

J. B. R. LESPINASSE.
Stereotype-Plate.

No. 221,685.

Patented Nov. 18, 1879.

Fig. 1.

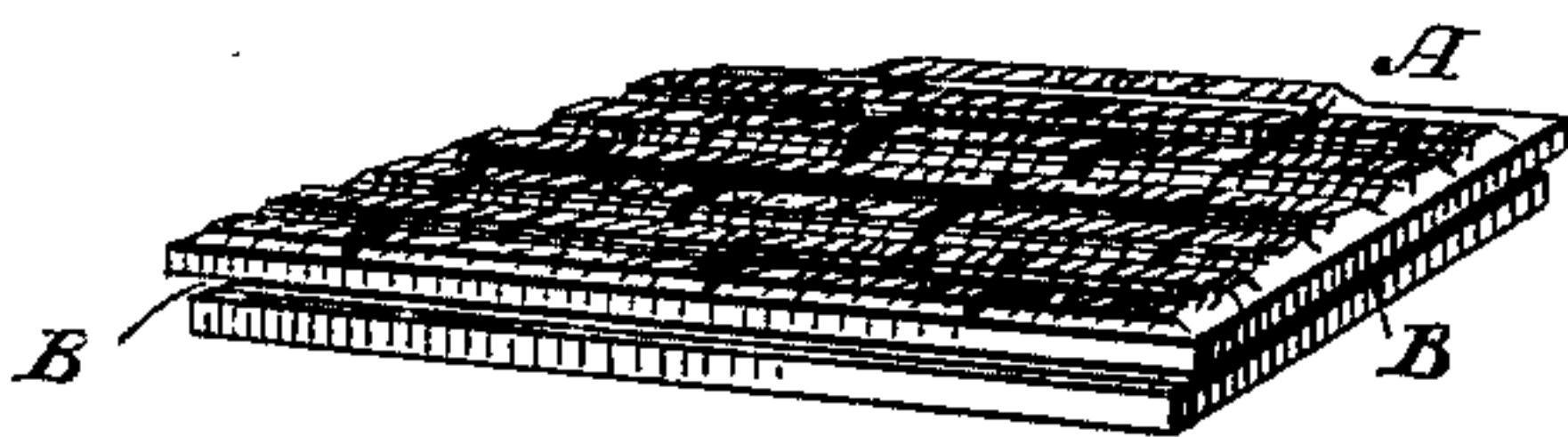


Fig. 2.

