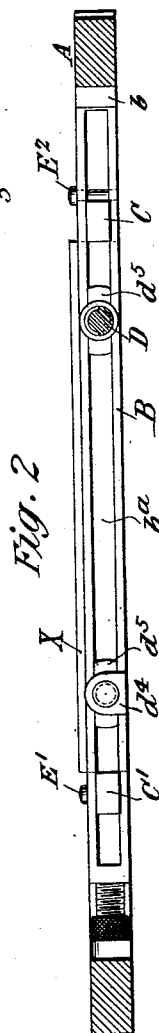
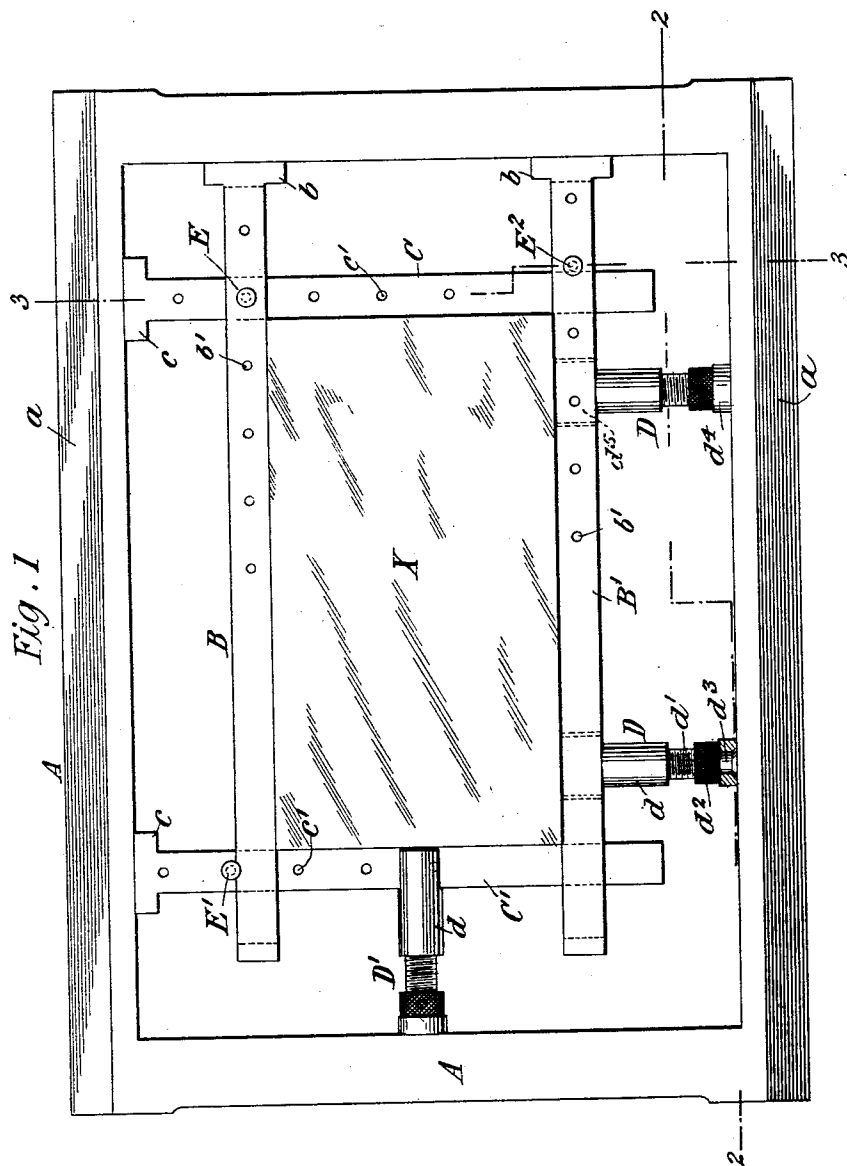
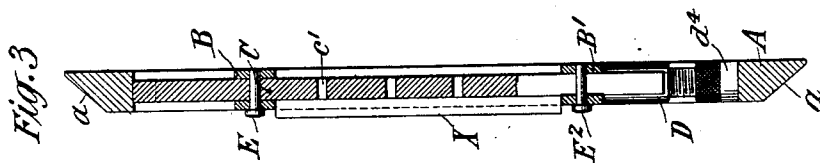


(No Model.)

