

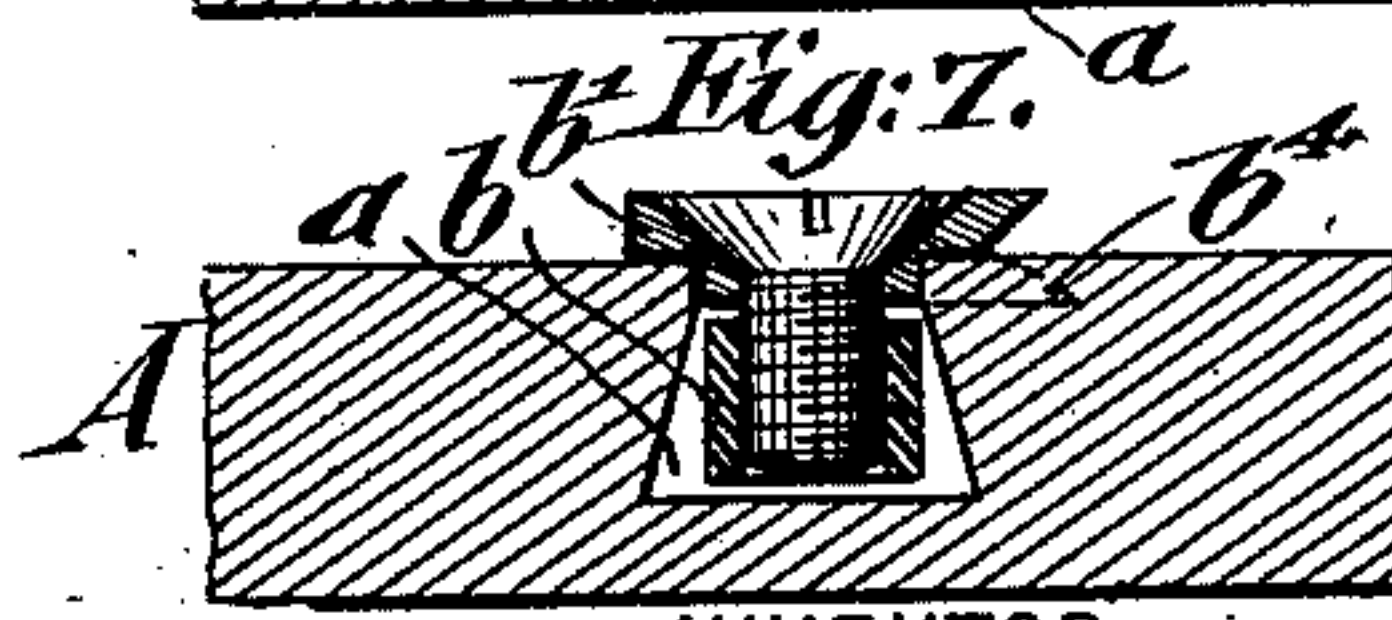
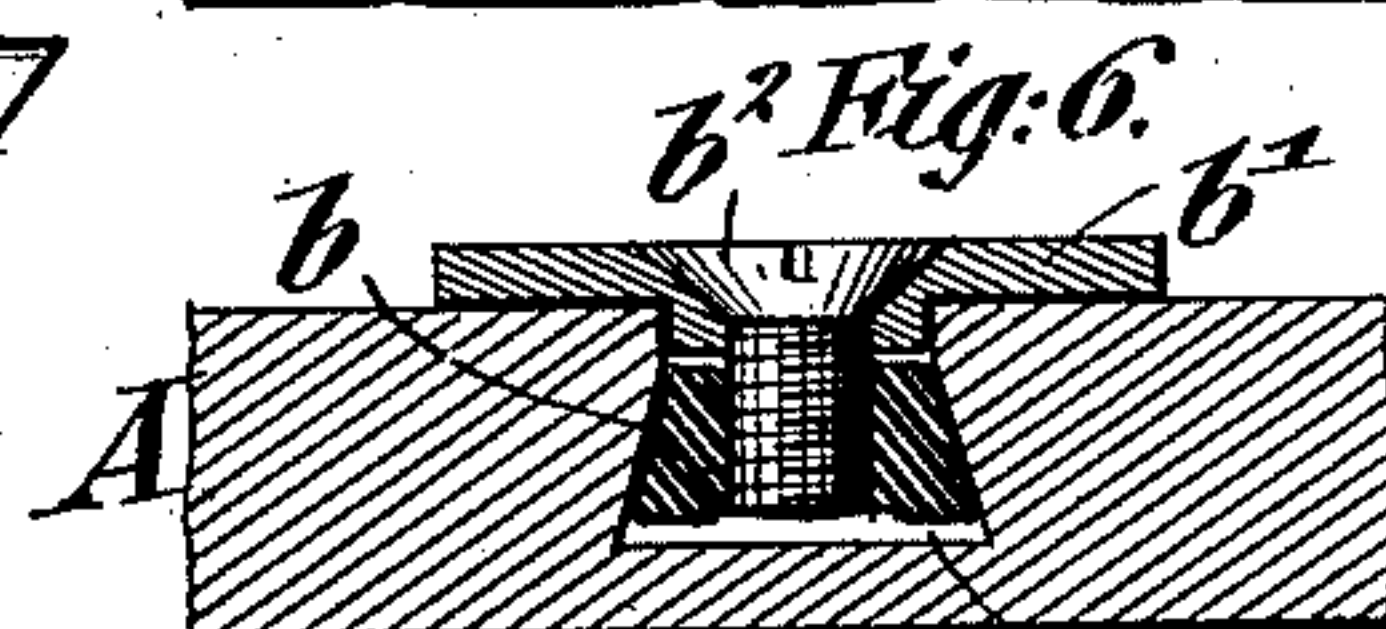
