

No. 661,780.

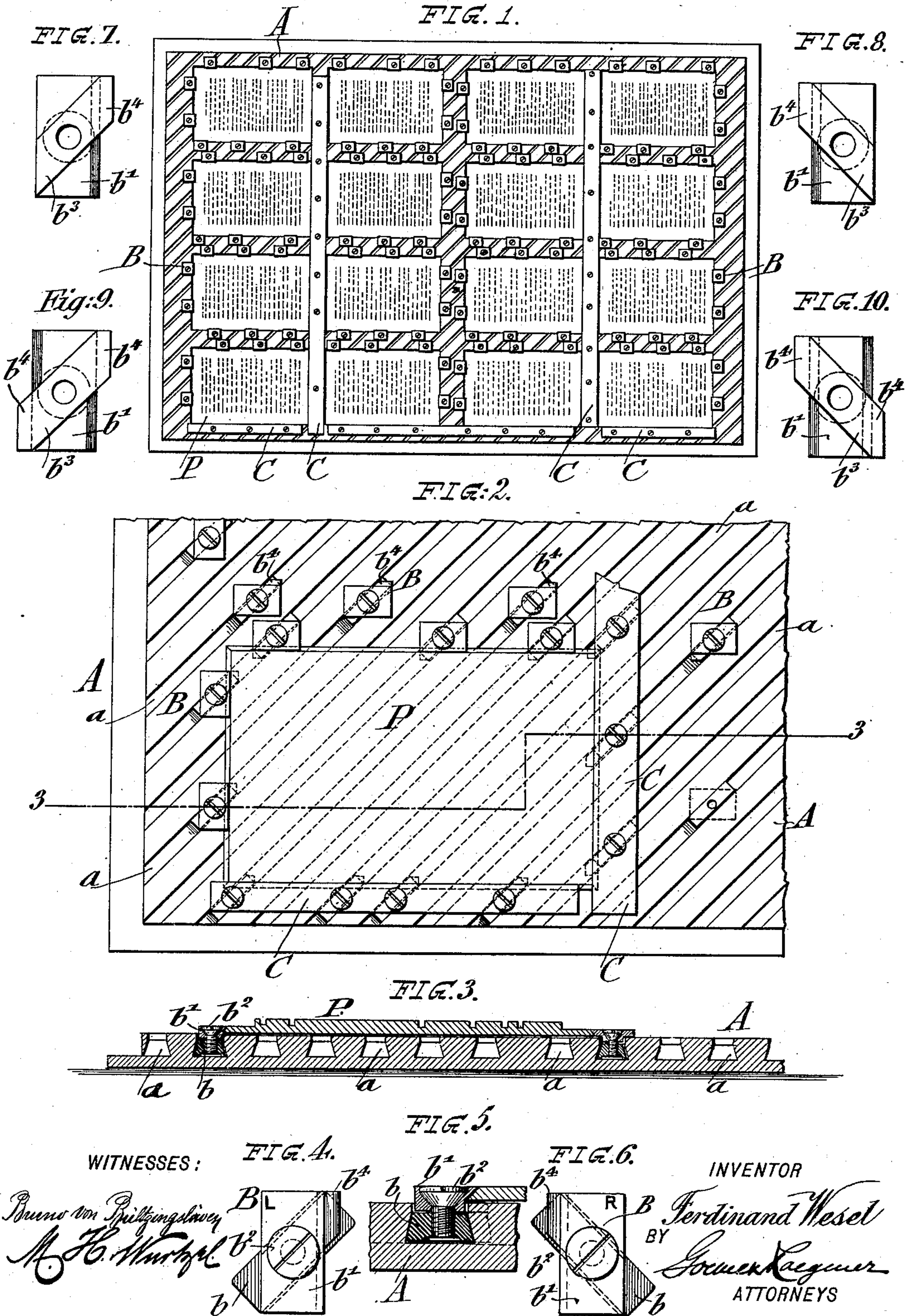
Patented Nov. 13, 1900.

F. WESEL.
STEREOTYPE PLATE HOLDER.

(Application filed Jan. 12, 1900.)

(No Model.)

2 Sheets—Sheet 1.



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Fig: 11.

