

From the time of Abel downward, attention has been paid to the breeding of sheep, and particularly so by the races of men inhabiting the Southern parts of Europe, a considerable portion of Southern Asia, and the Northern part of Africa, with a few remarkable exceptions, as in the case of the Medes, the Phœnicians, the Egyptians, and the inhabitants of some of the islands in the Mediterranean. The Egyptians, however, as early as the time of Moses had become sheep-breeders, and about 1,500 years later it is related that the sheep of Egypt thrived so well upon the rich alluvial soil of the country that their owners were able to shear them twice in the year.

As an instance that the sheep of antiquity possessed a good fleece, examples may be cited from the Nineveh marbles. But the celebrated breed of sheep of antiquity was the *Milesian*. It was delicate in constitution, but it yielded a peculiarly fine wool, admirably adapted for manufacturing purposes.

This breed, I believe, first appears in history at and near Miletus, in Asia Minor, about 500 B.C.—it was from thence probably introduced into Greece 490 B.C.—and shortly after that into Italy, where it became famous under the name of the *Tarentine Sheep*. By the Romans this breed was carried to their various colonies, and amongst others to Spain. In Spain material improvements were effected in this breed about the commencement of the Christian era,—the fleece, which before was spotted, and frequently dark coloured, was rendered a pure white, and a sounder constitution was given to the delicate Tarentine Sheep. This regenerated race became known as the *Merino Sheep*, and from them have descended those animals which from that time to the present have supplied our clothiers with their best quality of wool.

About 1765 the Merino sheep was introduced into Saxony, and after some years the Saxon fleece was found to be even superior to the Spanish. At the present time but little Spanish wool comes into the English market.

The Merino sheep was introduced into Australia, Tasmania, New Zealand, the Cape of Good Hope, America, and other countries, with marked success, about the commencement of the present century. In Australia, the Merino succeeded the Leicester and South Down, which in their turn had supplanted the gaunt, hairy sheep imported by the early colonists from Bengal.

The fibre of Merino wool exceeds in fineness that which any other breed of sheep produces, and North America Merino wool now surpasses most other wools for its felting properties. Samples have been obtained from American flocks, which contain 2,552 serrations to the inch, while the finest Saxony wool only contain about 2,400 serrations to the inch.

The increase of the sheep in some of our colonies is truly wonderful. In 1788 Australia had no sheep. In 1796 the entire stock of sheep in the colony of New South Wales was 1,531; in 1859 this number had increased to 7,581,762; whilst in 1861 the quantity of sheep's wool imported into the United Kingdom from our Australian colonies amounted to 68,084,202 lbs.

It must have struck every observer that man exercises a wonderful influence over the members

of the animal kingdom, no less than over the members of the vegetable kingdom. Wherever attention has been paid to sheep-breeding, there a marked improvement has been manifested in the particular direction in which that improvement has been sought—whether in the carcass or in the fleece. This may account for the superiority or breed of sheep around the ancient seats of civilisation.

Climate greatly affects the quality of wool—in very hot countries scarcely any wool is produced; the animal is clothed with hair only. Variations in the temperature are very injurious—any sudden check of perspiration produces an irregularity in the staple of the wool (distinctly seen under the microscope), and this of course greatly diminishes the value of the fleece.

The sheep produces the finest quality of wool in two of the isothermal zones only—the warmer-temperate and the sub-tropical. Thus the most celebrated breeds of ancient times were the Coracic, the Milesian, the Greek, the Tarentine, and the Spanish—all the spots upon which these sheep pastured are within the sub-tropical zone; England, the United States, Buenos Ayres, the Cape of Good Hope, and South Australia are in the warmer-temperate zone; whilst Tasmania and New Zealand are in the sub-tropical zone. It must, however, be remembered that elevation above the sea-level reduces the temperature, and that in ascending a mountain range, a few hours will take you from the tropical scenery surrounding its base to the pines which fringe its snow-capped summit, passing through the familiar forms of the temperate zone on your way. For instance, the alpaca is a native of Peru, which is in the tropical zone, yet the alpaca succeeds well in Australia, which is in the sub-tropical; but, then, this animal inhabits the elevated, and consequently cold, table lands of South America, and really finds the temperature of Australia warmer than its native habitat. The wool produced by the alpaca in Australia is stated to be superior to that produced in South America.

Before quitting this part of my subject, I must remind my readers that the sheep did not exist in America, in Australia, or in New Zealand when those countries were first visited by Europeans.

Naturalists and geologists draw some interesting conclusions from this fact. They state that the sheep is the most recent type of animal with which they are acquainted; it is even a question whether it is found in a fossil state at all—it is peculiarly an animal belonging to the human period, and whether viewed as affording man food and clothing, or as imparting fertility to the soil he cultivates, it is scarcely possible to conceive an animal more valuable to him.

*Stages of Manufacture.*—Wools are divisible into, firstly, those best adapted for carding, and, secondly, those most fit for combing. These two varieties may be classed as (1) short and (2) long wools, although the length of the staple is by no means their only distinction.

(1) Short wool is used for the production of woollen cloth. It is first scoured; next it is scribbled and carded; it is then "slubbed;" and, lastly, it is spun, or drawn finer, and twisted. None of these processes destroy the felting property of the wool.