

to successful farming. *Summer-fallowing* does not restore anything to the soil, but the cultivation given makes available a fresh supply of latent plant food and generally leaves the soil in better mechanical condition, and if properly done conserves moisture. *Seeding down to grass* does much to improve the mechanical condition of soils, prevents drifting, and adds humus or vegetable matter, which increases the capacity of the soil to retain moisture. *Plowing under green crops* amounts to little or no gain in supplying fertility, unless it is a leguminous plant, as clover or peas, that is turned under, as these plants take nitrogen from the air and sub-soil, storing it in their tissues.

While any of these methods of cultivation are well enough in their way, keeping the land clean and in better condition for cropping, they cannot take the place of manure. Manure the soil must have, or our farms will become impoverished, and it will cost us or those who follow far more to restore the land and make it productive than it will cost now to maintain and improve its virgin fertility. The sooner every farmer gets down to mixed farming on a systematic and permanent basis the better. Mixed farming means, in our vocabulary, wheat the staple product, the growing of fodder and hoed crops, seeding down for hay and pasture, live stock breeding and feeding, by which the raw material of the farm is converted into a concentrated finished product, beef, mutton, pork, dairy products, etc., while the manure is left on the farm to keep up the fertility and make possible the continued production of Manitoba hard wheat.

Agricultural Schools.

At the annual meeting of the Scottish Chamber of Agriculture recently held in Edinburgh a resolution was unanimously passed, affirming "that the subject of agricultural education is one of the first importance to agriculture," and strongly recommending the establishment of schools of agriculture "where theory and practice could be taught and experiments conducted." In regard to the experimental work the mover of the resolution said:

"I think it is an essential part of agricultural education. There is no farmer of fifty years' standing who has not been an experimenter. His daily practice is ruled by the results of prolonged observation. He pursues certain methods and he avoids others because he has observed and noted certain results. He cannot, perhaps, give you a reason, but he is satisfied in his own mind. The defect of such experiment is that it is long and laborious, that the results are not placed on record, and the young farmer has, in many cases, to begin and gain experience in the same way. An important part of all experiments is to define cause and effect, and experiments in agriculture are so much affected by side influences that they need to be carried out with the utmost care and be repeated before reliable results are attained. You cannot get the best conditions in ordinary farm practice. You require trained experimenters, with ample time and means, to attend to every detail, and even then must be again and again repeated before you can rely on your results."

The resolution in question was moved by Mr. Jas. Biggar, of Dalbeattie, and seconded by Rev. Dr. Gillespie, of Mouswald, both prominent agriculturists, and in speaking to the resolution, both referred in the most eulogistic manner to the Ontario Agricultural College, the seconder referring to it as the *beau ideal* of an agricultural college.

It must be gratifying indeed to Ontario to have her agricultural college so highly thought of by such eminent agriculturists, and held up as a model for Scotland to copy. It will have been noticed by the greatly increased attendance this year that the College is steadily advancing in popularity and usefulness at home. When the Manitoba Government is ready to establish an agricultural school, it will not be necessary to go farther afield for a model than the Guelph College.

Exhibition Dates.

To the Editor FARMER'S ADVOCATE:

SIR,—I was pleased to see a discussion started about the dates for holding the big shows. I cannot speak from either the standpoint of an exhibitor or a manager, but from that of a common farmer and interested sightseer. In 1892 the Toronto management changed the date of holding the show, putting it a week earlier, so that it takes place now in what is with us in Peterboro district the busiest time of the year; i. e., the season for sowing fall wheat. I believe that double the number of farmers would go to Toronto exhibition from this section if it were put back to the old date, or even a week later, and my proposal is that the Eastern exhibitions which are held in a section where they do not raise fall wheat, and where the cold season comes earlier, be held first, at a pretty early date, and let Toronto and London come in after. This is the opposite of Mr. McMahon's proposal, and he should of course know what would suit directors and exhibitors, but I believe I am voicing the wishes of a considerable number of the ordinary farmers, of this district at least.

Peterboro Co., Ont.

R. S. SUTTON.

STOCK.

Canada to the Top at Chicago.

As in important cattle and other live stock classes at the World's Columbian Exposition, and on a later day in the battle of the mutton breeds of sheep at Madison Square Gardens, New York, so a week ago at Chicago, the American met his Waterloo when he went down before the prowess of Canadian horsemen. The names of Graham, Davies, Beith, Hendrie, and Beck—"Royal Standard," "Young McQueen," "Mikado," "Banquo," and "Othmar"—and their triumphs on the tanbark of the Coliseum became historic in the showyard annals of that great city. Canadian sheep, too, were there to win. Canada has the soil, the climate, the breeding stock, and the men to produce what will win and sell anywhere in the wide, wide world. All that we need to-day is to raise more of this high-class stock to sell. The salient features of the Chicago show are faithfully portrayed elsewhere in this issue by an editorial staff representative who was on the scene from start to finish.

The Chicago Horse and Fat Stock Show.