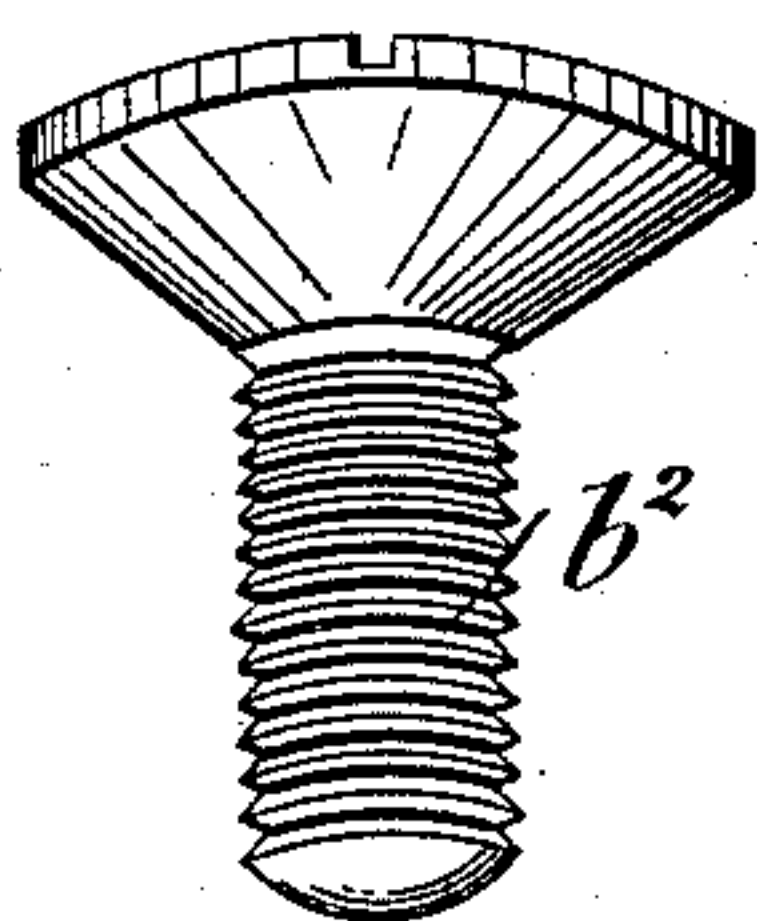


Fig: 12.

