

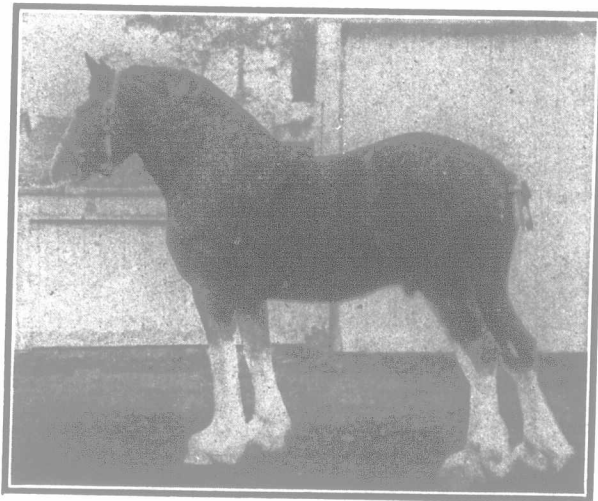
this added terror. Labor was scarce, and wages were high. The milk-trader drives a pretty hard bargain with the milk-producer, and unless something is done to alleviate the situation there is just the possibility that we may experience a milk famine. A food Controller has been appointed, in the person of Lord Devonport, and a shipping Controller has been appointed in the person of a Glasgow shipowner, Sir Joseph P. Maclay, and both of these gentlemen are entrusted with duties which may have an important bearing on dairy farming.

Stockbreeders of all classes have had the time of their lives. At the pedigree sales all breeds made record prices and averages. The average price of 1,576 head of Shorthorns sold was £76 14s. 6d. as against £49 4s. 8d. for 1,465 head in 1915. The highest price of the year was £2,310 paid for a bull calf at William Duthie's sale in October. This is the record price for a Shorthorn bull calf in this country. The average price of 1,409 Aberdeen-Angus cattle was £35 5s. 0d. as compared with £30 14s. 1d. for 1,411 head in 1915. Females of this breed made unusually high prices. The highest price paid for a bull was £462, and for a cow £220 10s. 0d. The average price for Galloways also showed an upward tendency, but the results for this breed are not tabulated with the same care as are the results for other breeds. Highlanders at the Oban bull sales showed an average of £34 4s. for 57 as compared with £31 8s. 8d. for 61 head in 1915. The most striking advances, apart from those reigning in the Shorthorn world, were those in connection with British Holstein cattle and Ayrshires. Both breeds are in high favor among dairy farmers, and at all sales record prices were received. The great attraction in what are called the Dutch cattle is their heavy milk yield and unquestioned value for feeding purposes when service in the dairy is at an end. At the Cradlehall dispersion sale in Inverness-shire in August, 39 cows made an average of £85 16s. 7d. an extraordinary price for dairy cows. Eleven two-year-old heifers made £74 7s. 2d. each, and ten yearling heifers £53 13s. 1d. At one of the English sales 45 head made an average of £112 6s.

The Ayrshire has entered upon an era of extraordinary prosperity. No one could have supposed when the late John Speir got the Highland Society to inaugurate Milk Records that inside a decade prices would have advanced as they have done. If ever a man's public services were posthumously vindicated those of Mr. Speir have been. He toiled in season and out of season to get a public system of recording milk yields established. He was laughed at and derided by the men whose sole idea of what constituted a good Ayrshire was that it should win a prize for fancy points in a show-yard competition. Yet he held on his way, and at long last succeeded in convincing the National Society that he was not a dreamer. During the past few months bull stirks of the Ayrshire breed have been sold by public auction for 380 guineas, 320 guineas and 300 guineas. The herd which made the two highest prices was that of John Logan, Bargenoch, Drougan. He disposed of 17 bull calves on 23rd November, and their average price was £91 10s. 8d. with the two top prices named. The 300 guineas was paid at Thomas Barr's sale at Hobsland, Monkton, on Saturday, 2nd December, when 18 bull calves or stirks made an average of £57 2s. 2d. The Bargenoch herd was always held in good repute, but in these later years it has eclipsed all its past achievements.

Clydesdale-horse business has also been phenomenally brisk. There has been no export trade worth speaking

about, but the home trade has known no restraint, and Clydesdale draft horses were probably never worth higher prices than at the present hour. At the Lanark sales in October a four-year-old gelding made £134 and at Perth a month earlier a six-year-old gelding made £132. Stallion hiring for 1917 has gone on steadily all through the year. Many horses have been hired for 1918, and a month ago, James Kilpatrick hired his young horse, Craigie Excelsior to Central Ayrshire for 1919. Sensational prices cannot be recorded as in 1915, but at the few dispersion sales which took place prices ruled high. In February a sale was held in West Cumberland when six head made an average of £196. At the Uppermill dispersion in May 23 head made £106 16s. 6d., and at Crannaboy the day after—(also in Aberdeenshire) 20 head made £127 5s. 8d. These figures were eclipsed at the Balgreddan dispersion sale in Kirkcudbright, also in May, when 12 head made an average of £146 10s. 9d. As an illustration of the value of ordinary work horses the following average results of the great four days' sale at Lanark in October may be interesting. Two-year-old geldings, numbering 288 made £54 4s. 6d., 228 two-year-old and three-year-old fillies made £66 13s. 4d.



