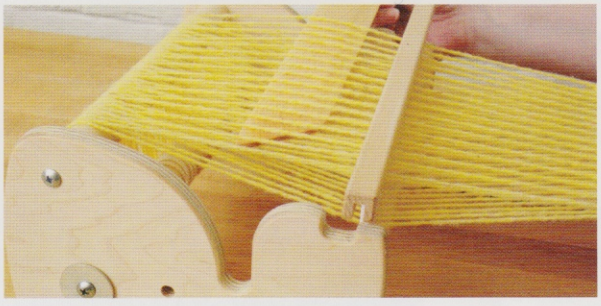
Using a Pickup Stick to Create Pattern

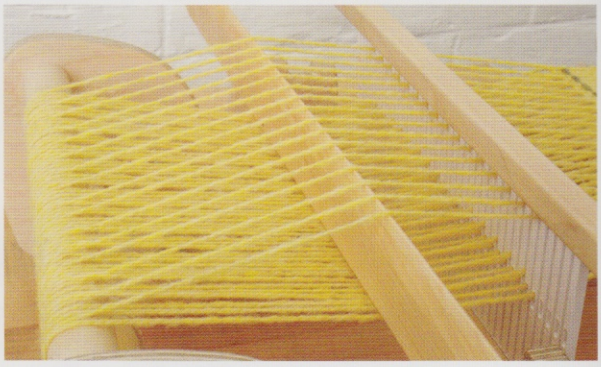
In the previous chapter, when a pickup stick was used to make a shed, it was placed in front of the heddle and, as a consequence, had to be reinserted for each pick of weaving. Betty Davenport, a rigid-heddle pioneer, popularized placing the pickup stick behind the heddle. This allows you to save the pattern in memory, and makes weaving much faster. We'll use this technique in the following sections to create floats in the warp and weft directions to add texture and create new patterns in rigid-heddle cloth. There are several principles necessary for making this work:

» **PUT THE HEDDLE IN THE DOWN POSITION WHEN YOU PICK UP THREADS.** You do this to ensure that you pick up only slot threads on the pickup stick. This is important because hole threads are locked in place by the hole and can't create a shed when you turn the pickup stick on end. Only slot threads have enough space to slide and open up a clean shed. If you start working with this technique and aren't getting a good shed, check that you haven't inadvertently picked up hole threads.

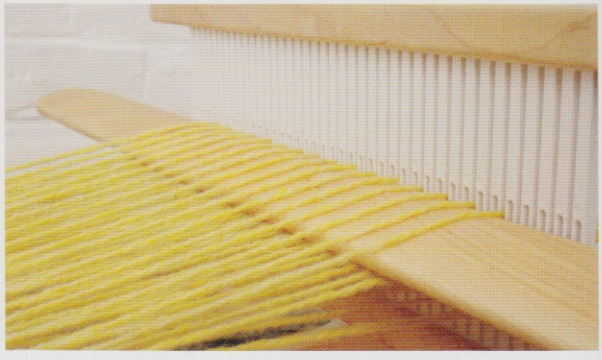


» **PICK UP THREADS BEHIND THE HEDDLE.** This makes it possible for you to store the pattern between weft picks. If you pick up in front of the heddle, you'll have to repick them with each pick.

» **"TURN STICK" MEANS TURN THE PICKUP STICK ON EDGE.** In the pattern notation below, where I've written the instruction "turn stick," it means, with the heddle in the neutral position, turn the pickup stick on edge to make the shed.

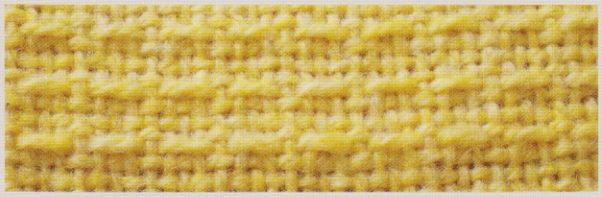


» **"UP AND SLIDE STICK" MEANS SLIDE THE STICK.** Here's how: Put the heddle into the up position. This raises the hole threads. Then slide the pickup stick forward without turning it on edge. This raises a subset of the slot threads. If you do this properly, the stick should be easy to move, and you'll have only one shed. If you find yourself with two sheds, check to make sure you haven't turned the pickup stick on edge.



