NDED 1866

gs are pale

anada from

vinters from

E.

nildness and est and musthe male are le where we of refinement particularly, trong-coupled may carry She is na and develop ce and in so ve a greater n of rib, in more successhard, brazen, s evidence of ecessary in a will substanres are more of sex chareative power. s them to asfemale while varies causes

In selectat importance to choose one str ed. The large mare of extreme size n e feminine and refined than others of so the proportions upon which to base a alone are no mal qualities. judgment of

There ak ditions and circumstances entering into its of a season's foal crop which may overcome the best breeding proclivities of the female. Among these governing factors may be mentioned food, labor and care.

Feeding has much to do with successful breed-Not only is a balanced ration required but the constituents entering into that ration must be chosen according to their respective merits. Corn may be added to until it forms a part of a balanced ration, yet the results are not so satisfactory as a ration of similar percentages composed of hay, oats and bran. Oats are better than corn for breeding mares; oats and bran are better than oats alone and in some trials, mares fed grass and hay with no grain produced more foals than when fed grain of any kind. The fellowing table is the result of experimental work conducted by G. L. Carlson..

No. of Mares		Average		
Bred	Feeds	Age	Foals	Cent
468	Range Feed		425	91
183	Grass in Summer	;		
	alfalfa winter	. 9.9	161	81
208	Hay, oats, bran	n. 9.2	147	71
398	Hay and corn		195	49
231	Corn, bran. hay.		117	52
306	Corn, alfalfa o	0 0	177	58
418	clover		284	68

The results of this experiment are at variance with breeders' ideas, but the difference in fodders grown in different districts and the Provinces will always prevent a unanimity of opinion. There is one object to be kept in view and that is to keep the brood mare in normal health, and as near natural conditions as possible. Grass, of course, is nature's food for the horse, and we are not surprised to learn that the brood mare under these conditions was most successful in performing her natural functions.

Saddle horses are subjected to violent efforts at times, and in addition to this the weight of makes the retention of foetus until the time of normal delivery difficult in that class of mares. Those mares producing the greatest number of foals are found engaged in farm work, especially those which are never obliged to leave the place. Freedom from over-exertion and protection from colds are the conditions which added to the proper type of mare will ensure a successful breeding season.

LIVE STOCK.

Our Scottish Letter.

The weather is a baffling theme these days. We had a magnificent winter-indeed we had any real winter weather from the beginning of November until the end of February. Rural work was proceeded with without intermission and everything promised well for an early seed time. March opened well, but after the first week rain fell incessantly in the west of Scotland and at present it is simply impossible to go on the land. Nearly all the advantage gained by the open winter has been lost, and so far as this part of the country is concerned, unless there be an immediate improvement Spring will be late and the seed will be sown in any thing but a dry bed. A curious feature is that this is by no means the universal experience. In the east and north-east of Scotland, there has been a long spell of dry weather, and so late as the month of February farmers in some parts were carting water from long distances for their stock. As I write, something like half a gale is blowing and it is a wet; dirty night. The week end was beautiful. Friday and Saturday were ideal Spring days, but since Saturday night it has been raining heavily at times, and seldom has it been altogether dry. The outlook is not cheerful, and unless the weather improves, 1914 will be a late season.

Death has been busy among prominent men in the agricultural world. The veteran, James Hope, of Eastbains, Dunbar, the greatest potato grower in Scotland, perhaps in Great Britain has passed away, having almost reached the patriarchal age of ninety. He was a wonderful man; farming the most famous of the famous red soil farms of Dunbar in East Lothian his methods and success were the last words in arable farming. His holding was like a colony, the workers of all grades, male and female, constituting a small army, and the weekly wages bill must have been enormous. The rent paid was somewhere about £5 per imperial acre, and the capital involved, must have reached a very high figure. The system of cultivation was intensive to a degree, and no visitor to Scotland could be said to have

exhausted the country until he had seen East-The fields are much more like great bains. garden plots than agricultural enclosures, and the system of cultivation led to the land being kept absolutely free of weeds, Mr. Hope in his time was a keen sportsman. He kept a pack of hounds, was for many years M. F. H. and colonel of a regiment of volunteers. Altogether as an organizer of farm labor, he was a captain of the first rank and no finer specimen of the Scottish tenant farmer ever lived. Two of his sons are in the House of Commons. John D. Hope is member for the home county of East Lothian, while Harry Hope who is his father's successor in his farming operations, is member for Buteshire, consisting of the three islands of Bute, Arran and Cumbrae in the Firth of Clyde. unique honor was paid to Harry Hope last week. He was presented with his portrait in oils, the result of a one-shilling subscription from constituents. Altogether we Scottish agriculturists are rather proud of the Hopes.

Colin M. Cameron, one of the best-known and most successful breeders of Shorthorns in Rosshire also passed away last week. He was not an old man, having scarcely reached his sixtieth year, but for some time his health has not been good. He was a close friend of the famous Argentine exporter, Dan Maclennan, who like himself was a native of Beach Isle, and he took an active part in promoting the testimonial to Mr. Maclennan from Shorthorn breeders. Cameron bred many high-class Shorthorns and was an excellent judge. He was factor on several properties in the north of Scotland and a trusted witness in cases connected with land and stock. As one of the leading men in the northern counties he will be greatly missed.

