

S H O R T C U T S

B E A M I N G .

Under this chapter we could describe so many interesting and out-of-the-way techniques that it would make a book. This is because human ingenuity has been working for decades to find a way to do the beaming without a helper. Besides the usual ways there are also such unorthodox ones as tying a piano to the end of warp and make it advance toward the loom when beaming is in progress. Another, only for weavers living in sky-scrappers, is to throw the warp out of the window with any heavy object attached to its end, and then beam over the window sill. Strange as it may seem, both these methods would work very well.

To come to more practical suggestions, we must first realise what is wrong with the traditional beaming. Nothing of course in case of sectional beaming or a warping mill, provided that in both cases the equipment is well designed. Otherwise there are two objections: the need of a helper, and too much friction, resulting in comparatively slow beaming. The first of them is probably more important.

A. Low-tension beaming without helper.

What the helper is doing, really can be done by the "beamer" except for maintaining proper tension during beaming. If we could get along without tension, we could eliminate the helper.

This can be done with any yarn provided that we use a continuous roll of paper at least as long as the warp to separate the layers of yarn on the warp beam. This paper must be heavy: the heavier the better; for mixed warps even corrugated paper. We have the following choice. Building paper, the cheapest grey kind, not tarred, impregnated or saturated with anything at all. It is sometimes called sheathing paper. It is cheap but it does not last. Then there is wrapping paper, the heaviest kind; it is sold in different widths and it is expensive. It lasts for ever if care is taken not to fold it, and not to tear the edges. Finally we have corrugated paper also in a selection of widths, good only for comparatively short warps because of its bulk. It is expensive.

The warp should be stretched out in front of the loom as far as the space permits, and after it has been straightened out (by combing if necessary) it is laid on the floor on a large sheet of clean paper. Now we put any soft and heavy object on top of the warp: upholstered stool upside down; a cushion weighted with bricks, or with a Webster dictionary; a folded blanket with a similar weight, etc.

Now we start beaming. After making one turn we insert the paper, and check very carefully that it is just in line with the warp. Then we keep turning looking from time to time on the warp, and most of the time at the paper which must be pushed or pulled to keep in line. When the weight comes to the loom, we straightened the warp again and move the weight back as far as possible. And so on until the whole warp is on the warp beam.

But what we have now is a warp with very little tension. If we tried to use it as it is, it would keep slipping, and hardly any weaving could be done. Therefore we first thread and sley it, tie it in (to the apron), and then turn the crank on the warp beam for a while as if beaming again. This will tighten the warp to any desired degree, and nothing can happen to the yarn since it will simply slide on paper. If we tried the same technique but without paper it would ruin the warp for ever.

B. High-tension beaming without helper.

Find a place on the wall just opposite the centre of the loom and a little higher than the breast piece. Drive a long screw in this point. Make sure that the screw went through the plaster, or building board, and got hold of something solid. If it is brick or cement, first drill a hole (star drills) and use an expansion bolt. Then get a length of sash cord, more than twice as long as the distance from the back of the loom to the wall. This is the whole equipment.

The warp is laid on the floor in front of the loom, spread over the raddle, attached to the warp beam, and straightened out as far as the wall.

Yes, but we have forgotten about the pulley. It must be a small one (about 1") of the kind used in boats with an eye at one end. The pulley is tied to the screw in the wall. One end of the sash cord is looped around the warp (make sure that it won't slip) taken

over the pulley and to the back of the loom. Now with the right hand we turn the crank of the warp beam, and with the left hold the sash cord to get the desired tension. Our left hand is our helper; otherwise there is no difference between this method and the traditional beaming. We can use paper or warp sticks, or nothing according to the kind of yarn and the sett of warp. When we finish one length, we repeat the whole performance until the warp is beamed.

C. Beaming with reduced friction.

Nearly any kind of beaming will succeed provided that there is not too much friction, which results in tangling and breaking of yarns. Here are suggestions as to how to avoid friction:

1. Beam only over a Raddle. Never through a reed, and (which is still worse) through the heddles. What is more: remove the lease-rods before beaming. This means of course that we must make two leases (or crosses), one at each end of the warp. The first lease is used only for spreading. Then the lease-rods are removed for beaming and inserted again in the second cross for threading.

2. Whatever method of warping we use, let us make sure that the tension is uniform all through before beaming. Even one single warp end looser than the rest means no end of trouble.

3. Any wood surface over which the warp must slide during beaming must be absolutely smooth, and better not varnished, because varnish may become sticky in hot weather or under friction. The proper finish is linseed oil rubbed in, sanded and waxed.

4. Whenever possible beam under low tension, and tighten the warp later on.

5. Do not chain the warp. Take the warp gradually from the warping frame, reel, or whatever warping equipment you have, as the beaming proceeds. If the warp must be kept in storage or shipped, wind it around a large piece of plywood .

Beaming with a warping mill is the easiest, and fastest. When all other conditions are fulfilled it should proceed at a rate of about ten yards per minute.
