inspection invited.
6-13-0

BROAD LEA FARM.
Ram and Ewe Lambs / Oxford Down Sheep / Yearling Rams
FOR SALE.

HENRY ARKELL, Teeswater, Ontario.

Oxford Down Sheep.
IMPORTATION ANNUALLY.
100 ram and ewe lambs. A few fine young Bronze turkeys. Also a nice lot of Barred Rock cockerels. For sale reasonable.
HENRY ARKELL, Arkell, Ont.
PLEASE MENTION FARMER'S ADVOCATE.

**BRANT AND PLAIN VIEW
Oxford Down Sheep.**

FOR SALE: A limited number of ewes and ewe lambs, and 40 ram lambs: strong, well woolled, and extra well covered. Prices right.
J. H. JULL & SONS,
MOUNT VERNON, ONT.

Shropshire Rams and Ewes

Newly imported from the greatest English breeders. Home-bred rams and ewes of best quality. Scotch Shorthorns and Clydesdale horses for sale at moderate prices, and in large numbers, by
ROBERT MILLER,
STOUFFVILLE, ONT.

Shropshire rams, ram and ewe lambs for Sale

Descended from importations made from Tanner, Minton, Barber, Farmer, Bowen Jones and Thomas, upon which have been employed the best English-bred sires. Also an imported shearing ram, well covered. o GEO. B. PHIN, Hespeler, Ont.

Shropshires FOR Sale

Rams and ewes of good breeding, fine lusty fellows. Prices reasonable.
ABRAM RUDELL, HESPELER, ONT.

SHROPSHIRE SHEEP AND CHESTER WHITE SWINE.

WM. E. WRIGHT, GLANWORTH, ONT.

Fairview Shropshires.

A few good rams still on hand. A splendid lot of ewes (imported and home-bred), bred to my best stock rams, are now offered at good values. They are the producers of winners.
JOHN CAMPBELL, Woodville, Ont., Can.



Berkshires Large, lengthy, English type. Five first-prize boars in service. Spring pigs ready for shipment. Boars fit for service. Sows ready to breed. GEORGE GREEN, Fairview, Ont.

SNELGROVE BERKSHIRES

We have for sale some promising young boars and sows of different ages. Boars fit for service, sows large enough to breed. Young pigs from 4 to 8 weeks old. These pigs are got by the prizewinning boars, Colonel Brant 5050, Court Master 7710, and Gallant Prince 7691. Our herd is bred from the best strains of Large English Berkshires. Write for prices.
SNELL & LYONS,
SNELGROVE, ONT.

BERKSHIRES FOR SALE.

YOUNG boars and sows carrying the blood of Baron Lee 4th, Bright Star (imp.), Enterprise and Highclere, on Bow Park, Teasdale and Snell females, with Allandale Boy 5875 and Royal Lad 3rd 4307 heading the herd.
S. DYMENT, BARRIE, ONT.

Large English Berkshires

YOUNG boars and sows from imported stock. Registered Leicester ewes and ram lambs. B.P. Rock cockerels from prizewinners. Write for prices.
H. BENNETT & SON, St. Williams, Ont.

