to Hamburg, Germany, for exhibition, which became the recipients of three awards, in a total of eight, when contending for such honors with over four hundred animals brought together from the wool-producing centers of Europe. At the Universal Exposition, at Paris, in 1878, a number of American Merino fleeces were shown in competition with those from other prominent wool-producing countries, securing for the owners:

Gold medals ........................................... 2
Silver medals ........................................ 3
Bronze medals ....................................... 10
Honorable mention .................................. 6

A total of .............................................. 21

from a jury of expert judges, whose residence in other countries, equally with their reputations, relieve their decisions from any suspicions of prejudice in favor of American-bred animals.

That the fleece of the sheep is influenced by climate, alimentation, and other local conditions, is no longer doubted by the practical observer. The extent of such influence, how it may be foreseen, and how its unfavorable tendencies may be obviated, or most readily overcome when present, is a point not so easily determined. In the case of the Merino this latter consideration assumes especial importance from the fact that its fleece is the most prominent factor in determining the economic value of the animal. While the marked improvement in Merino fleece in the United States may, to some extent, be traceable to these occult influences, the credit for the greater part of such change undoubtedly belongs to those very capable breeders who have made ovine improvement their especial study and labor. Of these there have been many, and, while some may have labored longer and become more prominent than their fellowmen, it is the aggregate of achievements that has secured the present standard of perfection. Contemporary efforts have fostered emulation, valuable experiences have been exchanged; criticisms, always valuable, whatever their inspiration, have not been lacking—the whole tending to that higher education in the science of breeding and those arts by which alone the real merits of an animal are made apparent, and entitling many names in the list of fine-wool breeders to especial prominence on the escutcheon of public benefactors.

In the hands of such men, many of them so located that their labors were supplemented by peculiarly favorable conditions of temperature, soil, water and vegetation, the highly susceptible Merino responded to the efforts for its amelioration with marvelous rapidity. Its historical purity of breeding finds vindication in the fact of its prepotency when coupled with inferior animals, as well as in its capacity for improvement under intelligent "in-and-in" breeding, whenever such a course is found necessary or desirable for attaining and perpetuating coveted peculiarities of body or covering.

With such material at hand, adapted, or readily accommodating itself to every caprice or necessity of its owner, the American Merino presents to aspiring breeders a strong incentive to such further study and stronger efforts as are required to produce the model

SHEEP, THEIR TYPES AND CHARACTERISTICS

NO. 7.

FINE WOOL—THE AMERICAN MERINO.

The remarkable improvement indicated in the reduction of the diameter of the wool fiber of the American Merino has been secured simultaneously with an improvement of fleece in other equally desirable particulars. Length of staple has been attained to such extent that a very considerable proportion of pure-blood and high-grade Merino wool is employed in the combing wool manufacture, which requires a staple of three inches in length, and above—known to the trade as "delaine" wool—and though the quantity of such wool is yearly increasing, the demand for the very superior fabrics into which it enters is so as to insure at the present time, and promise for the future, a highly encouraging market. It is this character of Merino wool, combined with the large yield from each animal, that has recently attracted the attention of breeders in foreign countries, and resulted in several experimental shipments for trial upon some of the best flocks of Australia and New Zealand. The most important of these was made in December, 1881, by Hon. Wm. G. Markham, of Avon, N. Y., Secretary of the National Wool Growers' Association, who has, through correspondence and personal visits to foreign countries, secured for American breeders and American flocks such a recognition as is warranted by the achievements of the one and the merits of the other.

This foreign recognition of the excellences of the American Merino dates back as far as the year 1863, when Mr. George Campbell, of Vermont, took twelve sheep from that State
sheep, which, according to a recognized authority, should be *symmetrical and finished in outline, and harmonious in all its parts. Back straight, ribs well arched, shoulders deep, chest broad, breastbone or brisket extending well in front; lung cavity well distended; hips long, straight and broad; thighs heavily muscled, and well let down; neck short and strong, without depression on top; head broad, with short face; nose broad, and well wrinkled; legs medium length, straight, heavy-boned, and standing well apart at knee and hock; fleece of uniform length, density and quality on every part of the carcass, especially on the belly, thigh and forearm, and between the neck-folds, covering as nearly as possible the inside of arm-pits, the legs all around to the hoofs, with cap extending well over face, covering the point between the eyes and horns; well cheeks up from face corner of eyes to mouth; * * of yolk or oil, the greatest amount that can be secreted without impairing the vitality of the animal, is admissible in a ram. Most breeders prefer a color bordering upon a buff, while a thin, sticky oil, of a greenish cast, is highly objectionable; as to folds or wrinkles, there might be some diversity of opinion as to size, location and number; still it would be difficult to find a ram with such heavy, pendulous neck as to disqualify him as a stock animal in any flock, while many would prefer that with the above he should have a large fold extending across the point of the shoulder, a considerable number on the sides, extending in massive proportion well under and across the belly, yet diminishing in size and lost to view in full fleece before reaching the back, with numerous large folds lengthwise across the hips and stifles."