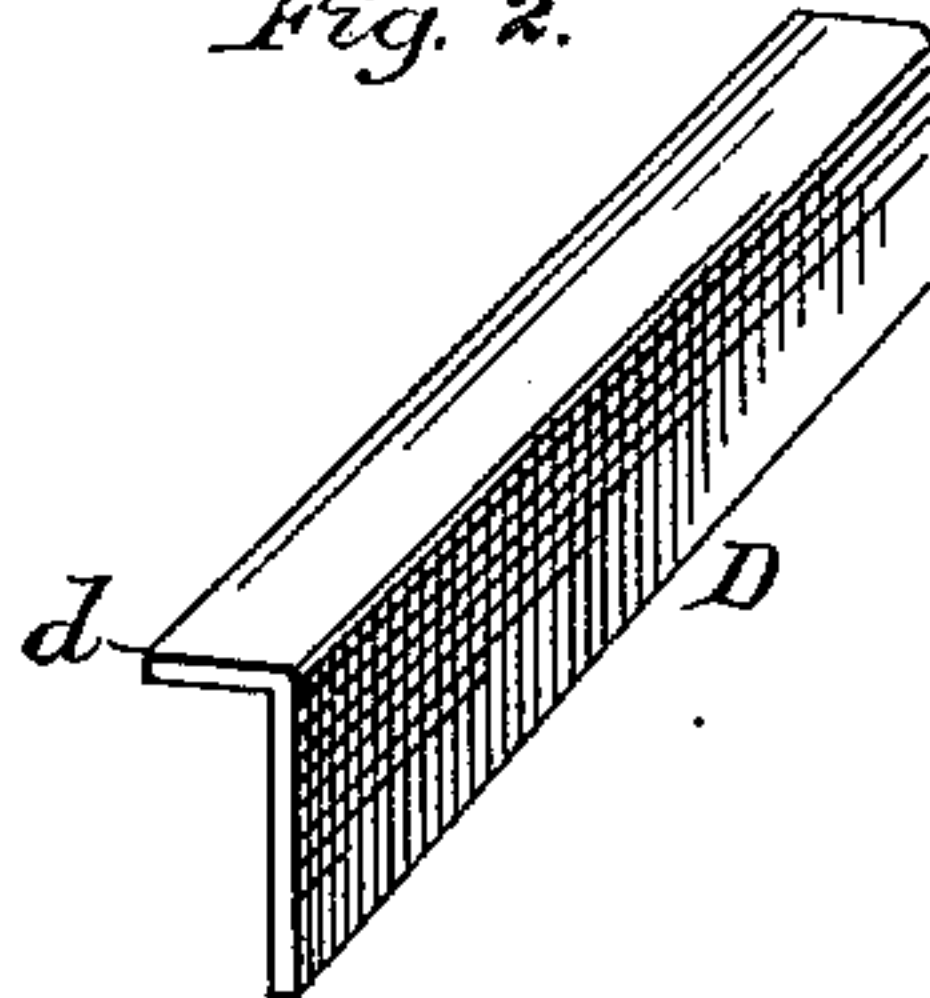


Fig. 3.

