

A. N. KELLOGG & J. J. SHOCK.
Stereotype Plate-Holders.

No. 166,702.

Patented Aug. 17. 1875.

Fig. 1.

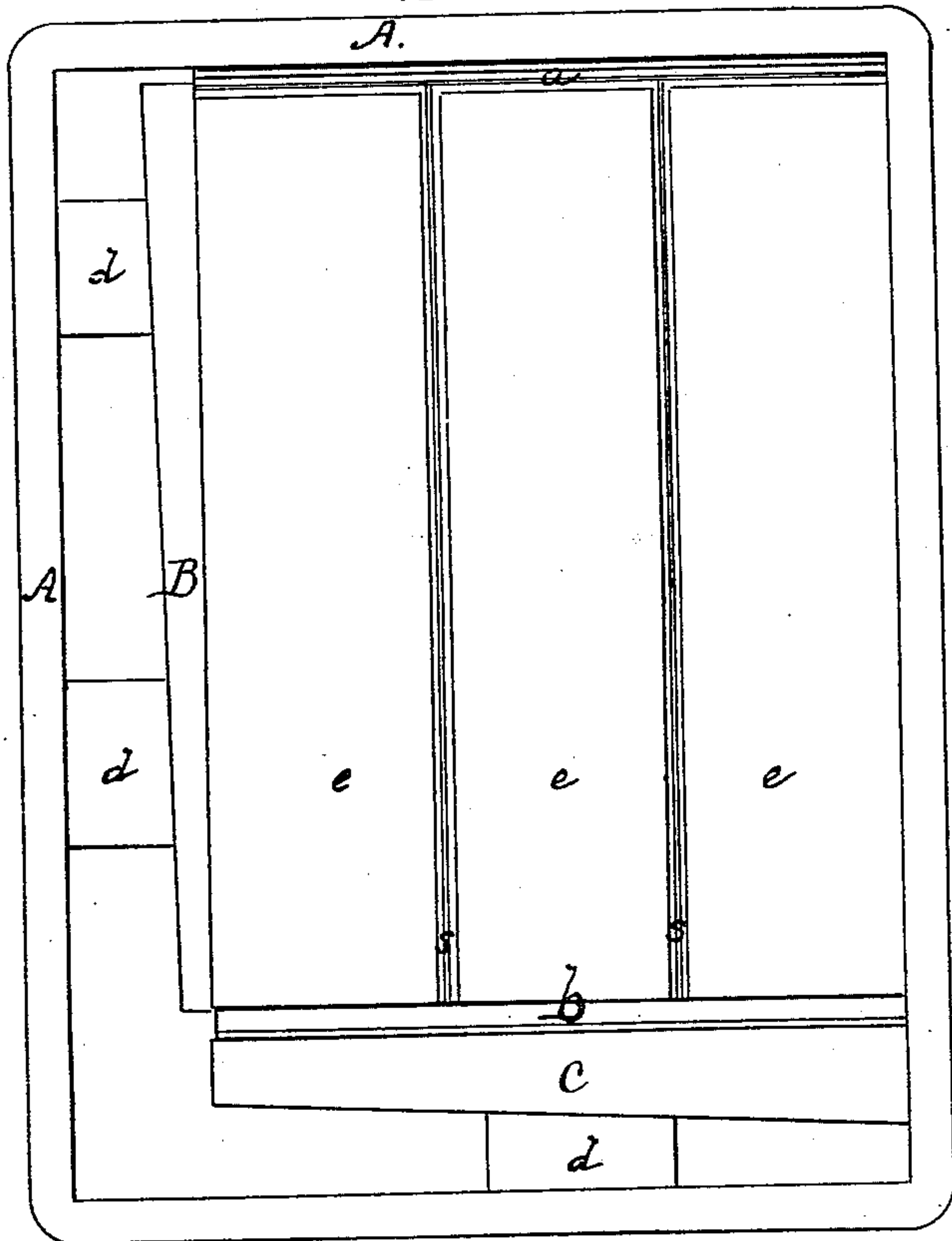


Fig 2

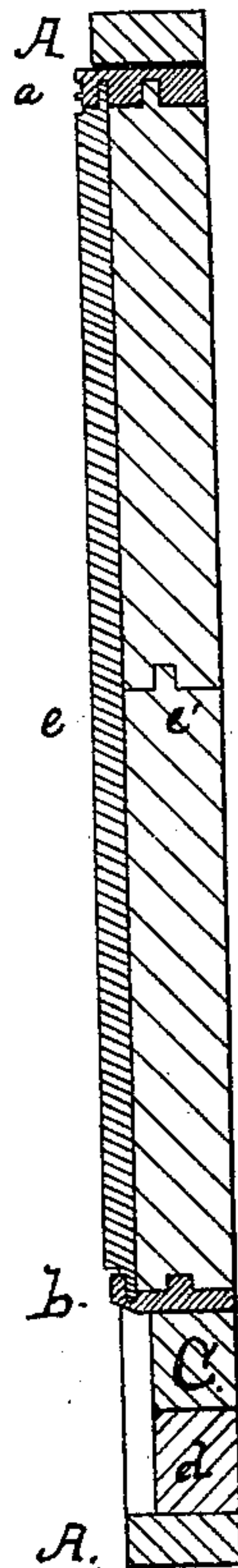


Fig. 3.



