

WOOL AND WOOL-SORTING

M. & P. PRIOR



Short Wool—South Down Ram.

DRYAD HANDICRAFTS
LEICESTER

W O O L

NUMEROUS kinds of fibres, animal, vegetable and mineral, are used in needlework and in weaving. The best known, and probably most useful, is wool.

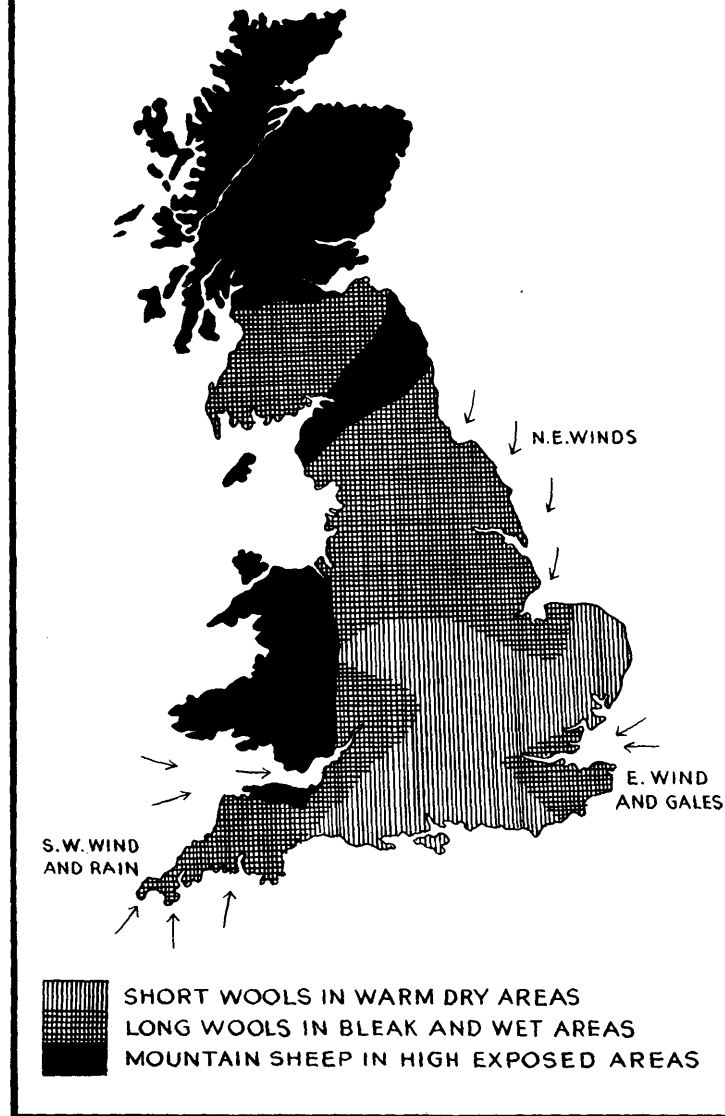
In section, magnified, a wool fibre is seen to be constructed of central canal-like cells, surrounded by elongated cells, with an outside covering of horny scale-like cells and indentations. These outside scales have microscopic bracts or imbrications as they are called. Hair and vegetable fibres do not possess imbrications. Under the varying conditions of spinning these imbrications become interlocked—this is one of the great advantages wool possesses over other spinning fibres. Fierce dry heat, strong alkalis and other abuses may destroy the bracts.

Wool withstands the action of diluted acids, but may be damaged or destroyed by strong alkalis. The reverse is true of vegetable fibres. Hence wool impregnated by burrs, hay-seeds, etc., may be freed of these impurities by acid solutions. The vegetable is reduced to carbon. On drying, this may be crushed and blown away. Some may like to experiment on this. If so, try soaking in a 4% to 4½% solution of H_2SO_4 , afterwards baking it in an oven at 150° to 160° F. This process is called “carbonization.” The vegetable fibres should now be turned to ash and can be blown out.

The outer scales form a reflecting surface for light. In a general way the coarser and longer the fibre the greater the reflecting area of each scale. Hence wool is lustrous or otherwise in proportion to the size of these scales. The finer and shorter the fibre the greater the number of imbrications, and hence the greater the spinning qualities. The number of imbrications per inch may vary from several hundred to two or three thousand. Hand spinners may easily damage the natural lustre of their wool by misuse, or the use of too strong, or unsuitable, scouring solutions.

Every part of the sheep is useful. It provides meat and clothing, carpets, blankets and an immense range of other things made from wool. Its bones make artificial manure, its horns make handles for knives and other things. From its skin, parchment is made, chamois leather, too, and imitation and fancy leathers of all sorts—crocodile, pigskin,

SKETCH MAP TO ILLUSTRATE ROUGHLY
THE NATURAL DISTRIBUTION OF SHEEP



peccary, and many others. Hoofs are made into glue, and potash salts may be obtained from the natural grease.

