

(No Model.)

A. W. EKSTROM & J. F. GALVIN.  
PRINTER'S CHASE.

No. 417,478.

Patented Dec. 17, 1889.

FIG. 1.

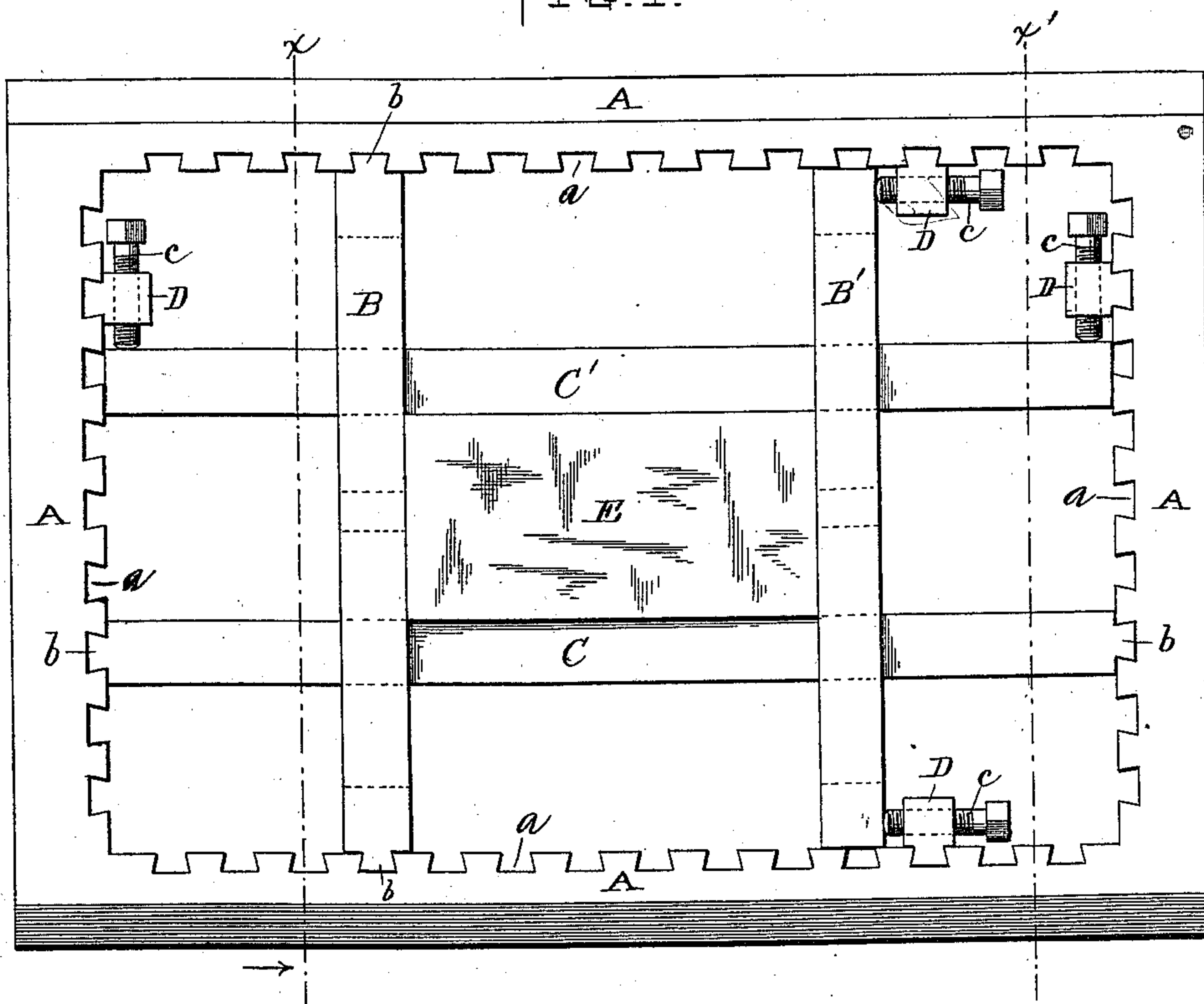


FIG. 2.

