Our Scottish Letter:

The leading feature of the female Clydesdale classes at Aberdeen was the superiority of the stock got by Messrs. P. & W. Crawford's solid big horse, Darnley's Hero. He was sire of the first prize brood mare, and the first two-year-old filly, both of them really first-class animals. The brood mare is owned by Mr. John Sleigh, jr., Mains of Strichen, and was bred by Mr. James Lockhart, Mains of Airies, out of the dam of the Balmedie Royalist, Darnley's Last, and Sir James Duke's Winetti. The Strichen mare, Queen of Hearts, as she is named, will take a position among the best of them, being wonderfully sweet and evenly balanced. The first two-year-old filly is a mare of rare quality, owned by Messrs, Cocker, Hill of Petty, Fyvie. She has since been purchased by Mr. W. Park, Brunstane, Portobello, and is one that promises well for the future. The Balmedie stud furnished the first three-year-old and the first yearling filly in Queenie Flashwood and My Lady respectively. Both are mares which should do good service in the future as breeding stock. Mr. George Bean has an excellent stud at Balquhain Mains, Pitcaple, which provides some of the best prize-winners at the Aberdeen shows. Mr. Bean is one of the best judges of Clydesdales in Aberdeen, and he has always something better than the average to be reckoned with in the show-ring. This season was no exception; Balquhain furnished as many good exhibits at Aberdeen Jubilee show as any other stud in the north, with the possible exception of Balmedie.

The Edinburgh show of the H. and A. Society has now been held, and it is undoubted that no such collection of stock peculiar to North Britain has been seen in the show-ring for a long time. The show has been a great success financially, the attendance having been greater than at any show held for a number of years—indeed since the centenary show of 1884. The great troppy of the exhibition was the three cups presented by His Royal Highness, the Duke of York, K. G., for the exhibitors gaining the greatest number of points for horses, cattle and sheep respectively. The cup for cattle was won by Mr. Leonard Pilkington, Cavens, Kirkbean; that for horses by Mr. John Gilmour, of Montrave. Leven. Fifeshire, and that for sheep of Montrave, Leven, Fifeshire, and that for sheep by Mr. David Buttar, Corston, Coupar-Angus. Mr. Pilkington's cattle exhibits were wholly Ayrshires and Galloways. The exhibitor who ran him closest was Mr. Thomas Valentine Smith, Ardtornish, Morvern, Argyleshire, whose exhibits were wholly West Highlanders. He had actually as many points as Mr. Pilkington, but the latter gained most first prizes, hence he was declared the winner. Mr. Gilmour's chief opponent was the Marquis of Landonderry, who gained numerous prizes for Shetland ponies, of which he is the most extensive breeder in Great Britain. He also gained first prize for a two-year-old Clydesdale colt named Holyrood, got by Gallant Prince out of the prize mare, Jeanie Darnley. Mr. Buttar is a leading breeder of Shropshire sheep in Scotland, but not the first. He has, however, been their keenest exhibitor and all his exhibits this year were Shropshires. There was heavier competition than we have ever seen at a show of the Highland, but it was nothing like so keen as in the classes for native breeds, such as the Blackfaced and Border Leicesters. Mr. Howatson, of Elenbuck, the well-known breeder of Blackfaced sheep, ran a neck-and-neck race with Mr. Buttar, but he had not as many first prizes as the latter gentleman, having more formidable opponents to face.

Shorthorns were generally admitted to be the best show of the breed seen at the Highland for many years. There was pretty keen rivalry between the patrons of the Aberdeen-bred cattle and the Booth cattle, and it was understood that of the two judges one favored the former and the other the latter. However, on the whole the northern-bred cattle came best through the conflict, although for the Tweeddale gold medal championship it was a tie between the famous "New Year's Gift," owned by the Earl of Feversham, and bred by Lord Lovat, and Mr. W. Graham's "Fairy King" from Edengrove, a Booth bull bred by the Duke of Northumberland at Alnwick castle. Mr. John Crau, Kirkton, Bunebrew, a well-known patron of Aberdeen-Angus cattle, was called in to decide and made the award in favor of New Year's Gift. The second prize aged bull, Her Majesty's Fairfax, was only a very little behind New Year's Gift. He also is what is generally known as an Aberdeen-bred

only a very little bening New Year's Gift, the also is what is generally known as an Aberdeen-bred one. Lord Boycott, a Booth bull, was third.

