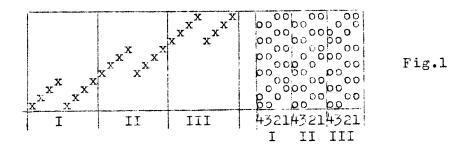


With 4 shafts it did not matter whether we call our Lace: twill, or huck. But with a higher number of shafts we must decide which is it. If it is twill, then the draft will be as in fig.l.



The tie-up here is purely theoretical, shown only to explain how it works. For instance when we weave block I in lace and blocks II and III in tabby, weuse group "I" of treadles. The lowest 4 shafts are tied as for lace, when the remaining shafts are tied for tabby (the treadling is 2415). Block II of lace is woven on group "II", and block III on group "III".

Since however treadles No.2 are all identical, and so are treadles No.3, we can save 4 of them for combinations of blocks of lace as in fig.2. The ground (or tabby) treadles are moved now to the

Fig.2

outside, so that the treadling with alternate feet will be still possible. The treadles are divided now into only 2 groups: A and B, and the numbers go in each group from the center out. The treadling is:

Block I: A6, B5, A5, B6.

Block II: A6, B4, A4, B6.

Block III: A6, B3, A3, B6.

Blocks I+II: A6, B2, A2, B6. Blocks II+III: A6, B1, A1, B6.

With a larger number of treadles we could have more combinations of blocks of pattern, e.g.: I+III, and I+II+III.

Any 3-block pattern can be woven in this way. There is no limit to the size of blocks, and the lace is firm enough to reach right to the edge of the fabric.

Obviously as a method the Twill Lace is not very economical, because with 12 shafts we have only 3 blocks of pattern (or 2 blocks plus ground), but then at least the threading is easy

PRACTICAL PROJECT I

Linen towels.

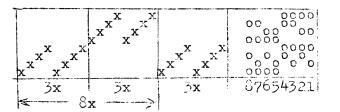


Fig.

Warp: 20/2 linen; No.of ends: 408; sett: 24 ends per inch; reed No.12; 2 ends per dent; width in reed: 17".

Weft: the same as warp, or No.10 single linen.

Treadling: 1,8 - to make 3"; 1,7,2,8 - 1"; 1,5,4,8 - 1"; 1,6,3,8 - 1"; 1,8 - 1". Repeat the last 4 groups for the desired length, and finish with 3" of tabby.

If we consider our Lace as huckaback, then the drafts should be of the type shown in fig.4.

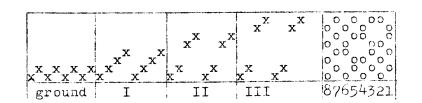


Fig.4

The tie-up is the same as for huck-lace, and it gives each block of pattern separately, but we can have also combinations of blocks as in fig.5.

	Fig.5	00000 0000 0000 0000 0000 87654321	Fig.6
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It is unlikely that we shall have 14 treadles with an eight shaft loom, and we are not going to use the whole tie-up, but only the groups of treadles which are needed for the pattern. Group A is ground or tabby, and must be kept in any case; B gives block I; C - block II; D - block III; E - blocks I+II; F - blocks II+III; and G - blocks I+II+III. In practice the arrangement of treadles should be changed so as to allow to alternate the feet. For instance in fig.4 the treadling for block I is 7658; for block II - 7438; and for block III - 7218. After re-arranging the treadles as in fig.6, the new treadling will be: block I - 4738; block II - 4628; block III - 4518.

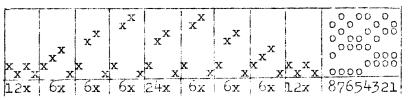
The draft in fig.4 is much more economical than the one in fig.1, because with 8 shafts it gives more possibilities than the former with 12 (3 blocks of pattern plus ground in fig.4, as against 3 blocks in fig.1). On the other hand the threading is more difficult and the warp less equally distributed: more than one half of the warp on the first two shafts.

Thus if we have a project which requires a large number of blocks of pattern, we shall treat the weave as huck lace, and use a draft of the type shown in fig.4. On the other hand when we have a loom already threaded for 1:3 turned twill (rough damask or dornick), we can weave twill lace on the same set-up by changing only the tie-up.

PRACTICAL PROJECT II

Rayon place mats.

Warp: 10/2 rayon (any colour); No.of ends: 336.
sett: 24 ends per inch; read No.12;
2 ends per dent.





treadling: 48 - to make 3"; 4738 - 1"; 4628 - 1"; 4738 - 1"; 4518 - 8"; 4738 - 1"; 4628 - 1", 4738 - 1"; 48 - 3".
