CLASPED WEFTS.

(or SKYSCRAPERS)

This is the only free weave which can be performed at a reasonable speed. It can be woven on any loom, and in any texture. It can be combined with any technique or pattern. It does not require any special equipment. It is excellent in teaching, since the results are very spectacular and encourage the student.

The principle is not very involved. In each shed instead of a single weft, there are two coming from opposite directions. They interlock or clasp each other and return to the same side of the shed from which they came. The point of interlocking can be shifted along the shed by pulling at one of the wefts. Thus any pattern which requires only two colours in one row can be woven easily. Fig.2 (page 9) a, b, c, and d - shows examples of such patterns.

Equipment necessary for "clasped wefts" consists of the loom, a small bobbin rack, and of several quills (twice as many as colours used). Quills should be much shorter than the shuttle-spindle, so that the weft will unwind without any resistance or friction.

The weft is wound on the quills as usual, each colour on two quills. One of them is placed in a shuttle, the other on the bobbin rack. Thus if we have four colours in the pattern, there will be four shuttles and four bobbins or quills on the rack.

The rack should be placed to the left of the loom (fig.1) near enough for the weaver to reach it without getting up, but too close. The quills should be at about the same height as the weaver's shoulders. All shuttles are always on the right hand side of the weaver on the bench, with the exception of the one in use at the moment.

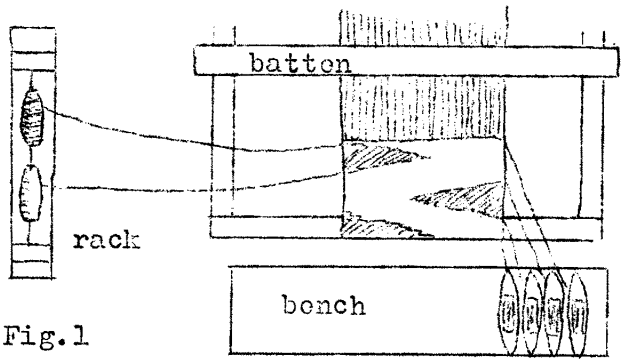

Fig.1

After checking up that all wefts both on the rack and in the shuttles unwind freely, we tie the ends of these on the rack to the warp at the left hand selvedge, and then weave an inch or so of plain tabby. Now, supposing that we are going to weave the pattern on fig.2 "a" which asks for white on the left and beige on the right, we pass the left hand under the white thread which comes from the rack and over all other colours, and keep this hand ready to catch the shuttle. With the right hand we throw the shuttle with beige weft, catch it, pull it over the white thread on the left, and throw back into the same shed. We shall notice that both wefts are clasped now and that we can move their point of crossing each other by pulling on the white or on the beige. After finding the proper place of crossing we change the shed and beat. It is rather important to change the shed before beating, or the wefts may shift considerably from teir original position. The whole operation is repeated in the next shed, and so on, as long as these two colours are used.

When the point marked "A" on fig.2a is reached, we replace the beige shuttle with the brown one, and the white weft one the rack with

with beige. At "B" we change to white in the shuttle, and beige from the rack. At "C" - shuttle: beige, rack: white. At "D" shuttle: brown, rack: beige. At "E" shuttle: beige, rack: white. At "F" shuttle: white, rack: beige, and so on.

The above pattern is one of the easiest. Although the bands of colours should be of about the same thickness, their sides should be rather irregular, and no time should be spent on careful adjusting of the wefts. With a little practice it can be woven as fast as any pattern weave. Other patterns in fig.2 may require more time, particularly the ones with vertical lines.

In general vertical lines should not be too straight, or a ridge will result. The should be rather blurred by pulling alternate picks of weft a little too much to the left and to the right. Diagonals are easy to make and they do not produce ridges even if geometrically straight.

When plain ground in one colour is wanted (fig.2b from "A" to "B") the weft used for this part of the fabric must be doubled to look exactly as the weft in the pattern. Or if there is not much of the ground, the shuttle of one colour may be crossed with the weft from the rack of the same colour.

Binder may be used between rows of pattern, but it should be very fine compared to the pattern weft, and of a neutral colour. The resulting effect will be one of a ribbed fabric.

The yarn used is of a certain importance. For instance it will be noticed that the edges are pulled in more than in ordinary weaving. Consequently linen warp is not indicated. The weft should be smooth, and slide easily. Here again linen is poor material, particularly single linen. Cotton is the best, rayon and wool - second best. Metallics can be used with care. In all cases however there is one most important condition: the two wefts used in the same shed must have the same direction of twist, and possibly the same degree of twist. Otherwise they clasp each other so firmly that they can not be moved at all. Their grist should be identical for different reasons. In other words the wefts should be of the same yarn, grist, twist - all through.

For the first experiments with "clasped wefts" one should start on a rather narrow warp, but it is quite possible to weave even bedspreads in this technique. The speed of weaving will however diminish quite rapidly with the growing width of warp.

Three colours in the shed. There are two methods of doing it:
1. Set up the loom for double-width fabric with the selvedges on the left. Now two colours can be placed on the rack, and they will make the borders of the pattern. The third colour will be in the shuttle. A mark will be left in the fold, no matter how carefully the piece is woven. Patterns made in this way may be quite attractive (fig.2 "e").
2. Place a bobbin rack on each side of the loom. Rather strong colours on the racks, and neutral ones in the shuttle or shuttles. Now we throw the shuttle with let us say beige from the right to the left, catch red from the left hand rack, carry it part way into the shed, then catch black from the right hand rack and pull it into the same shed, then change and beat. We shall have three wefts in one shed: on the left two red with one beige, in the middle three beige, on the right two blacks and one beige. It is obvious now why strong colours should not be used in the shuttle: they would kill the more subdued shades. Fig.2 "f" shows a pattern suitable for this last technique.

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C L A S P E D W E F T S

Fig.2