

(No Model.)

C. S. SULTZER & H. E. SHEDD.
STEREOTYPE PLATE HOLDER.

No. 581,046.

Patented Apr. 20, 1897.

Fig. 1.

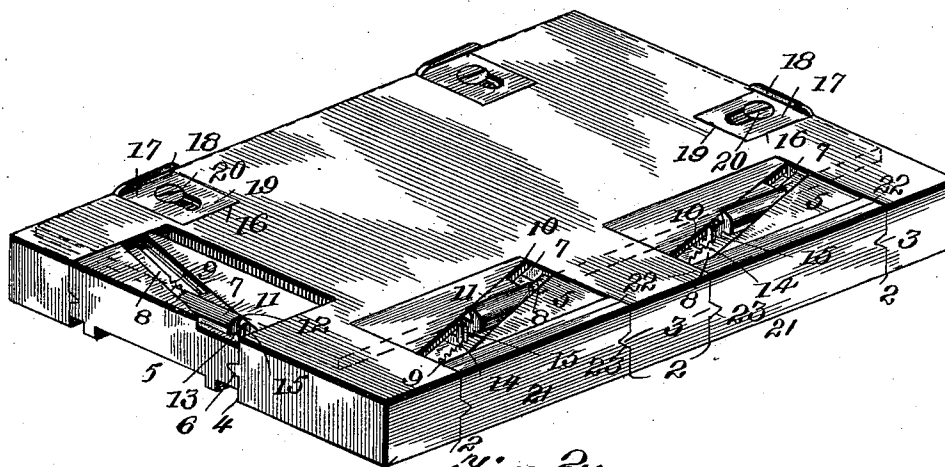


Fig. 2.

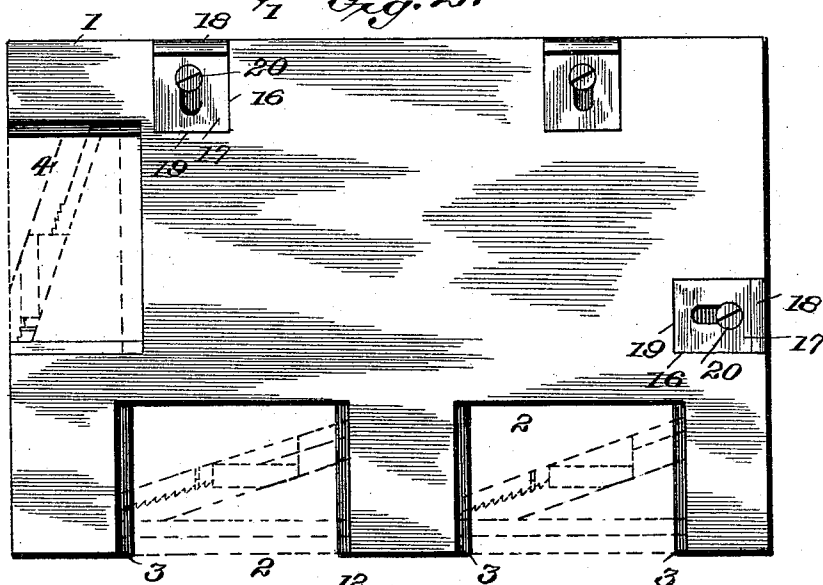


Fig. 3.

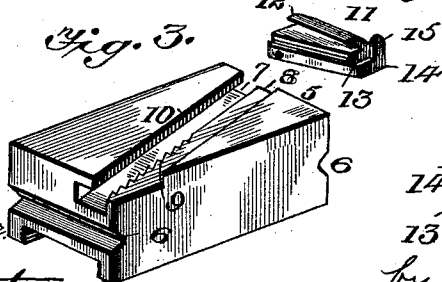
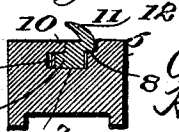


Fig. 4.



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UNITED STATES PATENT OFFICE.

CLIFTON S. SULTZER AND HUGH E. SHEDD, OF CHICAGO, ILLINOIS.

STEREOTYPE-PLATE HOLDER.

SPECIFICATION forming part of Letters Patent No. 581,046, dated April 20, 1897.

Application filed June 4, 1896. Serial No. 594,308. (No model.)

To all whom it may concern:

Be it known that we, CLIFTON S. SULTZER and HUGH E. SHEDD, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Stereotype-Plate Holders; and we do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in stereotype and electrotype plate holders, and is particularly adapted for clamping plates of various sizes to a block, as will be hereinafter fully described and claimed.

In the drawings, Figure 1 is a perspective view showing a stereotype-plate in dotted lines. Fig. 2 is a plan view of the block. Fig. 3 is a detail perspective view of one of the clamps, showing the parts separated; and Fig. 4 is a cross-section of the same.