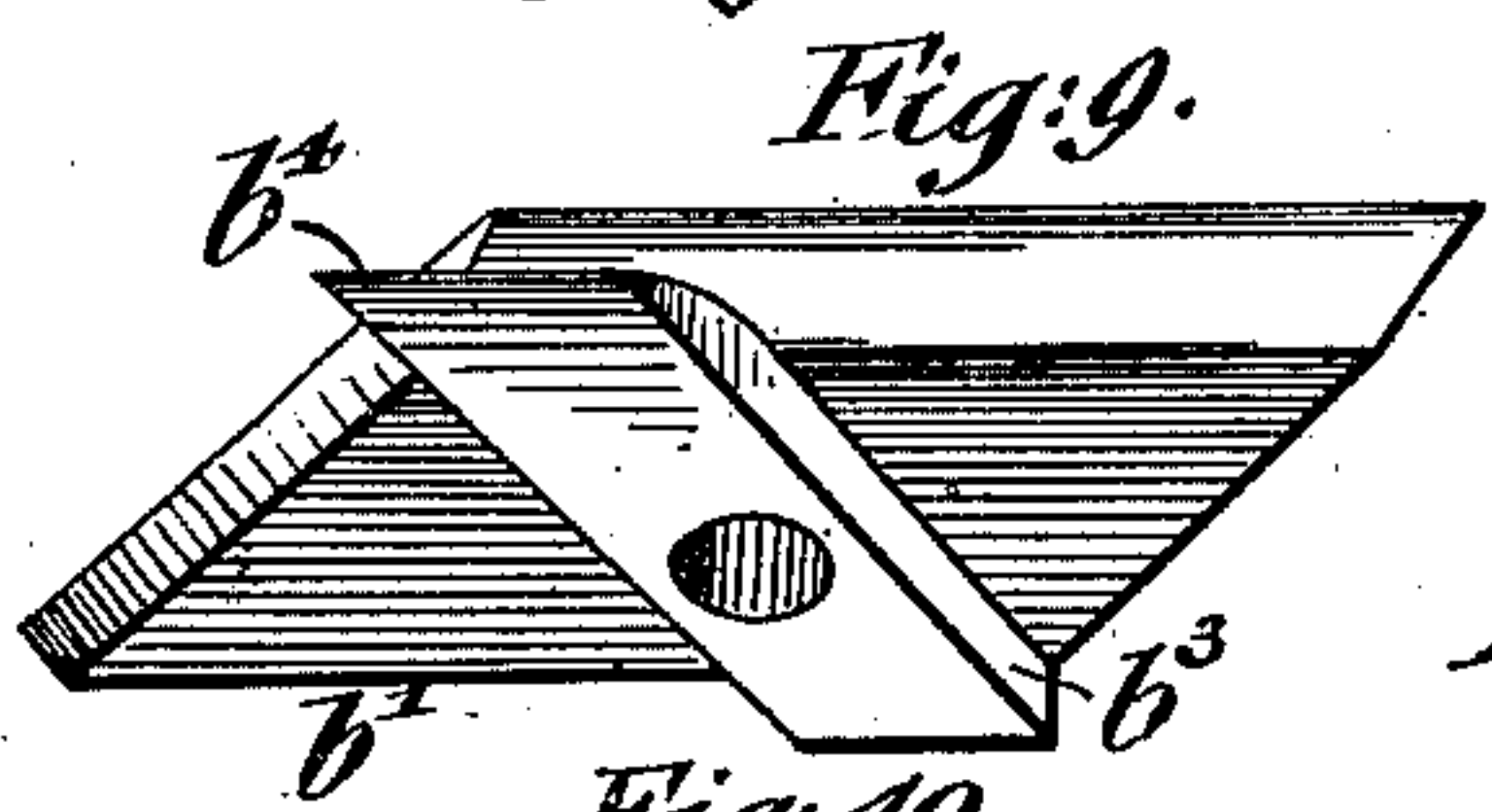
