

EDITORIAL.

Next comes the great Ontario Fat Stock and Dairy Show, in Guelph, Dec. 8th, 9th and 10th.

The foundation of the new Black Agricultural College near Gattton, Queensland, was laid recently.

South American buyers have been in Scotland lately after breeding stock, giving a decided impetus to the sale of the "Doddies."

"Scotland Yet" contributes in this issue a letter of special interest to sheep breeders. The Border Leicester, Blackface, and Cheviot sales have been most encouraging.

There is a likelihood in Scotland of an improvement in the Clydesdale demand after a few months, and it cannot have escaped notice that intimations of foreign shipments have been much more frequent than for several years past.

Farm Building Plans.

A feature of the FARMER'S ADVOCATE to which special attention has been paid during the past few years is the publication of plans and descriptions of barns and other farm buildings. We find that these have been very highly appreciated as something of real practical value, and we purpose giving others, one of which appears in this issue, viz., the new dairy stock barn of Mr. W. C. Edwards, M. P. Now, there are doubtless many barns, sheep and swine buildings throughout the country of which we have not cognizance, but which contain original features of great value, and we invite our readers to advise us of such, or, still better, send us plans and written descriptions similar to those which we give from time to time. It is our desire to make the ADVOCATE more than ever a means of communication between farmers in all parts of the country, so that useful ideas in regard to building and farm management generally will be widely circulated.

We cordially invite our readers to co-operate in this work. Let our readers generally have the help of your experience.

A Lesson from the Antipodes.

A great deal has been said and written of late years concerning the development of Danish butter dairying, but we regard the successful progress of the Australian industry as even more remarkable, especially when all its obstacles are considered; in fact, as an object lesson it is probably more deserving of study. Take the colony of Victoria alone, with an agricultural population of only a little more than 85,000, which in five years shows an increase in butter exported, from practically nothing to some \$6,000,000. (When Canada has done as well in butter and cheese combined, our exports will be \$50,000,000 instead of \$15,000,000 worth.) Not only so, but we have noticed Australian butter actually quoted higher in English market reports than Canadian or American. Originally buttermaking was carried on in Victoria in a most wretched way, the conditions being such as one would hardly credit here. Then, the British market is five or six weeks distant and the torrid zone between; their land less fertile, and the Canadian winter fully offset by the droughts and heat of Australia. If the dairy revolution effected there does not merit attention, we need hardly look in any direction. They have the advantage of nearly all the year pasture, but all things considered, we ought to land our butter in Britain not only much cheaper but in vastly better condition; that is to say, Canadian butter should sell for more money than Australian, and give the Canadian dairyman a better net return. Australian journalistic enterprise first investigated dairying in countries where good butter was made; then the Government stepped in and helped to complete the work. Elsewhere in this issue of the ADVOCATE we lay before our readers the first installment of a description of the evolution of Australian butter dairying, prepared by special request for the ADVOCATE by that wide-awake observer, Mr. J. S. Larke, Canada's Commercial Agent in that Colony.

"Canada's Glory."

Julius L. Inches, Secretary of Agriculture, Fredericton, N. B., writes:—"I think I neglected to thank you for the copy of your splendid picture, 'Canada's Glory,' which reflects so much credit on the enterprise of the FARMER'S ADVOCATE."

"Miss Baker" and the Hackneys.

The place of honor in this number is given to the portrait of a model of what a harness horse should be. The imported Hackney mare, Miss Baker (4371), is not seen at her best while standing, as she is one of the showiest all-round actors that ever made an appearance in a Canadian showing. In color she is a rich brown, stands 15 hands 3 inches high, and, as will be noticed, is exceeding well-proportioned. She was bred by Mr. James Case, Cockthorpe, Wells, Norfolk, Eng.; imported by Senator Wm. H. Cochrane, Hillhurst, Que.; and is now owned by Messrs. D. & O. Sorby, of Guelph, Ont., with whom she is doing good service in the breeding stud. She is now some seven years old, and has come through a most noteworthy showing career, having won the following prizes: In 1893, 1st award at the Toronto Industrial as a high-stepper in harness. In 1894 she won the same as in 1893, as well as silver medal for best mare any age. At Sherbrooke, the same year, she won 1st in single Carriage class; also, highly commended as a Hackney brood mare at the New York National Horse Show. In 1895, at her last appearance in the showing, she won 1st in single harness and again silver medal for best mare any age. Miss Baker has for sire, Ruby (Hamond's) 1312, and is out of Betsy Baker by Norfolk Jack (Sudbury's) 516.

