

R O M earliest times hand spinning and weaving of wool has been carried on in India and to-day it is still an integral part of the rural economy, producing blankets, carpets and low-grade woollens, and with an estimated output of eleven million pounds of cloth a year. Although in large centres like Muzaffarnagar and Panipat hand spinning and weaving is carried out almost entirely by full-time weavers and their families, in the villages it is done by peasants who, during the dry season when they are unable to work on the land, turn to spinning and weaving to provide clothes, blankets and rugs for their own use, and for sale on the market to supplement their small incomes. Before the war, cottages and small-scale factories consumed about half of India's total wool and it was estimated that there were 100,000 looms. The great bulk of the yarn used is hand spun, and, on an average, three spinners are required for every weaver. Since throughout the greater part of the sub-continent the demand for wool cloth is seasonal, skilled weavers are frequently compelled to find casual employment or remain idle from time to time.

# CLIMATE, CUSTOM AND CLOTHING

By tradition the people of India are users of woollen materials, but their specific needs are determined by such factors as climate and custom. In the north, climate determines the need for woollen clothes and blankets, and 75 per cent of the woollen hand-loom industry is concentrated in this area in Uttar Pradesh, Punjab, Kashmir and Rajasthan. Wool is used all the year round in the extreme north, and for most of the year in the hill country of Assam and Bengal. Further south and in Central India wool is used mainly as a covering at night, although it replaces cotton for clothing during the colder parts of the year.

INDIA

The actual type of clothing or covering is governed by custom, for each of the tribes or races has a distinctive dress both for men and women. One of the most common articles of dress is the woollen shawl which varies from the delicate Kashmiri type to the eighteen feet long shawl of the hill country shepherd.

### TYPES OF CLOTH

The industry caters for the clothing requirements of the home market by producing tweeds, shawls, coatings, and scarves, and some knitted articles, such as socks and jerseys, are also produced, though on a small scale. Most of the tweeds are made of hand-spun yarn from local wools, but in the north there is a recent tendency to use mill-spun yarns which give a more regular structure to the cloth and which, owing to a more careful blending of the wool, can be given a better finish. The pashmina yarn\* of Kashmir can be spun to very

<sup>\*</sup> Made from the fine undercoat of the Kashmir goat.

high counts, but elsewhere most of the hand-spun yarn is coarse in quality and uneven.

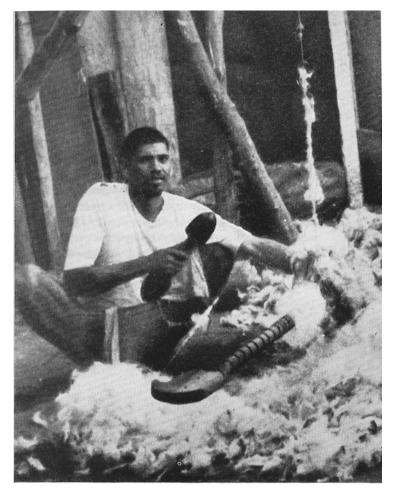
In the plains of the west, south and east, the local wool is mainly used in the manufacture of coarse blankets or *kumblies*. These blankets are frequently sold in the loom state, and, as they contain a certain amount of grease, they are used as waterproof capes in the rainy season. The quality varies with the wool; in Madras where the wool is coarse and hairy, the finished cloth resembles hessian, but in Uttar Pradesh, Punjab, Kashmir and parts of Mysore, where the wool is of a better quality, the blankets, when given a satisfactory finish, equal many of the types produced in the heavy woollen districts of England. During the last world war the industry supplied thousands of barrack blankets and blanketing cloth to clothe the armed forces.



The industry also has its place in the export trade. The shawls and carpets of Srinagar, Amritsar and Mirzapur, the druggets of Mysore and Bellary, the namdas\* from Kashmir, find their way as far as Britain and the United States, earning valuable foreign exchange. It is the hereditary skill displayed by artisans which enables this cottage industry to maintain its share in the export trade.

#### **HAND PROCESSES**

Since the hand manufacturing processes used in the cottage industry of India have been evolved independently of Western processes it is desirable to describe them briefly. The carding is done with



Carding indigenous wool with a bow,



<sup>\*</sup>Felt rugs with embroidered designs.

a bow made of bamboo or cane whose ends are connected with strings. The carder, usually a woman or child, squats on the ground and pulls the bow through the fleece and this is continued until the wool is suitable for spinning. Where large quantities of wool have to be carded, professional carders or *pinjaris* are employed.

In the village, spinning is sometimes still done with the takwa or takli, a simple type of hand spindle, but the charkha is widely used. This spinning wheel is usually worked by hand and has an endless cord passing over to a spindle. A handful of loose or carded wool is rolled into a sliver and attached to the point of the spindle, and the work of drawing and twisting is begun.