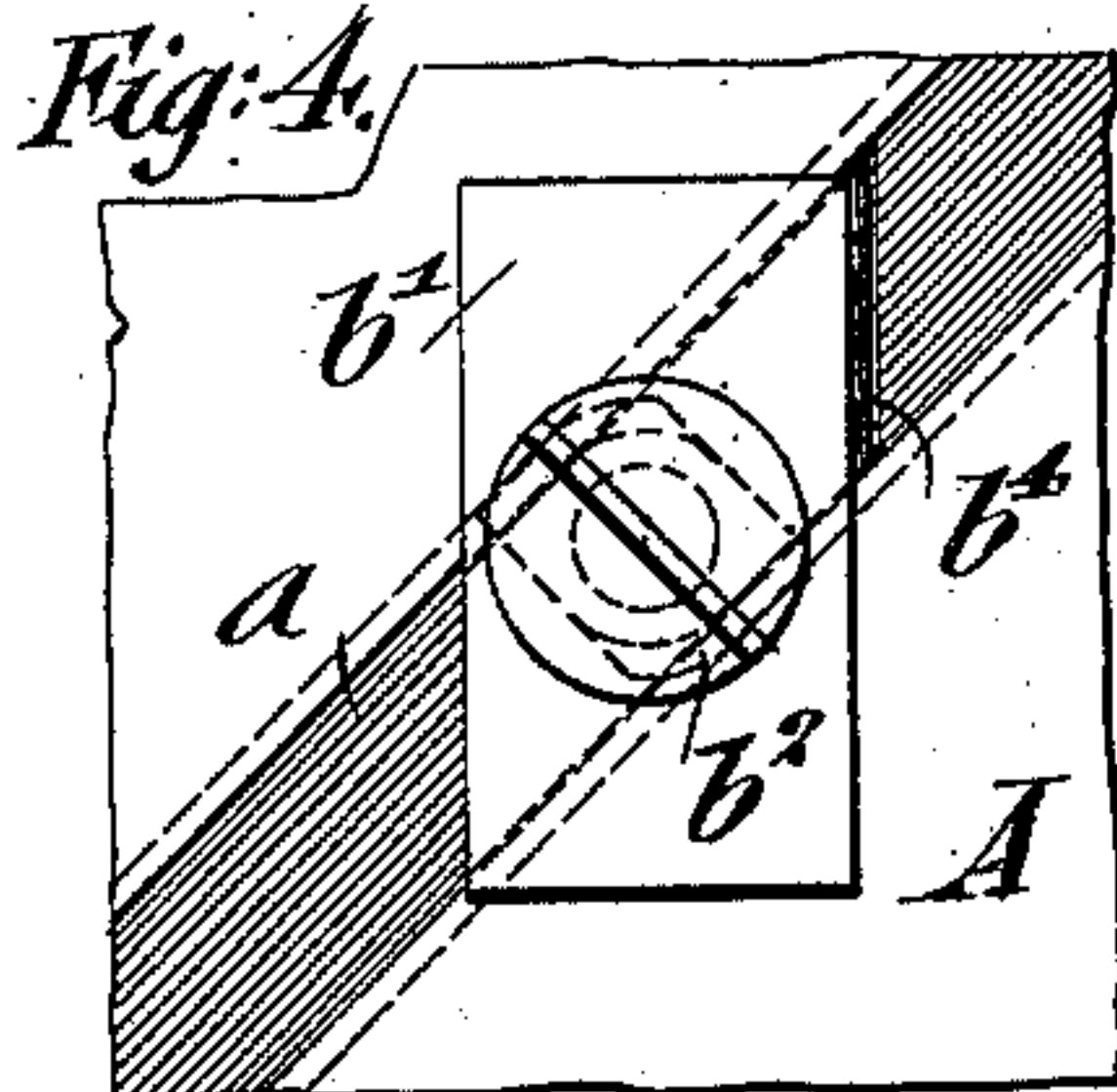
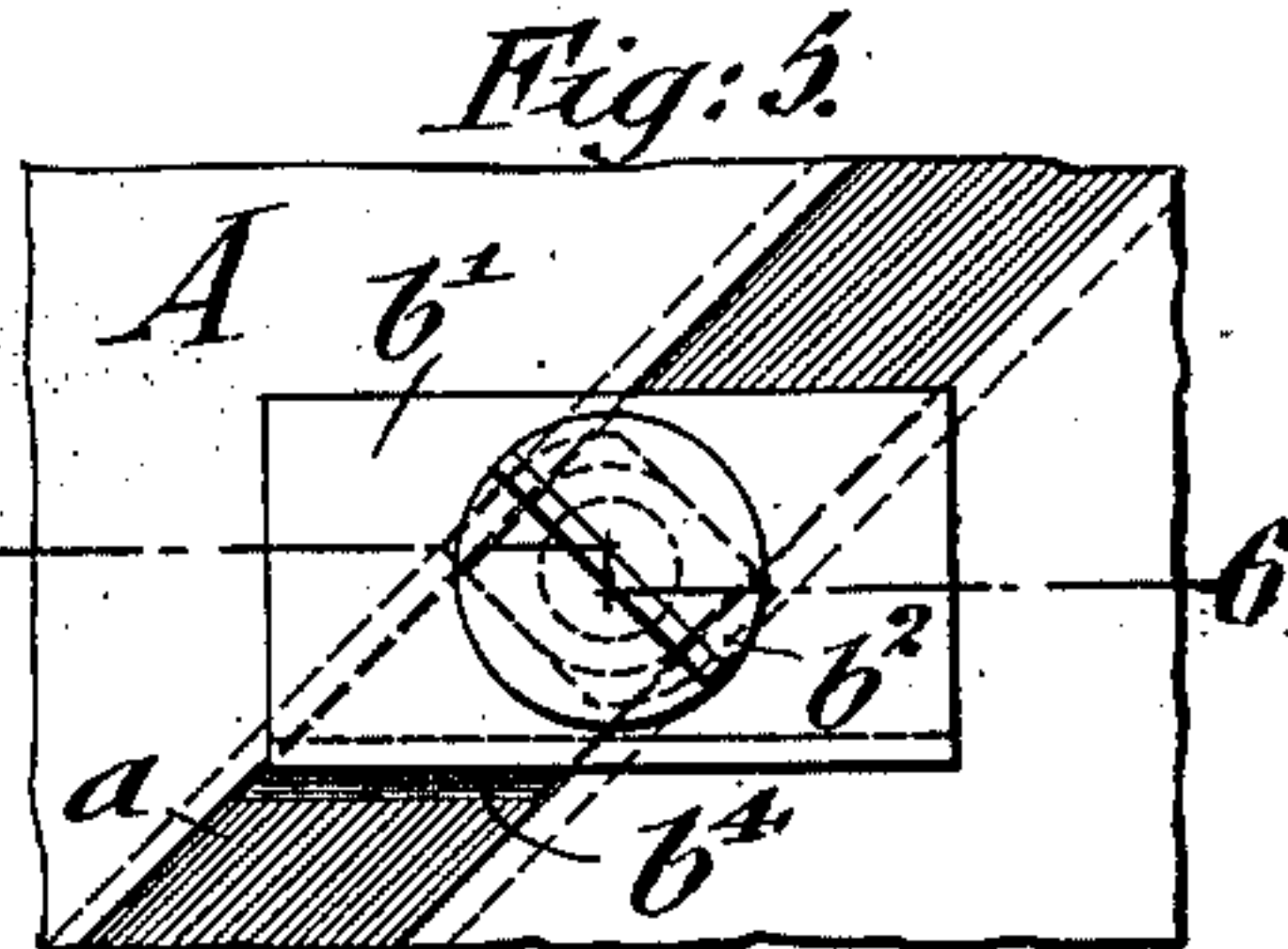
