

"Our Canadian Prairies."MANITOBA COURSE OF AGRICULTURE—
(FIRST SERIES).

The educational value of the study of Natural History in its various branches has long been recognized by those engaged in the training of the young. To some extent, too, the sciences treating of plant and insect life, the formation of soils, and their chemical composition, have found a place among the subjects considered necessary in our Canadian schools for preparing boys and girls to become useful men and women. Believing that these studies of Nature's work are of special value in the formation of habits of exactness, neatness, and careful observation, we approve highly of the wise step lately taken by the Educational Advisory Board, of Manitoba, in introducing into their Provincial schools an elementary course of Agriculture. Under the above title a neat little octavo of 162 pages has lately been placed in the hands of teachers and scholars, as the first of a series of handbooks for this course. As a second explanatory title states, it is "a description of the most notable plants of Manitoba; the chief noxious weeds, and how to destroy them; the trees and wild fruits, along with Arbor Day exercises and poems."

It begins with a short account of plant life in Manitoba, the pleasure and advantage of growing flowers, and the advisability of having school gardens. Concise instructions are given as to the best way of collecting, preserving, and studying the plants which grow wild on our beautiful Western prairies. Thirty of the most notable Manitoban plants, which ought to be known to every boy and girl, are then treated of at some length, and scientific details, which are generally looked upon by the student as drudgery, are skillfully hidden in attractively-written treatises on these thirty plants in turn. In this way much valuable information is imparted in an entertaining manner.

In the proceedings of an imaginary convention on Noxious Weeds, will be found much of great value on this most important subject, and if the children, of farmers particularly, will learn carefully and practice all that is taught in this chapter, it will be of incalculable value to the country.

Arbor Day—Its importance to Manitoba is a plea for tree planting, with advice on the subject.

At the end of the book is given a key to the families of plants, as well as an explanation of the terms used, schedules for classifying plants, and short lists of some of the chief plants, trees, noxious weeds and wild fruits.

On the whole, this is a very serviceable little work, skillfully prepared so as to present much useful knowledge in a pleasant and attractive manner. Some may object to the short poems distributed through its pages, but it is to be remembered that this is not a botany but a hand-book designed to educate the mind by drawing it to the objects treated of so that they may become well-known and easily distinguished from many others like them. In this way school children of to-day, the farmers of the future, will soon know, as all should, the common weeds on their farms, and recognize at once a new enemy when it appears.

J. F.

Winnipeg Industrial a Financial Success.

We feel sure that many of our readers, and especially live stock breeders and those who visited the Winnipeg Industrial, will be pleased to learn that in spite of the very unfavorable weather during the week of the fair, that financially it has been a success, rather than a failure. At the last meeting of the Board of Directors, the Manager presented a summary of receipts and expenditures, which just about balanced at \$23,300.00. The disbursements included the wiping off of a debt of \$2,000 from the previous year; \$600 insurance on buildings, and about \$3,000 on buildings and permanent improvements. A large saving was effected by Manager Heuback in running expenses, office assistance, etc.

Prof. Robertson's Retirement.

As our readers will observe in the biographical sketch published in another column, the retirement of Prof. Jas. W. Robertson, Dominion Dairy Commissioner, and Agriculturist at the Central Experimental Farm, from his present position at no distant date, is foreshadowed for the purposes therein indicated.

Bloat from Rape.

When sheep or cattle are first turned unto rape there is more or less danger of bloat or hoven. This can be largely prevented by turning in only when the leaves are perfectly dry and the animals are not very hungry. A feed of clover hay or other relished dry food, given every morning, will tend to make rape feeding safe. When a case of bloat does occur it can be readily relieved by a drench of salt water, and by fastening the animal's mouth open by means of a wooden bit tied on like a bridle. Stock seem to crave something dry when eating a very succulent food such as rape or rank green clover, and will often feed greedily at a straw-stack if given an opportunity. If stock feeding on rape have access to grass pasture, there will rarely be any trouble from bloat.

