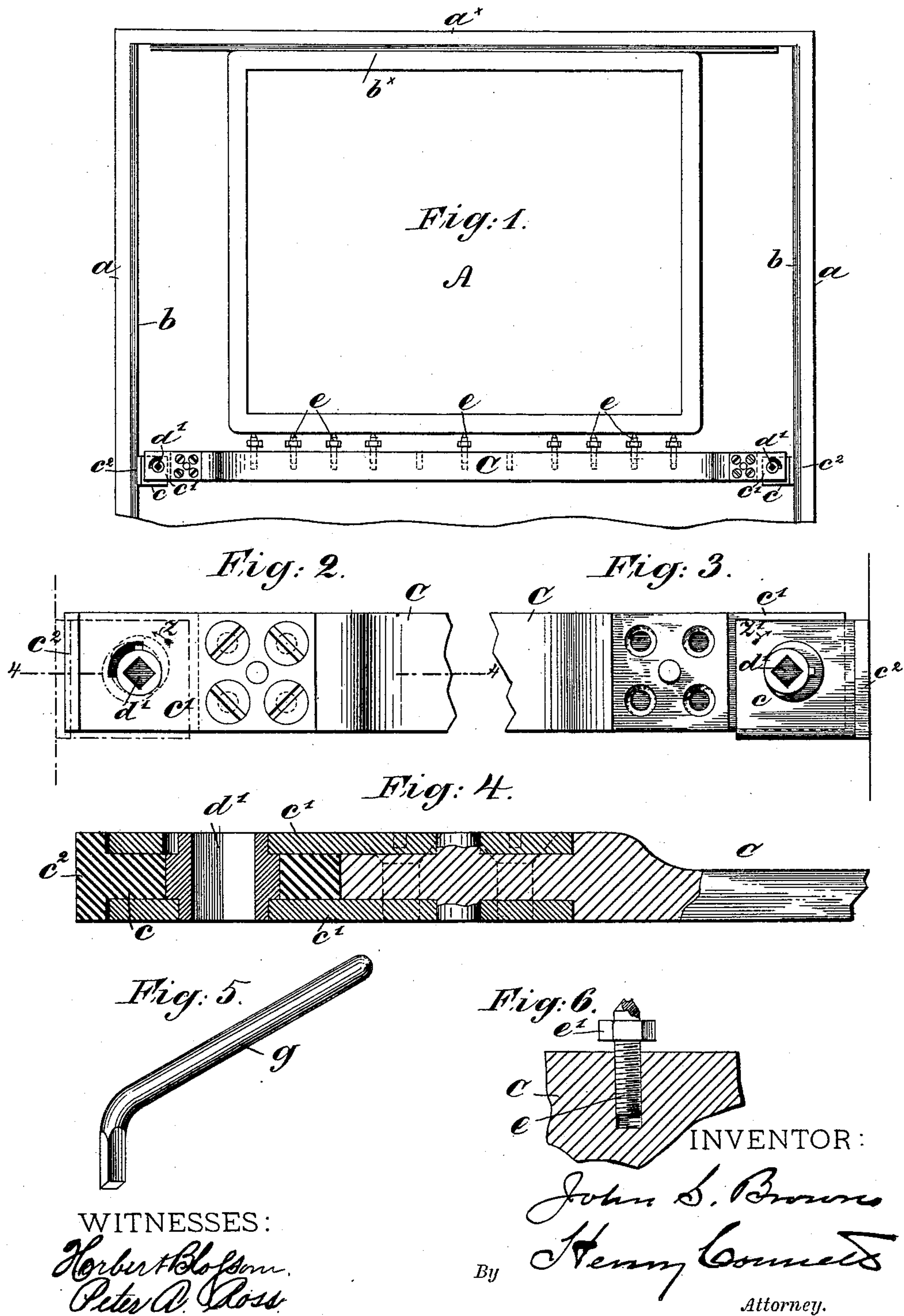


(No Model.)

J. S. BROWN.  
LOCKING BAR FOR CHASES.

No. 482,160.

Patented Sept. 6, 1892.





# UNITED STATES PATENT OFFICE.

JOHN S. BROWN, OF JERSEY CITY, NEW JERSEY.

## LOCKING-BAR FOR CHASES.

SPECIFICATION forming part of Letters Patent No. 482,160, dated September 6, 1892.

Application filed November 24, 1891. Serial No. 412,980. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN S. BROWN, a citizen of the United States, and a resident of Jersey City, Hudson county, New Jersey, have invented an Improved Locking-Bar for Chases, of which the following is a specification.

My invention relates to means for locking in position on the bed of a printing-press the chase which holds the form.

The invention is especially adapted to cylinder-presses having reciprocating beds with marginal flanges or rails.

The object of the invention is to provide a locking-bar which will lock itself endwise between the side rails or flanges of the bed and simultaneously press the chase up firmly against the end flange of the bed, so as to hold it in position.

