

bruised beans for cattle, to a limited extent, mixed with cake, I have always found to be of great benefit when cattle are nearly ripe, if they can be got at 40s. per quarter, or thereby. On no other class of cereals do I put much value as a substitute for oil-cake for cattle, except for young cattle; oats may be given in limited quantities, there being more bone substance in oats than in any other of the cereals; they make cattle grow in the bone, bringing out size.

Mr. Paton, Standingstone, said.—I am sure the club will agree in almost everything that had been said by Mr. Robertson on the subject before us to-night.

The chemist tells us that wheat contains 80 per cent. of fat and flesh-forming substance; barley, 77; oats, 75; beans, 74; linseed cake, 73, and linseed 85—31 per cent of this being oil. It seems to me, therefore, that a mixture, say of two tons of wheat and one of linseed, would make a very excellent feeding stuff, at a cost of about £10 10s. to £11, containing about 83 per cent. of flesh and fat-forming material, while oil-cake contains only 73 per cent., and costs about £2 per ton more money.

The expense of carriage to market is also saved, and we are sure of a genuine article. Against this, however, there is more trouble in preparing and giving it to the cattle, and there is also more waste by the cattle while eating it. Barley and oats are too dear to think of offering to stock, and I may here mention that I have heard one of the best feeders of cattle say that he would sell oats as low as 16s. per quarter, and buy cake at £12 per ton; perhaps a half of each would be better. It is rather a queer state of matters when a farmer finds cattle his best customers for his wheat; but the crop is exceptionally good this year, which makes up a little for the low price. Then as to potatoes, chemistry again tells us that there is only 17 per cent. of real food in this root, 15 of that being for the formation of fat and two only for flesh; and calculating as before, we find that they are worth about £2 per ton for feeding, a price which is generally allowed they are worth from practice; but as potatoes at present are much higher than this, of course they must go to market.

The chairman said there seemed to be a pretty general opinion in favor of using a mixture of feeding substances in preference to any one substance. Fine linseed cake, though highly spoken of as one of the best feeding substances either for cattle or sheep, made more progress on the stock and was more satisfactory to the feeder, when mixed with some other material, than given alone. His practice just now, considering the low price of wheat, was to mix four parts of wheat meal with one of linseed meal, all finely ground. He mixed the meals the day before using, or early in the morning, for use in the afternoon, with cut hay and chaff, and steamed the whole. There was no way by which the cattle would make more progress. At the present moment wheat was the cheapest food they could use. It was very important that when they saw their way to save a little of their own money in disposing of their own produce, instead of giving so much money to the cake manufacturer, they should do so. He thought some people made a mistake in giving more cake than the cattle could easily assimilate. He approved of small quantities, so that the animals could thoroughly assimilate what they got. There was a good deal of bruised or broken oats used in mixtures for stock feeding. A little of those substances was better than even using turnips alone. If they gave many turnips without any of those other substances, the animals were more apt to scour. There was nothing like keeping the animals regular, healthy, easy and comfortable.

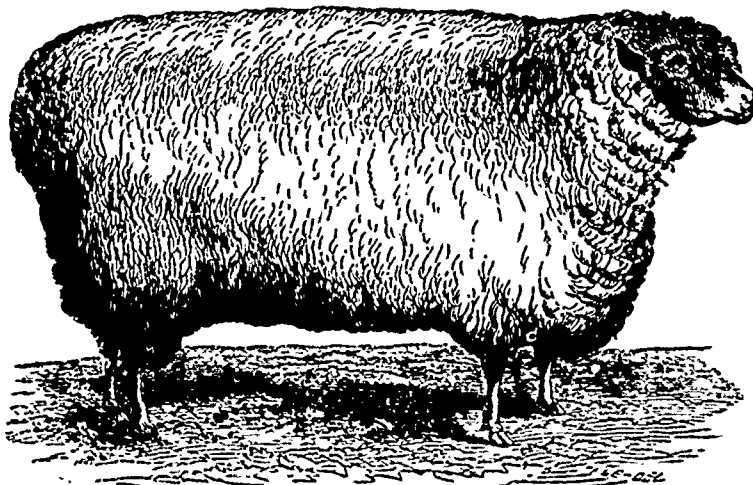
Cotswold Sheep.

Mr Smith, of West End, England, gives the following interesting notes in Cotswold history:

The Cotswold sheep are supposed to derive their name from the "cots" or sheds from which they were fed in winter, and from the "wolds" or open hilly grounds in which

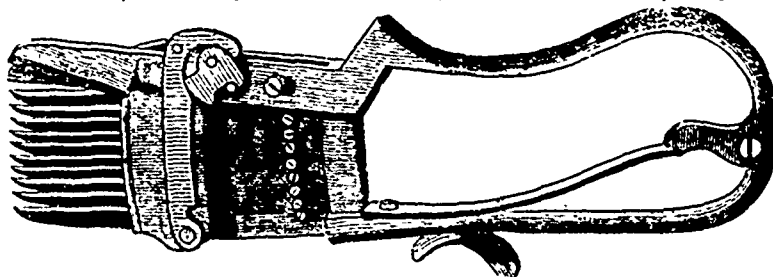
they were pastured in summer. I believe them to be the original breed of the long-wool sheep, as they are continually spoken of from the earliest times, when no other sheep are noticed.

