

AYRSHIRES

were shown by A. Mutter, Brandon (who was awarded all the prizes he entered for, including the herd prize and sweepstakes for bull), and by W. M. Smith, Fairfield Plains, Ont., who had the second prize yearling bull.

The special prize of \$25, offered by the Bank of British North America, through their Brandon manager, Mr. H. G. Marquis, for the best herd (one bull and four females, two years old and under) of any pure-bred class, bred in Manitoba or N.-W. T., was awarded to J. E. Marples, Souris, for an excellent young herd of Herefords.

SHEEP.

The judges of sheep and swine were Messrs. J. McQueen, Carievale, and J. Yule, Crystal City. The competition in the classes for sheep was limited, there being more in the class for Leicesters than any other. The exhibitors in the latter were A. D. Gambley, Brandon; Jas. Murray, Lyleton; and D. Preston, Glenewen. Gambley won first prizes for 2-shear ram, shearing ewes, ewe lambs, pen of one ram, two ewes, and two ewe lambs, and for ram any age. Murray secured first prizes for shearing ram, first and second for two-year-old ewes, and second for two-year-old ram, ram lamb, shearing ewes, and ewe lambs. Preston had the first prize ram lamb.

OXFORD DOWNS.

In Oxford Downs, Alex. Wood, Souris, was the only exhibitor; and in

SOUTHDOWNS.

W. M. Smith, Fairfield Plains, had the field to himself.

There were no Shropshires shown, and there being no class for Cotswolds or Dorsets, these were entered in the class for any other pure breed. F. W. Brown, Portage la Prairie, showed Cotswolds; and R. H. Harding, Thorndale, Ont., Dorsets. The latter won the majority of prizes. The contest in aged rams was so close that the judges recommended a first prize for each. Harding was awarded first for shearing ram, ram lamb, shearing ewes, ewe lambs, and for pen of one ram, two ewes, and two ewe lambs. The first prize for aged ewes went to Brown, who had also second for ram lamb and ewe lambs.

SWINE.

The swine classes were fairly well filled, and many really good specimens were shown. In

BERKSHIRES.

R. McKenzie, High Bluff, and F. W. Brown, Portage la Prairie, were the exhibitors. The former was awarded first for boar over two years old, on Proud Victor; first for boar under six months; for sow over one year and under two; for sow under six months; and the sweepstakes for best boar any age, on Proud Victor. McKenzie had also second for boar under a year; for sow under a year; sow under six months; and sow and litter. Brown secured first and second for yearling boars; first for boar under a year; first and second for sow over two years; first for sow under one year; for sow and litter; and sweepstakes for sow any age, on Cora Belle, the first prize sow over two years.

YORKSHIRES.

The exhibitors of Yorkshires were James Bray, Portage la Prairie, and A. B. Potter, Montgomery. Mr. Bray was awarded first prize for boar under a year and boar under six months; for sow over two years, sow under six months, sow and litter, sow any age, and boar any age. Potter had the first prize yearling sow; second for boar under six months; for sow under six months, and for sow and litter.

CHESTER WHITES AND POLAND-CHINAS

were grouped, and the prizes were divided between W. M. Smith, Fairfield Plains, who showed Poland-Chinas, and W. L. Trann, Crystal City, who showed Poland-Chinas and Chester Whites. L. A. Bradley, Portage la Prairie, showed a good lot of Tamworths, and secured most of the prizes.

Suit of Interest to Farmers.

WHEN ARE CATTLE RUNNING AT LARGE?—C. P. R. MUST PAY THE FARMER \$120.

An action of peculiar interest was tried before Judge McGibbon and a jury at Brampton last month. J. W. Albertson, of Lorne Park, owns a farm on both sides of Grand Trunk Railway track between Toronto and Hamilton, over which the C. P. R. has running powers. Last July, a year ago, Albertson sent his hired boy to bring the cattle from the field down to his farm. The boy collected the cattle and was driving them south along the road towards the railway track, when he suddenly saw a C. P. R. train approaching at a tremendous rate of speed. He dashed forward for the purpose of saving the cattle, but was unable to do so. Two of the cattle managed to get across the track, but the other three did not and were struck by the approaching train and killed.

