

admitted that the ordinary arguments against the employment of boys, aged from 12 to 14, could not be urged under present conditions. The scarcity might in some parts be relieved by a more extended employment of women, and an increase of wages to men might have a beneficial effect. When these remedies have all been applied it remains certain that in many districts there will still be a shortage, and in Northamptonshire the Education authorities have somewhat released the stringency of the compulsory clauses so as to admit under strict regulations of the employment of well-grown boys. A difficulty arises in connection with the housing question. In many cases unmarried men have enlisted, leaving their wives and families in possession of the houses. These houses are, of course, part of the equipment of the farm; while the families of those who have enlisted are in possession of the houses other workmen cannot be put into them. The farmer is therefore shut up to the employment of unmarried men, and these have enlisted in greater numbers than the married men. The farmer is in a curious dilemma; the Government calls upon him to increase the cultivated area of his farm, and at the same time it calls upon his servants to enlist for their country's service. The farmer cannot extend his cropping if his servants are to be withdrawn.

February has been an extremely wet month. The rainfall has been very heavy, and there is reason to believe that the extraordinary cannon-ading which has been going on during the winter in Flanders and the north of France has not been without its share of responsibility for the delay. Work on the farm is far behind, and this intensifies the labor difficulty. There is an improved prospect at the moment, but how long it may continue or how far it may extend none can foretell. The early potato growers on the Ayrshire coast would like to have had most of their crops in these days, but so far very little potato planting has been over taken. The necessity for securing mechanical planters is being increasingly felt, and we are to have a trial of such on 25th inst. near Edinburgh. All the auguries point to the necessity for increasing the number of mechanical appliances on the farm. Horses are scarce and dear, and many are crying out for a motor plough which will overtake work hitherto done by men and horses. The result of the war undoubtedly will be the supplanting of horse labor by machinery. The horse will go out of use, and once out he will be always out. The military problem will then become more acute even than it is at present, and the provision of an adequate horse supply for the army will require some thinking out.

Allied to this is a present-day controversy regarding the running of the Derby and the Oaks during the war. Lord Rosebery has placed himself in the van of those who demand that racing should go on as usual. He finds himself opposed by quite a phalanx of men of his own standing. Foremost among the opponents of racing, while nations are engaged in a death struggle, is the Duke of Portland. His grace is one of the most successful breeders of race horses in England. His views have been mainly supported by the Duke of Rutland and the Earl of Dunraven, as well as other prominent members of the peerage. We do think that in this Lord Rosebery has mistaken the views of his fellow countrymen. No doubt there are many among them who care more for racing and betting than they care for the well-being and good name of their native land. But surely in such a crisis, as we are now passing through, it is not such as these to whom deference is to be paid. There is something strangely out of joint when men can contemplate the saturnalia of Epsom Downs going forward at the time when so many of our sons are engaged in a death struggle within a few hours sail of the shores of England. And what is to be said in favor of the gaiety of Ascot amidst the mourning and tears of the victims of war? For the credit of Great Britain it is hoped the views of the Duke of Portland and his followers may prevail. It is well to carry on the legitimate business of the country when at all possible in these days, but pleasures should be foregone, and men should recognize that the future of liberty and free institutions in Europe is at stake as it has not been for centuries. There is a time to laugh and a time to dance, and there is also a time to weep and a time to mourn. This is emphatically a time to pray, mourn and weep, and laughter and dancing should be at a discount.

February and the first week in March is the period of bull sales and horse shows. This year the London Horse Shows have been held under a cloud. Instead of three weeks we have only had two. The Shire Horse Show in the last week of February was quite a successful event. The display of horses and mares was quite worth going to London to see, but with the railways commandeered for military purposes, there were no special trains from the northern and midland counties, consequently the attendance was much smaller than usual. Still, it was a successful show, nothing new was to be seen among the older horses, and the tops in every class were ex-