This useful breed—the Hackney—which every horse lover admires, has won an enviable and surely an abiding place in popular esteem, both in Europe and America. Unfortunately for many who would like to own them, the good ones cannot be bought, like those of some other breeds, for a moderate figure, though this is a condition that in time will right itself. They are of the sort that moneyed men are wanting and are securing as rapidly as they are ready for the market. During the last year there has been a large number sold from Canadian studs, which doubtless had much to do in holding down the numbers in the principal showings this autumn, among which may be mentioned Seagull, Dundrennan, Kilnwick Fireawav, Roseberry, Royal Dane, Gentility, Rosseau Fireball, and a number of others which we do not recall at present.

The number of registrations being made in this country speaks exceedingly well for the future of the breed. Registration of Hackneys commenced in Canada about 1890, and up to the present there have been some 60 females and a number of males recorded in the Canadian Hackney Stud Book, from comparatively few breeding studs. This, of course, has reference only to breeding stock, and does not show the full rate of increase, as many of the mature stallions do heavy seasons every year, and are getting the single and double harness stock which is commanding the big figures at the New York and other large horse sales, and were it not for the produce of this breed the great modern horse shows which attract so much attention in New York, Philadelphia, Boston, and other places would be at a loss for the visitors who go largely to see the sensational acting of the cob, tandem, and four-in-hand. Not only do they answer a desirable purpose as a show-making breed, but as money makers their offspring from strong, warm-blooded roadster and carriage mares cannot be excelled, as they are no sooner mature than they are picked up at good figures. To this end, however, they must be sound, and partake of the Hackney characteristics which usually occur when good mares are chosen as dams.

The Canadian studs with which Miss Baker has been associated are well-known to our readers. While the Sorby Bros. have not as yet gone extensively into Hackney breeding, their individuals are, like Miss Baker, of the highest order of merit. Their position among Clydesdale breeders is now, as it has been for years, among the foremost, as our reports of the various big shows indicate.

The Hillhurst stud, where Miss Baker had her home for some time, is exclusively devoted to Hackney breeding. The class of stock kept has spoken for itself at the recent contests. The female sweepstakes award at the Toronto Industrial this year went to this stud, even without Miss Baker, in Princess Dagmar, who is yearly perpetuating her kind. The noted chestnut two-year-old, Barthorpe Performer, was a close reserve number to the sweepstakes Royal Standard at Toronto and Ottawa, while his place at the top at the Montreal show was not for a moment disputed. These individuals are not more than slightly in advance of a number of others in the stud which followed the late big shows and captured good premiums, as mentioned in our reports. In short, the Hillhurst stud is an extensive one of the highest quality, and managed in a manner to do the Hackney breed of horses permanent good in this country.

Ministry of Agriculture in Denmark.

A Ministry of Agriculture was created this year in Denmark. Official business connected with agriculture in that country has hitherto been transacted by the Minister of the Interior, in the Section of Agricultural Economy and the Section of Valuation of Landed Property. Under the new arrangement these two sections have been separated from the Ministry of the Interior and have been joined to the Departments of Woods and Forests and of State Domains (both hitherto part of the Ministry of Finance), in order to form the new Ministry of Agriculture.

Notes of Interest on Experimental Work.

BY E. E. F.

The writer, who has just been making a tour through a number of the States across the border, was favored with the opportunity of visiting several experiment stations, agricultural and horticultural centers.

