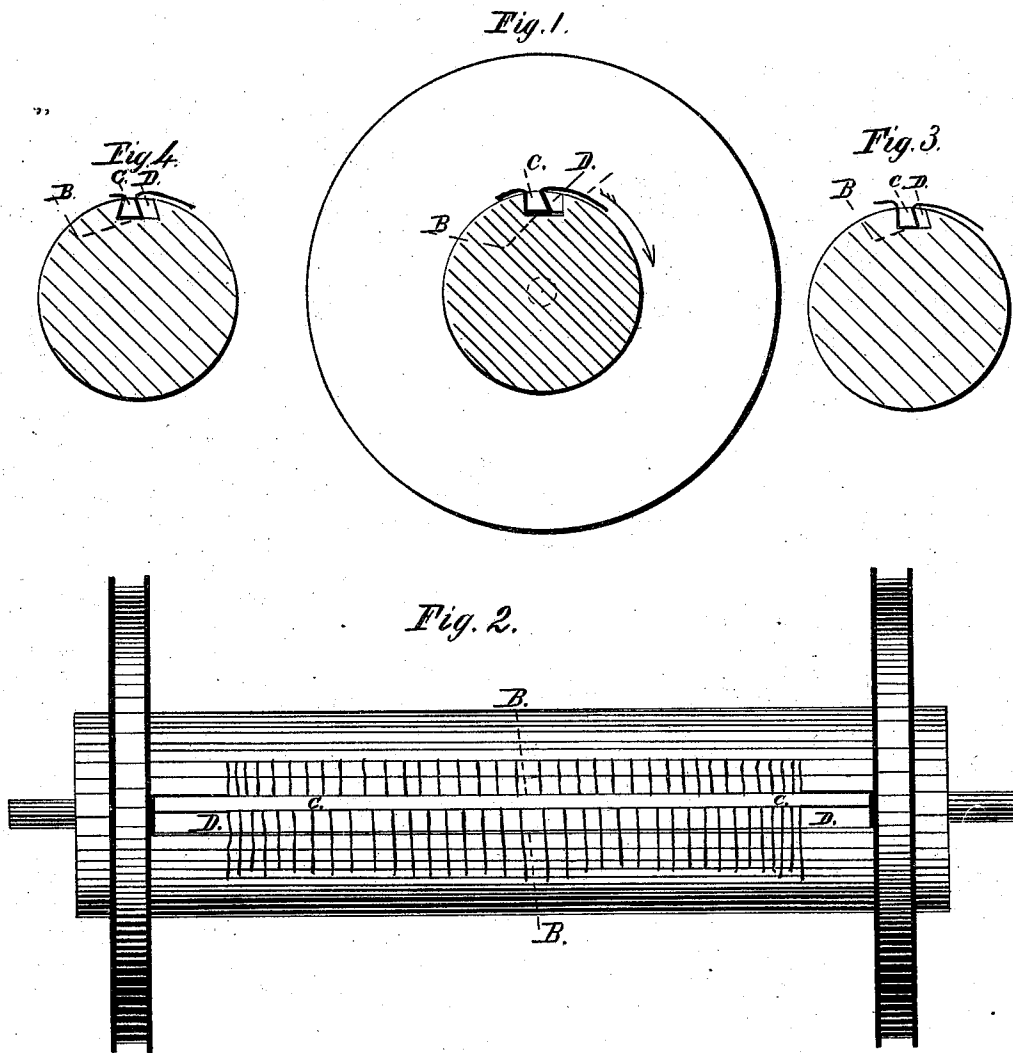


J. POTTER.
WARP-BEAM.

No. 173,419.

Patented Feb. 15, 1876.



Witnesses.
John C. Woodward
David Chas.

Inventor.
Joseph Potter.

UNITED STATES PATENT OFFICE.

JOSEPH POTTER, OF NEWBURYPORT, MASSACHUSETTS.

IMPROVEMENT IN WARP-BEAMS.

Specification forming part of Letters Patent No. **173,419**, dated February 15, 1876; application filed December 6, 1875.

To all whom it may concern:

Be it known that I, JOSEPH POTTER, of Newburyport, State of Massachusetts, have invented an Improved Warp-Beam, of which the following is a specification:

My invention relates to an improvement in the method of securing the warp to the beam; and consists in the combination of the inverted wedge-bar C with the bar D and slot B of a warp-beam.

Figure 1 shows a cross-section through middle of warp-beam, showing position of warp and bars when in position for operation. Fig. 2 shows longitudinal view of warp-beam with warp in position, Figs. 1 and 2 both embodying my invention.

In the warp-beams in ordinary use the warp has been held in the beam by confining the warp in the slot by means of a single bar held in place in an imperfect manner by the friction of the sides of the bar against the warp and sides of the slot. The sides of the slot are made parallel, or nearly so, as are the sides of the bar, and when carefully fitted, to effect the retention of the warp as far as possible with this device, the bar is with difficulty placed in the slot, and when loosely fitted, or after a little use, fails to hold the warp-ends when the warp is nearly unwound from the beam.

In my improved warp-beam the bar C is placed over the warp ends in the slot, the ends extending a few inches from the slot. One

side of the bar is pressed against the side of the slot farthest from the loom when the beam is in position, and the slot at the top of the beam, when the other bar, fitted to occupy the remaining space of the slot, is put into place, and the warp drawn over the bar D and around the beam. When the sides of the slot are parallel, or nearly so, the bar D will be wedge-shaped, the wider portion being at the top of the slot, the bar C having its wider part at the bottom of the slot, this form of slot, with parallel edges, being that in general use in looms in present use, is preferred; but the slot may be made of forms shown in Figs. 3 or 4 without departing from my invention, both using an inverted wedge-shaped bar, and the second bar conforming to the remaining space of the slot.

In my improved warp-beam, with the warp secured as described and shown, the warp will not become loosened until the whole warp is unwound from the beam, and the operation of securing the warp to the beam is easily performed.

I claim—

In combination with a warp-beam provided with a slot, B, the confining-bars C and D, constructed and operating together substantially as and for the purpose set forth.

JOSEPH POTTER.

Witnesses:

JOHN C. WOODWARD,
DAVID CHASE.