My invention will be fully described hereinafter, and its novel features carefully defined in the claims.

In the accompanying drawings, illustrating the invention, Figure 1 is a plan of the press-bed on a small scale, showing a chase and my improved locking-bar in position thereon. Fig. 2 is a plan view of one end of the bar on a large scale. Fig. 3 is a plan view of the other or opposite end of the bar, showing the eccentric and jaw of the bar as it appears when the outer plate is removed. Fig. 4 is a sectional view of the bar on the line 4 4 in Fig. 2. Fig. 5 shows the wrench or key for operating the eccentrics of the bar. Fig. 6 is an enlarged view of one of the set-screws of the bar.

Let A represent the bed of the cylinder-press;  $aa$ , the side flanges of the same;  $a^x$ , the end flange of same, and B a chase resting thereon.  $b b b^x$  are wooden strips to prevent the contact of metal with metal in locking up the chase.

C is the locking-bar, which will be of such length as to fit loosely between the side flanges  $aa$  when placed transversely on the bed A, as in Fig. 1.

In each end of the bar C is mounted a movable piece or jaw  $c$ , which is embraced between plates  $c'$ , fixed to or forming part of the bar C. Said jaw has a jaw-head  $c^2$ , which bears on one of the wooden strips  $b$  when the locking-bar is set. In the plates  $c'$  is journaled an eccentric  $d$ , which fits a circular aperture

in the jaw  $c$  and has a square socket  $d'$  to receive an operating wrench or key of any kind.

In Fig. 2 the full lines show the normal position of the jaw  $c$  and the dotted lines show its position when the eccentric  $d$  has been rotated a quarter-way round in the direction of the arrow  $z$  in Fig. 2. In Fig. 3 the full lines show the position of the jaw  $c$  at that end of the bar when the locking has been effected by turning the eccentric  $c$  in the direction of the arrow  $z'$  in said figure.

In placing the bar on the press-bed it may be pushed up against the chase or against a thin strip of wood interposed between it and the chase; but I prefer to provide the bar at its front edge with a series of holes to receive two or more setting-screws  $e$ , one of which is seen on a large scale in Fig. 6. These screws should be of steel, and each has a sharp point where it bears on the chase and a polygonal head  $e'$  to receive a wrench. The advantage of using these screws is twofold. Their points bite into the metal of the chase and prevent any lateral movement thereof after locking, and in case the side bar of the chase is not true or straight they insure a better bearing than could be had if the side of the locking-bar bore on the uneven side of the chase.

The operation is as follows: When the bar C has been placed and pressed up to the chase and the latter pressed up to the end flange of the press-bed, two wrenches or keys  $g$  (seen in Fig. 5) are simultaneously applied to the eccentrics  $d$  and the latter turned in the direction of the arrows  $z$  and  $z'$ . This has the effect to move out the jaws  $c$  until the heads thereof bear on the interposed wooden strips  $b$ . As soon as this is effected, the further rotation of the eccentrics drives the bar itself sidewise up against the chase B, thus clamping the latter firmly in position. It will be noted that the eccentric  $d$  imparts an endwise and lateral motion to the jaw  $c$ , to some extent simultaneously; but during the first part of the movement of the eccentric the endwise movement of the jaw is greatest. As soon as the jaw-head  $c^2$  is fairly seated against and bites into the strip  $b$ , so that the jaw cannot rock about the eccentric, the further rotation of the eccentric drives the bar laterally toward the chase, the jaw being held stationary by its end contact with the strip  $b$ . Two



keys *g* will be used, and the two eccentrics will be rotated simultaneously. The movements of the jaws *c* need be very slight, as the bar will be brought into contact at its side and ends, or nearly so, before the locking is effected. To limit the rotation of the eccentric to the extent required, a stop similar to that used on the cocks of gas-burners may be employed. A stop of this character is represented in Fig. 2.

Having thus described my invention, I claim—

1. A locking-bar for securing a chase in position on a press-bed, comprising a bar *C*, having locking-jaws *c* mounted one in each end of said bar, and eccentrics *d*, journaled rotatively in the bar, said eccentrics engaging apertures in the respective jaws, substantially as set forth.

2. The combination, with a press-bed having flanges at its sides, of a chase locking-bar extending transversely across the bed and

resting thereon, said bar having jaws *c* mounted in its respective ends and each adapted to be driven outward in two directions by eccentrics, the said eccentrics mounted rotatively in the bar and engaging circular apertures in the respective jaws, as set forth.

3. A locking-bar for securing a chase in position on a press-bed, comprising a bar *C*, having pointed screws *e* set in its edge or face adjacent to the chase, a movable jaw *c*, mounted in each end and adapted to be protruded by an eccentric, and eccentrics mounted in the respective ends of the bar and engaging apertures in said jaws, substantially as set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JOHN S. BROWN.

Witnesses:

HENRY CONNETT,  
HERBERT BLOSSOM.