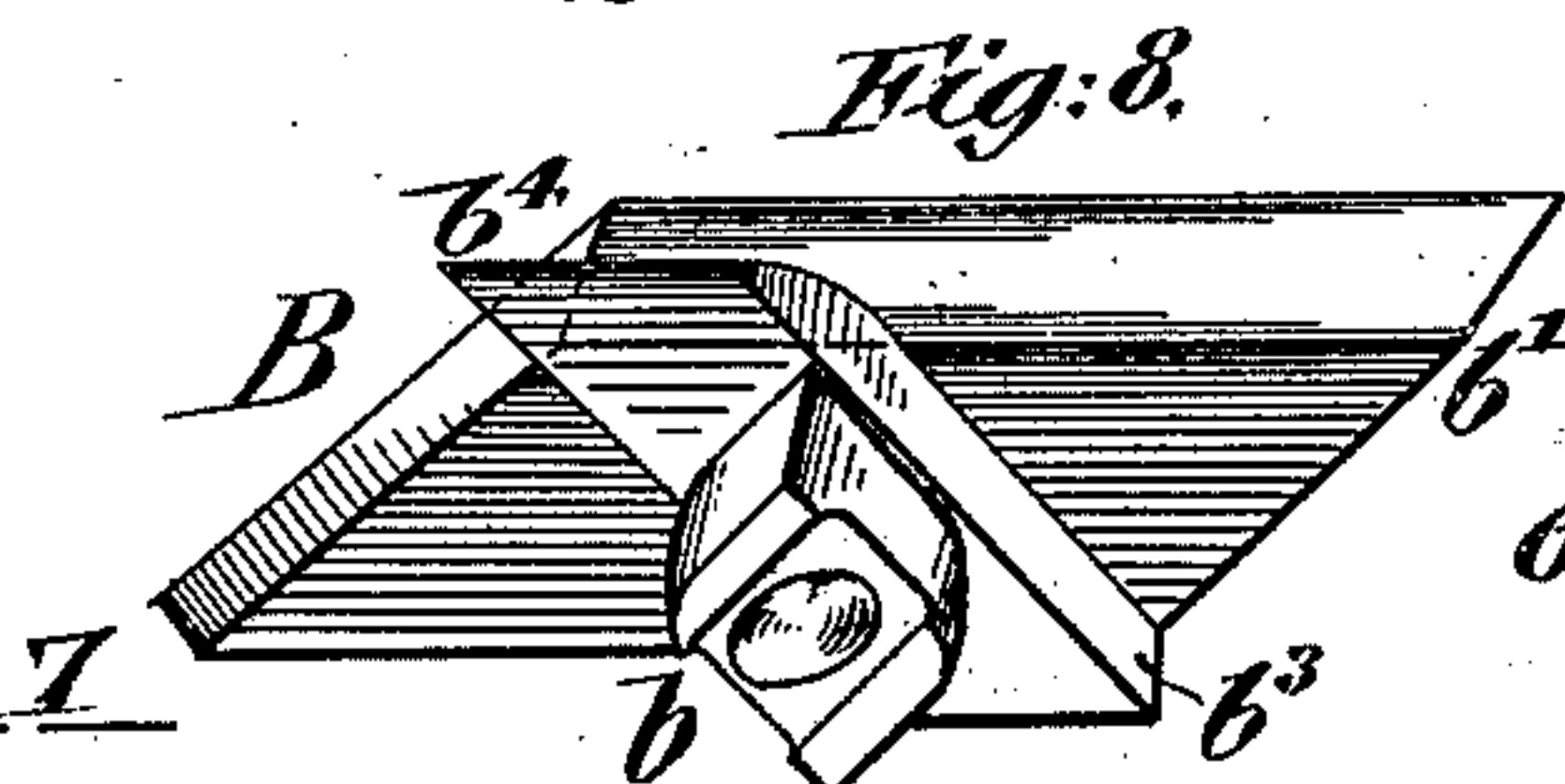
