

pitch of efficiency. Hog feeders who have tried this practice pronounce the effects most gratifying, and the benefits unmistakable. The wood ashes may have a little, very little, salt mixed with them to advantage. Any man who holds that the pig is not deserving of care and attention will never make a dollar raising them. Whilst as the scavenger of the farm they are invaluable, and will more than earn their keep for that purpose alone. But what is the general practice of keeping these animals? Any place seems good enough for a sty—dark, damp, and hence unclean. No man would think of keeping any other animal under such conditions. Give your animal plenty of light; let the sun shine into the pig sty, by making large windows that can be opened, admitting fresh air and sunlight by that means. See that the pens are kept clean, give plenty of straw, and you will soon find that pigs are quite as clean as any other animal. It is often said pigs delight to wallow in the mud. That is no doubt true; at the same time it must not be forgotten that they are carrying out a natural instinct, for they are of the pachydermatous class of animal—the same as the hippopotamus that delights in taking a mud bath occasionally. We hold the opinion that the best animal to grow fat and thrive in the least possible time is a half-bred pig—a direct first cross from pure stock to the ordinary stock of the district, and may be described as a grade pig, and are always so described. If pigs are not intended for breeding purposes, they should be all castrated and spayed at the time mentioned above, and it will be found that the average loss by the operation will not exceed one per cent., if ordinary care is taken.

Our Scottish Letter.

The month of April, 1892, will long be remembered in the annals of Scottish stockbreeding. The sales of Clydesdales at Seaham Harbour, Montrave and Kilmarnock revealed an amount of vitality in the home trade in Clydesdales which completely belied the gloomy vaticinations in which some indulged. The only class of stock for which there is a slackened demand is that of stallions. The sudden collapse of the American trade, through the operation of the new restrictions, has rendered all but the very best of Clydesdale, Shire and Suffolk stallions a drug in the market. Mares and fillies, however, never sold better than they did at the sales during April, and the sensational figure of £1,050, paid for a two-year-old filly, was not more notable than the high average of prices realized for females at all of these sales. The Montrave sale will long remain the record sale of Clydesdales. Prince of Albion has proved himself to be a wonderfully uniform breeding horse, and his produce are marked by strong family resemblances. Fifteen yearlings and two-year-olds got by him made the high average of £167 7s. 4d. each.

Macgregor mares are also a splendid item in an auction sale, and their high average at Montrave of £185 17s. 0d. each for five of three years old and upwards is an achievement possibly unequalled of its kind.

The steady and unmistakable growth in popular favor of the produce of the Londonderry stud horse Castlereagh is well illustrated by the following results:—

In	1887	their average price was	£	31	7s.	3d.
"	1888	"	"	"	80	12 3
"	1889	"	"	"	106	4 6
"	1890	"	"	"	109	14 6
"	1891	"	"	"	130	19 9
"	1892	"	"	"	145	57 0

Castlereagh himself is a strong, powerful, well-colored horse. Perhaps no horse of the present day is equal to him in the formation of his top and general outline as a draught horse.

The great show at Kilmarnock on 15th April, and the scarcely less interesting gathering at Ayr on 27th, afforded illustration of the success which has attended the breeding of Clydesdales in the south of Scotland. At Kilmarnock there was perhaps as grand a display of Clydesdales as has ever been seen; and of the eight first prize winners, four were bred in Galloway, two in Ayrshire, one in Lanarkshire and one in Renfrewshire. The two best animals in the show were, without doubt, the two that