STOCK.**Our Scottish Letter.**

The advent of a new Government, with a new Minister of Agriculture, has not, unnaturally, to many seemed a favorable opportunity for reopening an agitation in favor of the admission of Canadian store cattle into this country. The new Minister has, however, been quite as firm as the old, and the likelihood of any change being made in the policy of the home Government is very remote. The result is that the outlook for the breeder in this country has brightened considerably, and there is a general cheeriness of tone which is most gratifying after so long a period of discontent. In the meantime, of course, the policy adopted operates against the interests of the comparatively small number of farmers who are graziers and feeders, and not breeders at all. When both United States and Canadian stores were coming in without let or hindrance, the price of home-bred cattle of the second quality went down, and bit by bit the influences adverse to the breeder became too strong, and many abandoned an unprofitable method of farming. When the ports were finally closed there was a scarcity of stores, and prices went up; now, however, breeding is becoming more general, and prices will by and by adjust themselves to the altered conditions of the farming industry. What view the Canadians may take of this determination of Mr. Long, we don't know; at any rate it has secured the hearty support of the great majority of farmers here.

A welcome visitor to these parts during the past few weeks has been Mr. Robert Graham, Claremont, Ont. He is at present prospecting amongst the Hackney breeders, and will, we imagine, buy a few of that kind, and a few Clydesdales for exportation to Canada. The Hackney business is brisk, and although there have been and will yet be many sales, good prices continue to be paid for animals with any pretensions to merit whatsoever. The Sandringham sale set the fashion, when 53 horses made the highly respectable average of £135 13s. 9d. each, but during the present week Mr. R. G. Heaton, of the Ferryhill Stud Farm, Chatteris, has had in many respects as good a sale with an average of £120 0s. 6d. for 57 Hackneys, of which no fewer than 15 were foals and 23 brood mares. Mr. Heaton is owner of a crack stallion named Agility, whose stock are coming well to the front, and have grand size, coupled with plenty of the right kind of quality. Mr. Morton, of Gowanbank, Darvel, has bought The Champion, the winning two-year-old colt at the Yorkshire show, for, it is understood, £1,000. This colt is a get of the celebrated champion horse, Ganymede, to our way of thinking, about the best piece of horseflesh we ever set eyes upon, and the young horse is by no means unlike his sire. Canadians favor Hackneys of the harness type, and they are right in so doing. One great complaint made about Hackneys amongst foreigners is that many of them are too small, and to such a charge no answer seems possible. It is too true that more Hackneys are under 15 hands than is at all desirable in the interests of the breed, and it is no answer to the complaint that the old Hackney was not a large animal. Horses with some height, and corresponding thickness, are always more to be desired than little cobs not much better than ponies, and this view of the case is beginning to dawn upon breeders in this country. Talking about ponies, a very notable sale of such will take place at the Flordon Stud Farm, Norwich, in a week or two. Sir Humphrey de Trafford, Bart., is giving up farming, and has let the place on which his Hackneys and ponies were kept; consequently all of them are to be sold, without reserve, on an early day. Sir Humphrey is owner of the most successful pony tribe in England; that of Snorer, a mare bred by C. W. Wilson, Pigmaden Park, Lonsdale. To this tribe belongs Sir George II., the champion pony at Dumfries, and the Londonderry pony stallion, Little Wonder II., the sire of Sir Horace, the champion at the Royal, which was lately sold for £525 by public auction. The policy of inbreeding has been carried to a great length in this family, one of the best of them having been got by Sir George 778, dam by Sir George 778, and granddam by Sir George 778. The stallion recently in use in the Flordon stud, Snorter 4995, was got by Little Wonder II., out of Snorer 2456, and Little Wonder II. was out of Snorer 2456. The result of this course of procedure has been to impress a wonderful uniformity of type on these animals. The champion at the Highland, Sir George II., was also bred in the same fashion; his sire was Sir George 778, and his dam was by the same stallion.

We are now in the heat of the lamb and ram sales, and all breeds are commanding good prices, the highest, however, being recorded for Lincolns and Shropshires. At the great ram sale of the latter, recently, the average price was £11 16s. 6d. for 45 rams; one selling for 230 gs. The Shropshire is bred on the better lands in the Scottish Midlands with great success. Mr. David Butt, Corston, and the Earl of Strathmore, having flocks which are held in high repute with breeders.

SCOTLAND YET.

Horse Breeding from a Western Farmer's Standpoint.

BY "CLAUGHBANE." (Concluded from page 154.)