I find that Gloucestershire was the earliest trading district for native wool in England. Gloucester had its trade companies and Guildhall long before one was established in London. In the thirteenth century, Cirencester had two markets—one on Monday for corn, and one on Friday for wool. The monumental brasses in the church at Cirencester and Northleach were paid for in Cotswold wool to foreign artists. That attests the importance of the wool trade at that period. The immense quantity of wool grown in the county of Gloucester is apparent from the fact that, in the reign of Edward III., 30,000 sacks of native Cotswold wool was the annual quantity granted from that county for the king's household.



COTSWOLD RAM.

In the fifteenth century, both sheep and wool were largely exported. In 1437, Don Durante, King of Portugal, applied to Henry VI. for permission to export sixty sacks of Cotswold wool to manufacture certain cloth of gold for his own private use. At that time the wool of the Cotswold sheep stood unrivalled in point of excellence, and bore a higher price than any other kind of wool. It is said to have been worth four shillings per pound at the present value of money. It continued nearly a century to realize that price, in consequence of the great demand for the manufacture of the beautiful fabrics, such as cloth of gold, etc. Cotswold sheep were undoubtedly considered the best animals England could produce at that period, as a proof of which I might say that if one monarch made a present of animals to another it would be what he considered the best in his kingdom. In 1464, a present of Cotswold sheep was made by Edward IV. to Henry of Castile, and in 1465



NEW SHEEP SHEARS

another lot of Cotswold sheep was sent to John of Arragon, both designed to improve the Spanish breed of sheep.

In the reign of Queen Elizabeth, the Cotswold sheep are described as a coarse, large-boned, long-wool sheep. They have undergone a great change and improvement since that time. Notwithstanding the improvement in most breeds of sheep, the Cotswold holds by far the pre-eminence. Their beautiful and immense frames, their fine countenance and full fleece give them a grand, majestic appearance, such as no other breed of sheep have ever yet attained. I think them the best sheep in existence, and will produce more mutton and wool for the food they consume than any other breed of sheep.

The Cotswold, although large sheep, have big backs and small bellies, and will not consume so much food as some smaller sheep that have little backs and great bellies.

Nearly fifty years past, the Cotswold ram-breeders all used Leicester rams. That greatly improved their flocks, giving them better symmetry, better quality, and more aptitude to fatten. Before the introduction of the Leicester, many of them were grey, but are since mostly white. I have always used grey sheep, but pure Cotswold. My flocks are the Cotswold greys.

A good Cotswold sheep has a large, wide frame, with abundance of valuable wool, a large head, eyes wide from each other across the forehead, not long from the eye to the nose, jaw deep and tapering to the mouth, ears long and fine, the head well covered with wool, a grand arched neck, set on high—feeding up to the ears, ribs well sprung out from the back and chine, a prominent, full, expanded chest, deep foreflanks, wide back and loin, rump nicely formed all round from one loin to the other, heavy leg of mutton, good and full in the twist, moderate-sized bone, feet small, clean, and upright in the posterior or fetlock joints.

Mr R. G. Hill, in an address delivered before a farmer's meeting at Morrisville, Vt., upon Cotswold sheep and their value, said:

We should constantly study the demands of the market. The scarcity of heavy mutton makes it always in good demand, and the demand is fast increasing.

The one great trouble in stocking the country with fine sheep, and supplying the demand both for wool and mutton, is the fear among many farmers of paying too much for them, though it is plain enough to be seen they are a great improvement over our common stock. Now let the farmer commence with a few of these sheep, and have his children share in the care and profit of them; they will soon feel an interest, and no longer think farming unprofitable. There is no employment on the farm so remunerative, and so attractive for children, as the care of lambs.

The importance of improving worn-out pasture is apparent to every farmer. There is no way this can be done so easily as in keeping sheep; it will take but a few years to double its value.

The Cotswolds are just the kind to improve springy, swaley pastures. They will thrive on rank, coarse feed, bringing in the white clover, and doubling its value in a short time. It is generally admitted that sheep are the best stock that can be kept for the pasture; but knowing that it was generally considered that they were equal to cows to keep up the mowing, I determined to satisfy myself which was the best, and some ten years since commenced feeding the hay on a small farm exclusively to sheep. This lot was in fair condition, yielding about one ton per acre. I let the sheep have the stable, spread the manure on the grass, going over one-half of it each year. The grass continued to increase until it yielded not less than three tons to the acre. The manure from this yield gave it a heavy dressing. For a year or two the grass has not been so heavy; the ground appears to be burnt with manure. Last spring I ploughed a part of it to re-seed, and sowed it with wheat. It grew very rank, but the weeds grew ranker—such weeds as grow on very rich ground. This land has been dressed with clean manure from the stable, and the grass has been free from weeds. There had been no manure put on previous to ploughing. That such weeds should grow on a sward well turned, shows the ground to be very rich.

The demand for good mutton is constantly increasing, and we think the mutton breeds will pay the best when they are kept in small flocks, and given that special attention required to produce the best animals.

New Sheep Shears.

As wool is becoming each successive year of more and more importance as an article of husbandry, and commanding greater attention in proportion, inventors are not behind in placing upon the market new practical ideas as to the method of harvesting that useful substance. It used to be considered in Scotland a fair day's work to clip four or five score. On these occasions, of course, the clipper had