English wools may be roughly classified as follows:—

<i>Long Wools.</i>	<i>Short Wools.</i>	<i>Mountain Sheep.</i>
Leicesters and Border Leicesters. Cotswolds. Lincolns. Kents. Devons and Dartmoors. Lonks.	South Downs. Hampshire and Dorset Downs. Suffolk Black-faced. Oxfords. Shropshires. Dorset Horns. Cluns and Kerries.	Cheviots. Black-faced Scotch. Welsh and Radnors. Exmoors. Herdwicks.

and numerous other breeds and half-breeds not so well known. It is extremely interesting to note the original homes of the breeds, though modern transport facilities have largely upset the natural laws.

Long Wools are found in bleak, wet districts.

Short Wools in warm, dry areas.

Mountain sheep are adapted for exposed mountainous districts. Thus Devons and Darts have splendid coats for withstanding the S.W. gales, Cotswolds are adapted to withstand the weather coming up the Bristol Channel, Kents can endure the bitter easterly gales blowing over the Kent marshes. The Lonks, of Lancashire, live in one of the wettest counties in England, while Lincolns have to contend with cold N.E. winds. The "exception which proves the rule" seems to be the Welsh as it has a short and light coat, but this dries much more quickly than the fleeces of other breeds. Some of the West Indian sheep have only a tuft of wool on their head to protect the brain, having no need of wool on their bodies in that hot climate.

The first coat sheared from the sheep is called "Teg" or "Hog" wool. Teg wool has a curly spiral top. It reminds us of the lovely curly locks, the pride of our fond parents, that we had as small children! All subsequent coats sheared are blunter topped and this wool is usually called "Wether" or "Ewe" wool. Hand spinners usually find that Teg wool is easier to use owing to the fact that it is a little longer in staple than the Ewe wool.

LONG WOOLS.

Leicesters are a pure breed of Scotch sheep with white faces and are fairly free from grey hairs. In England we find more often the Leicester crossed with a Cheviot. They are usually rather too long for the finer hand craft work.



Cotswolds are very large, handsome, curly-coated sheep with lustrous wool. Lincolns, too, are large sheep and have very long, strong and lustrous wool.

Kent or Romney Marsh sheep have long wool. They are excellent for crossing and have largely been exported to New Zealand and other countries. They thrive on poor, marshy land and differ from many breeds in that they do not flock together. The pastures are thus kept cleaner. The wool is white and semi-lustrous. Crossed with South Down it makes a beautiful half-bred wool.

Devons and Darts are not an original pure breed, having a very strong cross of Leicester in them. They are very long and strong.

SHORT WOOLLED SHEEP.

The South Down. The oldest breed of Down sheep in the country and probably the foundation of all the Down breeds. It is pure white and is the finest English wool. The harder it lives, the finer the wool. It has a grey face, but no grey hairs on its body. Hand-weavers will find it hard to get a better wool than good South Down Teg for their use.

Its neighbour the Hampshire Down has a black face and has a tendency to grey hair in its body. It is a very valuable

type but not so fine as the South Down. The Down sheep grown in Dorsetshire are near relatives to the Hampshire Downs, but are bolder in character and lighter in yield. The Dorset Down takes second place only to the South Down in value.

The Dorset Horned sheep grows side by side with Dorset Down and the uninitiated, seeing a fleece of each, would have great difficulty in knowing which was which. The Dorset Down has a black face and a tendency to stray grey hairs in the fleece while a pure bred Dorset Horn has a white face and can be guaranteed to have no grey hairs. Instead, it sometimes has a loose, dead white hair known as "kemp." Dorset Horn is also largely grown in the Isle of Wight, but grown out of its native county the wool loses somewhat in value.

Oxfords are of medium length. They are not an old breed, but probably owe their existence as a result of crossing South Down, Hampshire Downs and Cotswolds. They are very hardy, but grey hairs are sometimes found. They are very useful spinning wools, especially for those who like a little length.

Suffolk sheep have jet-black faces. Downs grown in Norfolk and Suffolk are favourites with some weavers. If a pure white material is required care must be used in sorting out the grey, which is particularly noticeable in this breed.

Shropshires are very much like enlarged South Downs, but they are not so fine. Grey is frequently found and kemp, too, is often present. Kerry sheep are rather similar to the Shropshires, but not of quite so Downy a nature.

MOUNTAIN SHEEP.

Cheviots are great favourites with hand spinners and a really nice Cheviot fleece is a thing of beauty. It is very good spinning wool and when crossed with a South Down you get a very useful class of half-bred wool. The male sheep only are horned. They can live on scanty fare and endure the hardest weather. The wool is of medium quality. They are not quite so hardy as the Black-faced Scotch which have long, rough, kempy fleeces. The hair-like wool is a little finer near the body and gets coarser towards the tips. It is interesting to observe that the reason for this is that the finer wool acts as a warm coat and the coarse tips, which overlap like a series of tiles, act as a thatch, shooting off the water and keeping



Black-face Mountain Ram.

the body and undercoat of wool fairly dry.