To prepare the warp yarn a board with a series of upright pegs arranged in a U-shape is frequently used.

thrown backwards and forwards, the shed being opened as required. "Beating up" takes place by means of a heavy stick shaped like a knife which is inserted into the shed. This serves a double purpose, and after 'beating up" the blade is turned edgeways to form a new shed.

Although many of the *kumblies* are marketed in the loom state, some villagers do carry out a form of finishing, especially where medium-type wool is used. The folded blanket is laid on a flat stone and soap solution is added. Then the "fuller" works the blanket with his feet until it attains the desired size. After being washed it is sun dried on a frame or merely laid on the ground.

# CARPET WEAVING

For carpet weaving a vertical loom, usually built in



Milling blankets.



Spinning with the Charkha.

The yarn is wound on to selected pegs, according to the length required, and this is repeated until the desired number of warp ends is obtained. In the case of blankets there are usually ten to an inch. Then the yarn is removed from the pegs, the threads are arranged to give the required width and are then placed on a trestle. After they have been stretched tight they are brushed with size made from crushed Tamarind seed boiled in water.

Once it is dry the yarn is ready for the hand loom. This is frequently a throw-shuttle type of "pit" loom, which has the advantage of being both simple and cheap. The weaver has an arrangement which takes the place of healds. For a shuttle he uses a hollow cane or bamboo in which is placed the weft yarn. The shuttle is

a pit, is used. The weaver sits on a rough wooden bench with his legs in the pit. The balls of coloured yarn are suspended above his head within easy reach. Frequently a prompter reads or sings the pattern, which is taken from a sample carpet or design. A few plain rows are inserted, which ensure that the end of the carpet is held firm. The woollen yarn to be inserted is held in the left hand, it is twisted round the warp, crossed on itself forming a knot, and the yarn is then cut with a knife held in the weaver's right hand, the pile being towards the weaver. When the whole line has been completed, a weft-thread of cotton or jute is passed through the shed and beaten down firmly with an iron comb. When the carpet is finished it is removed from the loom and the pile is trimmed by placing the carpet over

a roller, or laying it on the ground, and using a sharp knife or scissors. Druggets are made on a similar loom, but in a plain weave without any pile.

#### **CHANGES AND IMPROVEMENTS**

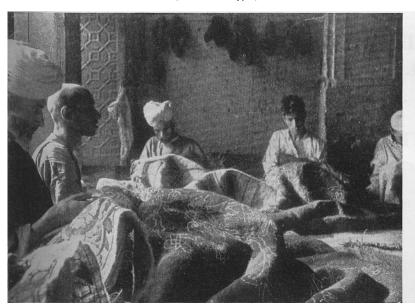
Although true cottage industry implies production by a family unit who use their own equipment, buy their wool and sell their goods, this system of work is declining under present economic conditions. In certain areas of Kashmir, however, the family unit still survives. In some areas the cottage worker has gradually been reduced to the status of a wage earner for a middleman, who provides the wool and markets the finished products. In the more developed areas of the Punjab and Uttar Pradesh small capitalists, frequently successful weavers, have set up small-scale factories or integrated the cottage workers into a single unit, while leaving them to carry out the work in their own cottages.

The villager is handicapped by his lack of capital. Having barely enough money to meet his daily needs, he cannot purchase more wool until he has marketed the finished product. Another difficulty is the lack of suitable wools. Often the weaver attempts to make cloth from unsuitable materials and not only is the spinning and weaving difficult, but the cloth is of a low quality and brings the weaver little financial return. To remedy these defects it would be necessary to provide cheaper credit facilities and a central organisation through which the right type of wool could be obtained. Moreover, to speed up the production of cloth certain improvements in equipment are essential. At the present

time it takes five carders to prepare enough wool for one spinner, whereas one mechanical card would keep five hundred spinners busy. To improve the final product there could be established central finishing plants, such as already exist in the Punjab. Here the weavers bring their cloths and these are either finished at a nominal cost or bought outright. In this way the functions of cottage and factory can be complementary.

Many years ago the Government adopted plans to assist the industry. Grants were allotted to different states and provincial governments and many of these appointed Wool Development Officers. The main needs of the industry are for weavers' co-operative organisations, for technical guidance and better facilities for obtaining raw wool and marketing the finished products. In some provinces co-operative societies have already been formed, but there is need for many more. To provide better facilities for technical guidance a Wool Technological Institute and a Central Training and Research Institute of Cottage Industries have recently been established in Delhi. Meanwhile, provincial centres and demonstration parties are doing valuable work in the rural areas. A central organisation of the co-operative societies could profitably undertake the bulk buying of finer wool and yarn. A few years ago the Central Cottage Industries Emporium was established in Delhi to market and advertise the goods made in the provinces. As a result of these improvements the woollen cottage industry will continue to play an important role in the economy of India, not only producing goods for the home and overseas markets, but also by providing useful employment for thousands of workers.

Making namdas in Kashmir.
(Photo: Paul Popper)



Weaving a carpet.

