

DRYAD LEAFLET No. 83

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SPINNING WOOL



DRYAD HANDICRAFTS
LEICESTER

SPINNING WOOL

THE origin of spinning dates back to very early times. Starting with the primitive forms of hand spinning it has gradually developed into the present-day commercial industry of machine spinning.

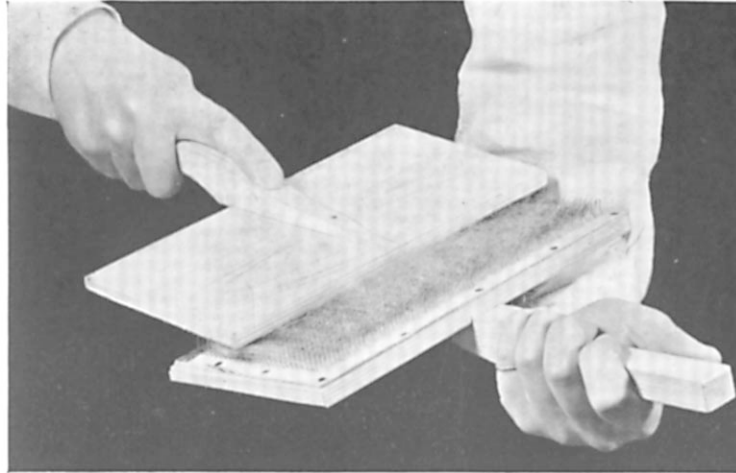
Here we are concerned, however, with the revival of the ancient form of hand-spinning, for it provides a fruitful occupation for the craftswoman at home and is of real educational value to children at school, being the first stage in the making of cloth. Further, the slightly irregular thickness of hand-spun wool when woven into cloth is particularly pleasing as compared with the regular, mechanical appearance of cloth woven with machine-spun wool.

There are two methods of spinning, one with a Spindle which is the oldest form of the craft and quite inexpensive. The other method is with a Spinning Wheel, which, although more costly, provides a much speedier method than the spindle, and is therefore recommended where any quantity of wool is to be spun. It is worked by foot power, leaving both hands free for manipulating the wool.

Both these methods are described.

WOOL

Long-stapled wool is most suitable for hand-spinning, for example that which comes from Shropshire, Lincolnshire and Leicestershire. South Downs and Shetland Wools are not so long but are noted for their softness. These qualities should be considered together with the purpose for which the wool is to be used. The long-stapled wool will stand hard wear better, but the softer wool is more pleasant for such articles as scarves, etc., where the strain is not so great as with some garments. The raw wool or fleece can be purchased by the pound. Most spinners prefer to retain the natural grease in the wool as it is much easier to spin in this condition. Some, however, object to its slightly dirty nature and prefer it washed. Then it is necessary to oil it with olive oil before it is spun, as otherwise it is difficult to manipulate and breaks easily. Before spinning,



the wool must be teased or straightened out. There are two methods of doing this, the first is to tease the wool with the fingers only, while for the second carders are used. This method is known as carding the wool. Some workers prefer the former method because they maintain that the carding is inclined to weaken the fibres of the wool. However, the latter is certainly a more speedy method where any quantity of wool is to be used.

TO TEASE THE WOOL WITH THE FINGERS.

Take a handful of wool, remove all bits of twigs and other hard fragments and gently pull the fleece apart with the fingers. Any remaining dirt and dust should fall away during this process. When all the tangles have been straightened pull the wool into rope form and it will then be ready for spinning.

CARDING THE WOOL.