G. E. LINCOLN.
 PRINTER'S ADJUSTABLE FURNITURE.

No. 587,745.

Patented Aug. 10, 1897.



Witnesses:

Raphaël Netter
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UNITED STATES PATENT OFFICE.

GEORGE E. LINCOLN, OF BROOKLYN, NEW YORK, ASSIGNOR TO CUTHBERT J. ORCHARD AND J. CLYDE OSWALD, OF SAME PLACE.

PRINTERS' ADJUSTABLE FURNITURE.

SPECIFICATION forming part of Letters Patent No. 587,745, dated August 10, 1897.

Application filed September 23, 1896. Serial No. 606,753. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. LINCOLN, a citizen of the United States, and a resident of Brooklyn, Kings county, State of New York, have invented certain new and useful Improvements in Printers' Adjustable Furniture, of which the following is a specification.

My invention relates to printers' adjustable furniture adapted for securing forms of various dimensions in chases of standard sizes and of the usual constructions.

The object of the invention is to provide simple and efficient means for locking up forms without the necessity of making use of the ordinary wood furniture, which is very liable to warp and spring up the type, especially when small forms are locked up in large chases.

In my invention there are no quads and furniture to work loose. The form always lies solidly on the press, and much time and annoyance are saved in making ready in using my improvements.

My improvements are illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of a chase having a form secured therein by means of my improved appliances. Fig. 2 is a section on the line 2 2, and Fig. 3 a section on the line 3 3, of Fig. 1.

In the drawings the same parts are indicated by the same letters of reference in the several views.

My locking-up appliances comprise a set of slotted longitudinal bars and a set of solid transverse bars. Each of the several bars has an enlargement at one end to insure its proper coöperation with the inner walls of the chase, and the several bars are provided with a series of transverse holes adapted to receive pins, whereby the bars are held together and guided when assembled in the chase, with the transverse bars passing through the slots of the longitudinal bars. This set of bars is adapted to be used with chases of the usual constructions.

Referring to the drawings, A indicates a printers' chase having its longitudinal rails beveled, as shown at *a*.

B B' indicate the longitudinal bars of my

invention, and they are provided with enlargements *b* at one end, which are adapted to abut against the inner surface of one of the end rails of the chase A. The bars B B' are slotted longitudinally, as shown at *b^a* in Fig. 2.

C C' indicate the transverse bars, which are not slotted, but are also provided at one end with enlargements *c*, the same as bars B, the said enlargements being adapted to abut against one of the longitudinal rails of the chase A.

The several bars B B' C C', which are made of metal, are provided with transverse holes *b' c'*, arranged suitable distances apart, as hereinafter explained. The said transverse bars are adapted to pass through the slots *b^a* of the longitudinal bars and may be adjusted within said slots longitudinally of the chase. These bars B B' C C' comprise a frame within the chase to contain and hold the form to be locked up. In the drawings the form is indicated by X.

D indicates screw-adjusting devices. There are two of these devices, each comprising an internally-threaded cylindrical portion *d*, which receives a screw-threaded stem *d'*, having the milled portion *d²*, a smooth front extension *d³*, provided with a head, as shown, which is seated in a depression in a disk *d⁴*. The disk *d⁴* is thus secured to the front extension *d³*, while the latter is permitted to turn in the disk. The disk *d⁴* is adapted to bear against the inner wall of the longitudinal rail of the chase A to furnish a bearing for the screw-adjusting device at its outer end. The inner end of the cylindrical portion *d* of the adjusting device D is provided with an oblong-shaped head *d⁵*, (shown in dotted lines in Fig. 1 and in full lines in Fig. 2,) and it easily fits within the slot *b^a* of the longitudinal bar B'. The said head *d⁵* is of less thickness than the diameter of the cylindrical portion *d*, the latter abutting against the side of the bar B, when the device D is in operative position, as shown in Fig. 2.

