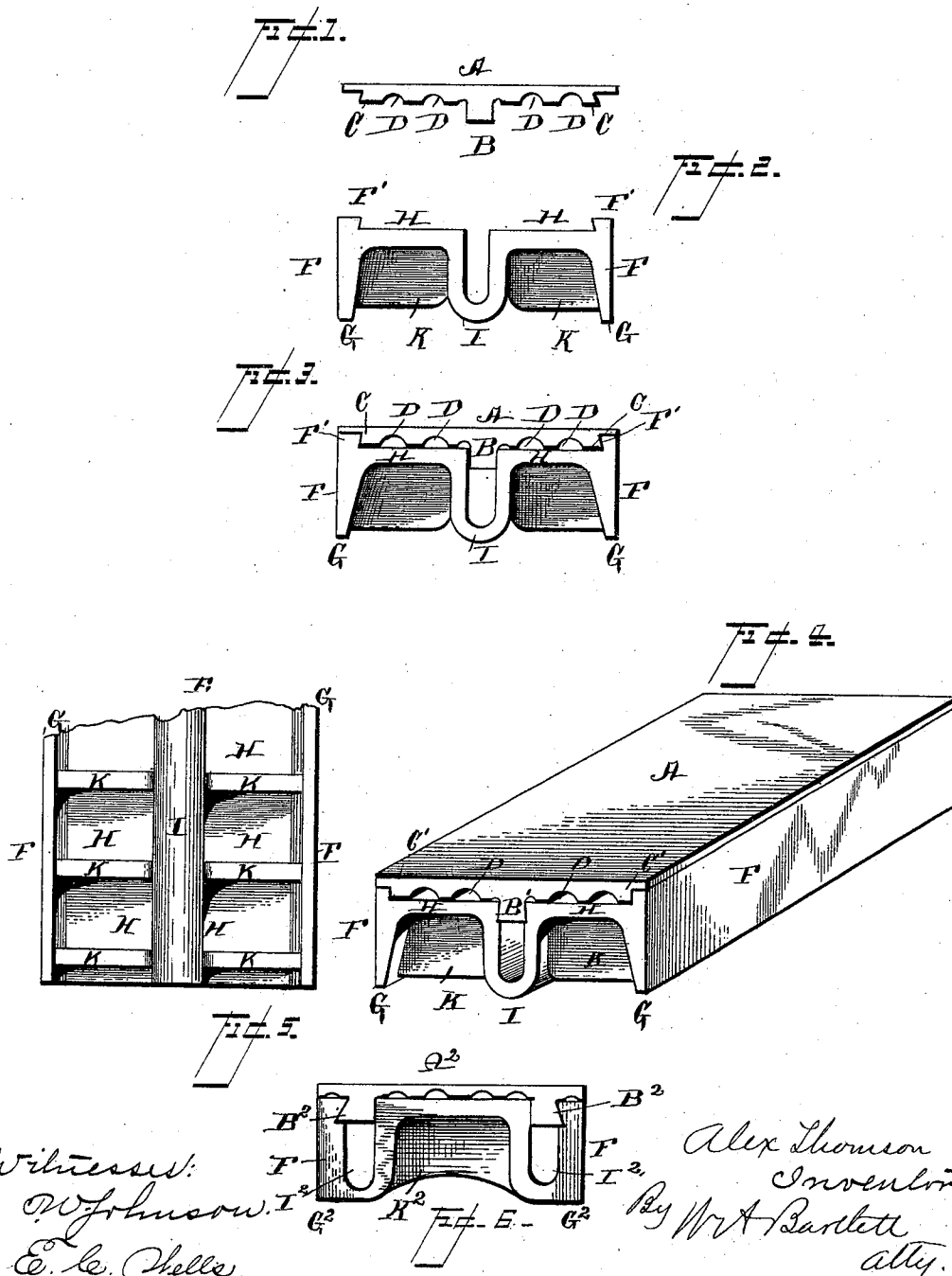


(No Model.)

A. THOMSON.
STEREOTYPE PLATE AND HOLDER.

No. 486,240.

Patented Nov. 15, 1892.



UNITED STATES PATENT OFFICE.

ALEXANDER THOMSON, OF LAKE CHARLES, LOUISIANA.

STEREOTYPE-PLATE AND HOLDER.

SPECIFICATION forming part of Letters Patent No. 486,240, dated November 15, 1892.

Application filed March 30, 1892. Serial No. 427,085. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER THOMSON, residing at Lake Charles, in the Parish of Calcasieu and State of Louisiana, have invented certain new and useful Improvements in Stereotype-Plates and Holders, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to stereotype-plates and plate-holders.

