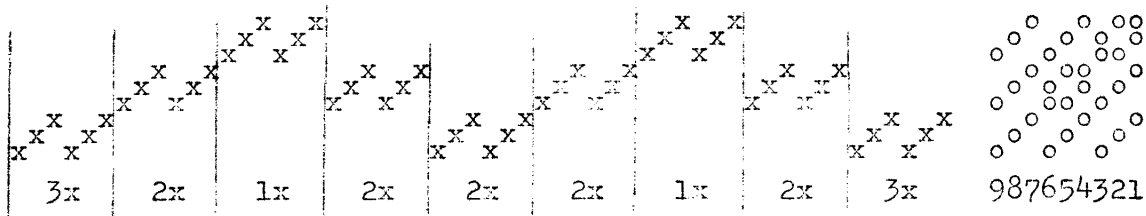
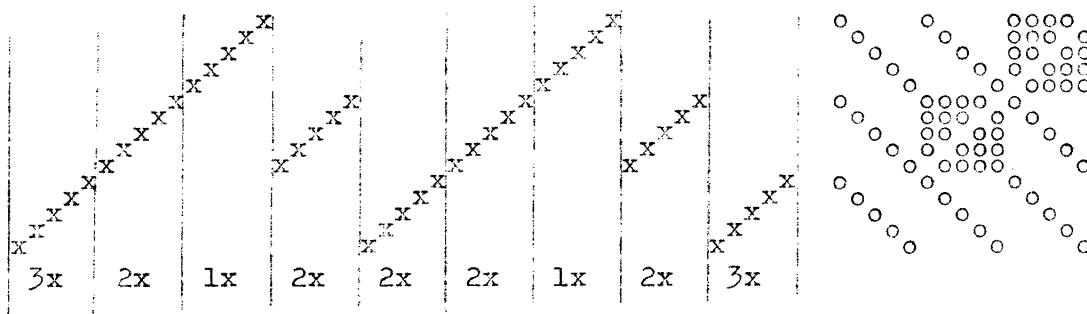


DRAFTING.

The profile used in the last lesson (page 12) can be further developed into 1:2 turned twill:



or damask:



In each case one square ("n") of the profile is replaced with one of the units of the weave. What are these units, and how many are there in each case? And how to recognise which unit goes on which line of the profile? The answer to the last question is the easiest: in most cases it does not matter, but as a rule we take for the lowest line of the profile the units written on the harness-frames with the lowest numbers.

The number of units for each weave depends only on the number of harness-frames which we can use. Summer-and-Winter has 2 units with 4 frames, but 10 with 12 frames. Damask has 2 units with 10 frames, and 5 with 25 frames. And so on.

Here are examples of units of a few weaves:

Summer-and-Winter: 1-st unit - 1323, 2-nd - 1424, 3-rd - 1525,
4-th - 1626, 5-th - 1727, 6-th - 1828, etc.

Triple Spot Weave: 1) 142434, 2) 152535, 3) 162636, 4) 172737,
5) 182838.

Huckaback 6 x 6: 1) 121212, 2) 131242, 3) 151262, 4) 171282.

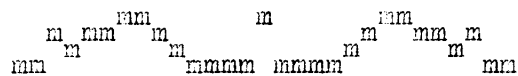
" " 10 x 10: 1) 1212121212, 2) 1313124242, 3) 1515126262,
4) 1717128282.

Bronson Lace, a/: 1) 1212, 2) 1312, 3) 1412, 4) 1512, 5) 1612,
6) 1712, 7) 1812.

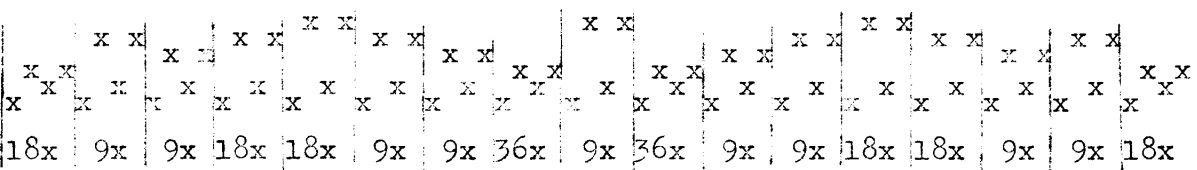
- Bronson Lace, b/: 1) 121212, 2) 131312, 3) 141412, 4) 151512,
 5) 161612, 6) 171712, 7) 181812.
- " " " c/: 1) 12121212, 2) 13131312, 3) 14141412, 4) 15151512
 5) 16161612, 6) 17171712, 7) 18181812.
- Dimity (1:2): 1) 123, 2) 456, 3) 789, 4) 10,11,12.
- Dornick, 1:3 turned twill, and double tabby weaves have the same
 units: 1) 1234, 2) 5678, 3) 9,10,11,12.
- Damask (1:4): 1) 12345, 2) 6789,10, 3) 11,12,13,14,15.

A complete list of all weaves which have units would fill pages, particularly that as we have seen above, some weaves have units of different length (Bronson, huckaback).

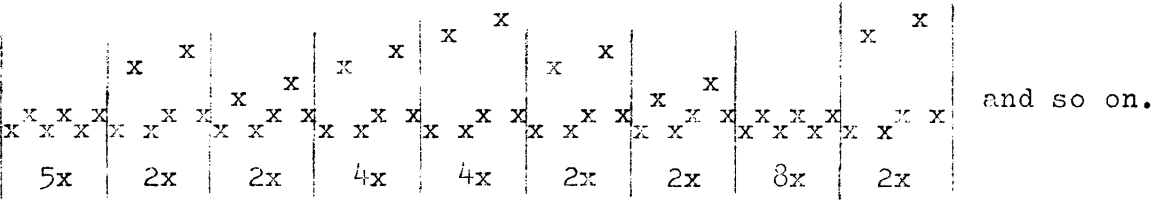
In all this cases the units must be used in full. However very often we use two or more units for one square of the profile. For instance the following profile:



has only 29 squares. If we replace each square by one unit of summer-and-winter, then the total number of warp ends will be 116, or hardly 4 inches if the warp is set 30 ends per inch. If we use the same profile for a 12 inch warp, we must take 3 units per square. If the warp is 36" wide - 9 units per square etc. Since the practical threading draft is always condensed, it will remain of the same length regardless of the width of the woven fabric. E.g.:



The best way to fit a profile into a woven piece is to figure out first the number of warp-ends required. If the woven piece is 15 inches wide and made of 8/2 cotton, it should have about 24 ends per inch, or 360 ends. Our profile has 29 squares. If the weave selected is 6x6 huckaback lace, then taking one unit per square we would have only 174 ends. Taking two units gives us 348 ends. The remaining 12 ends will go into the border - 6 ends on each side. Thus the threading draft, or rather one half of it will look as follows (read from the left):



In the next lesson we shall see what can be done about weaves which have no definite units.