

also weighed, while the percentage of fat in the mixed milk of the herd at each milking was also determined. In all, 217 cows came into the tests, but complete records of twelve months were obtained only in the case of 95 cows. The average yield for 95 cows was 687 gallons, 44 cows giving this quantity or more. There was a range of variation in the total cost of feeding on the different farms, roughly from \$45 per cow to \$125.

#### GOVERNMENT AID TO HORSE-BREEDING.

The English board of Agriculture give \$200,000 a year towards the encouragement of light-horse breeding. Their chief method of procedure in spending that money is to provide an increased number of high-class Thoroughbred stallions for the service of half-bred mares at a low fee, and of about 1,000 selected mares, free of charge. Then, in order to encourage farmers and others to keep brood mares of the correct substance for mating with Thoroughbred stallions, the Board have also arranged, through the agency of country committees, for the purchase of mares of this type for leasing out to suitable custodians at a small annual rent.

To encourage farmers to breed light horses the Board in 1911-12 bought 437 mares at a cost of \$89,323, or an average of \$192 per mare. Quite rightly, representations were made to the Board that in many parts of the country there was a serious shortage of mares of the hunter type, and that farmers and others were giving up breeding owing to the increased difficulties of getting good brood mares of that class, and to the lack of suitable Thoroughbred stallions available for mating them with at a reasonable fee. The Board in its wisdom realized that it would be advisable to encourage farmers to breed light horses of that type for which there is little or no demand, and in view of the fact that there is always a call for the heavy-weight hunter type, they decided to provide funds for the purchase of mares likely to throw stock of that class. With that object in view, grants amounting to \$100,000 have been made to thirty-six county committees for the buying of mares, which are to be leased at a rental of \$10 to suitable custodians for brood purposes. One of the conditions of the grant is that the average price of the mare is not to exceed \$250 and though representations have been received by the Board that that amount is not sufficient, it is satisfactory to report that many excellent mares have been purchased below the figures named.

The Board of Agriculture are encouraging breeders to use only sound stallions and with a view of placing on the roads as many stallions as possible free from hereditary disease, and suitable for breeding purposes, the Board undertake the veterinary examination free of charge of all stallions the service fee of which does not exceed \$50, and it issues certificates of soundness to all animals which pass inspection. Owners of stallions are beginning to recognize the advantage of having their horses registered in such a manner as this. In the year under review 715 stallions were accepted for registration, and of that total 220 had been on the list in the previous year and 90 refused, and of the latter 20 had been registered in 1911. Shires, 247; Clydesdales, 57; Suffolks, 36; Cleveland Bays and Yorkshire Coach horses, 4 each; Hackneys, 60; Thoroughbreds, 172; Ponies, 116; and Hunters, 19; are among those registered.

#### CLYDESDALE DOINGS.

Mention of Clydesdales reminds me that Scotland has been busy with its parades of stallions. At Edinburgh markets, Gorgie, a prominent exhibit was T. Purdie Somerville's very fine young horse, Scotland's Favorite, hired by the East Lothian Horse-breeding Society. He is regarded as one of the best horses that have been shown in the Edinburgh circuit for some years.

A. & W. Montgomery had two horses on the ground, Pride of Blacon, the hero of so many fights in his young days, and Baron Newton, a young horse bred at Harviestoun. The latter, with Scotland's Favorite, shared to some extent the honors of the show. He is by Baron's Pride out of the Hiawatha mare Cleopatra, and has the right kind of bones with beautifully placed limbs. The other heavy horses shown included Andrew Brook's Gamecock, formerly owned by the Seaburn Harbor Stud Company. Mr. Watt showed Walter's Memento, whose usual average of foals is over eighty per cent. A. & W. Montgomery have shipped seven stallions to Russia. Six of them are three years old. Messrs Montgomery have also sold two two-year-old fillies to go to Sweden.

Berkshire hogs are selling well in the Old Land. At Reading Corporation Farm sale 85 head averages \$50 each, a lot going to Russia.

#### BERKSHIRES.

The Berkshire breed has had a class at our Royal Show since 1862 and since that time it has proved its worth as an economical bacon and pork producer.

As a test of this we naturally turn to the re-

sults of the Carcass Competition at the Smithfield Show, London, which is open to all breeds; we find the striking result that, during the past eight years the Berkshires have gained 67 awards against 28 by all other breeds combined.

During the period 1901-1910, the pedigree pigs imported into the Argentine were: Large White 440, Various 409, Berkshire 1,795. Thus the importations of Berkshires exceeded by four times the number of any other pure breed and twice the number of all breeds put together—conclusive evidence of the high opinion of the Berkshire pigs held by the largest breeders of live stock in the world.

#### OTHER STOCK NOTES.

John Jones & Sons, Colwyn Bay, have shipped to Mr. Cox, an Ontario buyer, five Hackney and three Welsh ponies. The former includes the great pony stallion, Little Briton, sold at a tempting figure.