**The Count of Hillcrest.**

First in his class at Guelph, 1916. Exhibited by T.H. Hassard, Markham, Ont.

Sixty three-year-old geldings made £67 6s. 140 colt foals made £30 8s. 6d., and 98 filly foals £46 4s. 2d. The leading sire of the year as judged by show-yard tests was William Dunlop's Dunure Footprint 15203. He made a clean sweep of almost everything. His progeny exhibited at the seven principal shows numbered 51, and among them they secured no fewer than 97 prizes and 7 champion prizes. In the 97 are included 21 firsts, 19 seconds and 20 thirds. The second best record was made by Dunure Footprint's famous sire, Baron of Buchlyvie 11263. He was represented by 18 animals which secured 45 prizes and 6 champion prizes. In the 45 were 21 firsts, six seconds and an equal number of thirds. Apukwa 14567 had 12 representatives and 27 prizes. Bonnie Buchlyvie 14032—fifteen representatives and 23 prizes. These are by far the most successful sires. Of the first ten sires on the list eight are alive, and Bonnie Buchlyvie has a very large number of his sons hired as premium horses for 1917, 1918 and

1919. Baron's Pride 9122, had by far the largest number of premium horses travelling in 1916.

Smithfield Club Show was held in the first week of this month as usual. There is some doubt as to whether it will be held next year. The shows of the Royal Highland and of the Highland and Agricultural Society of Scotland have been abandoned. The former was to be held at Cardiff and the latter at Edinburgh, but there is every likelihood that men will have more serious matters to think about in July. It has been resolved by a narrow majority to go on with the Ayr show in the end of April. There was something stolidly John Bullish in the holding of the Smithfield Club Show this year. Undaunted by Zeppelin raids and almost within hearing of the big guns in the north of France, the bucolic element thronged London as of yore in the first week of December. The exhibition of live stock was of an unusually high order of merit. His Majesty the King had four breed championships and won both the championship and the reserve for the best animal bred by exhibitor. His Majesty has splendid herds of Herefords, Shorthorns and Devons at Windsor, and his Hereford bullock, which came very near being champion of the show, is one of the best representatives of his breed ever seen at Smithfield. The reserve to him was the white Shorthorn steer, Carol, from Windsor. He was first last year, and to our thinking is a beauty. Undoubtedly he is too light of his flanks and thighs, but he is wonderfully straight above, and a very gay animal on parade. The champion of the show was the Aberdeen-Angus steer, Neraska owned by J. J. Cridlan, Maisiemore Park, Gloucester. A well-known breeder of Aberdeen-Angus and perhaps better known as a London west-end butcher. Neraska was not bred by Mr. Cridlan, but by Francis Gilbert, Whiteside, Alford, Aberdeenshire. In the opinion of the breed judges there was a better representative of the breed in the yard than he—viz. J. F. Cumming's beautiful young heifer Enamour II, which won the junior champion cup both at Edinburgh and London. This heifer was bred at Glenfaleas in Banffshire, and her sire was Black Jacobus of Ballindalloch. Messrs. J. & G. Grant of Glenfaleas, also bred the best cross-bred at the show, a heifer which was got by the same sire. She is owned by Mr. Cridlan and is a wonderful animal. In the carcass competition Aberdeen-Angus blood also asserted its superiority, taking the championship and the lion's share of the honors. Thomas Biggar & Sons, Dalbeattie, showed a splendid Galloway bullock, named K. O. S. B. He was breed champion both at Edinburgh and at London, and may fairly be claimed as the best butcher's beast at either show. He was worth more per lb. to the butcher than any other of the breed champions. It is rather strange that at shows ostensibly run for the purpose of showing the best and most profitable beef and mutton champion, honors should so frequently go to animals which are not worth nearly so much per lb. to the butcher as others that are passed over. The explanation of course is that the question of early maturity has to be taken into account and the length of time taken to put on a certain weight of flesh. When this phase of things comes into play the Galloway gets left, and many a time the Shorthorn gets a look in. In the finals, however, when quality of flesh as well as rapidity of laying it on have both to be considered, it is very difficult to dethrone the Aberdeen-Angus bullock or heifer.

Here endeth our correspondence for the marvellous year 1916. May 1917 bring prosperity to our readers and peace to a sorely distracted earth.

SCOTLAND YET.