Before carding the wool it must be teased. To do this take a handful of wool in the left hand and remove all hard bits as before. Then with the right hand draw away small pieces at a

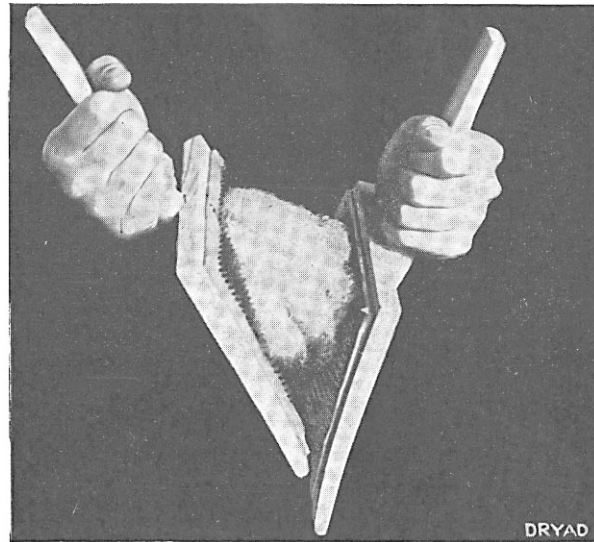


FIGURE 2

time for the full length of the staple with a quick movement. If the wool has been previously washed, a little olive oil should be worked very gently with the fingers into the pile of teased wool. As the figures 1 and 2 show, the carders consist of two rectangular pieces of wood with a handle attached and small wire teeth fixed on one side of each piece. They are used as follows: Hold one carder in the left hand with the teeth uppermost, the handle pointing away from the body. Place a small handful of teased wool on it, hold the other carder in the right hand with the teeth facing downwards and the handle facing towards the body (see fig. 1). Draw the right hand carder down sharply against the other one two or three times and the wool will be transferred on to the right carder. Now this must be transferred back to the left carder. Raise the handle of the left hand carder and turn the right hand one so that the teeth are facing and the handles pointing in the same direction (see fig. 2). Lift the right hand one and press it down on to the left carder and the wool will cling to it. Repeat this entire process

twice more and the wool will then be ready to be taken off as follows: Hold the carders in an upright position and press the right hand carder down against the left hand one and then the left carder against the right one. Repeat this, removing the wool from right to left and left to right and it will gradually come away. When it is sufficiently loose shake it from the right carder on to the back of the left one and roll it between the backs of the two carders until the wool is in a neat roll called a "rolag," ready for spinning.

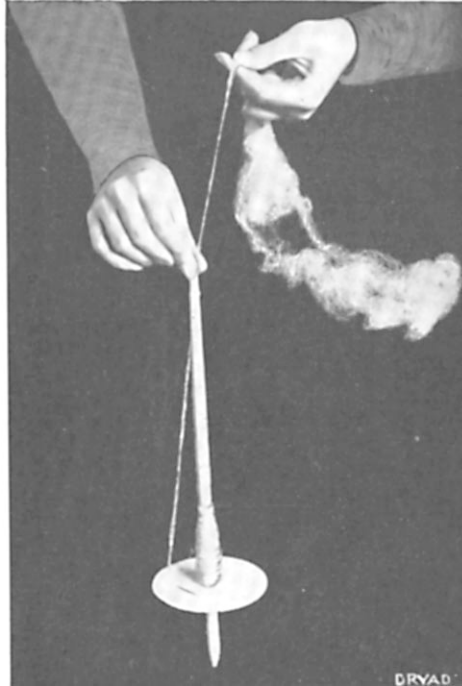
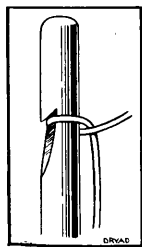


FIGURE 3

SPINNING WITH THE SPINDLE

The spindle consists of two parts, an upright stick or stem with a hook at one end and a point at the other lower end, and a wooden disc which is fixed to the stick a few inches above the point to help the spindle to spin easily.



A length of about 18" of spun wool is required to begin. Machine-spun wool will do for the purpose. Tie the end of the wool to the spindle just above the wooden disc. Pass it over the disc and round the stem below it, then up again from here to the top of the stem, and loop it round the hook with a half hitch as follows: With the wool

on the right hand side of the spindle place the first finger of the right hand behind the wool. Twist the finger backwards over it picking up a loop, which is slipped off the finger on to the hook, see diagram. Now hold the fleece in the left hand, draw an end from this about 4" long, which will give the required thickness of the yarn when it is twisted. Overlap the end of this with the end of the spun wool and hold them between the left finger and thumb. Then with the right hand twist the spindle sharply like a top outwards to the right, and let it spin until there is a tight twist on the spun piece of wool. Rest the spindle against something, the foot, for instance, or the leg of a chair to prevent its unwinding. Ease the left finger and thumb away from the joining point and let the twist run along so that the two ends are fastened together. When the twist reaches the end of the 4" length of wool which was drawn from the fleece hold the wool at this point between the finger and thumb of the right hand and draw out another length of the same thickness from the fleece. Remove the fingers and let the twist run along again. When all the twist is used hold the finishing point of this with the left finger and thumb and repeat the process by twisting the spindle again (see fig. 3).

