

## Crackle Weave, Part 2: Tie-Ups and Treadlings

The first article in this series introduced crackle weave design in terms of the conventional block method and an alternate, unconventional method of placing a motif along a path [1].

Before going on to more interesting topics, there are some nuts-and-bolt issues to cover.

### Tie-Ups

Crackle is a twill weave, a variety of point twill. As such, twill tie-ups normally are used. In order to keep the maximum float length to 3, expected of conventional crackle weaves, twill counters must be less than 3.

The following tie-ups work well for crackle:

4 shafts:

2/2

5 shafts:

1/2/1/1

6 shafts:

1/1/2/2

1/2/1/2

1/2/2/1

2/1/2/1

7 shafts:

1/2/1/1/1/1

2/2/2/1

8 shafts:

1/1/1/1/2/2

1/1/1/2/1/2

1/1/1/2/2/1

1/1/2/1/1/2

1/1/2/1/2/1

2/2/2/2 (same as a 4-shaft twill)

9 shafts:

1/1/1/2/2/2

1/1/2/1/2/2

1/1/2/2/1/2

1/1/2/2/2/1

1/2/1/2/1/2

1/2/1/2/2/1

1/2/2/1/2/1

2/1/2/1/2/1

10 shafts:

1/1/2/2/2/2

1/2/1/2/2/2

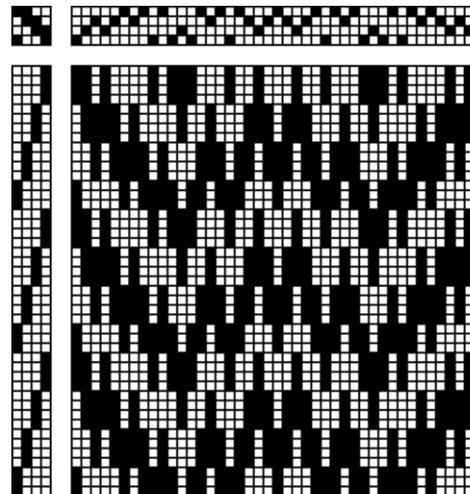
1/2/2/1/2/2

1/2/2/2/2/1

2/1/2/1/2/2

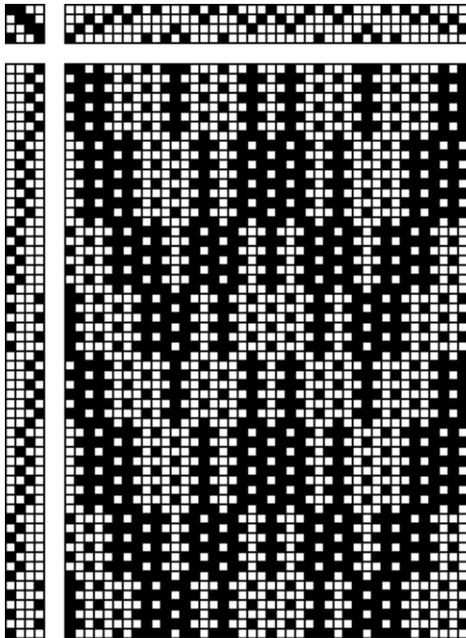
### Treadling

Traditional crackle threading uses the same treadle for all the threads of one block, with pattern picks alternating with binding picks. Here is an example, in which the binding picks are not shown:

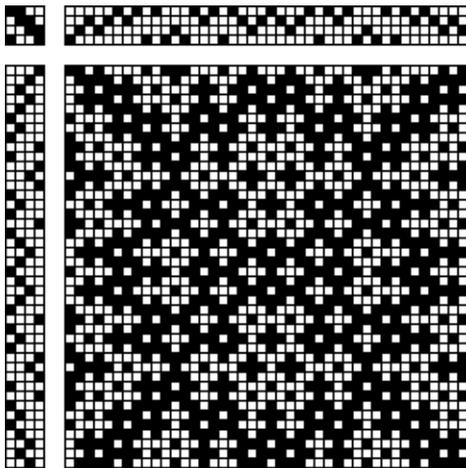


Summer and Winter is another conventional treadling for crackle, with two treadles alternating, the first block woven on treadles 4 and 3, the second on 3 and two, the third on 1 and 2, the fourth on 1, and 4, and then repeat-

ing. Here is an example:



Crackle also can be treadled as drawn in. This is the treadling now most commonly used. Here is an example:

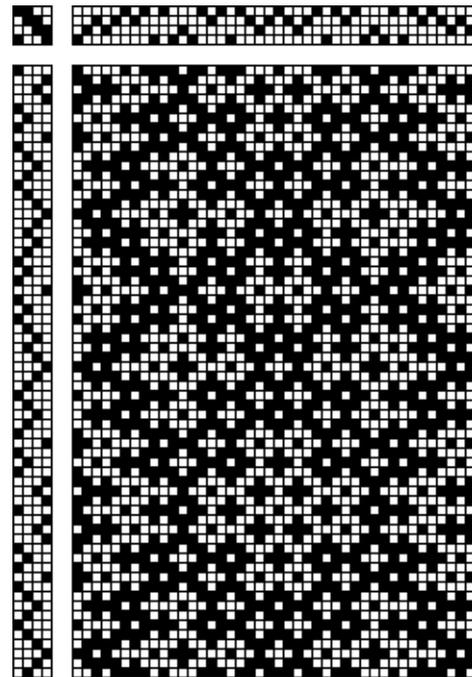


See Reference 2 for more information on conventional crackle treadling.

Many other treadlings have been tried, including straight draws, point twill, and advancing twills.

Crackle treadling is an area for experimentation, which may produce interesting results.

One particularly interesting method is to use one crackle sequence for threading and a different crackle sequence for treadling. Here is an example:



## References

1. *Crackle Weave, Part 1: Designing with Blocks and Motifs*, Ralph E. Griswold, 2004:  
[http://www.cs.arizona.edu/patterns/weaving/webdocs/gre\\_crk1.pdf](http://www.cs.arizona.edu/patterns/weaving/webdocs/gre_crk1.pdf)
2. *Master Weaver Library, Vol. 8: Contemporary Approach to Traditional Weaves*, S. A. Zielinski, Nilus Leclerc, 1981.

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