

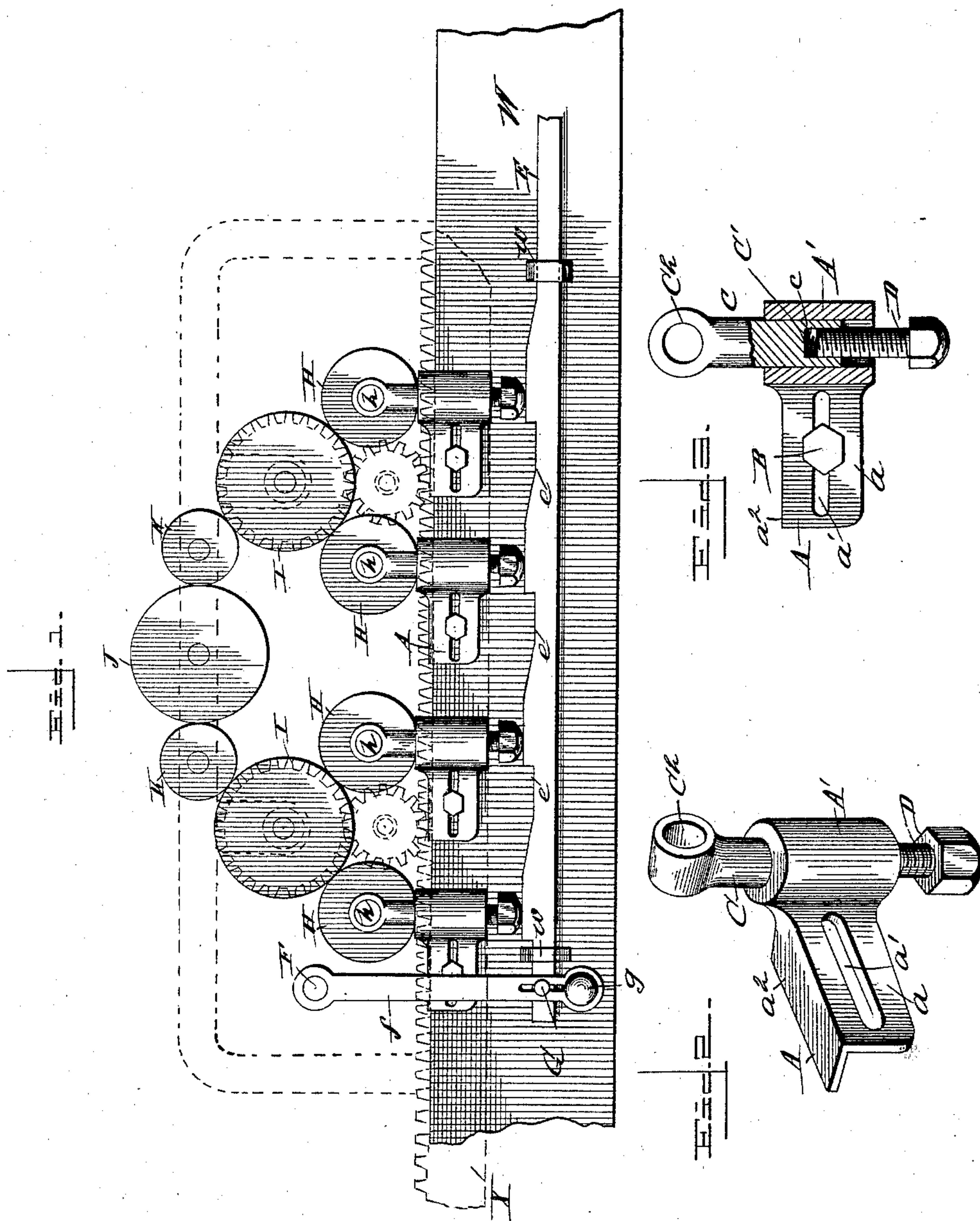
(No Model.)

J. L. COX.

INKING DEVICE FOR PRINTING PRESSES.

No. 441,789.

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WITNESSES
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INKING DEVICE FOR PRINTING-PRESSES.

SPECIFICATION forming part of Letters Patent No. 441,789, dated December 2, 1890.

Application filed November 1, 1889, Serial No. 328,943. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH L. COX, of Battle Creek, in the State of Michigan, have invented certain new and useful Improvements in Inking Devices for Printing-Presses; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a side elevation of the inking form-rollers of a printing-press, showing my improved devices for adjusting the form-rollers independently and simultaneously. Fig. 2 is a perspective view of one of the form-roller-journal supports, and Fig. 3 is a sectional view through the same.

This invention is an improvement in printing-presses wherein a series of rollers are employed to distribute the ink as it is carried from the fountain to the type; and it consists, essentially, in novel devices for supporting the form-rollers and rendering them simultaneously adjustable, so that they may be set to properly supply the ink to the type and when necessary simultaneously set off or throw apart from the distributing-rollers, which supply the ink thereto, to allow foreign substances—such as paper—which may casually work or be caught between the form and distributing-rollers—a common occurrence—to be readily removed without disturbing the working adjustments of or removing the form-rollers, all of which will be clearly understood from the following description and claims.