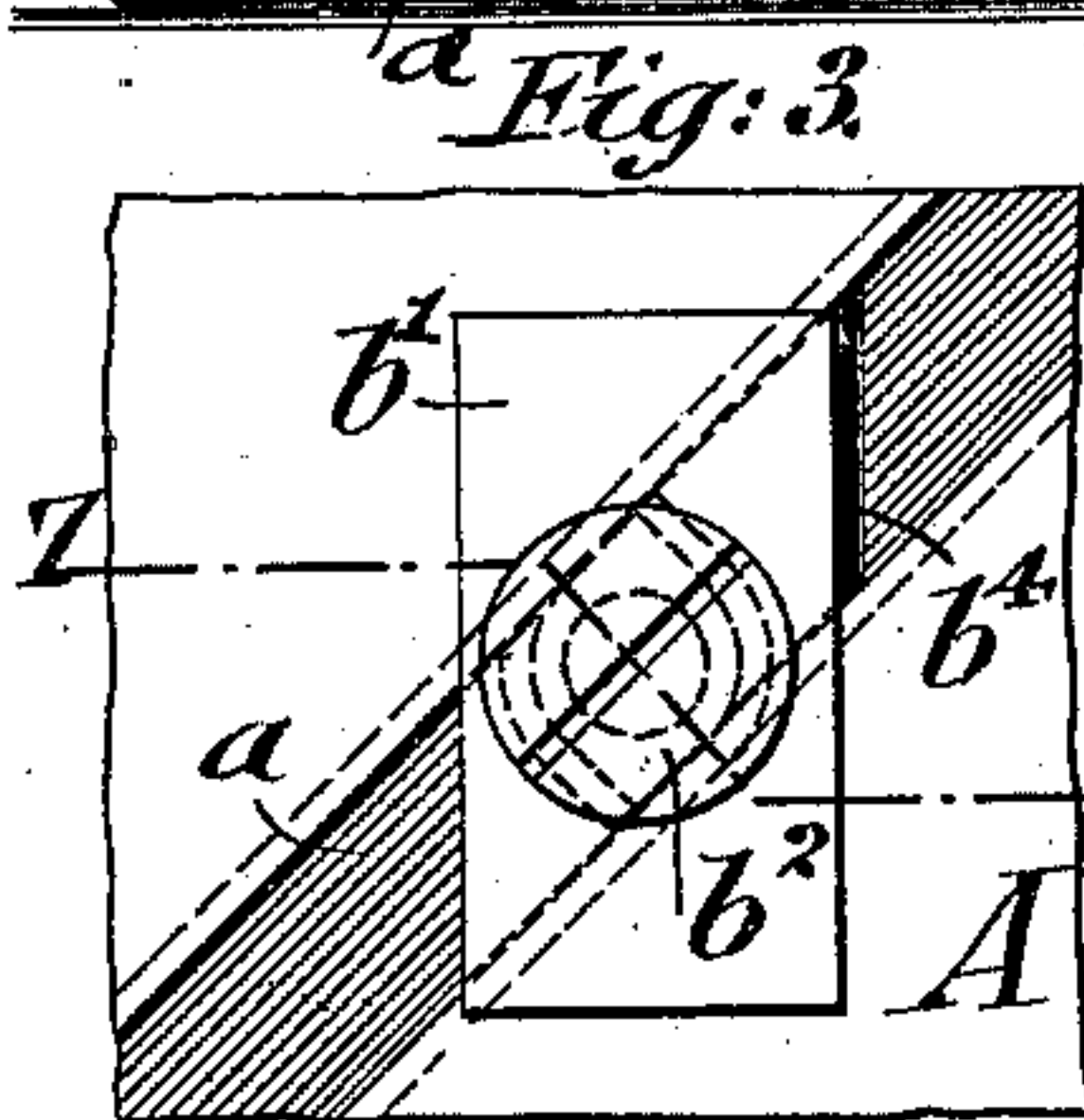
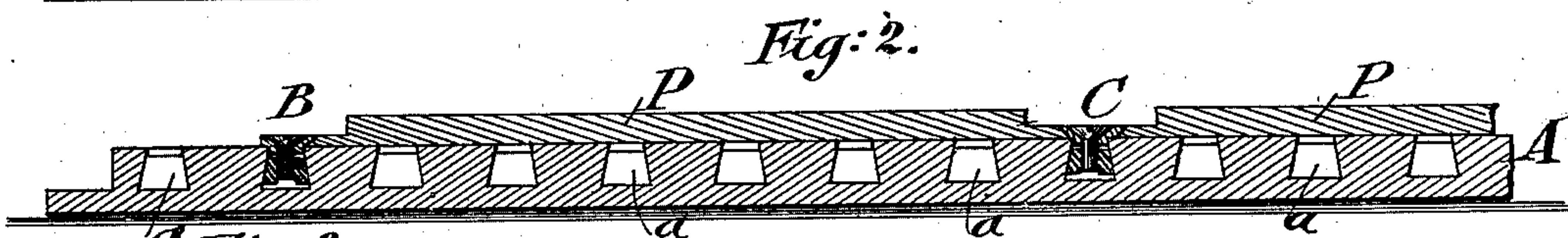