TO WIND THE FINISHED WOOL.

The finished yarn is wound on the stem of the spindle just above the disc as shown in the illustration. Holding the spindle in the right hand wind the spun wool on the left hand from the thumb to the little finger in the form of a figure 8. Slip the wool off the hook and the other end of the spindle, and then holding the spindle upside down with the right hand and the yarn with the left, wind the wool evenly in the form of a figure 8 on the stem by turning the spindle. Make the greater part of the weight come next to the disc of the spindle, as this makes it spin more evenly. An end of about 12" must be left unwound ready to loop on the spindle again before proceeding with the spinning.

When the wool is ready to be taken off the spindle, ease it gently along the stem of the spindle and slip it off the end and

insert a roll of paper through the centre of the ball and twist up the ends to prevent the wool from slipping off. The wool can remain in this condition until the worker is ready to wind it into skeins preparatory to washing.

The spun wool is wound into skeins by means of a Skein Winder, in readiness for washing, for which instructions are given later. Before being removed from the winder the skein must be tied in four places to keep it in order for washing.

SPINNING WHEEL

The various parts of the wheel are numbered on the illustration on the next page and the terms given to them are as follows:—

(1) Wheel, which connects the spindle to the treadle.

(2) Spindle, a metal rod which holds the flyer, bobbin and bobbin screw, and fits into leather pieces attached to the spindle supports Nos. 5 and 6. It has an eye at one end through which the wool passes to the bobbin.

(3) Flyer, a horseshoe-shaped piece of wood with small hooks along each arm to regulate and guide the wool as it is wound on the bobbin.

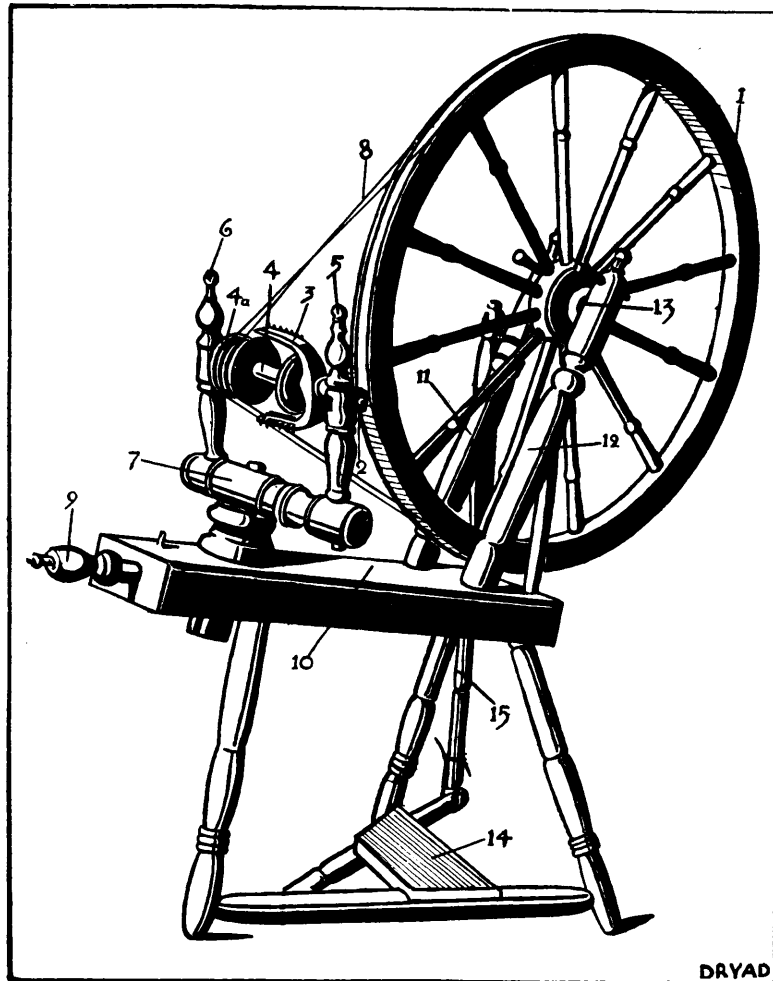
(4) Bobbin, which receives the spun wool. It is essential for this to run quite freely on the spindle so that it draws the wool in as it is spun.