The invention is principally designed for use on presses having a reciprocating bed for carrying the forms, which is moved back and forth beneath the form-rollers, and the drawings indicate the invention as applied to such a press.

Referring by letters to the drawings, W designates a portion of the main frame of the press, and X designates a portion of the reciprocating form-supporting bed. On the part W, which is a horizontal bar, are secured brackets A, that form part of the devices for supporting the form-rollers. Each bracket has a horizontal portion a , which is longitudinally slotted, as at a' , and on the upper edge

of which is an inwardly-projecting flange a^2 , which rests upon the top edge of bar W, while portion a lies against the face thereof, and is secured thereto by a screw-bolt B, passing through slot a' and tapped into a suitable threaded opening in the bar, as indicated in the drawings. By means of a flange a^2 and bolt B the bracket is kept in a horizontal position, and at one end of the bracket is a cylindrical offset A', which is vertically bored and elongated, as shown.

C designates a bearer consisting of a body C', fitted and resting in the bore of offset A' and having a tubular bearing C² on its upper end, in which is received one journal of a form-roller, and in the lower end of said bearer within the offset A' is a vertical bore c , internally threaded, as indicated in Fig. 3.

D designates a bolt engaging bore c and projecting below offset A', as indicated. The bearer and bolt D can be adjusted up and down in the bore of offset A' or moved longitudinally therein; but the bearer has no lateral play or oscillation.

E designates a longitudinally-movable cam-rod supported in stirrups or loops w on the bar W below the brackets A, and upon the upper edge of said rod rests the heads of bolts D, so that by this means the several bearers C are upheld. The upper edge of the bar is notched, as indicated at $e e$, adjoining each bolt-head, the one side of the notch being inclined, as shown, to form a cam-surface, so that as the bar is shifted longitudinally the bolts D may ride easily down into the notches e or up therefrom, as is evident.

It should be understood, of course, that there is another set of brackets, bearers, bolts, and a longitudinally-movable cam-rod supporting the bolts, as shown and described, at the opposite side of the machine, this being necessary to support the form-rollers at each end and effect their proper adjustment.

F designates a rock-bar mounted in proper supports (not shown) on the main frame and provided with crank-bar f , which is connected to the end of cam E by a slot and pin G, as shown, and has a handle g , by which it can be shifted so as to throw rod E back and forth, as desired.

There are, as shown, four form-rollers H H,

arranged in two pairs, and each roller H has its journal *h* engaged in the tubular bearing C² of an adjoining bearer C. Above each pair of form-rollers is a distributing-roller I, which
 5 is driven by gearing from a rack on the bed, as indicated, if desired. Above and between the rollers I I is a roll J, which receives ink from the fountain by any suitable delivery apparatus, (not shown,) and from which the ink is
 10 carried by composition rollers K K to rollers I I, as indicated. By turning any bolt D the bearer C, that it supports, can be raised or lowered on bracket A, and of course the corresponding end of the roll H supported by
 15 the bearer is adjusted accordingly, so that by this means the form-rollers can be accurately aligned with the distributing-rollers I on the type-bed. Should any paper or other substance get between the form and distributing-
 20 rollers, the pressman can by shifting bar E drop all the bearers, and thus simultaneously separate the form and distributing rollers without any disturbance of their adjustment, and after the removal of the foreign matter
 25 the form-rollers can be moved back to working position together and the press at once started, thus avoiding vexatious delays in re-adjusting the rollers.

Having thus described my invention, what
 30 I claim, and desire to secure by Letters Patent thereon, is—

1. The combination of the sleeved brackets attached to the main frame, the bearers C, playing vertically in the sleeves of the brack-

ets, and a cam-bar below the brackets, with
 the bolts D, supported on said cam-bar and
 having a threaded connection with the bear-
 ers C, for the purpose and substantially as
 described. 35

2. The combination of the horizontally-ad-
 justable brackets A A, bolted to the main
 frame, the vertically-movable bearers C C,
 playing through said brackets, the rollers
 journaled in said bearers, and the horizontal
 rods for simultaneously adjusting and sup-
 45 porting said bearers, all substantially as specified.

3. The combination of the horizontally-ad-
 justable brackets A A, the vertically-adjust-
 able bearers C C and the form-rollers sup-
 50 ported thereby, and the cam-bar E for simultaneously raising or lowering said bearers, substantially as specified.

4. The combination, in a printing-press, of
 the form and distributing rollers, the hori-
 55 zontally-adjustable brackets A, the vertically-adjustable bearers C C, supporting the form-rollers, the adjusting and supporting bolts D D for said bearers, and the longitudinally-movable cam-bars E, sustaining said bolts, all sub-
 60 stantially as and for the purpose described.

In testimony that I claim the foregoing as
 my own I affix my signature in presence of
 two witnesses.

JOSEPH L. COX.

Witnesses:

P. L. BROOKS,
 A. E. DOWELL.