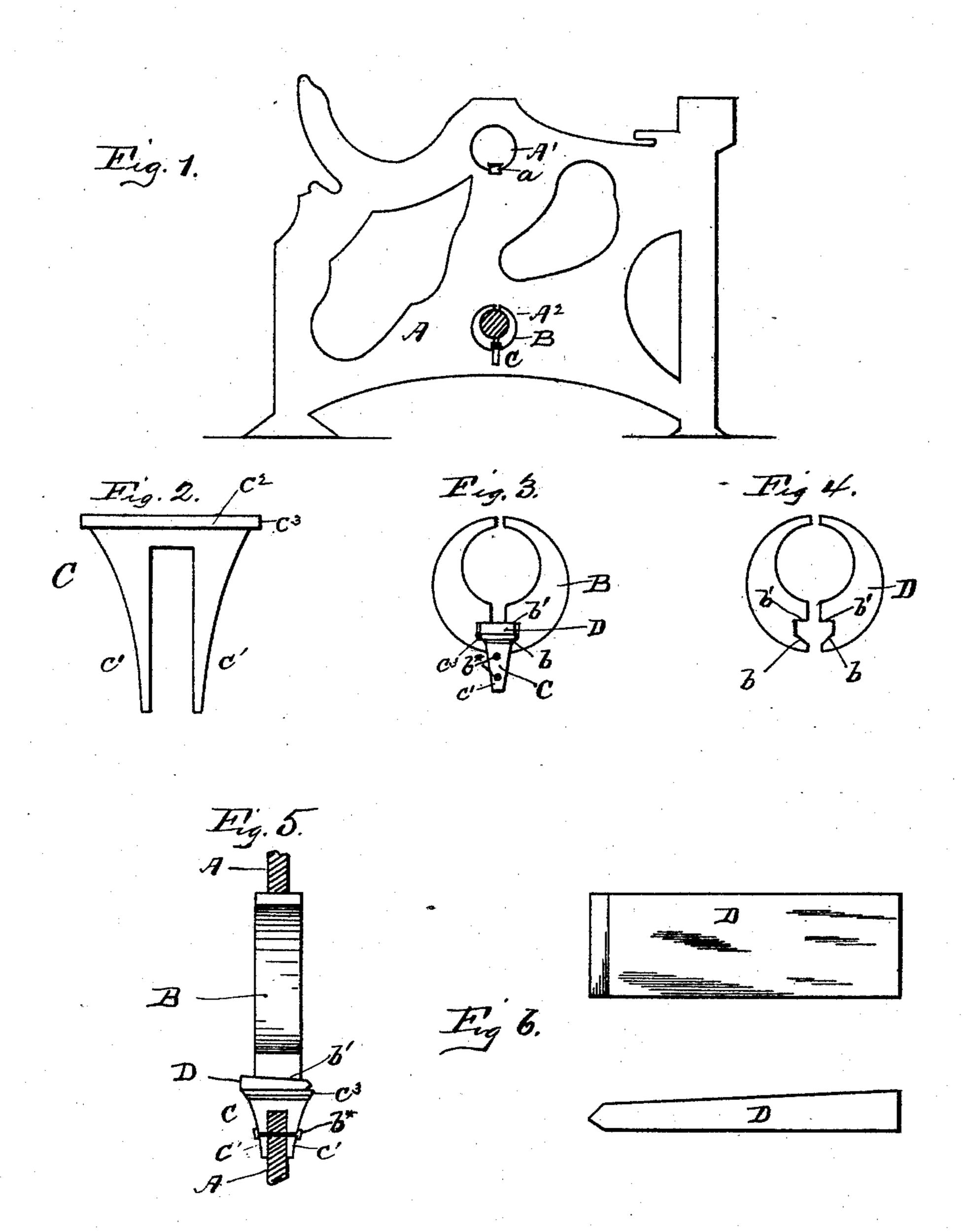
(No Model.)

## W. MONK & D. T. SHAW. SHAFT BOX FASTENING.

No. 441,850.

Patented Dec. 2, 1890.



WITNESSES: 4. 7. Holmson INVENTORS;

Milliam Monk

and Daniel T. Shaw.

By IM Kall

Attorner,

## United States Patent Office.

WILLIAM MONK AND DANIEL T. SHAW, OF FALL RIVER, MASSACHUSETTS.