The English-bred bulls had the best of it in the two-year-old class, with Fairy King as their leader, the third and fourth being Aberdeen bulls; but in yearling class the northagain was at the top, the Earl Rosebery being first with Sittyton Seal, the highest-priced youngster at the Collynie sale last year. In the female classes for aged cows Lord Brougham and Van got first and second prizes with Booth-bred ones; but in the class of two-year-old heifers was found what was regarded as the best female exhibited—Mr. George Harrison's Warfare, bred by Mr. S. Campbell, Kinellar, Blackburn. She was first at Newcastle, and is capable of doing signal warfare for the northern cattle on many a battlefield. Her Majesty was second with Bouquet, a daughter of New Year's Gift, the latter having been in Her Majesty's pos-

session, and sold at her sale in 1892 for 1,000 gs. Booth blood, as represented in the herds of Lord Polwarth and Mr. Thompson, Inglewood, had the best of the prizes in the yearling class. Mr. Thompson's herd, however, is not recognized as so distinctively composed of Booth blood as Lord Pol-

In the classes for Aberdeen-Angus cattle the Ballindalloch representatives were in great force. Mr. Bolden was first in the aged bull class with Esmond of Ballindalloch, but Sir Macpherson Grant's own bull Eltham, the two-year-old, beat him for the championship. Mr. Grant, Mains of Advie, showed some excellent stock, got from other than blood usually identified with Ballindalloch. His fourth aged bull, Rustler, is an animal of grand scale, and was well brought out. The Earl of Rosebery also exhibited some admirable stock, and got second prize in the two-year-old class with Marquis of Moray 9387. Mr. Whyte, Spott, Kirriemuir, showed superior stock, and in the cow classes Mr. Arthur Egginton, South Ella, Hull, was first, and secured the championship with Equality, a beautiful cow—indeed a model. She was bred at Ballindalloch, and is a choice animal if not very big. Mr. John Grant was second with his famous prize-winning cow Ladybird. Mr. Geo. Smith Grant, of Anchorachan, with Legend, Miss Morrison Duncan, of Naughton, with Elena of Naughton, and Sir George Macpherson Grant, Bart., with Gentian of Ballindalloch, were first prize winners in the various classes.

The leading prizes in the Galloway section were gained by Mr. Leonard Pilkington, with the bulls Henry of Tarbreoch and Cedric 2nd of Tarbreoch, and Mr. W. Parkin-Moore, Whitehall, Mealsgate, with Macdougall 3rd of Tarbreoch—a wonderful record for animals bred by Mr. James Cunningham, and possibly never surpassed. In the female classes Mr. Pilkington was first with Tidy 5th of Drumlaurig; and Sir Robert Jardine, Bart., both with Lady Vaudeville of Castlemilk and Mable of Castlemilk.

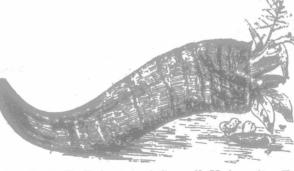
The premiums for the Highlanders, as I have already stated, went chiefly to Mr. Valentine Smith, of Ardtornish, but Mr. I. R. Campbell, Shinniss Lairg, secured a very fair share of the money also.

Ayrshires were a better show than has been seen at the Highland for many years. The owner and breeder of the champion bull, Duke of Mauchline, was Mr. Hugh Drummond, Craighead, Mauchline; and of the champion cow Mayflower 3rd, Mr. Robert Wilson, Mansurals, Bridge of Weir. Other winners of first prizes were Messrs. R. Osborne, Wynholm, Lockerbie, with the aged bull Cockie Leekie; and Mr. Pilkington, with the yearling Field Marshal. Mr. Alex. Cross, of Knockdor, had the first prize cow in ca'f, Beauty of Holehouse 6376; Mr. Robert Wardrop, Garlaff, New Cumnock, the first two-year-old, Lady Diana; Mr. Pilkington, the first yearling, Braw Lass.

For the first time in its history there was a really good display of Jersey cattle at the Highland. The prize money was chiefly subscribed by Major Wardlaw Ramsay, of Whitehill, and some friends.