It is likewise of great interest to note that a tendency to have a slightly coarser tip is frequently found in many breeds of sheep, particularly in teg wool. Many years of careful breeding have resulted in producing fine wools, but the tendency to revert to the natural state is seen in this effort to produce a sort of thatch as a protection against the weather.

The Welsh are very active, hardy sheep. The males are horned. The fleeces are small and of a quick-drying type. Usually very kempy, it is extensively used in the blanket trade and in making materials in which kemp does not matter. Radnor sheep are somewhat similar to the Welsh, but larger.

Exmoors are white-faced, horned sheep, very agile, and their wool is very useful, but hand weavers would not find it easy to spin. It has a tendency to kemp but is fairly free of grey.

The Black and White sheep is a queer-looking animal. Its piebald coat and four horns give it an amusing appearance. St. Kildas are jet-black.

Last, but not least in the hand weavers' eyes, are the Shetlands. They are great favourites and may be obtained in a variety of pretty natural colours—whites, blacks, fawns, moirets and shades of grey.

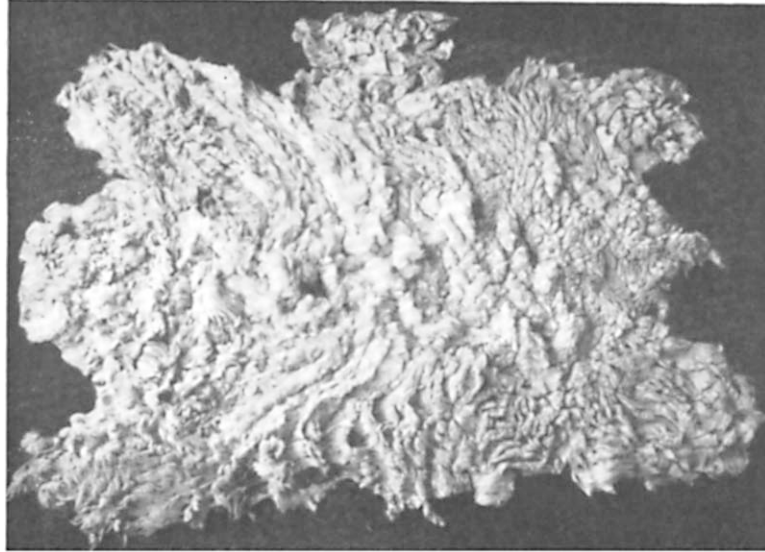
WOOL-SORTING FOR HANDICRAFT WORKERS

WOOL-SORTING,—what is it?" This question is often to be heard nowadays, and it is the purpose of this article to attempt to describe something of this skilled, but somewhat obscure trade, and particularly to give handicraft-workers who buy their wool "in the fleece" a few hints on sorting the fleece into various qualities in such a way as to make as economical a use as possible of the wool.

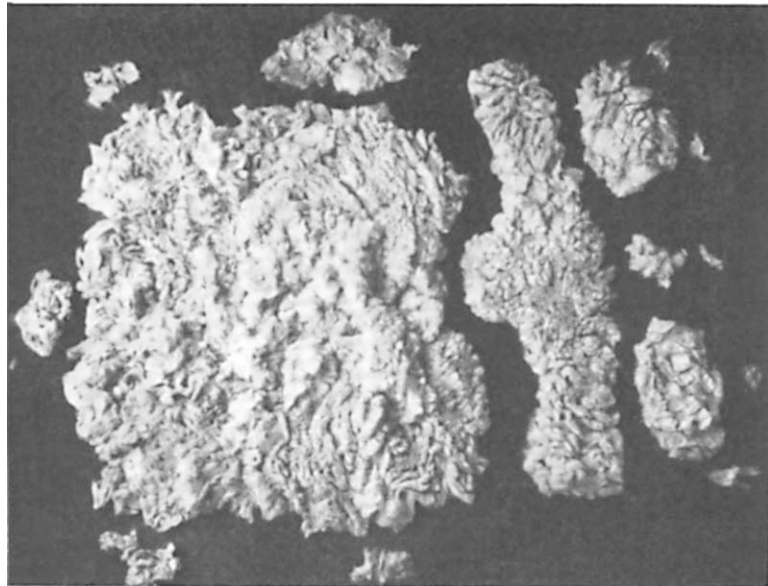
It is, of course, a well-known fact that wool has to pass through many processes, from the fleece to the finished article, but it is not generally known that the sorting of the fleece into different qualities, or "Matchings," is one of the most important basic processes, and one finds that this work is very seldom mentioned, except in passing, in books dealing with the handling of wool. Many people little realise that, were it not for the wool-sorter, the garments one sees in the shop could never possess that evenness of fibre that makes for neatness. A sorter may "make" as many as seven or eight different sorts from one fleece, ranging from the coarse-fibred wool from the hindquarters to the soft fine wool which grows on the shoulders of the sheep.