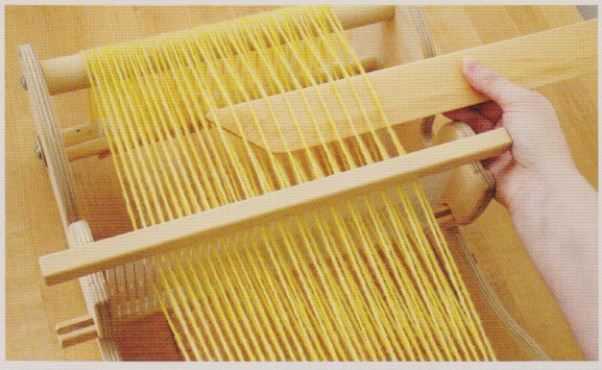
Introducing Weft Floats

This first structure creates a series of weft floats across the fabric. It's a simple and easy-to-weave structure that's a good introduction to this technique.



PICKUP STICK SETUP

Put the heddle in the down position, so only the slot threads are up. Insert a pickup stick into the slot threads so that the first slot thread is on top of the stick, and the next slot thread is beneath the stick. The easiest way to do this is to wiggle the tip of pickup stick up and down so that it weaves into the slot threads. Continue to do this across the warp. You've now stored the pattern shed "in memory."



WEAVING WEFT FLOATS

This cloth is essentially plain weave, with the exception of some weft floats every fourth pick. It's simple to weave and creates a richly textured fabric. Here is what's happening in the fabric: Steps 1–3 are pure plain weave; step 4 creates floats in some areas (where the threads were picked up above the stick) and plain weave in others (where the threads were below the stick). After a few repeats of the pattern, you'll find it easy to remember.

1. Put the heddle in the up position. Throw a pick of weft, and beat. (This is a plain-weave shed.)
2. Put the heddle in the down position. Throw a pick of weft, then beat. (This is a plain-weave shed.)

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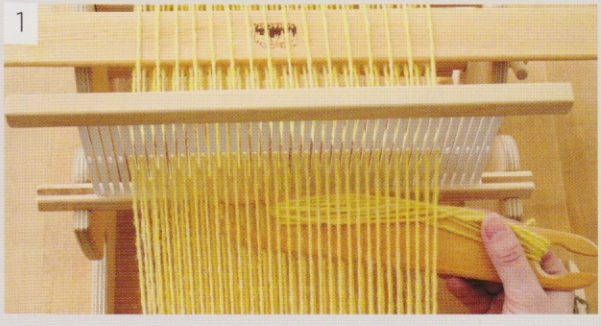
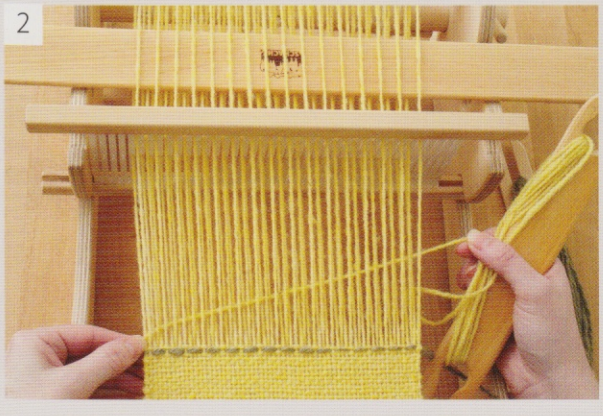




Introducing Weft Floats , *continued*

③ Put the heddle in the up position. Throw a pick of weft, and beat. (This is a plain-weave shed.)

④ Put the heddle in the neutral position, turn the stick on edge, throw a pick of weft, and beat (a). (This shed creates floats. You can use the same yarn that you use for the plain-weave sections, or, as shown here, use a different color for the floats(b).)