were awarded the championships—Mr. David Mitchell's magnificent strawberry-roan mare Sunray and Mr. Andrew Montgomery's three-year-old stallion Prince Patrick. The former has had a remarkable career. Bred by a small farmer in Gartcosh Parish, Lanarkshire, she was unable when a yearling to take any position in the show ring, and was sold at a small price to Mr. David Riddell. He sold her to Mr. David MacGibbon, Chamberlain to the Duke of Argyle, in Kintyre, who secured the championship with her at the Kintyre show in 1886. She was then two years old. At the Glasgow summer show, then held in June, Mr. MacGibbon sold her to the late Mr. John Simpson, Drumfreck, Helensburgh. In his hands she secured a long succession of show-yard distinctions, and at his dispensing sale she became the property of Mr. James Johnston, Lochburnie. Her career in his hands was again one of unbroken triumph, except one season when she aborted, and consequently was not at all like her former self. She, however, was quick to recover her form, and two years ago at the Lochburnie sale she was sold to Mr. David Mitchell, of Millfield, for a splendid price. She has gained many prizes since, but never in all her history did she so captivate the popular eye as on her appearance at Kilmarnock a fortnight ago. She has foaled within the past few days to the celebrated horse Prince Alexander, and her career as a breeding mare will be followed with great interest. It is hardly necessary to remind the reader that she is a get of the celebrated Merryton show horse Prince of Avondale and a well-built Darnley mare, which is now also owned by Mr. Mitchell.

Mr. Andrew Montgomery's Prince Patrick has fairly taken the popular fancy. He was bred by Mr. W. H. Rolston, Culmore, Stranraer, and his sire was Prince of Wales, dam a mare by McCamon. He is a horse of great substance and size, with beautiful quality, combined with strength of bone. His action is simply perfect, and there are those who regard him as the best stallion of his age. Last year he was second to Prince Alexander at the Royal, and to Rosemount at the Highland. The latter is dead, but the former would have had enough work to hold his own against Prince Patrick now. His own sister, Enid, is a wonderfully sweet mare, and has gained numerous prizes, and in her new owner's (Mr. R. Sinclair Scott) hands she was second at Ayr in a fine class of brood mares. Their dam is a capital mare, and it is to be hoped that she may breed many more like Enid and Prince Patrick. The latter is the Stirling premium horse this season, and as the farmers there were smart enough to engage him at the Highland Society's Show in July last they have got him well worth his money, and are likely to make plenty of money by means of him.

It was another worthy circumstance that in the family competitions the two best groups were bred in Galloway. The competitors were Mr. James Lockhart's young horse Handsome Prince, a son of Prince of Wales, and the celebrated prize mare Pandora, by Darnley, and Mr. Andrew Montgomery's veteran, Macgregor. The success of this famous horse in competitions of this class—in which five yearlings have to be produced got by one sire—has been one of the leading features of the Scotch show yards for the past ten years, and the fact that during that long period, although he has never failed to compete even for one year, Macgregor has only twice been placed second, is a striking testimony to the uniform merit of his progeny. On the present occasion it was felt that he had a stiff opponent to face, and he was somewhat handicapped through four out of his five of a family being fillies, while the five produce of Handsome Prince were all colts. With a bench of six judges he, however, emerged triumphant, the award being made with the approval of at least four out of the six. The produce of Handsome Prince were an excellent lot; they were in first-rate form, and were greatly admired when three of the five were first, third and fourth in the class of yearling colts. Considering that the horse was only two years old when these prize-winners were got, and that there were less than a score of foals to select from altogether, the position taken by Handsome Prince must at once be pronounced unprecedented.

Vanora was first in the yeld mare class at Kilmarnock, and her son, by Prince of Kyle, named Vanora's Prince, was on the same day first in the class of two-year-old colts. Both animals are owned by Mr. Geo. Alton, and occupied the same positions in competition with different animals at Ayr ten days later. The same remark holds good regarding Mr. Robert Murdock's massive Prince Lawrence filly, Duchess II., three years old, which gained second prize last year at the Highland. She is a black filly with a fine top and good action, and was bred by Mr. John M. Hannah, Gervan. She was first both at Kilmarnock and Ayr.

Two-year-old fillies at all the shows this season so far are abnormally good. At Kilmarnock Mr. R. Sinclair Scott was first with the Prince Lawrence filly Scottish Ruby, bred by Mr. Walter S. Park, and Mr. Leonard Pilkington was second with a beautiful filly by Flashwood, bred by Mr. Robert McClelland, Balfarn. At Ayr this latter was not forward, but another daughter of Flashwood, the noted Lillie Langtry, bred by the Earl of Galloway, was in the field and beat Scottish Ruby, being placed first, while the Ruby was second. Lillie Langtry is one of a group of three sisters bred by the Earl of Galloway and got by Flashwood, out of Maritana, by Premier Lyon, gr. dam the Barneau mare, by Drumflower Farmer. All of them have been purchased by Mr. Jas. A. Wallace. The eldest, Mary Anderson, has been a noted prize-winner, and was second at Ayr. Lillie Langtry was first last year at Ayr, Glasgow and the Royal, and the youngest, Ellen Terry, was fifth at Ayr. She and Lillie Langtry have been sold to Mr. David Mitchell, of Millfield, whose stud they have now joined.

