AS THE WHEEL TURNS

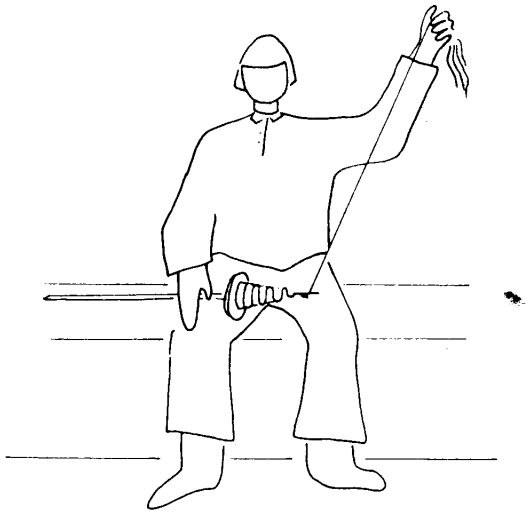
FLOOR SPINDLES

Many spinners wish to make thick yarns, but find there is a limit to the size of yarn their wheel can spin. If you have this problem, consider using a floor spindle. The floor spindle is especially suited to spinning thick yarns and is easy to use.

The floor spindles is most frequently associated with the Navajo. Figure # 1 illustrates the use of the spindle. The following is a description of the spinner's hand technique: "The spinner has rested his spindle tip, not on the floor but in a small pottery bowl. That keeps it in position while it spins. The upper end of the spindle rests against his right leg. When he starts spinning, he pushes this upper end gently away from him. The spindle revolves as it moves and its lower tip moves forward along the floor or round and round in the bowl. The upper tip moves along his leg, then away, so that the spindle stands free, held in a slanting position by the fingers of his right hand and the pull on the yarn. When it has stopped spinning he brings it back and starts it again."[1] Navajo spinners often spin yarn once with a minimal amount of drafting and twisting. The yarn will be spun again (one or more times) drafting the fibers finer and adding more twist.

Although often referred to as a floor spindle, this tool can be used in many ways. A Hopi spinner might roll the spindle on his thigh to achieve the required twist as in figure# 2. Notice that when used in this manner the spun yarn is collected on the opposite side of the spindle whorl. The following is a description of spinning cotton with this technique.

"The spinner sits with a pile of cotton fluff on the floor at his left. In his right hand he holds the spindle, with the whorl pointing inward. He attaches a streamer of cotton

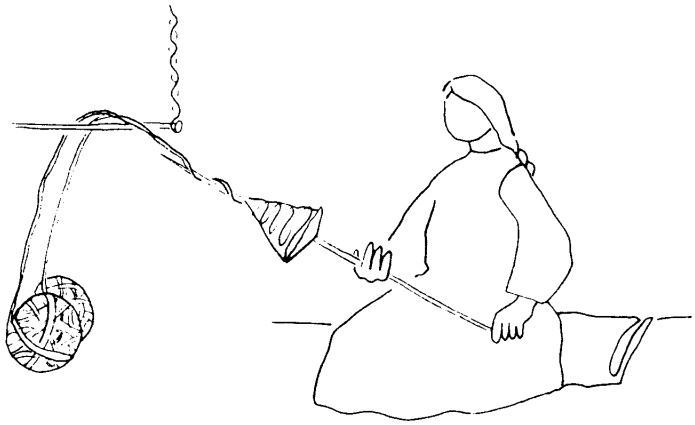


to the spindle below the whorl, by winding the end around tightly a few times. Then he holds the spindle horizontally on his right thigh, under the palm of his hand. His left hand holds the streamer of cotton which can be pulled out from the fluff in one loose, continuous mass. He brings it up between the little finger and the third finger of his left hand, winds it two or three times around all four fingers for firmness, then holds the hand as far up as he can so that there is a long, tight stretch of fluff between spindle and hand.

Now he starts revolving the spindle. He rolls it forward along his leg, with the palm of his hand which lies over its longer portion above the whorl. When it reaches his knee, he pulls it lightly back with thumb and middle finger and rolls it down again. More and more cotton is pulled away from his left hand and wraps itself around the spindle while the revolving motion twists the loose streamer into a fluffy cotton yarn. Meantime the left hand holds the cotton taut for it is this pull between hands and spindle that makes the twist firm.

Finally the laps of cotton are all off the left hand and it is time to pull more from the mass. Before doing this, the Hopi spinner evens the twist in the yarn he is already holding. He places the spindle under his foot, then he grasps the taut yarn with his right hand and reaches with his left as far as he can along the unspun thread. Then his right hand pushes the twist up along his thread."[2]

Salish spinners use a similar style of spindle for spinning yarn and for plying together single strands of wool yarn into 2-ply. "The spinner squats upon a mat on the floor and with outstretched arms raises the huge spindle to an oblique position (see figure # 3) by grasping its lower end in the palm of her left hand and clasping its shaft a little below the whorl in her right. The twirling might be termed a tossing motion which is performed by the upturned palm of the right hand. When the roving has received the required amount of twist the upper end of the spindle is swung upward and backward, thus bringing the next draft of roving forward and permitting, after the spindle end is again dropped to position, that the loosely sagging and already twisted yarn be wound upon the spindle. This is accomplished by lacing the yarn back and forth in



large oval coilings on the upper arm of the shaft as the spindle is lifted and lowered from the oblique to the vertical and from the verticle to the oblique while it is still revolving. After the stretch of completed yarn is wound on the shaft the spinner returns to the twirling motion that the freshly drawn roving may be twisted . . ."[3]

(Next month, selecting and spinning with a floor spindle.)

[1] Underhill, Ruth. *Pueblo Crafts.* U.S. Dept. of the Interior Bureau of Indian Affairs, Division of Education, 1944. p. 38.

[2] *Ibid.*, p. 35-36.

[3] Kissell, "A New Type of Spinning in North America" in *American Anthropologist.* 1916. p. 265-266.

QUESTIONS

What type of spinning wheel would you suggest for a new spinner?

I would suggest a doubled band wheel so there is only one tension adjustment, with a 3/8" or larger orifice, flyer to bobbin pulley ratios of both 1.2:1 & 1.5:1, and a drive wheel to flyer pulley ratio of no larger than 7:1. After this, your personal tastes and preferences for available options should determine additional features.

What is overtwist and how do I know if my yarn has it?

Overtwist is an elusive quality that means different things to different people. When you are adding twist to your yarn, you are making a trade-off of strength for softness: The more twist, the less softness to the yarn, but the stronger the yarn.

This should suggest that yarn twisted too much for a hat could be perfect for socks, for example.

A good test for overtwist while you are spinning is to take a length of yarn and pull on it gently. If all the loops and bumps stretch out and disappear, then your yarn is not too twisted. If the yarn breaks, it needs more twist.

Watch for the forthcoming workshop with the Glaskis, "Understanding Spinning Wheel Features and How They Affect Yarn".