## SHAFT-BOX FASTENING.

SPECIFICATION forming part of Letters Patent No. 441,850, dated December 2, 1890.

Application filed August 25, 1890. Serial No. 363,064. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM MONK and Daniel T. Shaw, citizens of the United States, residing at Fall River, in the county of 5 Bristol and State of Massachusetts, have invented certain new and useful Improvements in Shaft-Box Fastenings; and we do declare the following to be a full, clear, and exact description of the invention, such as will ento able others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to devices to be used for securing boxes to loom and other frames, and has for its object the provision of a simple and effective substitute device to take the place of the securing lip or flange, which 20 is cast upon the frame when it is molded.

The invention consists in a saddle or movable lip which is to straddle or rest upon the frame, either with or without the use of a key or cotter for holding it tight, bearing 25 upon its upper edge a rib or flange, upon which the overhanging edges of a gib or a portion of the boxing engage, and a wedge or key which is driven in between the saddle or lip and the base of such gib or box to tighten

30 and hold the parts together.

In looms and other machinery where the shaft-bearings are secured in or upon the frame it frequently happens that by use or accident the original lip, which is molded in-35 tegral with the frame, becomes worn away or broken off, and the frame is thereby rendered almost worthless. Particularly is this the case with the boxing for the crank and cam shafts of looms, and it is the purpose of this 40 invention to supply a substitute device, as already stated, by means of which the loss of the original lip is cured and the operations of the loom uninterrupted, except for such short time as is necessary to put the saddle 45 or new lip in place and secure the boxing thereto.

The following detailed description will more fully indicate the nature, construction, and purpose of our said invention.

50 The accompanying drawings illustrate means for carrying the invention into practice.

Figure 1 is an elevation of one end of a loom. Fig. 2 is a side elevation of the saddle or new lip. Fig. 3 is an end elevation of 55 a boxing with our fastening detached from the loom-frame. Fig. 4 is a similar view of the boxing alone. Fig. 5 is an edge view of Fig. 3, somewhat enlarged, with one side of the boxing removed and a portion of the 60 loom-frame in section. Fig. 6 is a side and edge view of the gib or wedge.

Similar letters of reference indicate corresponding parts in all the figures where they

occur.

A is the end of a loom-frame, and A' A2 are openings therein for the boxings of the cam and crank shafts. B is such a boxing, which is circular in form and set in the openings, and in new frames held by a lip or flange 70 a, cast upon the frame at the bottom of the openings, as shown at opening A'. When this lip a is broken or worn away, it is the purpose of our invention to supply a substitute which will enable the work of the loom 75 to proceed. For this purpose we provide a saddle of bifurcated lip C, which straddles or sits over the frame and may or may not, as may be desired, have a key driven between one of its limbs and the side of the frame to fix it 80 securely in position. It may be attached by bolts  $b^*$  or otherwise, as may be desired. Its limbs or forks c' c' are formed with considerable strength and at sufficient distance apart to allow the thickness of the loom or 85 other frame to lie snugly between them. At the top the limbs are joined by a flat top  $c^2$ , which is provided with a rib or flange  $c^3$ , which runs the length of its upper edge.

The boxing is provided with overhanging 90 undercut edges b, which engage the rib  $c^3$ , and with a flat under surfaced portion b' to oppose the flat top of the wedge or gib. When the overhanging edges b are engaged with the rib  $c^3$ , a gib or wedge D is driven in between 95 the under surface b' and the flat top of the saddle and securely binds the parts together. and the boxing then will be found to be reliably and operatively held in place.

It is apparent that this substitute attach- 100 ing means can be secured upon any form of machinery where a shaft-boxing has been previously held in place by a lip cast with

the frame or support.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. The combination, with a boxing having 5 overhanging edges, as described, of a bifurcated saddle having a rib and a wedge or key for tightening the parts, as set forth.

2. The combination, with a boxing, of a bifurcated saddle receiving the frame between to its limbs and provided with a flat top and a

rib or flange along the sides thereof, and a wedge or gib for tightening the parts, as set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

WILLIAM MONK. DANIEL T. SHAW.

Witnesses:

S. W. ASHTON, BENJ. K. LOVATT.