

J. BRYSON.
Stereotype Block-Holders.

No. 146,163.

Patented Jan. 6, 1874.

Fig. 2.

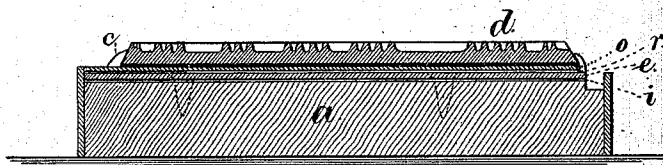


Fig. 3.

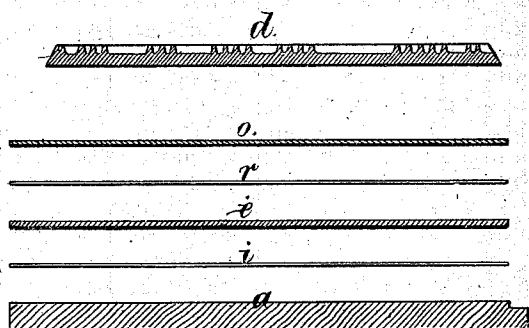
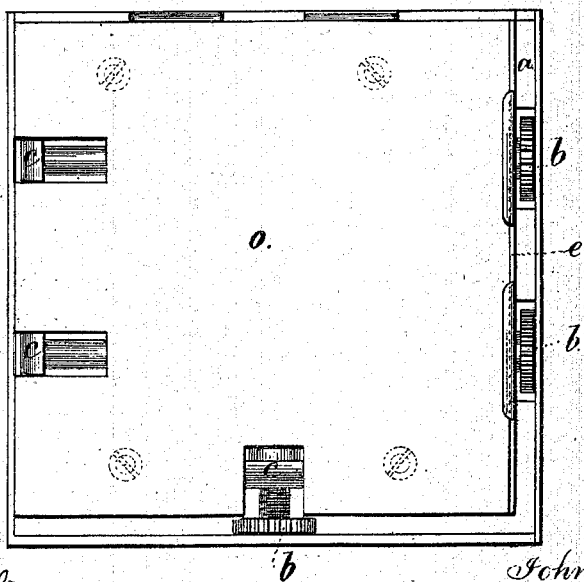


Fig. 1.



Witnesses,

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att.

UNITED STATES PATENT OFFICE.

JOHN BRYSON, OF JERSEY CITY, N. J., ASSIGNOR TO HIMSELF, JOHN J. BAILEY, AND JOHN N. O. HANKINSON, OF NEW YORK, N. Y.

IMPROVEMENT IN STEREOTYPE-BLOCK HOLDERS.

Specification forming part of Letters Patent No. 146,163, dated January 6, 1874; application filed November 1, 1873.

To all whom it may concern:

Be it known that I, JOHN BRYSON, of Jersey City, in the county of Hudson and State of New Jersey, have invented an Improvement in Stereotype-Plate Holders, of which the following is a correct description:

In printing from stereotype or electrotype plates, it is usual to paste upon the back or under side of the plate pieces of paper known as "underlays," in order to produce the proper tone and uniformity of impression in printing, said underlays being applied where the impression is light, and acting to raise the plate from the press-block. It is necessary to remove the plates from the press-block for washing them and the lye or benzine employed is liable to get upon the paper, softening the adhesive material, causing the underlay to become detached or misplaced, and under all circumstances the plate cannot be wiped dry, and the lye or benzine presses out from the underlay, and injures either the impression, the paper, or the parts of the block or plate.

Another source of difficulty in printing-presses arises from the character of the press-block used to back up the stereotype or electrotype plate. Wood has usually been employed, but its surfaces are liable to become rounding from the pressure in printing. Iron blocks have been used, but to lighten them they are made with legs or bearing-blocks at the back of the metal plate forming the surface for the stereotype or electrotype, but these legs or blocks are liable to press into and injure the surface of the press-bed.

My invention is made for obviating the aforesaid difficulties; and consists in a plate of thin flexible metal applied between the press-block and the stereotype or electrotype plate, to the under side of which the underlay is applied, instead of being applied to the plate itself. Thereby the underlay is retained in position during the printing of an entire edition; it is kept from moisture; the plate can be taken off and washed and wiped; and the plate is protected from injury or risk of being broken, because the intervening plate of annealed sheet metal bends and presents the necessary undulations instead of a series of angles, such as those heretofore existing be-

tween the edge of one underlay and the surface of the next, which in the ordinary way of applying underlays is liable to injure the soft metal of thin stereotype or electrotype, and spread the metal or crack the plate.

The second feature of my invention relates to a removable overlay-plate applied to the surface of the press-block, which press-block is made of wood, so as to insure lightness and prevent injury to the press-plate; and between this overlay metal plate and the surface of the wood block sheets or pieces of paper are applied from time to time, sufficient to keep the surface of the block perfectly true and compensate any inequalities.

In the drawing, Figure 1 is a plan of the press-block. Fig. 2 is a section of the parts in place together; and Fig. 3 shows the parts separately and in section, to illustrate the order in which those parts are made use of.

The wooden block *a* is provided with the usual screws and burs or ratchets *b*, and catches or hooks *c*, to hold the stereotype or electrotype plate *d*. The overlay-plate *e* of the block *a* is preferably of brass, and attached by screws, so as to be removed for applying the overlay of paper *i* to the surface of the block *a*, to maintain the same in a level condition, as may become necessary from time to time, in consequence of shrinkage or yielding of the surface of the wooden block. The underlay-plate *o* is preferably of copper or annealed brass, and sufficiently thin to yield to pressure, and the underlay of paper *r* is applied to the under surface thereof, for the purposes aforesaid.

I claim as my invention—

1. The thin annealed metallic underlay-plate *o*, for receiving the paper underlay between that and the surface of the press-block, for the purposes set forth.

2. The overlay metal plate *e*, connected removably to the surface of the wooden press-block *a*, for receiving the paper overlay to the press-block, substantially as set forth.

Signed by me this 28th of October, A. D. 1873.

JOHN BRYSON.

Witnesses:

GEO. THOS. PINCKNEY,
CHAS. H. SMITH.