(4a) The Bobbin Screw, round which one string of the driving band is passed.

(5 and 6) Spindle Supports, 2 vertical bars of wood. No. 5 has a square piece of leather with a hole, and No. 6 a loop of leather for holding the ends of the spindle.

(7) Horizontal bar, holding the spindle supports. This is slotted through the table No. 10 and secured underneath it with a wooden nut.

(8) Driving Band. This connects the spindle to the big wheel and consists of a piece of tightly twisted string passed round the big wheel and the bobbin and bobbin screw, instructions for this being given later.



(9) Tension Screw. A wooden screw at the end of the table to adjust the tension of the driving band.

(10) Table, to which all the main parts are fitted.

(11) and (12) Uprights, holding the axle on which the wheel revolves.

- (13) Metal Axle.
- (14) Treadle, the pressing of which keeps the wheel revolving.
- (15) Treadle Arm, the bar connecting the treadle to the wheel. It is slotted on to the bent arm of the axle.

The various parts of the wheel can be assembled by following the illustration. When fixing the two spindle supports in the bar No. 7 place them with the leather pieces facing the wheel. No. 5 with the thick square of leather must be at the front of the wheel, i.e., nearest the worker, and No. 6 at the back of the wheel. The flyer is threaded on the spindle with its curved end closed up to the hole or eye of the spindle, and the smallest end of the bobbin fits into this curved end. Beyond the bobbin the bobbin screw is threaded on the spindle. This end of the spindle is inserted in the loop of leather on No. 6 support and the other eye end is inserted in the leather piece of No. 5 support. It is a good plan before starting to use the wheel to oil sparingly the metal parts with some good machine oil.

TO ATTACH THE DRIVING BAND TO THE WHEEL.

Take a long piece of tightly twisted string of medium thickness, pass it once round the large wheel holding the end with the left hand, bring it over to the spindle and pass it round the outer groove of the bobbin screw. Then pass it round the large wheel again, first crossing it over the end of the previous string and bring it back to the spindle. This time it is passed round the groove at the end of the bobbin. The crossing of the string is most important for if this is omitted the band will come off immediately the treadling is started. Pull the ends of the string tightly together and oversew them firmly for a short distance with a needle and thread. After the wheel has been worked a little the string may stretch, in which case it is necessary to adjust the band. If the tension screw does not tighten it sufficiently the join must be undone and rejoined.

TO USE THE WHEEL.

It is quite a good plan to practise treadling before starting to spin, in order to obtain the regular motion necessary for good

