An experimental Sampler using 8 harness Twills.

It has been some time since I have given any material on eight harnesses in the News. This experimental sampler which I shall describe was woven by Helen Hill one of my students. And if you wish to discover some truly amazing and unusual effects, try one of these experiments yourself. The result will give you many new ideas for bags, draperies, upholstery materials etc. in great variety.

Materials used—The warp used for this sampler was beige 20/2 cotton. It was sleyed two threads in each dent of an 18 dent reed. Weft was No. 10 mercerized cotton in a cream white. It would be possible to used many other colors of weft as well as many different kinds and sizes of weft to get still more effects. This would be an excellent way to use up odds and ends of different kinds of threads.

The Threading Draft above is a combination of 6 different variations of twill, and is planned for a warp of 780 threads. It is threaded from the beginning up to the center at C and then in reverse back to the beginning. If one did not wish to make the pattern drafts balance in the center, the six more threadings on the next page could be used, and give 12 different threadings for the same width on the loom. And by using the tie-ups as given one would have still more variety. I have never seen anyone else use just this idea. It is not only very much of a short cut, but is truly exciting and very much worth while. Our sampler was about a yard and a quarter long and had about 176 different weaves. If you use the 12 threadings this is greatly increased.

From A to B of the draft above is just straight twill repeated 5 x to equal 40 warp threads. Note the threading begins on the 5th harness. From B to C is twill reversed, repeated twice to equal 60 threads. From C to D, the 3rd threading, are the twill repeated 4x. On this threading many two block patterns may be woven in double weave, damask, etc. The News for July 1940 explains this and gives 8 variations of this technique, in addition to that given here. Copies of this available at 45c ea. D to E or the 4th threading above is a similar threading with the pattern blocks made larger. Repeated 5x this equals 81 warp threads. E to F the 5th threading is one reversed twill on the first four harnesses and one on the second four harnesses, repeated 3x to equal 42 warp threads. From F to G the 6th and center threading is a double reverse twill similar to E to F. The single thread just beyond G is the center, repeat back to the beginning A in same order for the complete repeat. Of course any of these threadings may be used alone, for a full repeat across the width of the loom if desired.

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Explanation of the Tie-up Draft. The different tie-up drafts are numbered from No. 1 on Page 1 through No. 14 on this page. The black squares indicate the levers of the Structo loom, or the ties to use for a jack loom, or a "rising" shed loom. For other looms tie the spaces on these drafts. For instance at Tie-up No. 3 above, the figures below the draft 1, 2, 3, 4, 5, 6, 7, 8, indicate the treadles, treadle being at the right. Read in order from right to left. And treadle 1, or the levers of the Structo loom, are 3, 5, 7; treadle 2 is 4, 6, 8; treadle 3 is 1, 5, 7; treadle 4 is 2, 5, 8 and so on. The groups under the tie-up as at A, B, C, D, E, F, and G indicate different orders of using the treadles, according to the line in which they occur. I hope this is clear. One shot of weft is only used on each pattern shed.

The six threading drafts arranged above at Figure No. 2 may be used with the ones on Page 1, if desired, and are arranged to use 390 warp threads also. From A to E is 18 threads x 3 is 54; B to C is 30 x 2 is 60 threads; C to D is 20 x 3 is 60 threads; D to E is 36 x 2 is 72 threads; and E to F is 26 x 2 is 52 threads; now F to G once then G to H the center is 51 threads. This is exactly one half of the threading. This news contains a great deal of material which I hope will be useful to many.

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