The railway company contended that the boy had not the cattle sufficiently in charge. The plaintiff denied this, and further by his witnesses proved that the railway company had neither blown a whistle nor rung a bell, as provided by the statute, and were therefore in default. The case went to the jury, who answered all questions in favor of the plaintiff; but the railway company made a motion for non-suit, upon which Judge McGibbon reserved judgment, and he has just given judgment in the plaintiff's favor for the amount of the three cattle killed, which was fixed at \$120, and directed that the railway company must pay the costs.

Wants More Shires in Canada.

SIR,—In your issue of July, No. 482, I notice a very instructive article on "Mares and Foals on Pasture," from the pen of Mr. David Burns, Ontario County. He winds up his letter with a reference to the present breed of Clydesdale horses in Ontario, his experience being that that breed is now smaller and not so robust in constitution as they were some years ago, and suggests that the Shire cross could, perhaps, be used to advantage in helping to eradicate this failing.

There is no doubt young, big Clydesdale horses are not so plentiful in the country as they were. This, of course, is no doubt owing to the lack of interest shown by farmers in not breeding, and also to the fact that farmers are not as careful as they might be in the selection of the stallion to be used. To get a good, serviceable, and at the same time marketable, heavy draft horse, a good hard colored, strong-boned and good-footed sire should be selected, and even were such a horse as this used, there will always be quite a percentage of small stock, or, as they are called in another country, "misfits."

Mr. Burns asks for opinions regarding the use of the Shire cross with some of the Clydesdale mares in this country. From personal experience I consider the Shire stallion quite as good as the Clydesdale stallion for the purpose of getting heavy draft horses for use in our cities. I find them to be a good-constituted and good-footed class of horse, and that is what is mainly required for use on the city pavements. I would like to see more Shire stallions in this country, and am sure the use of them would be beneficial to the farmers and breeders in this country. WM. HENDRIE, JR.

Hamilton, Ont.

FARM.

Good Results from the Plowing Under of Green Clover.

BY DR. WM. SAUNDERS, DIRECTOR OF EXPERIMENTAL FARMS, OTTAWA.

Among the many things of interest seen by the large number of farmers who have visited the Central Experimental Farm at Ottawa during the past few weeks, none have awakened greater surprise than the striking illustrations made this season, showing the advantage to crops of the plowing under of green clover. This is particularly seen in



DR. JAS. FLETCHER. PROF. OTTO LUGGER. HUGH M'KELLAR
The professors hunting grasshoppers in the Boissevain and Deloraine districts of Manitoba, where the Rocky Mountain locusts committed considerable damage to farm crops in 1898.

a field of oats of about ten acres. This land in its preparation in the spring was treated the same throughout; the field was all sown the same day with one variety of oats—the Bavarian. Last autumn, about eight acres of this field had a good mat of red clover turned under, which was grown from seed sown (10 lbs. per acre) with a barley crop in the spring. One acre was plowed which had been in Brome grass for two years; one acre which had been occupied with other pasture grasses for a similar period; and one acre with a mixture of pasture grasses and clover.

Over the whole area where the clover was turned under, the increase in the growth of the oat crop is most striking. The difference in the height of the grain will average about twenty inches, and the deep green color of the leaves on this part of the field, and the vigor of the plants, are in striking contrast to the crop on the adjoining land where there was no clover. This remarkable increase in growth affords convincing proof of the added fertility given to land by the plowing under of green clover.

In another field, which has been planted with potatoes, a strip of the land covering eight rows of this crop had clover grown on it last year, which was plowed under. On that strip the growth of the potatoes, as compared with the same variety on the land adjoining where there had been no clover, was quite remarkable, the plants being much larger and more vigorous. The results of the crops in both these instances will be watched with interest.

Last year a like illustration was given on eight plots of land on another part of the Farm, on four of which red clover had been sown with grain in the spring of 1897; while on the other four, grain was sown without clover. This land was all plowed in the autumn of 1897, and in the spring of 1898 the whole area was sown with Banner oats. The greater vigor in the growth of the grain where the clover had been turned under was very noticeable quite early in the season and became more striking as

growth advanced. These results were brought under the notice of a large number of visiting farmers during the season of 1898. When this crop matured, the grain on these eight plots was harvested and threshed separately, and the yield per acre on the four plots on which the clover had been grown exceeded that obtained from the plots on which there was no clover by an average of eleven bushels and one pound per acre.