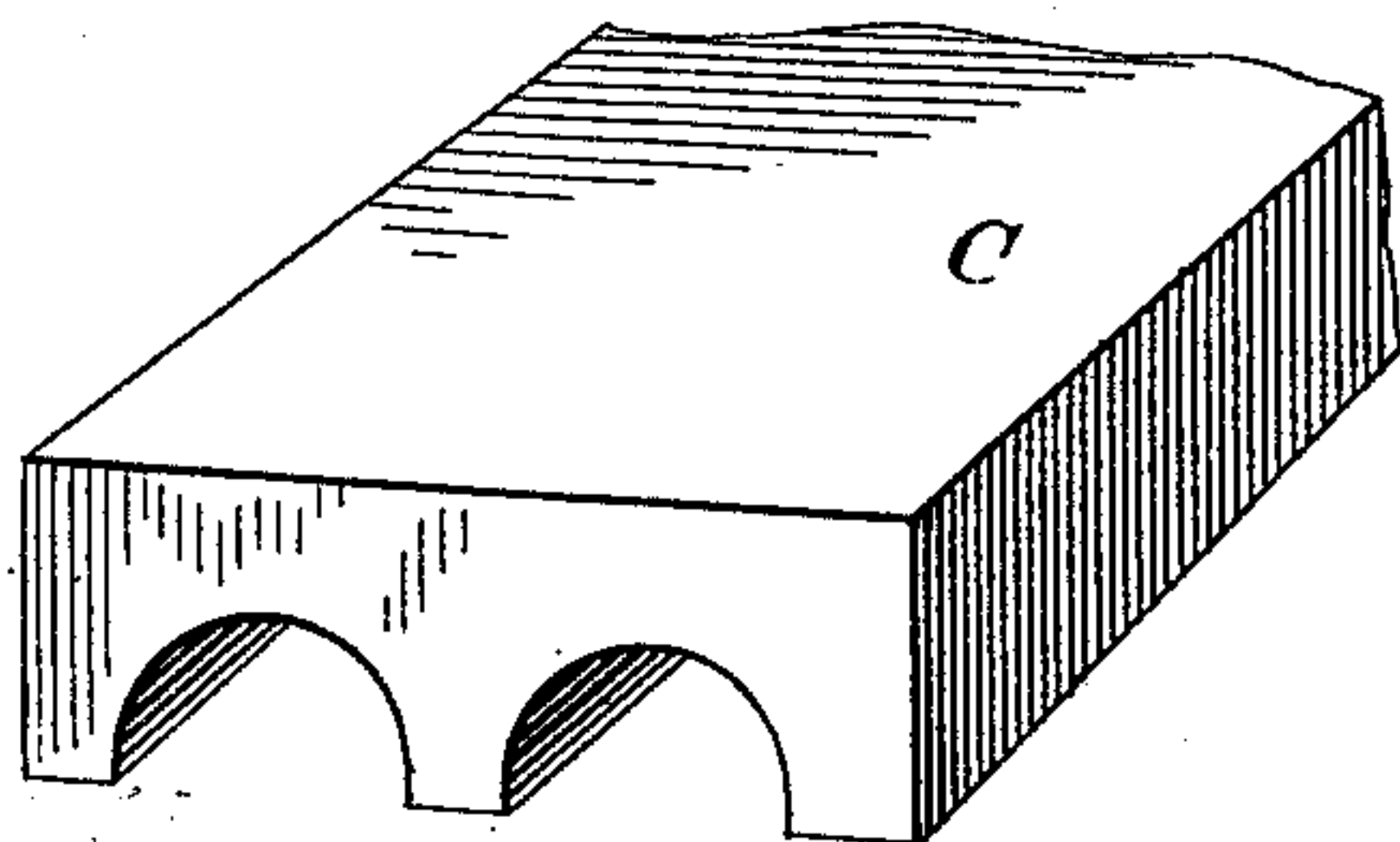


Fig. 4.

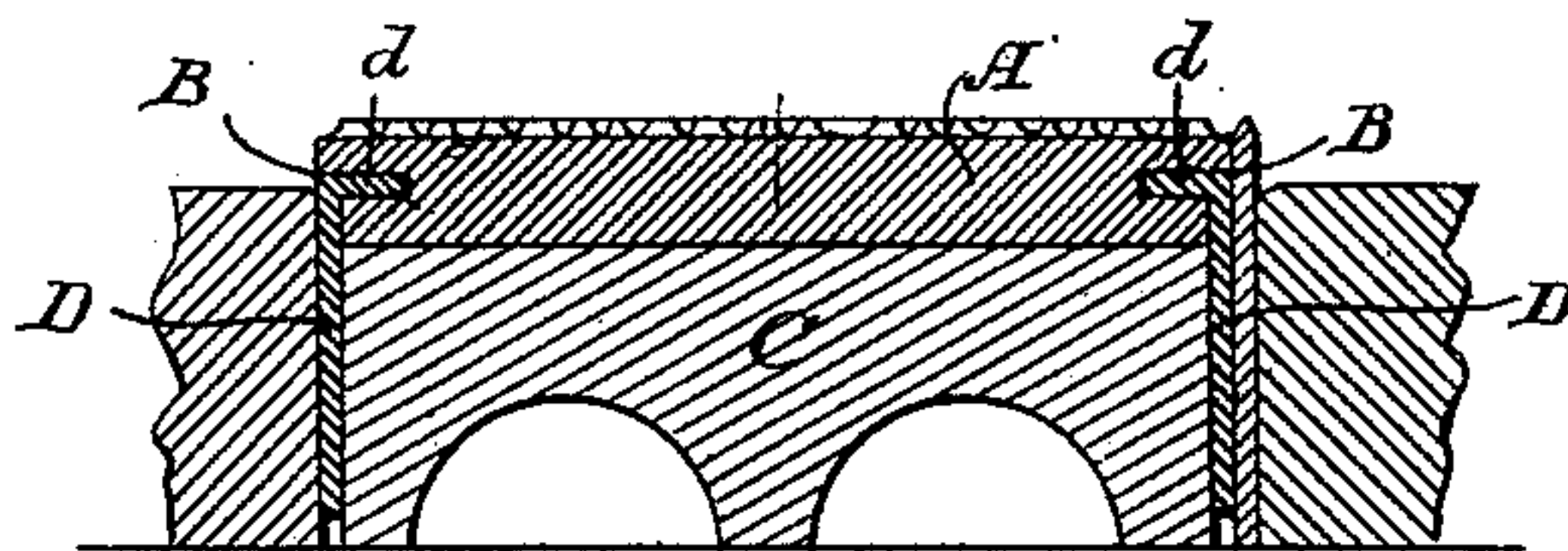
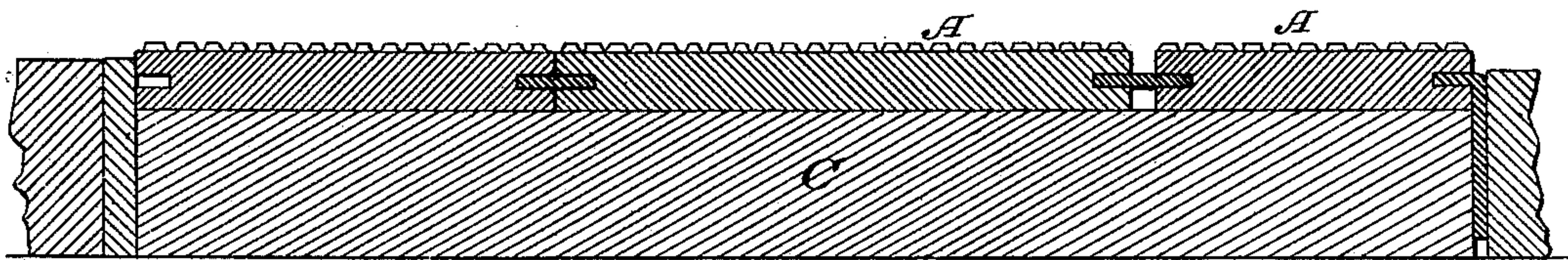