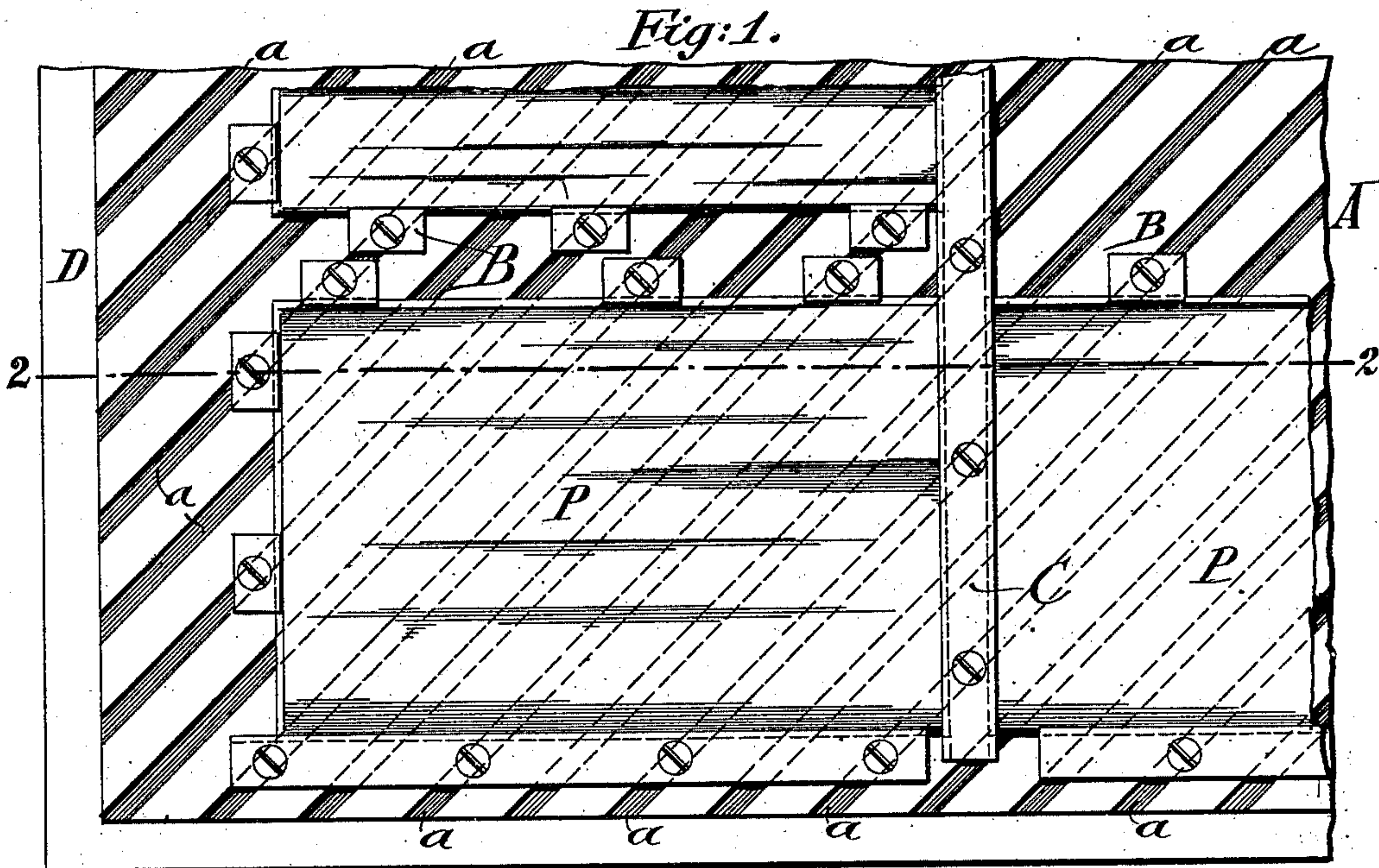
No. 671,327.

