

C. HURST.
Stereotype-Plate Holders.

No. 139,393.

Patented May 27, 1873.

Fig 1

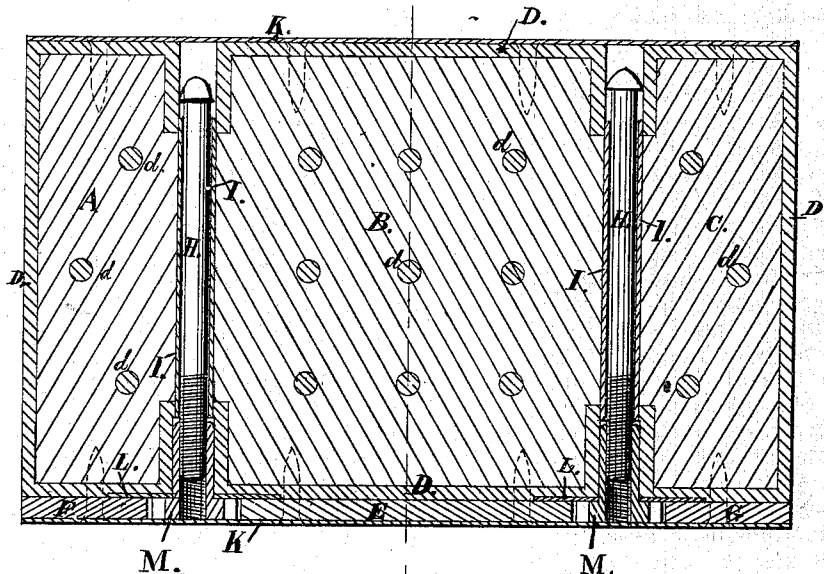


Fig 2

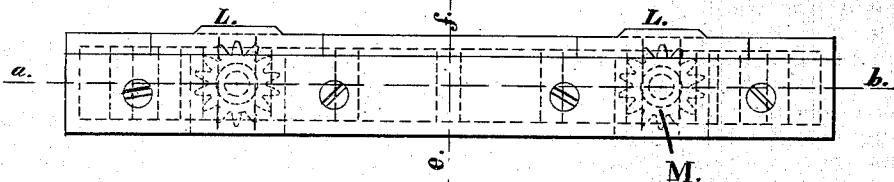
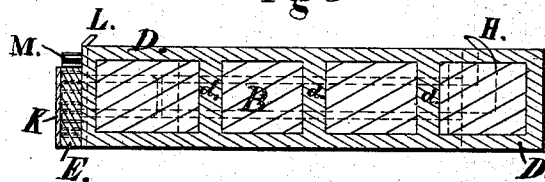


Fig 3



Witnesses:

Stanley Williams
Rev. M. J. Ford, Jr.

Inventor:

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UNITED STATES PATENT OFFICE.

CHARLES HURST, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN STEREOTYPE-PLATE HOLDERS.

Specification forming part of Letters Patent No. **139,393**, dated May 27, 1873; application filed May 2, 1873.

To all whom it may concern:

Be it known that I, CHARLES HURST, of Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented certain Improvements in Stereotype-Plate Holders, of which the following is a specification:

My invention relates to the construction of stereotype-plate holders.

Heretofore these implements have been made wholly of wood, with the exception of the parts composing the mechanism for adjusting the hooks for holding plates of different widths; but when so made they are amenable to several objections: For instance, when the bodies of the blocks are made wholly of wood, they are rendered variable in thickness, according to the degree of moisture to which they are subjected. They contract and expand accordingly, and, moreover, when they do so, they become warped, so that they do not form an even, level, and true bed for the stereotype-plate, and then they have to be "overlaid" in some parts, and "underlaid" in others, before they can be used, and thus much time is lost in the use of them.

Being aware of these defects, I thought of making them wholly of type-metal, or other metal; but to doing this there occurred to me two objections: Their weight would be excessive, and would render them quite inconvenient to handle, and the large amount of metal required would render them expensive. I therefore made them, and do make them, of wood and type or other metal combined.

Over a core of wood I cast or mold the metal, so as to have a metallic surface on both the under and upper sides of the block; and in order that the under and upper plates of this metallic shell shall preserve their parallelism to each other, in spite of the pressure to which they may be subjected in use, the block or core of wood, before the metal is cast over it, is perforated vertically through and through with holes equally distributed over the entire area of the same, and, in casting, the metal will pass through these holes

and form posts and pins of attachment between the plates, as aforesaid.

Such blocks made thus will last many times longer than those made of wood alone, besides being much better.

In the accompanying drawings, Figure 1 represents a horizontal section of a stereotype-plate holder made according to my invention, the section being taken through the broken line *a b*, in Fig. 2; Fig. 2, a side-edge view of the same; and Fig. 3, a vertical cross-sectional view of the same taken through broken line *e f*, in Fig. 1.

In Fig. 1, A B C represent the wood, and I I the tubes or sleeves of metal incasing the hook-bars H H, to keep out the water from them when the blocks are washed; and *d d d* are the pins or posts, before mentioned; and K K are thin plates of metal, attached to the side edges of the block by screws, which run into and hold by the wood in the interior; and they serve to confine the hook-bars H H, and the ratchet-wheels M M, which are provided with holes and interior threads in them, to correspond with the exterior threads upon the straight ends of the hook-bars. L L are stationary hooks, against which one side of the stereotype-plate abuts; and in Fig. 3 is shown the hook on the end of the hook-bar H, which confines the other side; and by turning the ratchet-wheels, the distance between the permanent and adjustable hooks is increased or diminished, according to the direction of the turning; but these hooks and ratchet-wheels, and their mode of operation, are no part of my invention.

What I claim as my invention is—

1. The block, composed of the cast-metal casing D and the wooden core A B C, constructed substantially as and for the purpose described.

2. The sleeves I I, in combination with the block composed of the metal D and wood A B C, substantially as described and set forth.

CHARLES HURST.

Witnesses:

STANLEY WILLIAMS,
P. O'DONNELL.