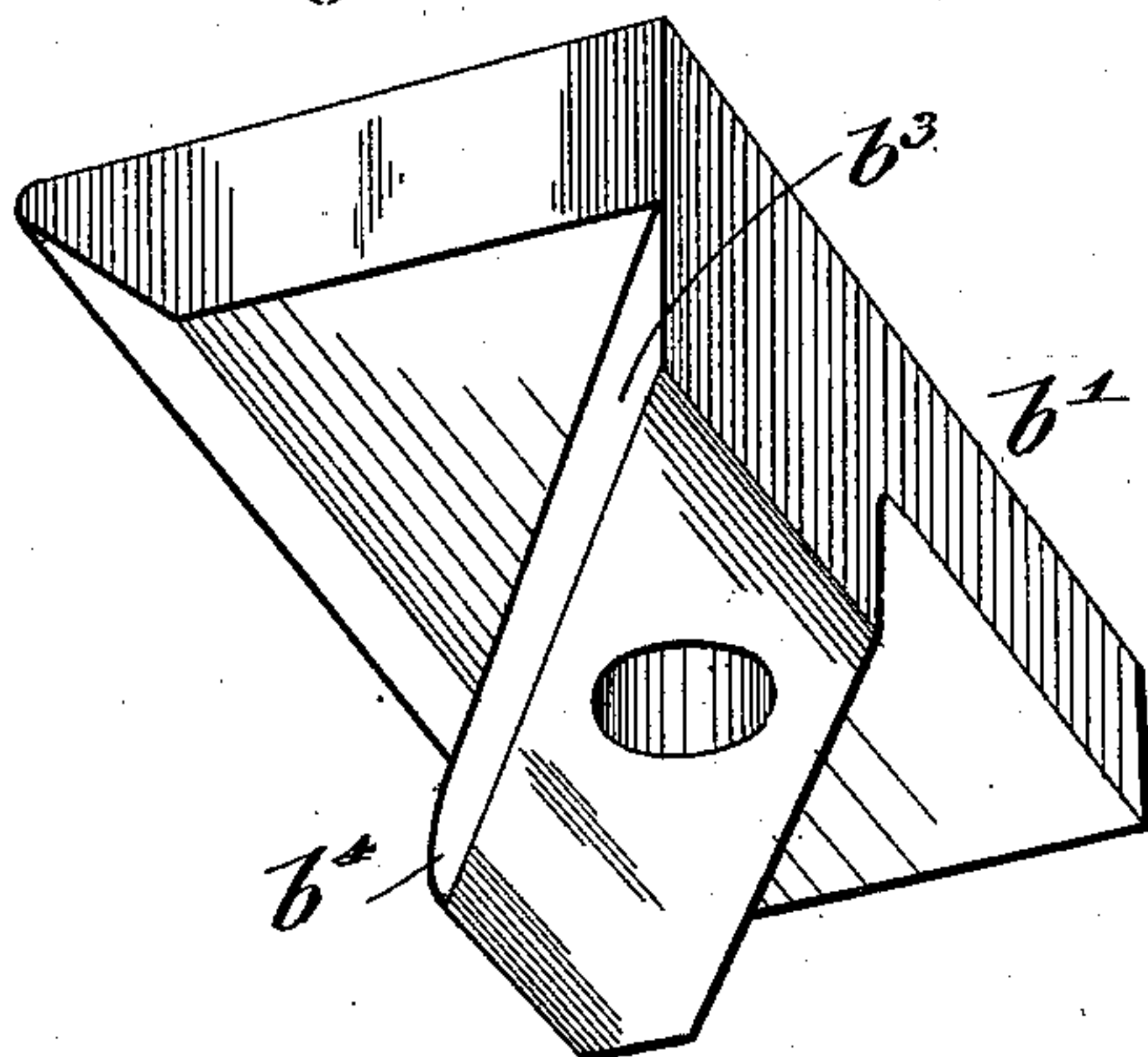
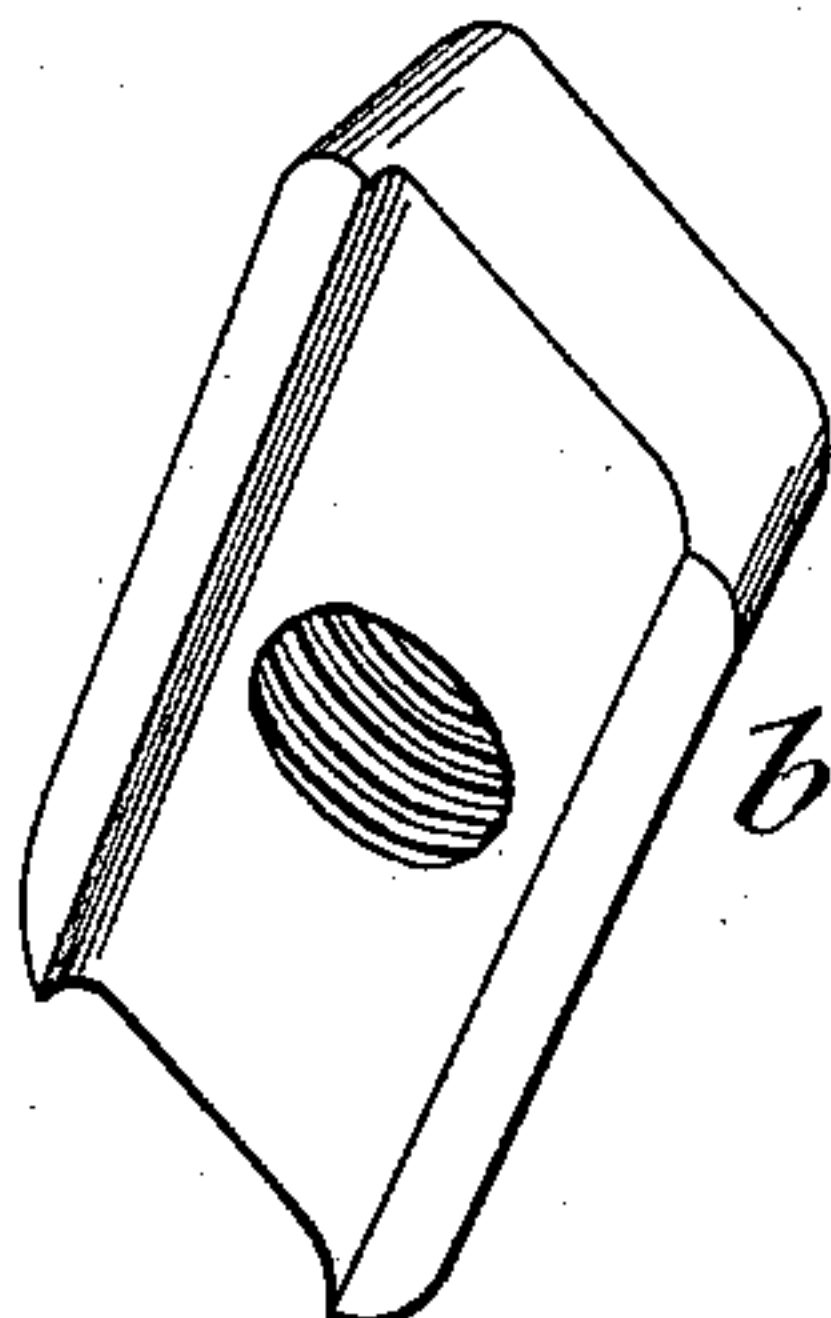