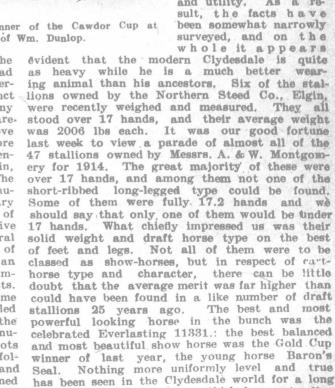
Ulster at present bulks large in the world's Recently we had an opportunity of seeing Ulster agriculture at its best. The town of Bal-

garded as a crop that pays very well. In one creamery visited the money paid out for milk in 1913 amounted to £35,000, the average price to the farmers, taking the milk season throughout, was about five pence per gallon. Winter dairying is nowhere practiced, the feeling of the farmers being that the cost of feeding stuffs would exceed any profits that might be looked for. As an illustration of the success of small tenancies where there is security of tenure, the experience of Ulster is worth much. The charter of agricultural liberty and progress in Ireland was Gladstone's Land Act of 1881. It gave security of tenure, and this encouraged the farmers to improve their houses and homesteads. But it also gave freedom of cropping, and free sale of the tenants' improvements, and this last created a dual ownership, the difficulties of which could only be extricated by a scheme of Land Purchase which at last came during the administration of the late Mr. Wyndham. Under this scheme the tenant becomes proprietor at the end of 681 years, and the State meanwhile finances the transaction as between the owner and the occupier. It is a great scheme, and it has worked an agrarian revolution in Ireland. Emigration has been checked, tillage has been revived, and the Irish farmer is relatively a much more prosperous individual to-day than either his English or Scotch neighbor. He enjoys advantages in tenure of which they are wholly ignorant, and security for his capital, the absence of which has often been a disaster for the British

The later bull sales maintained the high range of prices set at the earlier. The existence of foot and mouth disease alike in England and Ireland no doubt operated to the success of the Scotland. The top price paid for a sales in Galloway bull stirk was £52-10s (50 gns.), the seller being William Donaldson of Dunkyan, Killearn, the head of the

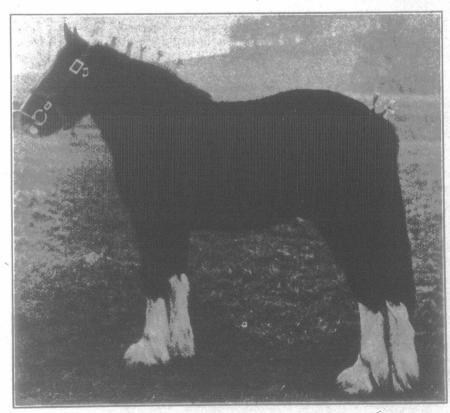
famous shipping firm of Donaldson Bros., Glasgow and Montreal. The top price of an Ayrshire bull stirk was £170, a record figure at an auction sale in Scotland for an animal of that kind. The fortunate exposer Thomas Scott Netherhall, Sandilands, Lanark, whose stock has long enjoyed a first-rate reputation. Mr. Scott was late in recognizing the merits of a Milk Record, but he had the cows that made good records, and when the public tester gave his results what was generally suspected was found to be true of the Netherhall herd. At Lanark, 250 Ayrshire bull stirks were sold at an average price of £16.3.6, a very fine return, due almost wholly to the public milk records.

We have had a good deal of discussion lately about the modern Clydesdale, his weight and utility. As a result, the facts have



time. He is a very heavy thick horse standing

on limbs of matchless quality with first-class



Dunure Refiner.

First-prize two-year-old Clydesdale stallion, and winner of the Cawdor Cup at Glasgow Stallion Show, the property of Wm. Dunlop.

lymoney is situated in North Antrim, and the farmers around are an exceptionally go-a-head race. It would be hard to match them in enterprise, and they have the keen commercial instinct of the Scot developed to an almost uncanny degree. Farms in the neighborhood named are. not large. One of 70 acres is regarded as above the average, and most of them are not more than 50 acres in extent. The people are a phenomenally thrifty race, driving a hard bargain, but industrious and honorable to a degree. Ulster Scot is perhaps the toughest piece of humanity on earth, and his thrift and industry have transformed the least promising part of Ireland into the most prosperous. Co-operative methods of handling all kinds of agricultural produce have been adopted, and the system of collecting, assorting and marketing eggs is an eye-opener to the visitor, so also is the creamery system of handling milk and its products. In Ireland a creamery is strictly what its name declares it to be. Only the cream is handled there: the separated milk is returned to the farmer to feed his calves. The cream is manufactured into butter or it is shipped to the Scots or English markets fresh, and used on the following day. A great trade is done in pigs and bacon, and flax is still a crop to be reckoned with in Ulster. It is an expensive and exhausting crop to raise, but in spite of all it is re-