The Iowa Experiment Station, under the careful direction of Prof. Jas. Wilson, has made rapid growth, and has become one of the best equipped Stations in the United States for carrying on practical feeding and breeding experiments with stock. Prof. C. F. Curtiss, for the past few years, has been making a careful study of breeds and their improvement by proper breeding, and is now carrying on a series of breeding experiments by utilizing the best bred stock on this Continent that is obtainable, and has imported during the past two years from Canada, making special trips to select the animals used in carrying on the experiments. The experiments thus far have not been pursued long enough to reach definite conclusions, although some points as to advantage of pure breeds have been determined that will prove of value to the stock raiser. The field is yet largely unexplored, and is a wide one.

At the Wisconsin Station the breeding point is not the issue, but feeding instead. Prof. Craig, for the past three years, has been conducting feeding experiments with sheep, in which all experiments are duplicated and are to be carried through a period of five years. He makes the claim that developing from the feeding standpoint, with well-balanced breeds, is more practical and cheaper than by high-breeding. He has proved by experiment during the past two years, that it is better to feed grain to lambs before weaning than after weaning if they are to be placed on the market as soon as they are fattened. By an experiment he found that where spring lambs were fed grain before they were weaned they were made to weigh 113 pounds seven weeks earlier than those fed after weaning, and less grain was used. Corn and peas, mixed, was the grain fed. A practical experiment was made in fattening rough picked lambs from mixed breeds in contrast with high-grade lambs. The mixed lambs were lighter feeders, but did not gain more than 62 cents per head during the fattening period. On the other hand, the high-grade lambs were heavier eaters, but fattened quicker, gaining \$1.12 per head—nearly twice as much—showing the necessity of abandoning the scrub sheep. Rape is being experimented with as a food for sheep. Director Henry has put no little force in raising the high standard of his dairy department. The pasteurizing of milk for sale in the city is proving a success. The process carried on is as follows: The milk is placed in the pasteurizing vats and at once raised to a temperature of 150° Fahr. as quickly as possible. It is held at this temperature for a few minutes, and is then lowered quickly to 50° Fahr. It is then bottled in different sized bottles, divided into three grades, determined by the per cent. of butter-fat; each grade being properly labeled on the bottle. In this condition, in ordinary temperature, milk will keep from two to four days without a taint. The process is very easily carried out, requiring but little skill. It is profitable when practiced on a large scale, as the product brings nearly double the price in the market. Milk sellers catering to city trade would profit by this practice. In France this process of handling milk is carried on extensively. A large portion of the milk used in Paris, among the better classes, is pasteurized milk from the celebrated De Arcey farm, which the writer visited last year. In parts of Germany this pasteurizing of milk is in vogue.

A look into the Michigan fruit districts shows a large crop of all kinds of fruits for this year. The peach crop this season has been a large one. The Elbertas have taken the lead in prices, and are being largely planted. They are, however, liable to peach curl, which injury can be easily remedied by proper spraying. Other sorts of promise are the Louis and Fitzgerald. The Kalamazoo and Crawford were the largest crop this season. Some trouble has been experienced in parts of Michigan with a new disease of the peach, resulting in considerable damage to a number of peach orchards—the dying of the tops of peach trees, with dwarfing of fruit. The cause is not known, but the general opinion of those engaged in investigating the disease is that the last two years of drought in the spring has retarded or injured the root development. The blighting of the leaves and limbs resembles the peach yellows. Spraying of fruit trees is carried on throughout Michigan. There is scarcely a farmer with an orchard but what is well equipped for thorough spraying. At the State Experiment Station may be found the largest weed garden in the States, conducted by Prof. Beal, containing the principal weeds of Michigan and other States. This is a step in the right direction as a means of detection of adulterated seeds with which our markets are unlawfully filled every year. The farm department can boast of a number of high-bred prize-winners of different breeds in its herd of live stock. Irrigation on the horticultural grounds is practiced each year with success, the distribution being from a central tank on the highest elevation of ground. This department is a strong one, and well equipped for all kinds of horticultural work.