ceptionally good specimens of the Shire. Judges in the south are discovering that the strong, wiry hair which they have cultivated in the breed is of doubtful advantage, and they are now looking for the soft, silken hair which Clydesdale judges long ago discovered was a necessary accompaniment of a hard, flat, wearing bone. The first week in March was given over to the light horse shows in London and the Scottish Stallion Show in Glasgow. Thorough-bred stallions were shown on Tuesday; Hunters on Wednesday and Thursday, with Polo and Shetland ponies thrown in, and on Friday and Saturday we had the Hackney show. The former shows were well spoken of by those who were present. So far as Hackneys were concerned they numbered fully 200. It was a breeding rather than a driving horse show, although in the afternoon of both days some good driving horses were seen. Ponies were much superior in quality to Hackney horses, indeed the ponies shown on both Friday and Saturday were a phenomenally good lot. Whatever may happen to the Hackney breed, ponies are likely to hold their own for many a day to come. The breeding of the Hackney is, however, a decaying industry. The motor car has fairly driven the Hackney off the road. The harness classes provided a series of triumphs, for Mathias 6473, owned by Robert Scott, Thornhouse, Carlisle. The best in almost every section were got by him. The action of some of his gets, notably a newcomer named Bricket Brilliant, a five-year-old bay gelding, bred by Alex. Morton, Gowanbank, Darvel, Ayrshire, was something worth considering. The produce of Mathias have, as a rule, hock action possessing a character entirely its own, and in Bricket Brilliant this action is seen at its best. Adbolton Black Prince 11314, a six-year-old black gelding by Mathias, was the champion of the driving section, and another of his sons named Carlwrie, won the Novice Class. The leading sires, other than Mathias, as tested by the group prizes, were McCababy's Leopard, and Mr. Surfleet's Buckingham Squire. The leading pony sire was Tislington Gideon.

The Glasgow Stallion Show was one of the best held for at least ten years. Seldom have a finer lot of big, well-bred horses been exhibited in a Clydesdale ring. The winner of the supreme honors, both the Cawdor Challenge Cup and the Brydon Challenge Shield, was a new exhibitor, John Samson, Drumcross, Bishopston, with his magnificent big young horse Drumcross Radiant 18323. He was got by the famous breeding horse Apukwa 14567, and his dam Rosetta 21770 was got by Royal Edward 11459. He was first last year at the H. & A. S. Show, and is a very worthy champion. The reserve for both honors was John Pollock's Royal Fern 18078, by the Cawdor Cup champion Bonnie Buchlyvie 14032; dam Silver Fern 21796, by the 1,000-guinea Silver Cup 11184. He won in the class for horses four years old and upwards. In the two-year-old class Wm. Dunlop had first with Dunure Birkenwood 18327, another son of Apukwa, and second with Dunure Kaleidoscope 18335, by Baron of Buchlyvie. The former was all but unbeaten last year, and the latter was generally second to him, although at the Glasgow Spring Show he was first. In the yearling class Mr. Brydon had first with a promising son of Bonnie Buchlyvie.

The bull sales this year were quite successful, although in no breed were prices recorded quite as high as was paid a year ago. The feature of the Perth Aberdeen-Angus sales, which came first, was the success of the Harviestoun herd of I. Ernest Kerr, which made an average of £226 16s. for five yearling bulls. Mr. Kerr had the first-prize group of them, and their average was £264 5s. The highest-priced bull was his second-prize winner, Escott of Harviestoun, for which Lord Rosebery paid 310 guineas. At the Aberdeen-Angus sale 341 yearling bulls made an average of £36 18s. 4d. apiece. Shorthorns made much higher prices. The average for 326 yearling bulls of that breed was £64 4s. 1d., and the highest price paid was 1,050 guineas. The youngster which made this money was Clipper Star, which won third in his class. He was bred by Duncan Stewart, of Millhills, Grief, and his buyer was William Duthie, Collynie. The first-prize group of them were owned by Mr. Mastone-Graham, of Redgorton, Perth. Their average price was £322. Millhills had an average of £246 15s. per seven bulls, Redgorton an average of £160 7s. for seven, and Cluny Castle (Lady Cathcart) an average of £145 10s. 7d. for five. Lord Lovat had the next best average, £139 13s. for five. At the Aberdeen sale the best prices were made by the herd of James Durno, Jacktown, Rothie, Norman who got 400 guineas for his first-prize bull Admirable Chief from Mr. James Sidey, an exporter to South America. Buyers from South America were operating at the Scots sales, as they got their cattle shipped direct from Glasgow. The first-prize bull at Perth, Redgorton Cruiser, was sold for 620 guineas to go to that part of the world. His buyer was D. MacLennan, the senior of all the exporters in that trade.