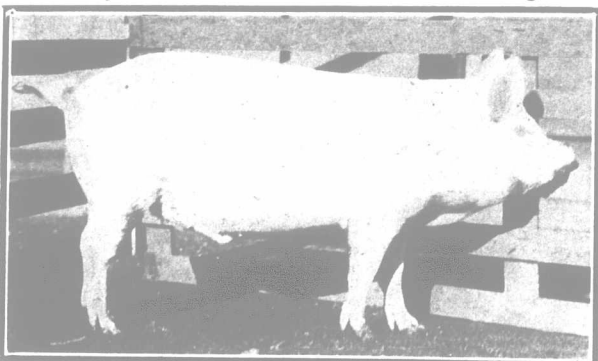
## Abattoir By-products and Their Industrial Significance.

The large packing plants have copied one of Nature's laws, known as "the indestructibility of matter," to a marvellous extent. Occasionally the squeal of a pig the bleat of a sheep, or the bellow of an ox, gets away, but seldom does anything else in the anatomical make-up of an animal escape the wonderful utilizing efficiency of the modern abattoir. The carcass of a cattle beast, the sheep or the hog, is only one portion of the animal which the packer looks upon as valuable, for those parts usually discarded, when butchering on the farm, are manufactured into commodities which the world could now hardly do without, and some of these outputs of the up-to-date packing plant, are of inestimable industrial value. The uninitiated are prone to consider an abattoir as an institution where certain classes of live stock are converted into carcasses, quarters, or different cuts of meat for human consumption, and in this conception they are correct, but a visit to one of these establishments will reveal a manufacturing plant where the parts, usually looked upon as valueless, are converted into commodities varying from fertilizer—worth around \$30 per ton—to suprarenalin, valued at more than \$5,000 per pound. Such is the organization and efficiency of a modern packing plant. Science and practice have worked hand in hand to conserve the most insignificant portions of a slaughtered beast, until now the finished by-products of the abattoir are useful without further processing or treatment of any kind in a thousand different ways; while some by-products considered finished articles by the packing plant, constitute the raw material for hundreds of other industries.

### How the Farmer's Bullock Comes Back.

A farmer may finish and dispose of a bullock, little thinking that, before many moons, parts of its carcass may be consumed at his own table, or by a foreign people, and its blood converted into "blutwurst" sausages, or dried and made into meal with which to

feed his calves or enrich his land. He little thinks of this bullock's hoofs and horns appearing as buttons on his next new suit of clothes, or being used in his home as combs, hair pins, umbrella handles, napkin rings, tobacco boxes, etc. Perhaps his next new pipe will have a mouth-piece made from the shin bone of his steer; the knives with which he eats and the razor with which he shaves may have a handle of the same material, or perchance the baby may nurse from a bottle covered with a bone ring from this same steer. There is absolutely no cause for alarm, but this farmer may even masticate his own food with an artificial tooth carved from the shin bone of his favorite bullock. His next pair of shoes, possibly, will be soled with leather from this animal's hide, and the hair therefrom will be used in plastering his home, or that of a neighbor. There is no doubt but the automobile he is induced to buy will be upholstered, in part, with the long hair from the



**Champion Barrow at Guelph.**

Exhibited by J. Lerch, Preston, Ont.

end of the steer's tail, and when he comes home from a pleasant drive in the country, his sleeping hours are spent on a mattress filled with hair from the same or a similar source. The artistic daughter may sit down at her bench and paint beautiful scenes of landscape and animals with a brush made from the hair on the inside of the ear of this now dead and ubiquitous bullock. If the man who is unkind enough to consign a good steer to such relentless distribution should live in the United States or Great Britain (not in Canada), and desired to save in war time by using oleomargarine instead of butter, parts of this forgotten product of his herd might crop up once more. After a busy day engaged in peaceful and productive enterprise he washes his hands and face with one of sixty grades or varieties of soap which this bovine has provided, little realizing that from the same contribution to the packing plant and as a by-product of the manufacture of this soap, glycerine is made and later manufactured into high explosives with which a semi-peaceful Europe is being converted into a veritable hell. The day's work done, he picks up one of the best sellers, but lo! the binding is held in place with glue, either from the hoofs that erstwhile trod his farm, or the hide that at one time, in his herd, was good to look upon. Glue from the same source appears in musical instruments, oil cloth, trunks, matches, carpets, cameras, toys for the children, whips, window shades, etc.; he cannot get away from it. "Glue holds the world together". Then after having filled in his allotted time on earth, and the Angel of Death calls this farmer Home, he is laid away to rest in a coffin fastened securely together with glue, made from the bullock he once sold to the packers.

### With a Steer Through the Slaughter House.

What is written in the preceding paragraph, regarding abattoir by-products, only touches the fringe of the subject. There are many others yet unmentioned and their industrial significance has not been approached.