Patented Apr. 2, 1901.

F. WESEL.  
STEREOTYPE PLATE HOLDER.

(Application filed July 28, 1900.)

(No Model.)



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# UNITED STATES PATENT OFFICE.

FERDINAND WESEL, OF BROOKLYN, NEW YORK.

## STEREOTYPE-PLATE HOLDER.

SPECIFICATION forming part of Letters Patent No. 671,327, dated April 2, 1901.

Application filed July 28, 1900. Serial No. 25,098. (No model.)

*To all whom it may concern:*

Be it known that I, FERDINAND WESEL, a citizen of the United States, residing in the city of New York, in the borough of Brooklyn and State of New York, have invented certain new and useful Improvements in Stereotype-Plate Holders, of which the following is a specification.

This invention relates to improvements in holders for stereotype, electrotype, or other printing-plates, the improvement being designed with the view of facilitating the insertion of the plate-clamps at any desired point on the supporting-block, whereby the clamping of the printing-plates in their proper position can be readily accomplished. The plate-clamps heretofore in use necessitated the introduction of their base portions into the dovetailed ends of the grooves of the block. In case any of the clamps should have been set in an incorrect position relatively to the stereotype-plate to be clamped it was necessary to remove and rearrange the clamps, which was an inconvenient and time-consuming operation.

The object of the present invention is to so form the base portion of the clamp that the same can be inserted at any desired point directly in the dovetailed groove and locked therein without shifting the other clamps or removing the stereotype-plates, by which improvement the clamping of the plates in position on the block for printing is rendered much easier, while the firm clamping of the plates by the clamps is not impaired.

For this purpose the invention consists in a holder for printing-plates comprising a block having grooves of greater width at the lower than at the upper part and plate-clamps arranged on said block, each of said clamps consisting of a base portion of such width as to pass into the groove at its upper part and of greater length than the upper width of the groove and turnable in the same, a face portion, and a screw connecting said base and face portions.