Glasgow.

SCOTLAND YET.

More Business Than Usual With Stockmen.

When commercial enterprises are talking hard times the live-stock men of the country go on doing business just the same. In certain months of the year live-stock cars from Toronto are sent West, conveying animals which have been sold to purchasers in the Prairie Provinces or British Columbia. This scheme reduces the cost of shipments, as many individual consignments would otherwise result with considerable expense to the parties interested in the deal. These are known as "Association Cars," and they are in favor both in Ontario and the West. The last consignment was made on March 10, and consisted of three carloads of cattle, horses and sheep. In the memory of R. W. Wade, Chief of the Live-Stock Branch, who has charge of this work, it was the largest shipment that has yet gone forward. Some of the individual animals were billed 100 miles West of Calgary. It requires more than a Kaiser to upset the live-stock industry of Canada.

Important to Stockmen.

Dr. F. Torrance, Veterinary Director General, writes that the Department is now in a position to favorably consider the issuing of permits for the importation of cattle, sheep and swine from any part of the United Kingdom.

FARM.

Preparing Land for Crop Production.

Editor "The Farmer's Advocate":

With exceedingly good soil and favorable weather any Canadian farmer can grow a good crop of almost anything that will grow readily in Canada. But the man who can grow a good crop of the same sort when the soil is poor or when weather conditions are unfavorable is the man who really is a farmer, while how much more deserving the title if, both soil and weather opposing, he still succeeds.

Undoubtedly the greatest factor making for profitable crop production is proper seed bed preparation together with good seeding methods. A careful study of this matter for 16 or 17 years, chiefly at Ottawa but at other points as well, convinces me that a firm bottom and a fine top are the principal requirements on all sorts of soil. These conditions mean easily accessible plant food and well conserved moisture, the one without the other is useless.

Where grain crops are to follow hoed crops our experience is that the less the land is disturbed after the hoed crop the better. To grow a good crop of grain one must have a good, solid foundation. The cultivation given the hoed crop the preceding year is just the thing to put the soil in the right condition for grain production in this respect. Further; the continued working of the surface soil while the land was under hoed crops has a summer-fallowing effect upon this top layer, and makes it the best medium possible in which to start off the young grain, grasses and clover plants. Besides this the continued stirring of this top layer while under hoed crops, having given all the weed seeds an opportunity to germinate, makes it now comparatively free from these troublesome occupants and to turn this layer under and simply put the good soil so well prepared by aeration, cultivation and weed seed germination for crop production down where all value due to its having been under hoed crop the previous year is lost. Hence, it seems to me evident that land under hoed crop for one year should be disturbed as little as possible when being used for grain production, and seeding down to grass seed the next year. Our experience here, extending over many years and including many experiments in this connection, points strongly to a minimum of surface soil being buried after hoed crop and preparatory to grain growing.

The soil prepared, the seeding is the next consideration. Neither a very heavy seeding nor a very light seeding is likely to give the best results. The very heavy seeding might do best on certain soils in certain years; but the same might also be true of the very light seeding. The medium amount has about two chances to one compared with any other quantity as being the best amount to sow in any given year. The seed should be sown about two inches deep, unless the soil is very dry, when it might go a little deeper; and if very damp then not quite so deep. As to the variety and quality, we can only say that it pays and pays well, even though the seed has to be bought, to sow the variety likely to give the best results in yield, and to sow the best seed procurable of that variety.

In our opinion no grain crops should be grown without grass and clover seed being sown at the same time, for our experience goes to show that one year under grain is long enough at any one time; and if a greater production of grain is needed than the rotation commonly followed