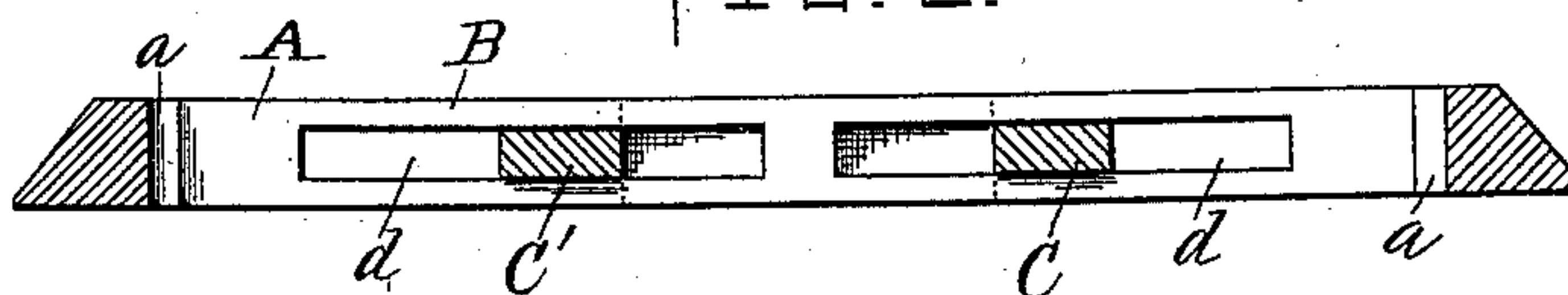


FIG. 3.

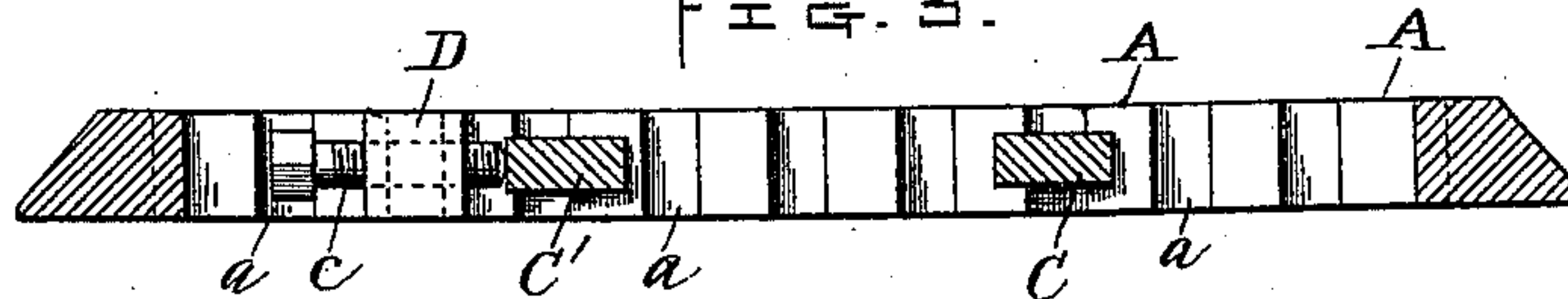
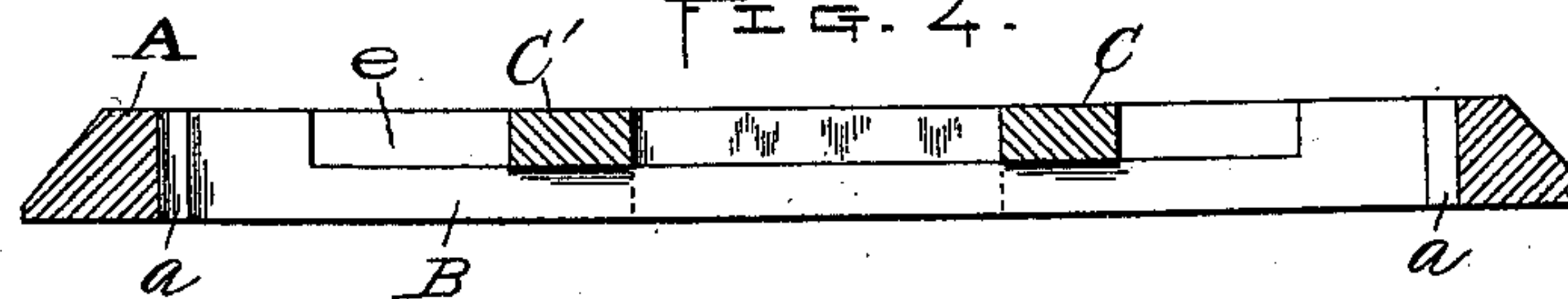


FIG. 4.



Witnesses;

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# UNITED STATES PATENT OFFICE.

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## PRINTER'S CHASE.

SPECIFICATION forming part of Letters Patent No. 417,478, dated December 17, 1889.