E. D. GEORGE, PUTNAM, ONT.

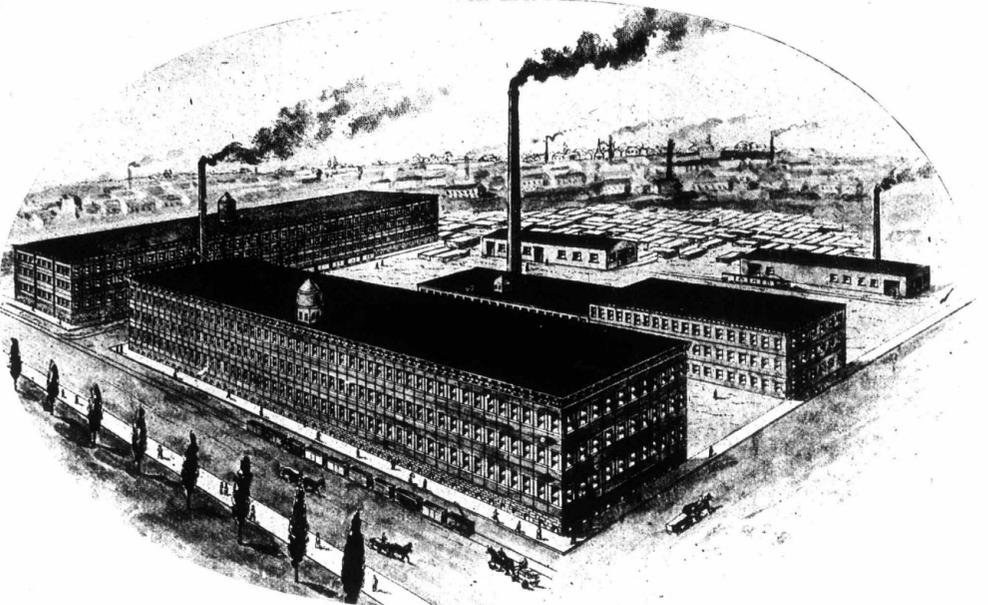
Importer and Breeder of **Ohio Improved Chester White Swine.**

The largest and oldest established registered herd in Canada. I make this breed a speciality, and furnish a good pig at a fair price. Write for prices.

OXFORD HERD OF POLAND-CHINAS

The home winners of the sweepstakes at Toronto, London, Ottawa, and Provincial Fat Stock Show, we are offering again young boars and sows of superior quality: bred along the same lines as our winners. W. & H. JONES, Oxford Co. Mt. Elgin, Ont.

IN WRITING PLEASE MENTION FARMER'S ADVOCATE.



The new establishment of the McLaughlin Carriage Co. OSHAWA, ONT.

From the Toronto Globe: WHEN on the morning of December 7, 1899, the extensive factory and warehouses of the McLaughlin Carriage Company, of Oshawa, were completely destroyed by fire, the citizens of that town might well have been excused for believing they had suffered a loss that was almost irreparable. For over thirty years this enterprising company had been part and parcel of Oshawa, bound up in its prosperity, giving employment to hundreds of hands, paying out hundreds of thousands of dollars in wages, and ever foremost in everything that tended to the advancement and welfare of Oshawa. The morning of December 7 last saw the splendid establishment of the McLaughlin Company in ashes, nothing remaining of the buildings, the costly plant and the expensive and varied stock of vehicles of all descriptions; a few piles of lumber only, that the flames had passed by as too insignificant to touch, marking the site where a few hours previously a great industry had stood, pulsating with life and energy and enterprise. There may at that moment have been some who thought that the commercial edifice erected at the cost of so many years and so much labor, and so suddenly destroyed, might not again arise in their midst, and that Oshawa had lost one of the principal factors in the material prosperity of the town. Less than a year after this event there stands, not exactly on the same site, but adjacent to it, another great factory, larger, more modern, better equipped in every way, with an increased capacity for production, again the establishment of the McLaughlin Carriage Company, and a lasting monument to the enterprise and pluck of the members of the firm. The building is thoroughly modern in every respect, being erected on what is known as the slow-burning system, the floors being five inches thick. Profiting by past experience, the company have taken every possible precaution against fire. A sprinkling system is installed all over the factory and warehouses, while the steam pump belonging to the system has a capacity of 1,000 gallons per minute. The machinery is all new, and every piece is of the latest and best design that money could procure. The company claim to have the largest and best equipped carriage factory in the British Empire, and have a capacity for turning out upward of 16,000 finished vehicles per annum. They have always adhered to the principle of making

"One grade only, and that the best,"

and to this policy largely they ascribe their success. The new premises are alike a credit to the town of Oshawa and to the Dominion as well. We wish the company every success in their large undertaking.

A \$3000.00 STOCK BOOK FREE.

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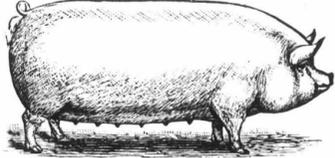
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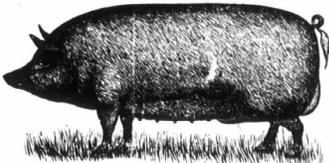
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