Fig: 13.



WITNESSES:

J. H. Niles.
Frank W. Lewis

INVENTOR

Ferdinand Wesel.
BY *James R. Rogers*
ATTORNEYS

UNITED STATES PATENT OFFICE.

FERDINAND WESEL, OF NEW YORK, N. Y.

STEREOTYPE-PLATE HOLDER.

SPECIFICATION forming part of Letters Patent No. 661,780, dated November 13, 1900.

Application filed January 12, 1900. Serial No. 1,223. (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, borough of Brooklyn, 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 an improved holder for stereotype, electrotpe, or other printing-plates by which said plates, whether of large or small size, are reliably held in position for printing. The invention consists of a stereotype-plate holder comprising a block having parallel dovetailed grooves arranged at an angle to the sides of the block and margin-clamps arranged on said block, each of said clamps consisting of a base portion sliding in a groove of the block and provided with beveled sides, a face portion provided with an approximately diagonal shoulder at the under side of the same and entering the groove, said shoulder having at one end a lip extending beyond the corresponding side of the face portion, and a screw connecting the face and base portions; and the invention consists, more specifically, in the construction of the margin-clamp itself, as will be more particularly pointed out herein-after and finally claimed.

In the accompanying drawings, Figure 1 represents a top view of my improved stereotype-plate holder with a form of sixteen plates clamped thereon. Fig. 2 is a plan view, drawn on a larger scale, of a portion of the stereotype-plate holder, showing the manner of clamping the individual plates to the block. Fig. 3 is a vertical longitudinal section on line 3-3, Fig. 2. Figs. 4, 5, and 6 are detail views of a left and right hand margin-clamp. Figs. 7 and 8 are detail views, respectively, of the face portions of right and left hand clamps. Figs. 9 and 10 are similar views of double right and left hand clamps; and Figs. 11, 12, and 13 are enlarged perspective views of the screw, face portion, and base portion of the clamp, respectively, viewed from the under side.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A indicates the block of my improved stereotype-plate holder,

which block is made of the size necessary for supporting the desired number of plates. The block A is provided with a series of parallel 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 preferably dovetailed in cross-section at their lower parts and vertical at their upper narrower parts. The stereotype-plates are locked in position upon the grooved block by means of margin-clamps B, each of which is constructed of three parts—namely, a base portion *b*, which is provided with beveled sides and which is of such dimensions as not to pull out of the groove, an oblong face portion *b'*, and a screw *b²*, 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. 6. The under side of the face portion *b'* is provided with a shoulder *b³*, which is arranged at the same angle to the sides of the face portion and to the longitudinal axis of the base portion as the angle at which the parallel grooves *a* are arranged to the sides of the block. The said shoulder, 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 *b⁴*, as clearly shown in Figs. 7, 8, and 12. The side of the face portion at which the lip of the shoulder is formed is beveled; but the opposite side of the face portion, together with the shoulder, is preferably cut off square, as shown in said figures. The shoulder may also be extended at the opposite end, so as to form two lips *b⁴*, one at each end of the shoulder, as shown in Figs. 9 and 10. In this case a double margin-clamp is obtained both sides of the face portion of which are beveled.