E E' E² indicate pins, easily removable, which are adapted to enter the holes *b' c'* of the bars forming the frame within the chase. In practice three of these pins are

made use of, as shown in the plan view Fig. 1. The pin E secures longitudinal bar B and transverse bar C (the latter passing through the slot of the former) together, with the bar B the proper distance from the end c of the bar C, according to the size of the form to be locked up, the object being to secure the form as near the center of the chase as possible. The pin E' is passed through one of the holes of transverse bar C' and furnishes an abutment for that end of longitudinal bar B through which transverse bar C' passes.

It will be observed that the holes of transverse bar C are not in the same relative positions as the holes of the transverse bar C', and the same remark applies as to the holes in longitudinal bars B and B'. The holes in the respective bars are so disposed that when bars B C are jointed together by pin E the outer edge of longitudinal bar B, when adjusted parallel to the inner wall of the chase, will be immediately in front of one of the holes of transverse bar C' and is held in that position, when the form is locked up by pin E', as shown, the pin serving as an abutment for said bar B, and the outer edge of transverse bar C', when parallel with the inner wall of the end of the chase, is immediately in front of one of the holes in longitudinal bar B' and is held in that position by pin E², serving as an abutment in the same manner as pin E' just referred to. The holes in the respective bars will be arranged about one-half an inch apart with a uniform space between them.

When the several bars are assembled in the manner explained, there is a fixed right angle provided by the bars B and C. The form X being placed in position the bar B' is forced tightly up against the form by means of the screw-adjusting devices D, which are operated by turning the milled portion D² by the hand or a tool. The transverse bar C' is forced against the end of the form by means of screw-adjusting device D', constructed the same as devices D, except that the cylindrical portion d is slotted at the end to receive the bar C' and firmly hold it. As the bar C' passes through the slots of longitudinal bars B B' it is obvious that said bar C' may be forced by the screw-adjusting device D' firmly against the end of the form X. Any desired amount of pressure may be exerted by means of the screw-adjusting devices D D' to firmly and securely lock the form in the chase.

It will be seen that my improvement embodies a very few number of parts, is very simple in construction, and is adapted to be used with the chases of common construction and in general use. Its efficiency in service has been fully proved by its practical employment.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. In printers' adjustable furniture, the combination with a chase of usual construction, of a pair of longitudinal bars provided with transverse holes and slotted longitudinally, a pair of transverse bars provided with transverse holes, a pin jointing together one of the longitudinal and one of the transverse bars, pins adapted to fit the holes in said bars to furnish abutments for one of the longitudinal bars and one of the transverse bars, and devices coöperating with one of the longitudinal and one of the transverse bars to exert pressure thereon, substantially as set forth.

2. The combination with a chase, of a pair of longitudinal bars provided with longitudinal slots and transverse holes and having enlargements at one of their ends, a pair of transverse bars provided with transverse holes and having enlargements at one of their ends, a pin jointing together one of the longitudinal bars and one of the transverse bars, abutment-pins for one of the longitudinal and one of the transverse bars, a pair of screw-adjusting devices provided at their inner ends with heads adapted to enter the slots of one of said longitudinal bars, and a screw-adjusting device coöperating with one of said transverse bars, substantially as set forth.

3. The combination with a pair of longitudinal bars slotted longitudinally and having rows of transverse holes equal distances apart, the row of holes of one bar beginning farther from the end of the bar than the row of holes of the other bar, a pair of transverse bars similarly provided with rows of transverse holes and adapted to be adjusted within the slots of said longitudinal bars, a pin detachably jointing one bar of each set of bars together, an abutment-pin for one of the longitudinal bars, an abutment-pin for one of the transverse bars, and screw-adjusting devices for one of the longitudinal and one of the transverse bars, substantially as set forth.

4. The combination with a chase A, and a form X, of longitudinal bars B, B' slotted as shown and provided with transverse holes, transverse bars C, C' likewise provided with transverse holes, pin E detachably jointing together bars B and C, abutment-pins E', E² and screw-adjusting devices adapted to exert pressure on longitudinal bar B' and transverse bar C' to lock the form X in place, substantially as set forth.

Signed at New York, county and State of New York, this 5th day of September, 1896.

GEO. E. LINCOLN.

Witnesses:

J. E. M. BOWEN,
C. HOLLOWAY.