In the accompanying drawings, Figure 1 represents a plan view of a portion of the plate-holder, showing the manner of clamping plates to the block. Fig. 2 is a vertical section on line 2 2, Fig. 1. Figs. 3 and 4 are top views of a left-hand plate-clamp, with the

base portion indicated, respectively, in locked and unlocked position. Fig. 5 is a top view of a right-hand clamp. Figs. 6 and 7 are respectively sections on lines 6 6, Figs. 5, and 7 7, Fig. 3; and Figs. 8, 9, and 10 are perspective views from beneath, respectively, of the connected clamp and the face and base portions separately.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A indicates the block of my improved plate-holder, which block is made of the size necessary to support any desired number of plates P. The block A is provided with a series of grooves *a a*, which extend entirely across the block, preferably at an angle of forty-five degrees to the sides of the same. The grooves *a a* are wider at their lower than their upper parts and are preferably dovetailed in cross-section. The plates are locked in position on the block by means of plate-clamps B, each of which is constructed of three parts—namely, a base portion or nut *b*, which is provided with beveled sides, an oblong face portion *b'*, and a screw *b<sup>2</sup>*, the beveled head of which fits into a countersunk opening in the face portion, while its threaded shank engages a threaded opening in the base portion, as shown in Fig. 2. The under side of the face portion *v'* is provided with a shoulder *b<sup>3</sup>*, which is arranged at the same angle to the sides of the face portion as the angle at which the parallel grooves *a* are arranged to the sides of the block. The shoulder *b<sup>3</sup>*, however, does not terminate at the side of the face portion; but one end of said shoulder extends beyond the corresponding side of the face portion, so as to form a projecting lip *b<sup>4</sup>*, as shown clearly in Figs. 7 and 8. Either or both sides of the face portion at which the lip of the shoulder is formed may be beveled. In other words, while ordinarily it is not possible to use a clamp, the face portion of which is beveled and provided with a lip *b<sup>4</sup>* at both sides, in case the width of the face portion should be the proper distance between the plates the two-sided clamp may be employed. Otherwise separate right and left hand clamps are used. Such a two-sided clamp is not illustrated in the drawings, as one side of the face portion is simply a duplication of the other. Furthermore, this



construction does not form the main feature of the present invention.

The new feature of this invention consists in the construction of the base portion *b*, the width of which is equal to the width of the top part of the groove, or, in other words, of such width as to pass into said groove directly from the top without having to be inserted at the end of the groove, while the length of the base portion is made of greater dimension than the top part of the groove, and two diagonally opposite corners of the base portion are rounded off, so that upon turning the base portion after inserting in the groove it cannot be withdrawn. The two positions of the base portion are indicated in Figs. 3 and 7 and 4, 5, and 6, respectively. The turning of the base portion in the groove is accomplished by the first turn of the screw by the friction with the same, after which the base portion is retained in position by its beveled sides in the groove, the turning of the screw being continued and the face portion tightly clamped in position on the block A, with its beveled edge in contact with the plate P. The sides of the base portion are cut off perpendicular, as shown in Fig. 7, so that the base portion can be readily dropped into the groove or removed from the same, as required. This construction of the base portion permits the attachment of the plate-clamp at any desired point on the block by simply dropping the base portion of the clamp and shoulder of the face portion into the groove without requiring the insertion of the base portion from the extreme ends of the grooves and sliding into position in the groove, which formed an objectionable feature of the old clamps. By the new form of base portion the plate-clamp can be inserted from the top directly in position at any desired point on the block, and thereby one of the main objections to the former construction of plate-clamps is removed. When the base portion has been placed in proper position in the dovetailed groove and the clamping-screw turned so as to produce the firm connection between the dovetailed groove and the base and face portions, the plate is firmly and reliably clamped in position. When the printing of the plates is accom-

plished and the same are to be removed, the plate-clamps are loosened by turning the screw in the opposite direction, the first turn of the screw producing the turning of the base portion into position in line with the center line of the groove, so that the clamps can be readily shifted or lifted out of the grooves, if necessary, and the stereotype-plate removed.

In place of the individual clamps at two sides of the plate may be employed margin-bars or plate-bars C. The face portions of these bars are beveled in the same manner as the face portions of the clamps and are provided with shoulders at the under side for entering the grooves, the shoulders having lips the same as the clamps. The base portions of these bars are of the same construction as those of the plate-clamps, as previously described.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A holder for printing-plates, comprising a block having grooves of greater width at the lower than at the upper part, and plate-clamps arranged on said block, each of said clamps consisting of a base portion of such width as to pass into the groove at its upper part, and of greater length than the upper width of the groove, and turnable in the same, a face portion, and a screw connecting said base and face portions, substantially as set forth.

2. A holder for printing-plates, comprising a block having grooves of greater width at the lower than at the upper part, and plate-clamps arranged on said block, said clamps consisting of a base portion equal in width with the width of the top part of the groove, and in length to the width of the lower part of the groove, and having two diagonal corners rounded, a face portion, and a screw connecting said base and face portions, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

FERDINAND WESEL.

Witnesses:

PAUL GOEPEL,  
M. H. WURTZEL.