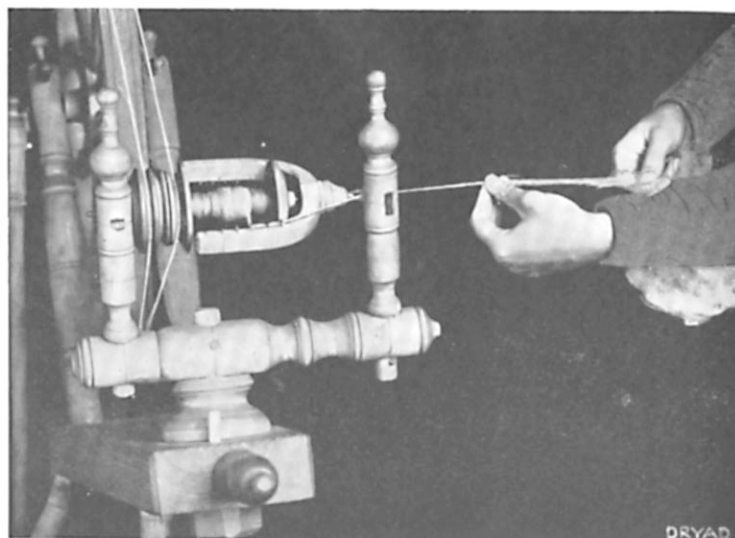


FIGURE 4

spinning. Place the right foot on the treadle and turn the wheel to the right keeping it revolving by means of the treadling, in the manner of a treadle sewing machine.

To begin spinning take a length of machine spun wool and tie it tightly round the bobbin. Pass it across and under the hooks on one of the arms of the flyer. Then thread it down through the eye of the spindle and out through the hole in the end of it. A small piece of bent wire is useful for this purpose. Now take some of the prepared fleece, tease the end out a little and wrap it round the end of the machine spun wool. Hold the join between the finger and thumb of the left hand. Start the wheel slowly and let the twist thus made on the wool run up the join. When it is secure pull out one or two inches of the fleece with the right hand to the thickness required, and remove the left thumb and finger (see fig. 4). The twist will then run along this wool. Hold the wool again between the left thumb and finger at the end of the twist and draw out more wool from the fleece with the right hand. Repeat this

process slowly, keeping the wheel revolving by means of the treadle. Do not hurry as the thread is more likely to break, and do not attempt to get the thread too fine at the beginning. When these movements have been mastered try drawing out large pieces of wool from the fleece. This makes the spinning quicker and allows for a more comfortable sitting position for the worker. When it is necessary to join on a fresh supply of wool it is done in exactly the same way as at the beginning, by overlapping the end with the end of the spun wool for about $1\frac{1}{2}$ ". With practice the movements of the hands and feet will form a continuous rhythm, and it is only in this way that an even thread is spun. As one section of the bobbin becomes full remove the wool from under the hooks on the arm of the flyer and rethread it under those hooks opposite the empty portion of the bobbin. In this way the wool is evenly distributed. Fast treadling will cause the wool to curl into small knots and it will not wind easily on the bobbin. This fault will also happen if the driving band is too loose.

TO MAKE A 2-PLY WOOL.

A single ply wool, for which instructions have just been given, is suitable for the weft of weaving, but for the warp and for knitting purposes it is necessary to ply the wool. Two strands of this single wool are twisted together to make a two-ply wool as follows:—

Place two bobbins of the spun wool on a spool rack and thread the two ends of wool through the eye and end of the spindle, along the hooks on one of the arms of the flyer, and on to the bobbin. Begin treadling in the usual way but turn the wheel to the *left* instead of the right as before. To keep the threads in order during the process lay one thread over the first finger of the left hand and the other thread in between the first and second fingers, and let them run through these.

WINDING THE WOOL.

When the wool has been spun for a single ply or double ply, it is wound from the bobbins into skeins by means of a skein winder. Before removing it from the winder the skein must

be tied securely in four places to keep it in order for washing, as previously mentioned with the spindle.

TO WASH THE WOOL.

Prepare a bath of soft hot water (not boiling) and make a lather of pure soft soap. Allow the wool to soak for about 20 to 30 minutes and then wash the wool thoroughly to remove all grease. Rinse the wool with warm water adding a little ammonia to remove the soap. It may require rinsing a second time. When dry it is ready for dyeing, although quite good results can be obtained by using the natural undyed wool if desired, for example, wool from a black sheep combined with natural wool is attractive.

Miss Violetta Thurstan, who has had a large and varied experience of dyeing in various forms, has written a most informative book for the Dryad Press, "The Use of Vegetable Dyes for Beginners," price 2/6, and this is recommended to all those needing practical help in this direction. There is also a chapter on spinning and dyeing in "The Weaver's Craft" by L. E. Simpson and M. Weir, Dryad Press, 15/-. This authoritative book is a standard guide to the textile crafts.

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