(BY AN EDITORIAL REPRESENTATIVE.)

For two years Chicago held no autumn show, but the intermission seemed to act as a storage battery, especially with the horse department, as perhaps never in the history of America has such a show been held, excepting, of course, the World's Fair of 1893. The Coliseum building, which may be said to have arisen out of the ruins of the structure destroyed two years ago, proved a perfect building, especially for the horses; but a large proportion of the fat cattle, and all the sheep and swine, were shunted in a rather dark shed a few feet from the main building. The Coliseum building is in all some 600 feet long by 300 feet wide. The arena in which the horses were exhibited is 250x110 feet. This was tanbarked and kept in perfect order by a number of liveried attendants. Around the arena is a wide promenade and tier after tier of seats, including the boxes, which were usually well filled during the afternoon and evening sessions. The horses were comfortably stalled in single and box stalls of modern pattern and fittings. The horse show was under the management of Mr. John A. Logan, every branch of which went off like clockwork, the well-arranged programme being carried out from end to end with very little clash or delay. The building was beautifully decorated with plants, flags, etc., and rendered a pleasant and fitting situation by a continuous band concert for the thousands of prettily-attired horse-loving ladies who paid their daily visits to see the horses, the other visitors, and be seen and admired.

The horse exhibit, as we have already said, was a great success. In no class was there a surfeit of entries, but of the twenty odd breeds and types there were grand representatives. This is especially true of the breeding classes, but, as at all modern horse shows, the harness and saddle classes exceeded the others by far in numbers—a fair index of the popular taste in that direction, and for which horse breeders may well continue to cater. The show was similar to Madison Square Garden's annual event at New York in so far as city competition was concerned, but New York never put up such

A GRAND DISPLAY OF HORSES.

for which the West is noted. Of Clydesdales there were fifty-nine entries from the best studs in America, including studs that even the Scotchmen occasionally draw upon to replenish their studs. We refer to Col. Halloway's and Robt. Davies'.

The exhibitors of Clydesdales were the following: Robt. Davies, Toronto, Ont.; Graham Bros., Claremont, Ont.; Col. Robt. Halloway, Alexis, Ill.; N. P. Clark, St. Cloud, Minn.; McLay Bros., Janesville, Wis.; R. B. Ogilvie, Madison, Wis.; Wm. Moffatt & Bro., Paw Paw, Ill.; Herman von Bridenfeld, Granville, Ill.; Brookside Farm Co., Fort Wayne, Ind.; and Robt. Morton, Johnstown, Wis. The first class in the catalogue for Clydesdales was for four animals the get of one stallion. When the families lined up they were a sight to please a Scotchman. No less than five lots came forward, including animals which proved later to be the best in the show. The contest for first place was strong between R. B. Ogilvie's Queen's Own and Col. Halloway's Cedric. The former had a source of strength in Graham Bros.' Young McQueen, the three-year-old that has carried all before him ever since he came to Canada, some nine months ago. Along with him was a rather rangy chestnut, five years old, Simon Yet 6895; also Dolly's Duchess 8673, that later won second in mares three years old or over, and Queen of Quality 8676, that won third as a two-year-old. They are a beautiful four. Cedric's get consisted of Handsome Prince 5581, owned by McLay Bros., a noble horse, that won second in stallions three years and over. He is eight years old, nicely topped, and has a grand set of limbs and feet and beautiful action. Prince Delightful, a five-year-old, shown by Col. Halloway, needs no apology made for him, although he did not win in the mature section, nor did his brother, Prince Radiant, three years old, although he too is a toppy good one. Minute II., owned by Col. Halloway, helped the group considerably, as she proved one of the stars of the breed, winning as she did first prize for mare three years and over. She is just three years old, grandly developed, and full of quality. It was no light task to decide this award, as the judges, Robt. Beith, Bowmanville, Ont.; Leonard Johnston, Northfield, Minn., and Joseph Watson, Beatrice, Neb., learned before they concluded. The matter seemed to hang for considerable time, but when the real merits of the Canadian colt, Young McQueen, began to be realized, the decision was made in favor of McQueen, which award was decidedly popular, especially after

YOUNG M'QUEEN CAPTURED ALL THERE WAS TO WIN; viz., for best Clydesdale stallion, three years old and over; best Clydesdale's stallion, any age; and for best draft stallion, any age or breed, a victory Canada should feel proud of when it is remembered that the best draft horses of all breeds were in competition, even those that won the best premiums at the World's Columbian. The third family award settled on the get of Barney 5002, owned by McLay Bros. This lot had good individuals, but seemed hardly as uniform as the fours above them. One of the best of the lot was Robt. Davies' Bar Bell, that has won so many premiums at Ontario exhibitions. A very uniform but rather short-ribbed and fretful four by Erskine's Heir 4852, owned by Brookside Farm, stood fourth. They were nicely topped and moved beautifully on smooth, hard limbs, but they could not stand the excitement of a Chicago audience without taking part in the dance act.