In another field clover was similarly sown in 1897, in different quantities, with grain on a series of plots, with three left as check plots without clover. As these were all to be planted with Indian corn, they were not plowed until May 23rd, 1898, by which time the clover had made a heavy growth. After plowing and harrowing, the corn was planted, and when harvested in the autumn the average crop on all the plots on which not less than eight pounds of red clover had been sown and plowed under exceeded in weight the average yield of the three check plots on which there was no clover, by 4 tons 233 lbs. per acre.

Inverted Clover Sod for Fall Wheat.

Where rotation of crops is practiced one cannot always choose the land best adapted to wheat; i. e., the land best located for it. The best crops we have grown have been on inverted clover sod, plowed about August 1st, and kept well cultivated with disk harrow or spring-tooth. We aim to work the surface well, to a depth of about three inches. This method forms a mellow, moist and firm seed-bed. When the clover crop has been a failure we have sometimes sown wheat after oats with good results. This method I know is not considered good farming. In many parts of England when land is leased it is agreed upon between landlord and tenant that no two *white* crops shall be sown in succession, as it impoverishes the land. Immediately the oats are carried we gang plow lightly. The land is manured at the rate of twenty loads per acre, and plowed fairly deep. It is next rolled, and then kept well harrowed until the time of sowing. This year we had good results after rape, which was sown on the weediest piece of land we had, about May 1st, in rows 2½ feet apart, and kept well cultivated. The lambs were weaned and turned on this the beginning of July. When it was eaten, was plowed, cultivated, etc., and sown with wheat the beginning of September.

We usually sow between the 1st and 10th September, but as the Hessian fly made its appearance in the early sown fields, we shall this fall follow the old rule and not sow before the 15th. We sow, if possible, north and south, to a depth of 2½ or 3 inches, then follow with a light smoothing harrow in order to fill in the valleys made by the drill. Then in case of a thaw in winter no ice will form. This year we grew the Dawson's Golden Chaff and Gold Coin. The former we have grown for five seasons with capital results. This is the first year for the Gold Coin. It seems to be very hardy, stands the winter well, is a good yielder, and a nice sample. We sow, as nearly as possible, 1½ bushels per acre of good, plump seed, but if the sample be small we set the drill to sow less. H. N. GIBSON.

Middlesex Co., Ont.

Wheat Requires Well-Manured Land.

SIR,—In your article on fall wheat, in July 15th issue, you have given the most important points relating to preparation and culture. In my opinion the land naturally suited to fall wheat is somewhat stiff limestone clay and gravelly loam, although fair results are obtained from flat, black-ash swamp land, if well drained. A southern and eastern exposure preferred. I think the advantages of protection by woods has never been better proven than in the present crop. For choice, I would plow down sod (clover preferred), well manured; to be plowed down some time in July, and cultivated on the surface till sown. Next, pea land, broken from sod this spring, cultivated on top. Either of these are as good as a summer-fallow. A summer-fallow is better not broken until last week in June, when thistles and weeds have almost matured, and the roots are at their weakest stages. While a mellow, smooth surface is good, it is well not to plow it for at least two weeks before sowing, so that the body of soil becomes solid.

For the average year, and no one can tell what the fall will be, a good time for sowing is from Sept. 1st until 15th. While good results have been had both before and after these dates, they are exceptions, and not the rule. I think it is immaterial which way it is drilled, provided the land is not left too smooth. It is best to roll the land before sowing, to firm it. About three inches is deep enough. We sow 1½ bushels to acre, and endeavor to procure seed from a field that bore a good crop and good sample. I believe a change of seed is an advantage, such as a change from light to heavy land, and *vice versa*. If the seed is not perfectly free from smut, an application of bluestone is a great preventive, but it is only in odd years that smut troubles us. The varieties which suit our locality best are Democrat, Genesee Giant, Dawson's Golden Chaff, and Red Clawson. The Democrat is the surest, and the Golden Chaff the largest yielder. The bare fallow is almost gone out of use here, and manure is not being applied directly to wheat land, as used to be the custom; it is mostly applied to corn land and as top dressing to sod. But the fact remains that fall wheat requires well-manured land, whether applied directly or a year before. JOSEPH MOUNTAIN.

Perth Co., Ont.