

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN
THE DOMINION.

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Prosperous Live Stock Organizations.

It is gratifying to know that the various Canadian live stock associations for the carrying on of pure-bred records, and otherwise advancing the interests of improved farm animals, enjoyed during 1898 a very prosperous period. There has been a decided toning up in the demand and in the prices paid for nearly all classes of stock; this being particularly true in the call for breeding stock, in the production of which Canada enjoys a pre-eminent position. For example, the Dominion Short-horn Breeders' Association starts the present year with the handsome showing of over \$8,100 in the bank, and recorded during the past year 5,386 pedigrees, as against 4,128 in 1897, an increase of 1,258. There has also been a splendid increase in membership—the number having run up from 537 paid members in 1897 to 713 in 1898. A noteworthy event of the year was the union of the Canadian Ayrshire Association of Montreal and the Prince Edward Island Herd Book with the Dominion Ayrshire Association, the amalgamated organization being styled the Canadian Ayrshire Breeders' Association. This establishes uniformity and promotes solidity. During 1898 there were 1,150 pedigrees recorded, as against only 672 in 1897. The Ayrshire men are to be congratulated upon their success. The registrations in the Record of the Holstein-Friesian Association were one-third greater last year than in any previous year. In fact, all the associations show increases, and the high standard of our records is being maintained. The Dominion Cattle, Sheep and Swine Breeders' Associations have continued to do vigorous and effective work, particularly in relation to transportation and exhibition matters. The annual and other gatherings of the leading associations, as announced elsewhere, are to be held next week in the City of Toronto, and should be all largely attended by those who have the continued progress of these important interests at heart.

Notice: No More Wanted!

In our last issue we announced that we required a number of back issues of the FARMER'S ADVOCATE. Many more have responded than were required. We have, therefore, been obliged to return all received within the last few days.

Our Scottish Letter.

THE AGRICULTURAL SITUATION.

The new year has been entered on with a good deal of hopefulness, and judging by the rents which farmers are offering for vacant farms the future of agriculture in the home land is bright; the shadow of depression has been lifted, and the Scottish farmer signals "all's well." One hopes he may not be deceived, and that the stress of foreign competition may not compel those who have with so light a heart embarked on this enterprise to seek relief from the obligations which they have undertaken. Some of the shrewdest members of the agricultural community are of the opinion that farmers should not be allowed deductions from agreed-upon rents, and doubtless greater care would be taken in offering if landlords made it a rule to insist on contracts being honored to the letter. The land hunger amongst Scottish farmers is abnormal. They seem never to have enough, and the business of the community is not hindered by any determination on their part to depress land values. The Scottish farmer cherishes a singularly sanguine disposition. On the enthusiasm begotten of Mr. Leiter's operations he feasts for many days, but if he were less sanguine he would have less cause to plead for rent abatements in subsequent days. During the worst days of the depression some landlords consistently refused to allow their rent-rolls to come down. They held the land themselves, and some of them made good attempts at farming. As a rule, however, it cannot be said that the landlords made much by farming their own lands, and some who did so have at length been compelled to give in and throw their farms upon the market. Had some of those now acting in this way done so in 1879 and 1880, their exchequers would have been in a more flourishing condition to-day than they really are. In spite of excessive competition many farmers in this country are doing well—making money—and viewing the outlook very hopefully. There is plenty of room for improvement in the quality of Scottish farm produce of all kinds, and while that is so, it would be foolish to despair of the future of British farming.

During 1898, all branches of agriculture, except, perhaps, cheese dairying, were successful. Prices, except for wheat, during the first half of the year were worse than during 1897, but crops were heavy and probably farmers may have done as well in 1898 as in 1897. It is, however, too early in the season to form any absolute opinion on this point, because, strictly speaking, the farmer's year ought to close at June 30th, and not at December 31st. By the former date the crops of the preceding year have all been disposed of, and a general squaring-up may be indulged in. At the close of the calendar year the crop is not disposed of, and on a feeding farm stock has gone into winter quarters and sales have not in many cases been made. Anything like a square-up in such circumstances is impossible. I expect few men will show as good a balance sheet at 30th June, 1899, as they did at the same date in 1898. Many farmers in the vicinity of Glasgow have been doing well in recent years by growing timothy, for which there is a steady demand in the large centers of trade. To such, the resolution of the Glasgow corporation to abolish horse haulage on their entire system within two years, and to substitute the electric trolley system, is ominous. The corporation are extensive hay buyers, and at a fair price, and the absence of their competition bodes no good to the hay growers. Hitherto they have viewed with comparative equanimity the struggles of dairy farmers who fought a stubborn battle with unnumbered foreign foes, but now that the loss of their hay market is in sight they may have deeper sympathy with the unfortunate dairyman. In a splendid lecture on "Commercial Cattle Breeding and Feeding," delivered in Glasgow the other evening, Mr. Ferguson, Pictstonhill, advised farmers that the most profitable market for hay when it fell below 70 shillings per ton of 2240 lbs., was to feed it to good cattle, and the future of British agriculture must lie in providing the best quality of produce of every kind. What the public eat and drink is always wanted; how the public are to be transported from one place to another is a much less stable fact.