The object of the invention is to produce a stereotype-plate and holder constructed so that the plate will be held to the block when locked in the form without any extraneous fastening whatever, such as pins, screws, clasps, or the like; also, to so improve the plate-holder that it shall serve as a clamp to the plate, but shall be able to yield for the removal of the plate when not locked in the form.

Figure 1 is an end elevation of a stereotype-plate made according to the principles of this invention. Fig. 2 is an end elevation of a stereotype-plate holder, showing the principles of the invention as applied to said block or holder. Fig. 3 is an end view of plate and holder. Fig. 4 is a perspective of plate and holder slightly modified. Fig. 5 is a bottom view of the plate-holder. Fig. 6 is an end view of a modification.

A indicates the stereotype-plate, which has a central rib B on its under surface, extending lengthwise of the block and having shoulders C C near each side, preferably slightly beveled or undercut, as shown in Figs. 1 and 3. Grooves or channels D may be cut in the under surface of the plate to reduce weight.

The block or plate-holder E is composed of a single piece of metal, preferably cast metal. Said plate-holder has perpendicular parallel sides F F resting on the feet G G, which extend lengthwise of the block, so as to be parallel with the column-rules or furniture with which the plate-holder is locked up in a form. The vertical sides F are connected by a web or floor-piece H, which is integral with the side pieces and extends from each side toward the center, preferably parallel with the general surface of the plate which is to rest on the holder. Near the median line of the holder or block the web turns abruptly downward, forming a trough or loop I, which extends

nearly or quite down to the level of the feet G or to the press-bed. This depression in the web gives a slight elasticity to the plate-holder or block, so that the sides F may be sprung slightly out of parallelism when the plate-holder is not locked up in the form. The sides F are connected to the loop I by transverse ribs K, which form braces between the sides and the loop and tend to stiffen the entire block. By preference these ribs should not extend quite to the press-bed, so that water used in washing the form may not be retained under the block. Where the ribs K join the loop I, the corners are preferably a little rounded.

The sides F preferably extend a little above the plane of the floor H, as at F', and these upward projections may slightly overhang the floor H, so that when the plate A is applied to the block or holder the shoulders C of the plate may be embraced by said upward-projecting ribs F'.

The rib B on the under surface of the stereotype-plate A fits neatly in the upper edge of the loop or trough of the plate-holder E. As shown in Fig. 4, said trough may be undercut at its upper portion I', and the tongue B' may be widened to fit into said undercut portion of the trough. In such case the shoulders C may be vertical, and the locking of the plate to the block or holder will be effected by the engagement of the tongue B' with the trough or loop and by the clamping action of the ribs F' against the shoulders C'.

The plate may be applied to the block or holder by sliding on from the end, or the block may be sprung enough to permit the application of the plate. When the sides F are clamped in locking up, the plate is held firmly to the block or holder.

The floor H gives a firm support to the plate for nearly its entire width, and the ribs K not only strengthen the block vertically, but prevent collapse sidewise.

In the modification shown in Fig. 6 the plate A² has a plurality of longitudinal ribs B² on its lower surface. The plate-holder E² has a plurality of troughs or loops I², preferably with undercut shoulders, into which the dovetail ribs B² project. The web K connects the proximate sides of these troughs.

The elasticity of the metal permits the sides of the block to spring over the ribs of the plate; but when locked in a form the block is firmly held.

5 What I claim is—

1. The integral stereotype-plate holder consisting of side bars and a connecting-floor, having a loop or depression to give elasticity thereto, combined with a stereotype-plate
10 resting generally on said floor and having interlocking engagement with said block, substantially as described.

2. The integral stereotype-plate holder having side bars and a web or floor connecting
15 the same, said web having a loop or depression to give elasticity thereto, substantially as described.

3. The integral stereotype-plate holder consisting of side bars and a connecting-web having a loop therein, the bars and web being
20 connected by lateral ribs, substantially as described.

4. The integral stereotype-plate holder having side bars, a floor connecting said bars a little below the top thereof, so as to leave a
25 side rib above said floor, and a loop or trough in the floor to give elasticity thereto, substantially as described.

5. The stereotype-plate holder having side bars, a connecting floor or web, and a loop or
30 trough in said web, combined with a stereotype-plate resting on said floor and having a rib entering said loop or trough, substantially as described.

6. The integral stereotype-plate holder having
35 side walls and a plurality of longitudinal troughs permitting the expansion of the side walls, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

ALEXANDER THOMSON.

Witnesses:

J. G. FOURNET,

W. G. McDONALD.