Referring to the drawings more particularly, 1 designates a stereotype-block. In one side of this block are two or more cut-out portions 2 2, having ribs 3 on their opposite faces. The end of the block is likewise provided with a cut-out portion 4 similar in every respect to the portions 2 2. A clamp-block 5 is designed to fit within each of these cut-out portions, and has on its sides the grooves 6, which correspond with and engage the ribs 3 of the stereotype-block. This rib-and-groove construction is preferred by us on account of its simplicity, but it will be readily understood that various means may be employed for holding the blocks within the cut-out portions or recesses without involving a departure from the principles of our invention. A diagonal groove 7 is formed in the upper surface of the clamp-block, and its front wall is somewhat reduced to form a bearing or shoulder 8 for the sliding clamp, hereinafter more specifically described, while its rear wall is constructed with the overhanging flange 10, adapted to engage over the said sliding clamp and hold the same in its operative position. The front wall of the groove 7 is provided with the ratchet-teeth 9, below the

shoulder 8, for a purpose which will presently appear. The sliding clamp 11 is approximately V-shaped in plan view, and has an upwardly-projecting inclined flange or lip 12, which is parallel with the edge of the stereotype-plate, and is adapted to engage the same, so as to firmly hold the plate when in use. On the under side of the clamp 11 is a flange 13, corresponding to and fitting within the slot 7, the upper edge of said flange 13 bearing against the flange 10 of the clamp-block, so that the clamp is held and guided thereby. A spring-pawl 14 has one end secured to the side of the clamp and its other end projecting beyond the same and engaging the ratchet-teeth 9. The upper outer end of the pawl is extended so as to form a finger-piece 15, by which it may be disengaged from the ratchet-teeth when it is desired to release the clamp.

Opposite the cut-out portions of the stereotype-block are shallow grooves 16, in which are adjustably secured stay-pieces 17, having upwardly-projecting holding-flanges 18, adapted to be engaged by the edges of the stereotype-plate. These stay-pieces have slots 19, through which a screw 20 is inserted to adjustably secure them to the stereotype-block.

The operation of our device will be readily understood from the foregoing description taken in connection with the accompanying drawings.

The stereotype-plate is supported directly by the block in the usual manner, and is locked thereto by having its edges secured by the stay-pieces and the sliding clamps. Should the outside dimensions of the plate be approximately equal to the outside dimensions of the block, filling-in plates 21 are fitted in the cut-out portions of the block so as to support the plate, and the clamp-blocks are then fitted in position, after which the clamps are pushed firmly against the edges of the plate, the ratchet-teeth being so arranged as to permit the clamp to slide toward the plate, but prevent movement from the same unless the pawl be manually disengaged. Should the outside dimensions of the plate be considerably less than the outside dimensions of the block, the filling-in plates are fitted in position after the clamp-blocks have been inserted. We thus provide for filling

up all vacant spaces and permitting a tight lock-up. The clamp-blocks and filling-in plates being introduced into the cut-out portions of the block, the plate is placed in position with two of its edges engaging the stay-pieces, after which the sliding clamps are pushed home.

It will be readily seen that we have provided a construction which permits the greatest practicable range in the size of the plate without multiplying the number of blocks or complete plate-holders, and that as the clamp-blocks are independent of the stereotype-blocks any size plate-holder may be quickly supplied for use without any cost if a set of the blocks be on hand. Slight inaccuracies in the stereotype-plate may be remedied by shifting the stay-pieces without unlocking the form or shifting the position of the block. The use of the clamp-blocks permits a holder for any odd or unusual sized plate to be readily built up from furniture.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. A clamp for securing a stereotype or electrotype plate to the block consisting of a clamp-block having a diagonal groove in the upper surface of the same, one side of said groove having an overhanging flange and the other side being provided with ratchet-teeth, and a locking-clamp sliding in said groove provided with a pawl to engage said ratchet-teeth.

2. A clamp for holding stereotype-plates having a body portion approximately V-shaped, a flange or holding edge projecting

therefrom, a lower flange having its edge projecting slightly beyond the edge of one side of the body portion, this flange being at an angle to the upper flange, and a spring-pawl secured at one end to the lower flange and having its outer end bent to form a finger-piece.

3. In a device for holding stereotype-plates the combination of a block having cut-out portions at one end and at one side, adjustable stay-pieces secured at opposite points on the block to the cut-out portions, clamp-blocks adapted to fit within the cut-out portions, diagonal grooves in the upper surfaces of the clamp-blocks, one edge of the groove having a series of ratchet-teeth and the opposite edge forming an overhanging flange, and a clamp having an upper flange designed to hold the plate and a lower flange and spring-pawl adapted to slide within the diagonal groove, the pawl designed to engage the ratchet-teeth in the groove.

4. A clamp for securing a stereotype-plate to the block consisting of a clamp-block having a groove in its upper surface, a clamp working in said groove, and a lock secured to and carried by said clamp and adapted to automatically engage a wall of the groove and thereby secure the clamp.

In testimony whereof we affix our signatures in presence of two witnesses.

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Witnesses:

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