Horse breeding is being prosecuted with almost as much vigor as ever, and those engaged in the enterprise do not appear to be much moved by the resolution of the Glasgow corporation. The spring shows are looming in view, and it is evident from the prizes offered that every effort is being made to improve the equine stock of the country if shows will improve it. The Glasgow corporation own several thousands of horses, and the resolution come to by the town council the other day means that within three years' time the vast majority of these will be set free and their places taken by the inanimate electric system. Glasgow is to celebrate the opening of the twentieth century by a great exhibition in 1901, and the whole system of internal locomotion is to be transformed before that day dawns. This means something for Canada also, because a very large proportion of the tramway horses in this city come from the Dominion. They are good kinds of horses, but just light enough for heavy street traffic; that is a department which the home horse breeder has still largely to himself, but he does not make as much of it as he might. A large number of Clydesdale horses are under hire for 1899, between 40 and 50 having their circuits already fixed, and more than one-half of these are owned by Messrs. A. & W. Montgomery, Castle Douglas. These gentlemen are fairly masters of

this trade, and their splendid business habits and first-rate skill in selecting sires have placed them at the top of the tree. My next letter will be occupied with an account of the Scottish Stallion Show, which takes place on 2nd February. Till then, adieu.
"SCOTLAND YET."

STOCK.

Wiltshire Pig Feeding Experiments.

Experiments recently conducted in Wiltshire, Eng., under the auspices of a local committee formed for the purpose of ascertaining the best combinations of foods for pigs, have gone to show that the best results, so far as increase in weight was concerned, were obtained from a mixture of corn meal and separated milk, the cost of every 20 pounds of increase in weight obtained with this food being 4s. 2d., or exactly 2½d. per pound. The results obtained with other food combinations were as under—the figures in each case being the cost of every 20 pounds increase in weight: Corn meal and bran, 4s. 5½d.; corn meal alone, 4s. 6½d.; corn meal and pea meal, 4s. 7½d.; corn meal and bean meal, 4s. 11d.; barley meal and bran, 5s. 0½d.; barley meal alone, 5s. 1½d.; barley meal and separated milk, 5s. 3d. The prices at which the different ingredients in the food were reckoned were as follows: Barley meal, £5; corn meal, £4 10s.; bran, £4; pea meal, £7 15s. per ton; separated milk, 1d. per gallon.

But these results referred only to the actual increases in the weight of the animals; of the quality of the meat produced by the different foods no account was taken in the calculations above specified. Subsequently, however, the carcasses of the animals fed upon the different mixtures were examined by a number of experts, and their relative qualities were classified as follows—perfection being represented by 1,000: Barley meal and bran, 900; barley meal and separated milk, 988; barley meal alone, 974. Of the corn mixtures, corn and bran gave carcasses which were valued at 964; bean meal, 951; corn with separated milk, 939; with nothing else, 939; and with pea meal, 908. Commenting on the results obtained in respect to separated milk, the deductions which have been made are to the effect it is the most valuable of the additions made to either corn or barley; nothing has a greater effect on the weekly increase; there is less loss of weight in killing; and it improves the quality of the meat to a greater extent than does anything else but bran.

The highest average given in weight was made by the pigs fed on barley meal and separated milk, and next to this came the lot fed on corn meal and separated milk. Barley meal in every instance gave a greater increase than corn meal, either when used alone or in conjunction with other foods. The low value of the quality of the pigs fed on the corn meal and pea meal was due to the fact that a large number of the pigs so fed increased in weight very slowly, and consequently were sold as rather small pigs. The quality of those which did well during the fattening period was about equal to those fed on corn meal and bran. A great falling off in the case of all the pigs fed on corn was that they carry excessive fat. Taking the number in thousand as representing an ideal pig food, the various mixtures employed in these experiments rank as follows: Barley meal and separated milk, 903; corn meal and separated milk, 877; corn meal and bean meal, 590; barley meal alone, 519; corn meal and pea meal, 480; corn meal alone, 484; barley meal and bran, 449; and corn meal and bran, 404.

A Steer Feeding Test at Brandon.

In order to demonstrate the possibility of feeding steers at a profit on a wheat farm, even when a plentiful supply of hay cannot readily be obtained, by utilizing straw, with the addition of a small allowance of roots and a little extra grain ration, the following experiment was carried on at the Brandon Experimental Farm last winter: Eight three-year-old Shorthorn grade steers were purchased in December, 1897, at three cents per pound live weight, and sold again in April at four cents per pound. They were divided into two groups of four each as nearly alike as could be, tied up in comfortable stalls in a well-lighted stable, and given all they would eat, the rations being made up as follows:

LOT I.	Native marsh hay, cut.....	20 pounds.
	Swede turnips.....	30 "
	Barley chop.....	3 to 9 "
LOT II.	Mixed straw, cut.....	20 "
	Swede turnips.....	30 "
	Barley chop.....	5 to 11 "

Lot I. were fed three pounds of grain per day for the first four weeks, and Lot II. five pounds, thus compensating for the difference in fodder till the maximum in each case was reached.

LOT I.—Each steer consumed in 112 days:		
2,166 pounds of native hay at \$5.00 per ton.....	\$5 41	
44 bushels of turnips at 5c. per bushel.....	2 20	
622 pounds of barley (chop) at 4c. per lb.....	3 11	
LOT II.—Each steer consumed in 112 days:		
2,160 pounds of mixed straw, cut.....	\$10 72	
45 bushels of turnips at 5c. per bushel.....	2 25	
890 pounds of barley (chop) at 4c. per lb.....	4 30	

SUMMARY OF RESULTS.					\$6 55
	First cost of each steer.	Cost of feed per head.	Average price realized for each steer.	Profit per head.	Average daily gain per day.
Lot I., fed hay.....	\$31.10	\$10.72	\$54.38	\$ 7.54	1.9
Lot II., fed straw.....	35.62	6.55	53.08	10.91	1.4