Application filed May 6, 1889. Serial No. 309,807. (No model.)

*To all whom it may concern:*

Be it known that we, ANDREW W. EKSTROM and JOHN F. GALVIN, both of the city and county of Worcester, and State of Massachusetts, have invented certain new and useful Improvements in Printers' Chases; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents a top or plan view of a printer's chase embodying our improvements. Figs. 2 and 3 are transverse sections of the chase, taken on lines  $x$  and  $x'$ , respectively, Fig. 1, looking in the direction indicated by the arrow; and Fig. 4 is a similar transverse section to that shown in Fig. 2, showing a modification in the construction hereinafter more fully explained.

Our invention consists of a printer's chase whose parts are constructed and arranged substantially as hereinafter set forth.

To enable others skilled in the art to which our invention appertains to better understand the nature and purpose thereof, we will now proceed to describe it more in detail.

In the drawings, the part marked A represents the inclosing-frame or chase proper, which is provided with a series of vertical grooves or slots  $a$ , arranged close together and extending entirely around the inner edge of said frame, as is shown in Fig. 1. They are preferably made dovetail in shape, and the ends of the bars which fit therein correspondingly shaped, so as to better hold the latter in position.

B B' are the transverse bars, and C C' the longitudinal bars. In this instance we have shown only two of each, but do not limit ourselves to this number.

The bars B C are provided with dovetail-shaped ends  $b$  to fit in the aforesaid grooves  $a$ , while the bars B' C' have plain square ends and are of just sufficient length to fit endwise inside of the chase, so that they may be freely moved laterally toward or from the other bars B C when fitted in said chase.

The parts marked D represent adjustable holding-blocks made upon one side of the

same shape as the grooves  $a$ , so that they may be fitted and held laterally therein at any point around the inside of the chase. Parallel to the side which fits in the groove, and a short distance from the inner edge of the chase when fitted in position, is formed a threaded opening to receive a screw  $c$ , adapted to be turned therein by means of a suitable wrench provided for the purpose.

The central block E is shown to indicate a printer's "form."

In practice, assuming that said form is ready to be placed and secured in the chase, the operation by means of our improved lock-up attachment is as follows: The stationary bars B C are first fastened in position by fitting their ends in the grooves  $a$ , as previously described, at about the right places to bring the form at the center of the chase, after which first one and then the other of the movable bars B' C' are moved up laterally against said form. The holding-blocks D are now fitted in the grooves just outside of the movable bars, and their screws  $c$  turned up tight against said bars, thereby, as will at once be apparent, holding the form in a very perfect and secure manner, being, in fact, so firmly held that it cannot work loose in practice. By thus dispensing with the usual quoins and wood or metal furniture the aforesaid operation of fitting and securing a form in position may be quickly performed and a large saving in time and labor effected.

Our improved chase is not only applicable for holding forms at the center thereof, as shown and described, but also may be used in place of what is known as "labor-saving furniture" in "blank" work as well. It is more especially designed for use on cylinder presses; but we do not limit ourselves thereto. It is of particular advantage in securing a small form in a large chase, where so much furniture is usually required to fill around the same to hold it in place, and much time and annoyance is obviated by having the means for fastening the forms always at hand, instead of in numerous separate parts of various sizes requiring to be selected to fill the space around said forms.

For small chases only four cross-bars would

ordinarily be required; but for large ones it is necessary to use additional ones, which we reserve the right to do, as previously stated.

5 We also reserve the right to slot out one set of cross-bars in any manner, so that the others may cross them at right angles without projecting above or below the surface of the chase.

10 In the first three figures of the drawings we have shown central slots *d* in the transverse bars *B B'* for the bars *C C'* to pass through, while in Fig. 4 a similar result is obtained by forming open slots *e* at the upper side of said transverse bars.

15 Having now fully described said invention, what we claim therein as new, and desire to secure by Letters Patent, is—

1. In a printer's chase, the combination of

the frame *A*, having the vertical grooves *a* and fastened cross-bars *B C*, with the movable cross-bars *B' C'* and the adjustable holding-blocks *D*, provided with the screws *c*, said bars *B C* and blocks *D* being fastened in the chase-frame, substantially as and for the purpose set forth. 20

2. In a printer's chase, the combination of the frame *A*, having the vertical grooves *a* and movable cross-bars *B' C'*, with the adjustable holding-blocks *D*, provided with the screws *c* and adapted to be held in the chase-frame, substantially as set forth. 25 30

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