tabby treadles and the ground shafts (fig.11 B). The next step is to add the ties for horizontal floats (fig.11 C), and then to remove the ties for vertical floats (fig.11 D). Finally we replace the remaining dots by circles (fig.11 E).

![diagram](image)

Fig.11

When we compare this tie-up with the one on fig.6 we find that they are identical, which is as it should be, because the short draw-down in fig.10 represents the same piece of weaving as the draw-down in fig.6.

There is one more question we must answer: what if we have in the same project large areas of huck and/or lace, as well as small symmetrical patterns?

Here we cannot use the method shown in fig.7. We must proceed as if the whole project were of the second type, that is as in fig.10.

**************

QUIZZ IN OVERSHOT**************

I believe that it is Saturday Evening Post which publishes short quizzes under the provoking title: "So you think you know baseball?". The same could be done with Overshot. There is no end of puzzling problems. Here is one.

If we consider a very small pattern of four blocks, all of the same size, the question is: how many symmetrical variations of this pattern can we weave?

There are three traditional variations (A,B,C fig.1), and the three variations which appear at the back of the fabric (D,E,F).

![diagram](image)

Fig.1

But in theory there should be two more variations with four blocks of
pattern. What happened to them?

One answer may be that the formula (MW 54/7) for the number of variations does not apply here, because besides the blocks of pattern we have the half-tones, which are not independent. Let us then disregard the halftones. If we do so we should have the following symmetrical patterns in addition to the traditional six: G and H in Fig. 2.

![Fig. 2]

But then what about the variations "I" and "J"? It is true that here the pattern is so scattered that it looks more like broken twill than anything else, but it is still a pattern, and it is symmetrical as long as we disregard the half-tones.

Can these patterns be actually woven? Yes; here is the draft:

![Fig. 3]

Treadling for variation G: 4 - 5x; 3 - 5x; 1 - 5x; 2 - 5x; 4 - 2x; 2 - 5x; 1 - 5x; 3 - 5x; 4 - 5x.

Treadling for variation H: 3 - 5x; 4 - 5x; 2 - 5x; 1 - 5x; 4 - 2x; 1 - 5x; 2 - 5x; 4 - 5x; 3 - 5x.

We may disregard "I" and "J" as not very practical, but even so we have two more variations. If they are woven in the same colour both in warp and weft, binder included, the half-tones will not show and the pattern will be as symmetrical as any overshot pattern.

Then what is wrong? Why such patterns are not woven, or are they? Can any Overshot threading be treated in the same way, and what will be the result?

The best answer will be published in the Master Weaver. We are sorry that we cannot offer prizes, but since there are thousands of similar problems in handweaving, we would get broke if we did.

ERRATA Please add on the front page of the former issue, under the title: November-December 1960 No. 54. Thank you!