BRONSON LACE

There are very few weaves which can be called with any justi-
fication "true linen weaves". One could even argue that there are none.
But if there are any, then Bronson Lace and Swedish Lace (MW 29/7)
are the best examples. The lace effect becomes apparent only after the
fabric is finished i.e. thoroughly washed and ironed.

In drafting the weave is a derivate of the spot-bronson. The
only difference is that in lace the same block of pattern is repeated
over and over again. But to be repeated each block must be tied down
to avoid long floats.

For purely practical reasons all floats of the lace should be
of the same length in the same piece of weaving, and therefore we have
here "units" both in threading and in treadling. These units may pro-
duce floats of 3, 5, or 7. The table in fig.1 shows all three, as well
as the tabby ground

ground	floats of 3;	floats of 5;	floats of 7;	Tie-up:
threading:	1212	121212	12121212	
treadling:	4545	454545	45454545	
1-st block				
threading:	1312	131312	13131312	
treadling:	4345	434345	43434345	
2-nd block				
threading:	1412	141412	14141412	
treadling:	4245	424245	42424245	Fig.1
Both blocks				
treadling:	4145	414145	41414145	

Tie-up grid (shafts 5 4 3 2 1)

With a higher number of shafts the blocks of pattern follow
the same principle, except that there are more combinations of blocks.
For instance with an 8-shaft draft we have 6 blocks of pattern, com-
bined at will as long as we have enough treadles. In lace with floats
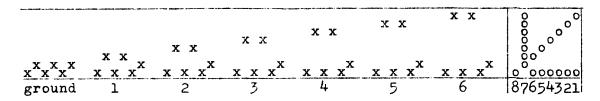of 5 we shall have the following units (fig.2):

Fig.2

Here the tie-up shows only individual blocks. To combine the blocks i.e. to weave two or more at a time we must either have more treadles or press two or more treadles simultaneously. How many possible combinations are there? Theoretically 64; in practice 63 (because one of them is "no blocks"), which would mean 65 treadles.

How many symmetrical patterns can be woven on the same 8-shaft threading? Roughly two millions. If one wanted to make all these samples 12" square, the warp would have to be 400 mls long.

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The lace effect is produced by at least two units of the weave both in threading and in treadling (fig.3). Right in the centre of the four repeats we have a characteristic opening which looks (against the light) like a small window with 4 panes. The lace is shown in fig.3 as "o". Actually the openings are much larger, because the two floats in warp and a similar pair in weft have a tendency to shift to the centre of each unit, particularly after washing. This is why Bronson lace looks rather disappointing on the loom.

Fig.3

Four-shaft lace gives only 7 symmetrical variations of pattern on the same threading. Therefore we can start with a certain

profile and draw on graphpaper all possible patterns to be able to decide which we like best. But with a higher number of shafts the number of patterns is too high, and the paper work would take too long, for instance: 50 years at 10 hrs a day for 8 shafts.

Here, as in the case of polychrome swivel (MW 53/7), we must start with a definite pattern; analyze it; find out the number of shafts it requires, and if the number is too high, simplify the pattern. An example is shown in fig.4: we make first the draw-down (A),
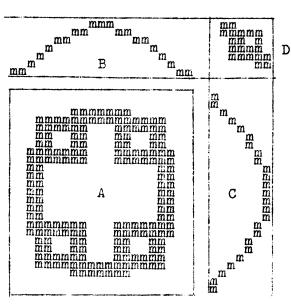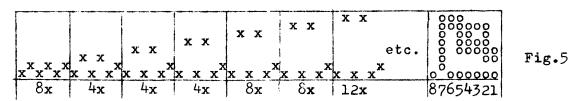

Fig.4

of the pattern; find the profile (B) and count the blocks. There are 7 of them, but the first is ground: just the right number for 8 shafts. Then we follow with a short treadling draft (C) and finally with the short tie-up (D). The first half of the threading draft is shown in fig.5 (read from the left).

If the number of blocks is too high we cut out one or two blocks in the profile, and re-draw the pattern.

Fig.5

treadling: 787878 - 8x; 767678 - 4x; 757578 - 4x; 747478 - 4x;
737378 - 8x; 727278 - 8x; 717178 - 24x; etc.

Once the pattern is visible, there is no need to follow the treadling directions, as long as we remember the units. We simply follow the draw-down.

There are very few purely technical difficulties about weaving the Bronson Lace. One is the right selection of the sett of warp. The other are sagging warp ends, whenever a block of lace is woven too long (e.g. block 3 in our case).

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