The stallion class for horses three years and over was a superb string of twelve. The first and second winners have already been referred to. The third prize fell to Lynoch Chief 5442, an 8-year-old bay son of Lord Lyndock. He was exhibited by Herman von Biedenfeld, Granville, Ill. He is a lowish-set, wide horse, nicely put up, and shown in fine vigor. He is beautiful at the ground, and had he held his back up a little he was hard to fault. Col. Halloway's newly imported Sirdar 4714 was at the show, but his years are against him beating such good horses as we have mentioned. He is a son of Darnley 222, which alone makes him famous. He is one of the big sort—dark bay with black points, with a strength of underpinning that many of our best horses lack to some extent. He received the highly commended ribbon. Two-year-old stallions, five in number, divided the honors between the exhibits of Messrs. Clark and Halloway, the former winning first and third on the gets of Rosewood and Lothian Top, while the latter was by Cedric. Yearlings had a good entry of nine. Clark's son of Stanley Prince was the victor, with Robt. Davies' Lyon MacGregor right at his heels, winning second award. This colt has gone on well since his appearance at Toronto Industrial just after his importation. His stable mate, Tom MacGregor, was placed fourth, leaving the third award to McLay Bros.' Sir David, by Barney.

The mare sections were quite well filled with animals equal in merit to the stallions. In the section aged three years and over, the first three winners were just three years old. Minute II. and Dolly's Duchess, the first and second winners, have already been mentioned as members of the families. Princess Maud, by Prince of Quality, until recently owned by Robt. Davies, was placed third, and does her sire credit. Robert Davies' Nelly was placed fourth. Half a dozen two-year-olds, and the same number of yearlings, also foals, were each strong classes in point of merit. The winners were as follows: Halloway, Clark, and Ogilvie; Halloway, Clark, and Halloway; and in foals, Col. Halloway won all three awards. Robt. Davies' noble pair of mares, Bar Bell and Nelly, captured the first premium for pair of horses to wholesale merchant's wagon.

Percherons.—We expected to see a strong competition in Percherons, and we were not disappointed. This breed of horses are quite in favor, especially in American cities where a gait above the walk is desirable. As a class, however, they did not show the quality throughout that was evident in the foregoing breed, despite the fact that World's Fair winners were numerous among the entries. Just one family was entered for the class of four—the get of one stallion. The sire was Bigelin, owned by H. A. Briggs, Elkhorn, Wis. This lack, if it may so be called, was made up in the section for stallions three years old and over, as here thirteen entries were made and nearly all forward. Handsome grays, with flowing manes and beautiful action, made an imposing display. The principal exhibitors of this breed were Robt. Burgess & Son, Wenona, Ill.; H. A. Briggs, Elkhorn, Wis.; Fietcher & Coleman, Wayne, Ill.; Wm. Hadden, Janesville, Wis.; Storm Bros., Marley, Ill.; Fred. Soper, Ripon, Wis.; and others. The younger stallion classes and filly class as were not as well filled as those of Clydes, but they did the breed a credit in the entries placed.

Sires made a rather poor attempt at a big show, but perhaps the secretary of the association was napping while the other fellows were stirring the breeders to action. The principal exhibitors were Robt. Burgess & Son, Wenona, Ill.; Jerry Warner, Mahomet, Ill.; H. A. Briggs, Elkhorn, Wis. There were in all some twenty entries, few of which were sensational, although some of the exhibits were worthy animals of this

FAVORITE ENGLISH DRAFT BREED.

A worthy feat was performed when Burgess & Son's yearling, Wenona Hawkstone, captured the yearling championship from all the draft breeds.

Hackneys.—It was hardly expected that the Hackney show at Chicago would reach the magnitude and splendor seen at Madison Square Gardens, as most of the big breeders live in the East; but despite this fact the display was a creditable one in point of quality; so much so, indeed, that both the male and female championship awards for all coach breeds were captured by this class. It is with much pleasure we announce that

CANADA WAS DECIDEDLY TO THE FORE in this, as they had been in Clydesdales, as Graham Bros.' (Claremont, Ont.) Royal Standard did as he pleased in every contest he entered, which were not few. In stallions three years and over he won easy, while his stable mate, Courier, formerly owned by Logie Farm, Mount Elgin, Ont., followed next in order. Erling a very breezy son of Cadet, shown by E. W. Twaddell, Devon, Pa., took third award. He is a chestnut three-year-old, and was much admired by the spectators. The first award for stallions 15 hands and under 15.2 also came to Ontario in the well-known Banquo, by Jubilee Chief, owned by Robt. Beith, Bowmanville. His only opponent was a bay horse, seven years old, known as Lord Palmer, the get of Kaiser. He was exhibited by Geo. McKerrow, Sussex, Wis. A. J. Cassatt's 18-year-old Little Wonder showed a one as stallion under 15 hands. He is a perfect model of a pony cob. In two-year-olds Langton Performer II., exhibited by F. C.