

# The MULTIPLE-HARNESS WEAVER

## A BASIC DRAFT

*by Harriet Tidball*

Among the multiple-harness threadings there are several which may be considered as basic drafts. These are simple drafts, which in versatility of use may be compared to the twill for four-harness weavers. A review of the versatility factor of the four-harness twill is a means for understanding the versatility factor of these multiple-harness basic drafts.

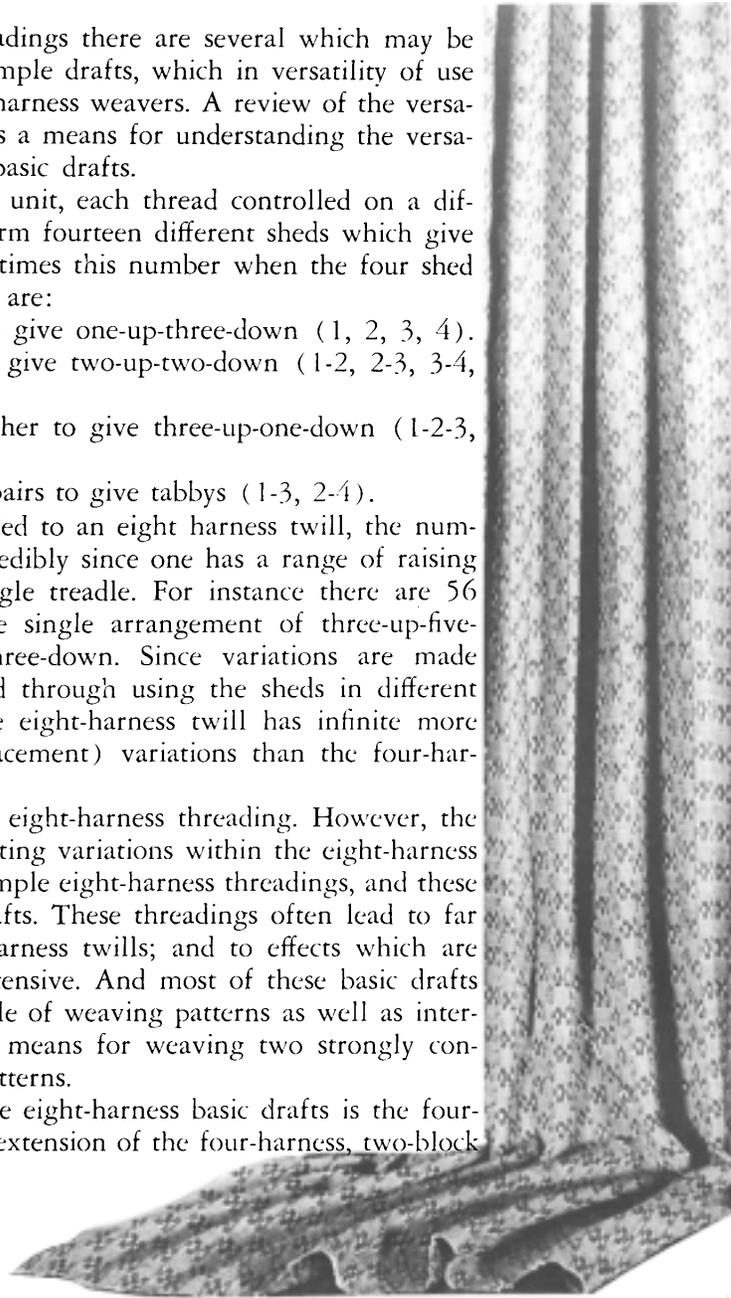
The twill has a four warp thread unit, each thread controlled on a different harness. These four harnesses form fourteen different sheds which give four different weave effects, but many times this number when the four shed types are combined. The possible sheds are:

- (1) Each harness raised alone to give one-up-three-down (1, 2, 3, 4).
- (2) Harnesses raised in pairs to give two-up-two-down (1-2, 2-3, 3-4, 4-1).
- (3) Three harnesses raised together to give three-up-one-down (1-2-3, 2-3-4, 3-4-1, 4-1-2).
- (4) Alternate harness raised in pairs to give tabbys (1-3, 2-4).

If the four-harness twill is extended to an eight harness twill, the number of the shed combinations rises incredibly since one has a range of raising from one to seven harnesses on a single treadle. For instance there are 56 different combinations possible on the single arrangement of three-up-five-down, and another 56 for five-up-three-down. Since variations are made through the use of different sheds and through using the sheds in different orders, it is perfectly obvious that the eight-harness twill has infinite more possibilities for texture (thread interlacement) variations than the four-harness twill.

The eight-harness twill is a basic eight-harness threading. However, the multiple tie-up principles used for creating variations within the eight-harness twill may be applied to certain other simple eight-harness threadings, and these threadings are also known as basic drafts. These threadings often lead to far more interesting textures than eight-harness twills; and to effects which are bolder because the drafts are more extensive. And most of these basic drafts have the added interest of being capable of weaving patterns as well as interlacement textures, and of providing a means for weaving two strongly contrasting textures arranged in simple patterns.

One of the most interesting of the eight-harness basic drafts is the four-block opposites threading, which is an extension of the four-harness, two-block



opposites. This draft is, in its simplest form: 1, 2, 1, 2; 3, 4, 3, 4—5, 6, 5, 6; 7, 8, 7, 8. The first half may be considered as an A unit, and it may be repeated as such, and the second half may be considered as a B unit, and also repeated. The curious weaver will see that the A unit is identical to the A unit of the M's and O's draft (See SHUTTLE CRAFT for February, March and April 1957), and the B unit is the same arrangement placed on the second group of four harnesses. All of the M's and O's experimental weaving for these SHUTTLE CRAFTS was in fact, done on this eight-harness threading, with the four-harness draft reproduced through the tie-up.

As an introduction to this basic draft, we are giving one textile which is a very interesting alternate block combination of tabby and an unusual basket weave. This weave produces a firm but softly draping fabric which is suitable for many decorating purposes and would be particularly lovely for baby blankets or full size bed blankets. The unusual feature of the basket texture is that it too is firm rather than having the loose, slipping quality which basket when combined with tabby usually has. Weavers should find many excellent adaptations for this design. A comprehensive study of this four-block opposites basic draft will be continued in later issues.