The third prize two-year-old filly at Ayr was Lady Muriel, owned by Mr. Andrew Mitchell, Barcheskie. She was first at Castle Douglas in the beginning of April, and last year was a well-known prize-winner. Her sire was Prince Lawrence, and she was bred by Mr. W. Watson, Ochterbury Mains, Forfar.

The class of yearling fillies at Kilmarnock was one of the finest displays of young Clydesdales seen for many a day. There was a great struggle for first place between a very sweet filly, Royal Rose, bred and owned by Mr. And. Montgomery, and got by Macgregor, out of Black Sally, by Top Gallant, and a handsome big filly, dark in color, and of Prince of Wales type, shown by Mr. James Lockhart. She was got by that gentleman's deceased horse, Prince Fortunatus, out of the Darnley mare that is dam of the celebrated Lady Louisa. Royal Rose is a popular favorite—indeed, some go the length of characterizing her as the best yearling seen for many a day, and her victory would have been popular. However, by a majority vote she was put second, and Mr. Lockhart's filly got first place. The latter repeated her victory at Ayr, where she appeared in better form than at the earlier show; but Royal Rose was not there exhibited.

The first prize three-year-old stallion at Ayr was, like the champion at Kilmarnock, a Galloway-bred son of Prince of Wales, namely, Garthland Prince, owned by Mr. Matthew Marshall, Stranraer. He is a big, gay, well-colored horse, and like so many other good horses by the Prince, is out of a Darnley mare.

The other notable incident of the Ayr meeting, so far as young horses were concerned, was the unqualified success that attended the stock got by Prince Fortunatus. As has been intimated, his daughter was first amongst the yearling fillies, and, in addition, two of his sons were first and second amongst the yearling colts. The breeding of a two-year-old colt that left stock of such quality is worth looking into. He was got by Prince of Wales, and his dam, Miss Meekie, was got by Prince George Frederick, a well-known prize horse, whose sire was Prince of Wales, so that Prince Fortunatus was the produce of a stallion and his own grand-daughter. The breed of the dam have a high reputation, and the gr. dam was a well-known breeding mare and the dam of several prize-winners. She was got by Logan's Lord Clyde 477, a celebrated prize-winner. The three prize-winning produce after Prince Fortunatus are, it is worth noting, all out of Darnley mares.

The brood m... choice pair—S... owned by Mr. first prize as th... Mr. Scott is la... which many fir... be bred.

Maryhill Sh... by breeders and... of Lanark, Ren... was held on 29th... success. I do n... can recall a be... show ground ou... boundaries. E... exhibition, an... man's Princess... first. Mr. Wil... Forest, from Br... ed, was an unc... got by King of... at the Highland... in the class of... year-old bred i... great horse Lo... awarded the ch... the show. Mr... first in the th... Maud, a level... by Top Knot, ... with the swee... Excelsior. Th... owned and bro... death, Sterling... worthy of noti... winners, no 1... Champion, ar... Lothian, Top... got by the Ar... The winning... in the three-y... Gallant Potent... Glasgow prem... class Mr. W... splendid horse... yearling class... Prince of Albi... the Champion... Prince of Al... winners in the

On the succ... hinges the... the mature an... follow or assis... success in bre... in the four br... cattle, sheep... the young an... supplied. T... forming bone... finish and ro... monize the w... is not only a... tains all the... the componen... as all the ess... but is also in... supplying th... strain upon t... ing table giv... from the cow...

Casein, or fle... Butter fat... Milk sugar, f... and fat... Ash... Water...

Thus the c... casein in the... when chemis... bones, and in... able of reach... ly shows tha... the growth