Fig. 5.



Attest:

Clarence Poole
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by J. H. Munn
att'y

UNITED STATES PATENT OFFICE

JOHN B. R. LESPINASSE, OF CHICAGO, ILLINOIS, ASSIGNOR OF TWO-THIRDS OF HIS RIGHT TO GEORGE C. THOMAS AND REUBEN H. PETERS, OF SAME PLACE.

IMPROVEMENT IN STEREOTYPE-PLATES.

Specification forming part of Letters Patent No. **221,685**, dated November 18, 1879; application filed May 13, 1879.

To all whom it may concern:

Be it known that I, JOHN B. R. LESPINASSE, of the city of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Stereotype or Electrotype Plates, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is a perspective view of such a plate to which the invention is applied. Fig. 2 is a perspective view of one of the strips used in fastening the plate to its supporting-block. Fig. 3 is a perspective of a supporting-block. Fig. 4 is a cross-vertical section, showing the relation of the plate, the supporting-block, and fastening-strip when applied in use. Fig. 5 is a vertical longitudinal section of two plates, showing the manner of connecting and adjusting at the ends of the plates.

The invention has relation to the form of such plates with reference to the method of securing the plates to their supporting-blocks and connecting and justifying the same to the length of the column, the object being to secure the plate of the same width of type-surface in the ordinary newspaper-column either when the column is made up entirely of two or more of such plates or of one or more of such plates, with common type in the same column, the type-surface of the plate and the newspaper-column in which it is used being of like width, and to justify the length of such column in either case.

To that end the invention consists in providing the plates with grooves all around and cutting away the under part of the grooved plate and the entire edge of the base-block on the sides next to the column-rule, and supplying the space so recessed or cut away by fastening devices having right-angular lips or flanges at the top adapted to take into the side grooves of the plate, and being arranged so that the part below the lip shall impinge the side of the base-block in such manner that the ordinary column-rule may be applied, in the usual manner, alongside one or more of such plates thus secured to the base-block in the chase in the same column with ordinary type when the type-surface of such plate and com-

mon type is of like width, and in applying thin strips of metal having parallel sides, but varying in width, in the end grooves of such plates, to justify in length the column in which such plates are used.

Like letters of reference indicate like parts.

A is the stereotype or electrotype plate, which should be made of the ordinary type-metal or other suitable material, and should be of the ordinary or any desirable thickness. The size and shape of its superficial area should be such as to correspond to the matter which it is to contain—that is, to the ordinary newspaper-column or book-page.

In the edges of the plate A are formed grooves B B, extending into the plate about a quarter of an inch, on a plane nearly or quite parallel with the top surface of the plate and extending continuously around it. The part of the plate which contains the printing-surface above the groove B projects slightly beyond the part which lies below the said groove.

C is the block which supports the plate A. This block may be made of type-metal or of hard wood or any other suitable material, and should correspond in width exactly to the width of the under part of the plate A, and one or more blocks may be used to make up the requisite length to correspond with that of the plate, and the under side of the plate and upper surface of the block or blocks should be made straight and smooth to correspond and fit together.