When it is desired to secure a plate to the block, the base portions of several margin-clamps are slipped into the grooves, with the shoulders of the face portions guided in the upper narrower parts of the grooves, and the clamps are moved up against a stereotype-plate P, which has been placed in its proper position upon the block. The beveled edge of the face portion of each clamp overlaps the correspondingly-beveled edge of the plate, and the projecting lip of the shoulder

extends beneath the plate, as clearly shown in Fig. 2. The screw b^2 is then screwed into the base portion and the face portion thereby firmly applied to the edge of the plate.

5 The base portion is retained frictionally in the groove by the tightening of the screw. The other plates of the form are then similarly secured to the block A, and when all the plates are thus firmly clamped the holder

10 is ready for the press. Single right and left hand clamps, as shown, respectively, in Figs. 7 and 8, and double right and left hand clamps, as shown in Figs. 9 and 10, are provided, so that all the sides of the plates

15 can be clamped. By stamping the face portions with the letters "L" or "R" the different clamps can be readily distinguished, so as to be properly inserted in the grooves. When the face portions are beveled at both

20 sides and the shoulders formed with lips at both ends, as before described, two plates can be clamped simultaneously by one clamp—*i. e.*, one plate at each side of the face portion. This is of advantage where there is in-

25 sufficient room for employing single clamps. Ordinarily, however, there is sufficient space between the plates to permit the use of single clamps for each plate. In place of using individual single or double margin-clamps so-

30 called "margin-bars" C may be used, which extend either transversely across the block or longitudinally of the same, as shown in Fig. 1. Each margin-bar is provided at the same distance apart as the grooves with approxi-

35 mately diagonal shoulders similar to those arranged on the individual margin-clamps, which shoulders are extended beyond the edge of the bar, so as to form lips beneath the plate similar to the single margin-clamps.

40 The dovetailed base portions of the bars are similar in all respects to those of the individual clamps.

My improved stereotype-plate holder possesses several advantages over those heretofore in use. While in clamps heretofore in

45 use the face portions were provided with projections extending downwardly into the grooves, this was found of itself insufficient to prevent the face portions of the clamps

50 from "jumping" the groove in the hurried operation of shifting the clamps for adjusting the plates for register and tightening the fastening-screws or unscrewing the screws for removing the plates and inserting new ones.

55 This jumping of the clamps is, however, entirely overcome by the improved margin-clamp. In attempting to "jump" the groove the lip of the face portion of the shoulder abuts against the under side of the plate, so

60 that the face portion is thereby prevented

from escaping from the groove. The plate assists thereby in retaining the shoulder of the face portion in the groove and preserves its position on the block. The face portion cannot follow the screw when turning the same,

65 either in the operation of applying the clamps to or removing them from the plates. The face portions are thereby retained in their proper position during adjustment with their sides in alinement with the edges of the plates, and

70 all operations connected with the making up of the form on the block, adjusting the plates for register, and breaking up of the form after printing are greatly facilitated.

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

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1. A stereotype-plate holder, comprising a block having parallel dovetailed grooves arranged at an angle to the sides of the block,

80 and margin-clamps arranged on said block, each of said clamps consisting of a base portion sliding in a groove of the block and provided with beveled sides, a face portion provided with a beveled side and a shoulder at

85 the under side of the face portion and entering the groove, said shoulder being arranged at the same angle with the face portion as the grooves with the side of the block and having a lip extending at one end of the shoulder

90 beyond the beveled side of the face portion, and a screw connecting the face and base portions, substantially as set forth.

2. A margin-clamp for stereotype-plate holders, consisting of a base portion having

95 beveled sides, a face portion provided with a beveled side and an approximately diagonal shoulder at the under side of the face portion, said shoulder having a lip extending at one end of the shoulder beyond the beveled

100 side of the face portion, and a screw connecting the face and base portions, substantially as set forth.

3. A margin-clamp for stereotype-plate holders, consisting of a base portion having

105 beveled sides, a face portion provided with beveled sides and an approximately diagonal shoulder at the under side of the face portion, said shoulder being provided at each end with a lip extending beyond the beveled

110 sides of the face portion, and a screw connecting the face and base 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.

115

FERDINAND WESEL.

Witnesses:

M. H. WURTZEL,
GEORGE C. GEIBEL.