within ten miles of the sea-coast generally possesses a longer staple, and more pliancy of texture, and consequently it is better adapted to the use of the spinner, than the produce of the same flock pastured farther in the interior on similar soil. This difference I am disposed to impute to the ex­halations arising from the sea, which, like the smoke of London, extend inland at least ten miles, thus operating on the herbage as well as on wool.”@@1

Of all the varieties of which wool is susceptible, the length of the staple is the most important in its results. Wool is accordingly divided into two classes, short or clothing wool, and long or combing wool, each class being subdivided into a variety of sorts, according to their fine­ness, and the length and soundness of the staple.

The finest wools are of short staple, so that the worsted spinner has sometimes difficulty in obtaining wools fine enough for the more delicate fabrics ; but man’s ingenuity has found a remedy for this, by combing wools of much shorter staple than was formerly deemed possible. In the case of the coarser wools there is no such difficulty, as they are usually of long staple. Wools which unite a high de­gree of fineness and softness with considerable length of staple, bear a high price.

The sorting of wool is the business of the wool-sorter, a trade which requires the nicest discrimination. Such is the tact which habit gives, that the most skilful sorter can appreciate differences which even the microscope can scarcely detect; and in appreciating the other qualities of the fleece, and weighing and balancing one against the other, a degree of accuracy is attained of which no instrument is capable. Of minute differences of quality, and of the result or balance of all the qualities taken together, the price of wool is perhaps the best measure, and we shall therefore presently advert to it more fully.

The principal qualities which the sorter regards in short or clothing wools may be stated as follows:

1. The fineness of the fibre.

2. Its softness.

3. Soundness of the staple.

4. Colour.

5. Clean state of the fleece.

6. Weight.

1. The fineness of the fibre is of very great importance. Modern machinery is capable of producing a finer thread from coarser wools than formerly, and the thinner and lighter fabrics can be made from it ; but unless the wool be also fine, no art can make a fine, compact, and even cloth. This will be readily understood when we come to describe the process by which a surface is produced ; a surface which consists wholly of the ultimate fibres of the wool.

Besides the fineness of the fibre, its regularity is of great importance. There are some kinds of wool which are only fine at the lower end near the back of the animal, while the extremity of the wool is coarse and hairy. There is perhaps no wool in which some irregularity is not percepti­ble, though it is much more conspicuous in some samples than in others, *cœteris paribus,* the value of two samples will depend on evenness or regularity, and it is for this quality that the wool of the Merino sheep is so remarkable.

In some fleeces of the finer sorts, an admixture of coarse hairs will often be visible; in some cases, long and silvery; in others, short and rigid : these latter are technically call­ed *kemps.* We do not remember to have seen the cause suggested, but we apprehend that this may merely be a mark of age. In the human eyebrow, for instance, it is well-known that long coarse hairs make their appearance even before the meridian of life ; and it is by no means im­probable that age may have some connexion with a similar phenomenon in the wool of sheep. When the wool is uni­form, it is said to be *true grown.*

The finest Merino fleeces are usually divided into four sorts ; the first three being called by the Spaniards *refina, fina,* and *tercera ;* the fourth or coarse part, from the head and shanks, not being sent to market. The distinctions of quality in German and other wools will afterwards be specified.

In English fleeces, however, the proportions are differ­ent, the finest portion seldom exceeding one third ; but our English sorters discriminate qualities much more nice­ly, making of the whole fleece no less than eight or ten sorts, varying perceptibly from each other in fineness, and known by the following names :

Prime. Seconds.

Choice. Fine Abb.

Super. Coarse Abb.

Head. Livery.

Downrights. Short coarse or breech wool.

Some sorters will even select from the prime sort the few remarkably fine locks which they may find, and so make a very superior sort, which they call *pick-lock.*

It is said that the very nice discrimination which the wool-sorter attains by constant practice is considerably im­paired if the practice be discontinued for a short period. It follows that both the buyer and the seller, the manu­facturer and the grower, must frequently err in their judg­ment respecting the comparative qualities of particular samples. Various attempts have accordingly been made to determine the fineness of the fibre by means of instru­ments ; but, admitting that accuracy is attainable by their means—a very doubtful point—their use can never be­come general, as the art of using instruments would pro­bably be more difficult of attainment by the Leicestershire wool-grower or the Yorkshire manufacturer than the art of sorting wool.

The individuals who have taken the most trouble to ascertain the fineness of wool by means of instruments are Dr Parry, Mr Luccock, and Dr Ure. These instru­ments consist of a micrometer and a lens ; and they differ from each other only in the mode of application and ad­justment. The result of these experiments seems to be, that the finest wools are about 1/1500 of an inch in diameter, while the coarsest of the combing wools are about 1/450 of an inch. Dr Parry’s table of the diameters of clothing wools, which has often been printed, is as follows.

*Table of comparative Diameters of various clothing Wools.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Outward End.** | **Middle.** | | **Inner End.** | **Mean.** |
| **Spanish ewe** | **Υ⅛ TO τδ⅛ τ⅛τ Tι⅛**  **TOW**  **T⅛I TTTJ∙ Tθδ3" π⅛7 f⅛**  **Γ⅛5 *lf>ii* Ti⅛K τ⅛r ^∏⅛ι ⅛** | **T⅛5 r⅛r T⅛5** t⅛j  **T3⅛i**  **TT⅛T τ⅛**  **Γi⅛3 ιΛψ r⅛i u⅛r** | | **T⅛ff**  **TT7i**  **T3⅛π**  **TOT**  **T-⅛3^ ττ⅛τ**  **TITS ⅛i i⅛**  **T2⅛H**  **Ξ⅛7 π⅛ ∏¼ τ⅛ TΙ⅛≡**  **TÖ75 STS 5⅛<J** | **TJTÏÏ τ⅛τ 1⅛4**  **T⅛5** |
| **Lasteria pile** |
| **Ewe..** |
| **Coronet pile** |
| **Native Merino ram** | **ι⅛ TS⅛l τ⅛**  **TTS7 πVs**  **T⅛7**  **ÎÈ** |
| **Saxon** |
| **Pictets Merino ram** |
| **Best Negrette pile** |
| **Alva pile** |
| **Rambouillet ewe** |
| **Imperial pile** |
| **Morte** |
| **Rveland** |  | 2 | **I⅛**  **ΪΠ5**  **∏⅛7**  **T0⅛3** |
| **South-Down** | **1 l'Jb**  **ττ⅛τ** | |
| **Anglo-Negrette ram** |
| **Charenton ram** | **9;** *τ.*  **V**  **τ** | s r |
| **Rveland ram** |
| **Cape 4th cross** | ∏3 |
| **Wilts ewe** | **U«-** |  |

@@@, Southey's Treatise on Sheep, p. 14.