The salient features of the sheep classes, in addition to the supremacy of Glenbuck amongst the Blackfaces, and Mr. Buttar with the Shropshires, were the success of Mr. Jack's flock at Crichton Mains in the Border Leicester section, and the Hindthrope flocks with the Cheviots. Messrs. Cadzow, Borland, Biggar, had great credit in the Blackfaced classes with some of their young animals, which were undoubtedly exceptionally good representatives. The Duke of Argyle has also a choice flock at Ballymenach, largely drawn from Overshiels stock—a famous fountain-head of much, if not, indeed, all the meritorious Blackfaced flocks. Our notes on the horses must be reserved until next issue.

Dehorning.



Prof. I. P. Roberts, of Cornell University Experiment Station, ornaments the cover of his last bulletin with the above illustration, the idea of which is that the farmer by dispensing with the horns of his cattle will come into possession of a "horn of plenty." This bulletin says:—

"The practice of removing the horns from cattle was first publicly advocated by H. H. Haaf, of Illinois, about 1885 or 1886, and since that time has come to be extensively practiced in all parts of the country. It has been found to be of great practical utility in rendering animals more docile and quiet, in rendering them much less capable of injuring each other or mankind, and in reducing the space necessary for safe housing and shipping. The operation, though somewhat severe, has been found to be a very safe one, usually leading to little or no functional derangement, and not followed by severe pain or profuse hemorrage."

The result of the Ontario Commission is given, and a recital of litigation on account of alleged cruelty, of which the following is a summary:—

"In the United States, so far as we have been able to learn, all trials upon charges of cruelty to animals by dehorning have resulted in the acquittal of the acquired parties.

of the accused parties.

"In Canada at least two trials resulted in the acquittal of the accused, but in a third trial the conviction of the parties resulted in the appointment of a Government Commission which made a report strongly recommending the practice and urging the passage of the necessary legislation to give it effect.

give it effect.

"In Great Britain there have been decisions on both sides, those in Ireland and Scotland being in favor of the legality of the practice, and those in England, notably that of Lord Chief Justice Coleridge and Mr. Justice Hawkins, against. Of twenty judges of higher courts who have passed upon the subject, sixteen declared the practice to be legal, while four pronounced it illegal."

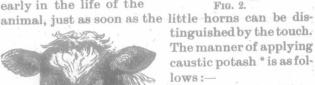
As many prefer to prevent the horns from growing to sawing them off, experiments with chemical dehorners were conducted under the direction of James Law, Professor of Veterinary Science, five calves being selected for the purpose. Caustic potash was found the most effectual means, and was used exclusively in subsequent experiments. Since the first trials the horns on seven other calves were successfully prevented by a single application to each horn, but in no case was the application made when the calves were more than one month old.

Fig. 1 is the head of calf No. 1; growth of horns destroyed by caustic potash paste.

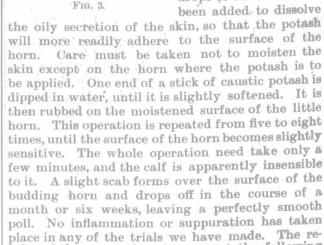
Fig. 2 is the head of calf No. 2; left horn destroyed by sulphuric acid mixed with sulphur.

Fig. 1. Fig. 3 is the head of a calf with horns destroyed by stick caustic potash applied in small quantity to the embryo horn early in life.

The results of all the experiments made at this station lead us to believe that the use of caustic potash is by far the easiest, most humane and most certain method of securing hornless cattle. The best time to apply preventive reagents is early in the life of the



The hair should be closely clipped from the skin and the little horn moistened with water to which soap or a few drops of ammonia have



1. That for efficiency, cheapness, and ease of application, stick caustic potash can be safely recommended for preventing the growth of horns.

2. The earlier the application is made in the life of the calf, the better.

sults of these experiments warrant the following

As a great many patented chemical dehorners are now being sold, one of them, sold at \$1 per bottle, was analyzed, and proved to be a solution of caustic soda and water, costing in all about 1½ cents per bottle! It would prevent the horns from growing, but the price was outrageous.

*Caustic potash comes in the form of round sticks about the size of a lead pencil. It may be had at any drug store, and should be kept from exposure to the air, as it rapidly absorbs