D D are strips or narrow plates to be used in securing the plate A fast to its supporting-block C. The strips D may be made of tin or other suitable sheet metal, and should correspond in length to the length of the plate or plates A, with which the strips are used. Along one edge or side of these strips there is a lip, *d*, formed by bending a narrow part of the strip's edge over at a right angle, or nearly so, so that when the strip is placed with its side against the side of the block C the lip *d* of the strip will project into the groove B of plate A, when said plate A is placed on top of the block C. Fig. 4 shows these parts so applied.

It will be noticed that the thickness of the

strip D is such that when applied to the block C and that part of plate A which lies below the groove of said plate, it is just sufficient to come flush with the upper part of said plate, which projects a little beyond the lower part, as before described. When the parts are thus applied to each other, as shown in Fig. 4, they may be placed into the chase or form and locked in place in the ordinary way and in the same manner as type, either separately or in connection with type. When so locked in the plate A and its supporting-block C will be held firmly together by means of the strips D and their lips *d* in the side grooves, B, of said plate.

For the purpose of connecting the plates A at their ends, when two or more of them are joined in the same column, the end grooves are used in combination with narrow strips of varying widths. These strips are made of metal. They are of a thickness adapted to fill the end grooves, have parallel sides, and their length corresponds to the width of the stereotype-plates. Their width varies from twice the depth of said end grooves in the stereotype-plates up to the width of an ordinary lead used by printers—say, from three-eighths of an inch to seven-eighths or an inch wide. I make these strips of varying widths, for the purpose of justifying the length of the column—that is, so that by means of the strips the space between any two plates, or the space between any plate and the plate lying next above or below it, may be increased or diminished by substituting a wider or a narrower strip, as the case may require, and the length of the column may be thereby adjusted or justified to any required length.

I am aware of the patent to B. B. Blackwell, No. 118,425, of August 29, 1871, for improvement in means for holding electrotype-plates, &c., and of the patent to Kellogg and Shock, No. 166,702, of August 17, 1875, for improvement in stereotype-plate holders.

In said Blackwell patent are shown and described holding plates or strips having deflected edges or flanges at a slight angle, which enter V-shaped grooves in the plates or impinge upon the beveled edges thereof; but this arrangement is different from mine, which has the holding-plates deflected at a right angle and entering right-angular grooves in the edges of the stereotype-plates, which enables me to make the plates thinner, and at the same time give them greater strength, because the right-angled flanges of the holding-plates in the right-angular grooves are protected by the side walls of the grooves

from being bent back, thereby giving the full strength of the metal of the holding-plates to secure the stereotype-plate to its base; and, moreover, my invention relates to the stereotype-plate itself, as well as the holding devices, and the upper part of the plate on the sides next to the column-rule is made to project beyond the lower part of the plate, which enables the plate and common type of the same width of type-surface to be locked by the ordinary column-rule and appliances in the chase together in the same column, which cannot be accomplished unless the lower part of the plate is recessed and its block cut away to receive the holding-plates.

In so far as the said patent No. 166,702 is concerned, my invention relates to the means for both connecting the plates and justifying the length of the column at the same time by providing strips of varying widths, and adapting the same to the stereotype-plates, whose side edges are constructed as before described.

It will, therefore, be seen that I do not claim any of the devices shown or described in either of the said former patents; but,

Having thus described my invention and the manner of using it, what I claim is—

1. As an improvement in stereotype-plates, the plate provided with the grooves B B, extending around on all edges of the plate, and having the part of such plate above the groove on the sides next to the column-rule project beyond the part lying below said groove, substantially as and for the purpose specified.

2. As an improvement in means for securing electrotype-plates, &c., in place, and justifying the column in which the same are used, the combination of the plates A, having grooves B B in all their edges and the projecting upper part on the sides next to the column-rule, with the holding-plates D D, having right-angular lips *d d* applied in said side grooves and narrow strips of varying widths, as herein described, applied in said end grooves, and the base-block C, all combined and arranged substantially as and for the purpose specified.

3. As an improvement in means for justifying the length of the column, two or more plates, A, having corresponding grooves in their ends, in combination with narrow strips of varying widths, as herein described, applied in said end grooves, substantially as and for the purpose specified.

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Witnesses:

JNO. H. WHIPPLE,
J. W. MERRIAM.