Witnesses:

A. Kleininger,
Henry L. Smith

Inventors:

Ansel N. Kellogg, and
James J. Shock
by Munday & Evans
their Attorneys

UNITED STATES PATENT OFFICE

ANSEL N. KELLOGG AND JAMES J. SCHOCK, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN STEREOTYPE-PLATE HOLDERS.

Specification forming part of Letters Patent No. **166,702**, dated August 17, 1875; application filed November 11, 1874.

To all whom it may concern:

Be it known that we, ANSEL N. KELLOGG and JAMES J. SCHOCK, of Chicago, in the county of Cook and State of Illinois, have invented Improvements in Stereotype-Plate Holders, of which the following is a specification:

This invention relates to the manner of holding in the form electrotypes and stereotype plates which are not directly attached to bed-blocks and column-rules, while the form is in the press. Its nature will be more fully understood from the following description and the accompanying drawing, in which—

Figure 1 is a plan view of our invention, showing a page-form in the chase. Fig. 2 is a longitudinal section, and Fig. 3 a transverse section, of Fig. 1.

Like letters of reference indicate like parts in all the figures.

Plates of the description mentioned have heretofore been secured by sliding them into grooves prepared for them in the sides of the column-rules or under the edges of holding-plates inserted at the side, the sides of the plates being made to fit the grooves or projecting edges. Also, by providing them with central longitudinal projections upon the under side to be embraced by the bed-blocks. These methods are all attended with serious objections, among which may be mentioned the following: Where grooves or projecting edges at the sides are used, the plate must be inserted at the foot of the form and slid its entire length in the grooves or under the edges, an operation which any unevenness of fit or obstruction in the groove would render difficult if not impossible. This operation also frequently necessitates the removal of the form from the press when it is desired to remove the plate and substitute another. Where the under projection is used, the plate can only be changed by unlocking the entire form. Added to all these is the labor and time lost in securing and releasing the plates by either method, and the necessity of providing both rules and plates of unusual form. By our improved method these objections are almost entirely obviated, and we are enabled to save a very great proportion of the time and labor heretofore consumed in changing the plates. It is es-

pecially adapted to the printing of a newspaper or other columned page, which it is desired should be removable in parts, so that portions thereof may be changed for different editions without changing the whole form. The drawing illustrates this use of it.

In the drawing, A represents the ordinary chase; B, the side-stick; C, the foot-stick; *d d*, the quoins; *eee*, the electrotypes-plates constituting the page; *e' e' e'*, the beds or blocks upon which said plates rest; *a*, the head-rule; *b*, the foot-slug, and *ss* the column-rules. The head and foot of the plates are intermortised or interlocked with the head-rule and foot-slug, respectively, as shown in Fig. 2. This is accomplished by providing the head and foot pieces with projections which overlap the plate when brought into juxtaposition therewith. We have found that the plate, even if made the length and width of an ordinary newspaper-column, will be held in position, under ordinary circumstances, by the mode just described, without other fastening; but, as an additional precaution against the suction to which it is subjected in the press, we provide a mortise in the head-piece, in which is inserted a corresponding tenon upon the bed-block, and likewise a mortise in the foot of the bed-block which receives a tenon upon the foot-piece, as shown in said Fig. 2. This serves to bind the parts firmly together, and to obviate all danger of drawing out either plate or head and foot pieces. Of course these mortises and tenons may be reversed, that is—tenons made on the parts where mortises are shown and mortises where tenons are shown—without changing in any degree the principle of our invention. The same would be true if mortises only were made to be filled by movable tenons.

If it is desired for the purpose of building onto the form, the bed-blocks may be made in sections and intermortised, as shown in said Fig. 2.

The operation of our invention is briefly this: When the form is prepared, with the block and head rule or slug in position, the plate is laid upon the block, and caused to interlock with the head-piece. The foot rule or slug is then crowded against the block and plate until it interlocks therewith, when the form is ready for locking. To remove the plate it is

only necessary to loosen and take away the foot-slug, when the plate may be slipped back sufficiently to release it from the head-piece, and then readily lifted off. There is always sufficient space within the chase to allow plates to be put in and taken out without removing the form from it, and it is never necessary to release the side-quoins.

An additional feature of our invention, but which does not change the operation just described, is this: For the purpose of more firmly binding the entire form together, either when in the press or in the process of handling, and also to prevent the working up of the column-rules in the form, (a matter of frequent occurrence, sometimes causing the sheet to be cut through as with a knife,) we provide the ends of the column-rules with the same mortises or tenons, or both, which are provided upon the head and foot of the plate and block, so that the head and foot of the column-rule possess the same outline as the head and foot, respect-

ively, of the plate and block, and will interlock in the same manner with the head and foot rules or slugs.

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

1. The method of securing electrotpe or stereotype plate to the head and foot rules or slugs by means of interlocking mortises and tenons having horizontal surfaces, substantially as set forth.

2. The rule or slug, constructed to interlock with the electrotpe or stereotype plate, and to intermortise with the bed-block, in combination with such plate and bed-block, substantially as specified.

A. N. KELLOGG.
JAS. J. SCHOCK.

Witnesses:

EDW. S. EVARTS,
JOHN W. MUNDAY.