Among the important events of this summer will be the dispersal of the old-established and celebrated Babraham flock of Southdown sheep, including all the noted and prize-winning animals. Mr. Adeane founded this flock nearly thirty years ago, and the majority of the pedigrees go back to sires bred by Mr. Henry and Mr. Jonas Webb. The remarkable success of this flock in the showyards and its uniformity of type is largely due to the use of this blood. Babraham Southdowns are largely in demand, not only for the home flocks, but also abroad, but last year a Colonial breeder purchased two rams for three hundred guineas.

The entire flock of ewes and rams will be sold without reserve; the lambs of 1913 will not be included in the sale. The date chosen is the 17th of July, the week following the dispersal of the late Mr. Henry Duddings famous Lincolns.

Thirty Shetland ponies, a consignment of 29 mares and fillies and one stallion, have been sent by John Anderson & Sons, Hillswick, Shetland, to buyers in Western Canada.

About 100 American and Canadian farmers are due in England on July 11th, and will stop until the 18th, to enquire into our methods of agricultural co-operation. They are to be right royally entertained by our agricultural organization societies.

London, Eng.

G. T. BURROWS.

#### Our Scottish Letter.

The weather is by far the most pressing topic at this time. We have had a wretched time during the past week or ten days. March ended very well. It came in like a lion and went out like a lamb, and the first ten days of April were very fine, but on the eleventh came a blizzard which wrought untold havoc among the lambs. These are now very numerous, and their numbers are daily increasing. But they are getting a very cold reception in this weary world, and numbers of them are succumbing. At the same time one is greatly surprised at the amount of cold which lambs will endure. The Blackface breed in particular is wondrously hardy, and the survival of such a large number of these youngsters is a standing answer to the croaking criticisms regarding deterioration of the breed with which we have been made familiar.

An important topic in connection with hill farming is the condition of the herbage on the hills. Many maintain that these hills are not making such good lambs and hogs as were made by them half a century ago. It is, however, to be borne in mind that the hills are much more heavily stocked now than they were then, and the constant drain upon the phosphates in the herbage has undoubtedly lowered its feeding value. No one has, as yet, been able to find an economic way of top-dressing hill pasture with

phosphates, potash and nitrogen. The lightest manure is, of course, basic slag, and where the hills are not too high it has been applied with conspicuous success to mossy land. It also gives good results on clay soils, but when applied to light, gravelly soils its effect is less apparent, unless the phosphates be supplemented by liberal dressings of potash and nitrogen. Until some means is devised of reinvigorating the herbage, it is premature to maintain that our hill pastures are not making such good lambs as they did half a century ago.

The revision of the United States tariff is naturally of considerable moment to many departments of agriculture here. It affects wool in a marked degree, and brokers here are rather nonplused by the sudden effects of the revision. It is good news, yet they did not expect it, and it has caught them almost wholly unprepared. Potato growers are also rather interested. Were there only a moderate tariff on potatoes, our growers could often furnish the United States with a substantial addition to their stock of sound, wholesome food. While, no doubt, the abolition of the duty on potatoes would benefit our growers it would equally benefit the people of the United States, and be a step in the direction of annihilating the principle of cutting off one's nose to spite his face. Here we get the benefit of the American high tariffs in another sense. The surplus machinery products come in here duty free and our farmers get the benefit, but at the expense of his American brother. That gentleman has to buy all his implements and machinery in a highly-protected market. He can get no reduction in prices as there is no foreign competition. Wherever there is a high tariff the farmer pays the penalty, and the manufacturer waxes fat and kicks. Whether the manufacturers of this country ever will get what is called Tariff Reform, it is abundantly certain that the farmer stands to lose every time by the imposition of duties on machinery and implements.

The horse shows in London this year finished as per usual. The finest fixture was that of the Shire horses in the last week of February. Naturally breeders were greatly elated by the successful sale held in the previous week at Lord Rothschild's farms, at Tring, when a two-year-old colt, which after became the London champion, was sold for 4,100 guineas, an almost unprecedented figure for a draft stallion. It will, however, be long before any attempt is made to equal the Clydesdale record of £9,500 for Baron of Buchlyvie, 11263. At the Hackney Horse Show, held in the first week of March, there was a notable display, and many very fine horses. But the outstanding feature of the event was the success achieved by three sons of the great old champion mare Ophelia. One of the three, Hopwood Viceroy, won the supreme championship of the show. He is a lovely horse and a great mover. The other two sons of Ophelia were Polonius, which won the group prize for five horses or mares in hand, and Mathias the sire of the best group of harness horses in the show. The champion driving horse of the show, King of the Air, was got by Mathias. He is a beautiful mover, and one of the "airiest" harness horses seen for many a day. Referring to horses, one is rather surprised to learn that the International Horse Show at Olympia, which, for several years had paid a dividend of 20 per cent., last year (1912) only paid 5 per cent. This is not a bad dividend, but the sudden fall from 20 to 5 per cent. is rather indicative of the temporary character of the public taste. The high-water mark seems to have been reached in the Coronation year. Last summer the directors attempted to compete with Ascot. They supposed that the swells would patronize Ascot during the day and Olympia at night, but the swells thought otherwise, hence



Some Choice Sheep.

Making meat and wool, killing weeds, and enriching the soil. Thousands of farms would be greatly benefited by the addition of a flock of sheep.