→ *Repeat steps 1–4 until the entire cloth is woven.*

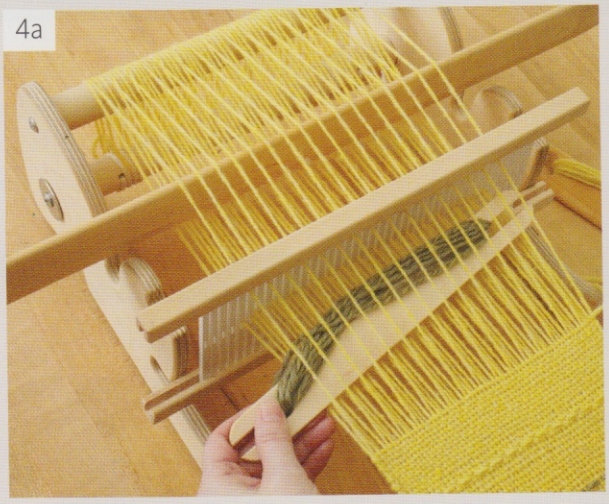
Now that you understand how the technique works, I've written it and the following patterns in tabular form, so they're easy to parse. The patterns that follow are a subset of what's possible. Experiment and you may discover your own patterns.

WEFT FLOATS WEAVE PATTERN

Pickup stick setup: 1 warp up, 1 warp down, repeat across all slot threads.

ROW	HEDDLE POSITION
1	Up
2	Down
3	Up
4	Turn stick (neutral heddle)

Repeat rows 1–4 to continue lace pattern.

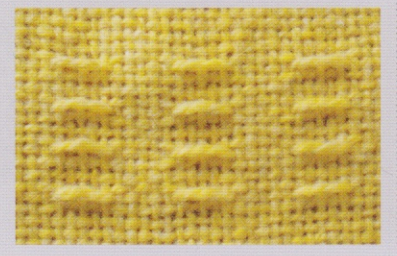


4a

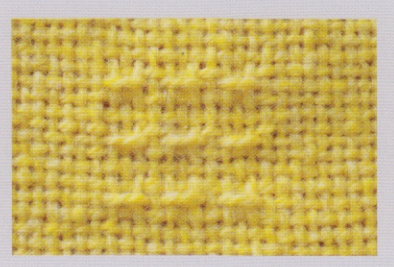
4b

WEFT FLOAT VARIATIONS

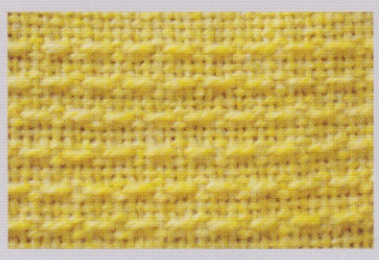
▶ Change the number and pattern of threads picked up on the stick.



▶ Insert the pickup stick so it weaves floats only in certain areas across the warp.



▶ Create a checkerboard of floats by changing where the pickup stick is creating floats.



Introducing Warp and Weft Floats

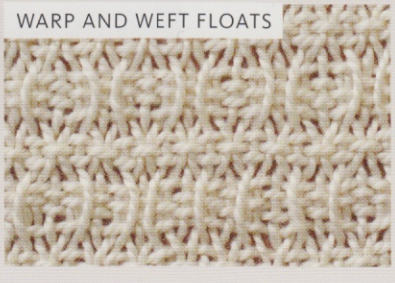
This pattern is similar to the preceding one, but it adds warp floats in addition to the weft floats, creating a windowpane effect around areas of plain weave. You can weave it on the same warp as the preceding example without changing the pickup stick. The pattern weaves the weft floats in the same manner as the preceding pattern, but extends the last step to also weave a series of warp floats. It's a good approximation of waffle weave on the rigid-heddle loom.

If you turn the cloth over (one nice thing about rigid-heddle looms is that it's easy to flip them over and view the underside of the fabric you're weaving), you'll see that warp floats on one side of the fabric correspond to weft floats on the other side.

You can use a contrasting colored thread in the fabric where the warp and weft floats are. The color change will emphasize the windowpane effect. This is particularly attractive if you use black to outline brightly colored plain weave, or vice versa.

CONTRASTING COLOR WEFT FLOATS

WARP AND WEFT FLOATS



WARP AND WEFT FLOATS WEAVE PATTERN

Pickup stick setup: 1 warp up, 1 warp down, repeat across all slot threads

Row	Heddle Position
1	Up
2	Down
3	Up and slide stick
4	Down
5	Up
6	Turn stick (neutral heddle)

Note: Advance the fabric frequently. As the fell gets close to the heddle, it can be hard to get a good shed on the "up and slide" sheds.