Size is the most important point in an English city draught horse. They are required to draw heavy loads, but this is accomplished more by their ponderosity than by snap. It is easy to understand that a smaller horse would do just as much at the same work, and, perhaps, stand it as long, but he would have to do it by his greater quickness, and at the expense of more muscular force, and while farmers, as a rule, would prefer this smaller, quicker horse for their own work, he is not the animal that commands a big price. Size the Englishman must have, even suppose the horse is a little plain, for, by putting plenty of flesh on him, he can be made to look all right. Fat will hide quite a few defects that in a comparatively thin horse would be very apparent. It is really a fine sight to see three or four of these big horses, with a big load behind them, walking along with a slow and stately step, their heads carried high—more like our stallions than ordinary work horses. It is claimed that a horse's feet and legs must be of the best to stand the street pavement, and I am sure no one admires a good set of pins more than I do; but if we watch these big horses at work we find that there is comparatively little heavy, straining work done by them, and it is this sort of thing that tries a horse's legs. The loads are heavy, but the road is good. Then, again, the work is slow, and there is no "hammer, hammer, hammer on the 'ard 'ighway to 'urt the 'orses' 'ooes." The smaller the horse the better feet and legs he requires, as the work is more straining to him, and he must go faster at it. It is weight that the English market demands in a draught horse, and if we would sell in that market, we must produce big colts, whether we think them the best or not.

Action is something which some persons think most requisite in a draught horse, but good action means a sloping shoulder, and a sloping shoulder is not the best for slow, heavy work. In heavy collar work the line of draught should be as near as possible at right angles to the shoulder, and with a really good-actioned horse this is difficult to get. Good action is nice to see in any horse, but in breeding heavy dray horses, the farmer should not sacrifice any other point to get it.

I would now say something about the agricultural horse, of which so many have been raised in Canada, and for good specimens of which there will always be a limited market. This horse, as he has been raised, is a grade draught horse varying from 1,200 to 1,500 pounds. Right here I might say that a 1,300-pound horse is quite heavy enough for farm work, and he is generally more active than a heavier animal. Sometimes we see much heavier horses with plenty of activity about them, but it is not generally the case, and the lighter horse, as a rule, does his work in a more satisfactory way. In breeding a good farm horse we should aim to get a good-tempered, intelligent animal, with good legs, muscular quarters, and a comparatively well-sloped shoulder, for he will have considerable work on the roads, and must be able to do it at a good pace and with ease to himself. Most of this class of horses that we have have been bred from Clyde sires and have inherited their good qualities. Some, too, though comparatively few, are of Percheron blood, and they also appear to be superior animals; but there is a very strong prejudice against them—for what cause it is hard to say. I have for some years, whenever hearing the Percheron condemned, made a point to question the person doing so, and I have invariably found that he had never owned or handled one: while, just as invariably, those who have them speak most highly of them and prefer them to anything else. They are always ready for their work, and easily kept in condition. Another point in their favor is that they are clean-legged. And here let me say something about feather. Of what use is it? Certainly none whatever to a farm horse. It is rather a defect, for it gives extra work in keeping clean, and is also an indication of poor bone. As a rule, the best-boned Clydes and Shires have the least feather. Its one advantage is that it makes a horse look bigger, and this is a consideration in breeding heavy draught horses; but in anything lighter, feather is worse than useless.

The Suffolk-Punch is a horse of great substance, and it is surprising that there are so few of them in Canada, for where they have been used as sires their colts have given general satisfaction. They are noted for their power in the collar, and three-fourths of the drawing matches in England have been won by this breed. The Suffolk grade is the very best draft foundation on which to use the Thoroughbred sire in raising big light horses, and for this reason it is a pity they are not more popular with us. Why these two clean-legged breeds of draft horses (Percheron and Suffolk-Punch) are not in greater demand I am at a loss to understand, for they are undoubtedly most suitable for getting agricultural horses.

In conclusion, I would say: do not breed a mare unless she is likely to raise a good colt; and again I say, avoid hereditary unsoundness. Look well ahead for the horse that is likely to be in the greatest demand in six years from now, for your matings this year will want a market about that time; it is not this year and next that we are breeding for. Do not think that because horses are now down in price that they will always be so, for even to-day a good horse of the right kind brings good money, and they will continue to do so.