The merchant when he receives the wool has to grade each fleece according to the breed and put it with others of its kind. This work is known as "casing" and is an expert's job. In fact, good casing is as important in its way as good sorting, as casing eliminates the necessity of making too many sorts on the sorting-floor—quite apart from the obvious need to grade fleeces according to breeds.

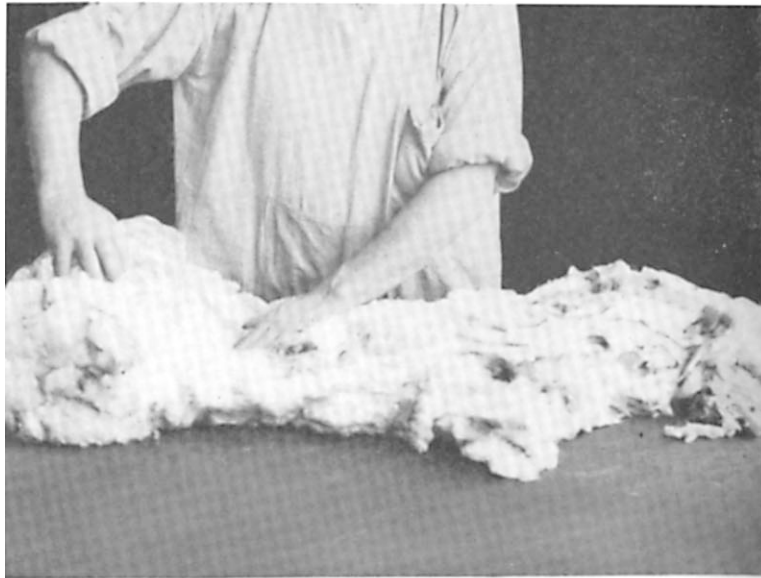
Certainly the rearing of sheep was one of the earliest occupations of man, and it follows that wherever and whenever wool has been used for clothing, etc., some kind of grading and sorting must have been done. Even amongst primitive peoples, wool was sorted to some extent before being spun. The sorter of to-day preparing wools for the mill is doing a high-skilled job. However long a sorter may live, he still goes on learning something fresh. It cannot be called an "exact science"; on the contrary, sorting is a matter of opinion; individual judgment backed by years of experience is the foot-rule by which a sorter does his work. Thus, just as no two



Fleece, laid out ready to sort.



Fleece, sorted, showing how the "breaks" may be made.



Sorter at work, unfolding a fleece.



Sorting, showing the use of fingers rather than hands.

men think exactly alike, so may two sorters differ in opinion as to where to “make the break” between one sort and another, without either man being necessarily wrong. Because of this, it is essential for the merchant to employ an experienced sorter to “look over” the work of the other men in order to bring all the wool under one opinion, so levelling down each matching to meet the requirements of the manufacturers.

All this may seem discouraging to those wishing to learn something of the elements of sorting but this is not so. All the sorting that need be learned by handspinners can be picked up fairly easily.

Some fleeces may be held together by a twisted lock of wool, which must be carefully unravelled. Give the fleece a good “bumping together” with your hands and it should then open out fairly easily. Roll it open on the table or sorting-board so that the tips of the staples are uppermost, and the two britches are to your right. Separate this coarse wool from



Sorter at work, shaking a lock of matching to clear it of small loose fragments of wool.

the fleece and also take off the short belly-wool. Then run your fingers round the edge of the whole fleece taking off the little untidy ends, but not breaking too deeply into the bulk of the fleece.

The wool that remains will probably be of two or three qualities, which need not be elaborately sorted for hand-spinning purposes. Break out any wool that is brown and dusty on the underside, or any scabby wool. If you are sorting with a view to making a pure white garment be sure to sort out any wool showing grey fibres. Look out for tar-marks, burrs, and other vegetable-matter in the wool, and if the fleece is tied with binder-twine, it is important to sort out every thread.

As you make each matching, give every lock a good shake. This clears the matching of those little loose fragments of wool which cling to the underside of the fleece, where the clippers made a second cut in one place at shearing-time.

The important thing to remember is that your own requirements will determine your methods of sorting; it is your wool, and by sorting it to suit your own particular purposes your finished articles should possess that evenness of fibre which is so desirable. It is not elaborate sorting that is needed in handicraft-work, but it is careful attention to the more obvious principles, as outlined above, that will be of the greatest help to you.

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