

(No Model.)

M. BENNITT.
STEREOTYPE PLATE AND HOLDER.

No. 484,082.

Patented Oct. 11, 1892.

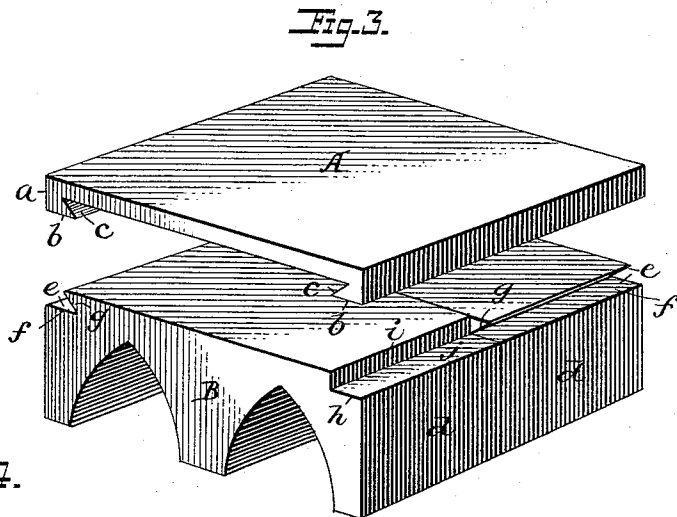
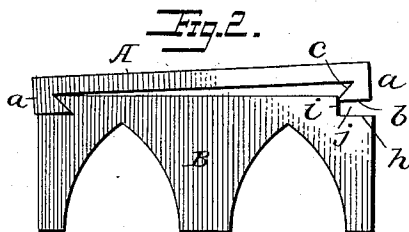
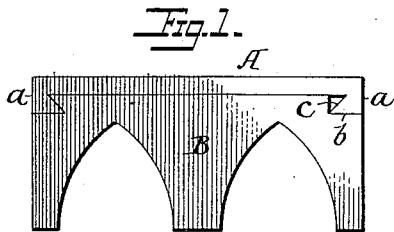


Fig. 4.

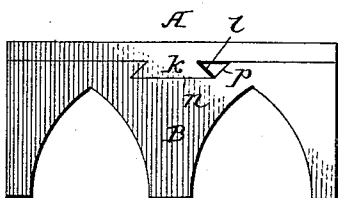


Fig. 5.

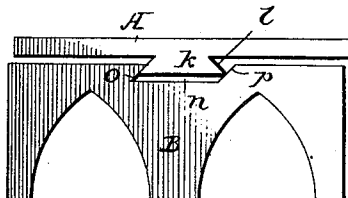
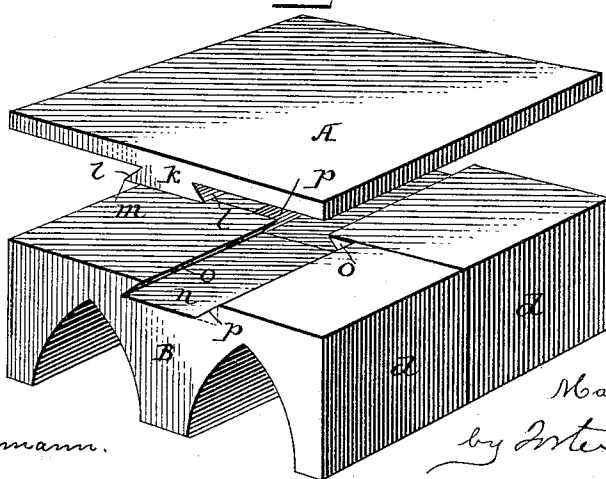


Fig. 6.



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UNITED STATES PATENT OFFICE.

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STEREOTYPE-PLATE AND HOLDER.

SPECIFICATION forming part of Letters Patent No. 484,082, dated October 11, 1892.

Application filed December 29, 1891. Serial No. 416,461. (No model.)

To all whom it may concern:

Be it known that I, MARK BENNITT, a citizen of the United States, residing at Buffalo, Erie county, State of New York, have invented certain new and useful Improvements in Stereotype-Plates and Holders, of which the following is a specification.

This invention relates to an improved means for detachably holding and securing printing-plates to their blocks, beds, or base-pieces, and is designed more particularly for use in connection with stereotype or similar plates employed in printing newspapers, although the invention may be applied to and used with advantage on all classes of such plates when removable from their supporting-blocks.

Heretofore various devices have been employed for temporarily securing plates to their blocks, one well-known means for this purpose consisting in providing the adjacent faces of the plates and blocks with interlocking or dovetailed joints, so that by sliding one part upon the other lengthwise of the joint they may be secured together or separated. In another class of devices for this purpose the contacting faces of the parts at the center or to one side only have interlocking portions so arranged that by an independent lateral movement of either the plate or its base-block the parts can be separated or brought into engagement. When so engaged or interlocked, high column-rules or other special furniture are employed to retain the parts in position and prevent disengagement while in use. These devices, however, are all more or less objectionable, as with the dovetail-joint connection an extended movement of one part upon the other is necessary to connect or separate them, thus rendering the operation inconvenient and slow, especially where the plates are of considerable length, as in newspaper work. In the other class of devices, as already intimated, special kinds of furniture are requisite, thereby increasing the cost, while at the same time the plates are liable to become detached or work up from their blocks at the edges, especially where the connection is mainly at one side, thus resulting in imperfect work or other objections. The object of my invention is to overcome these and other objections incident

to the old forms of locking devices of the character specified and to provide means whereby the plates may be easily and conveniently applied and firmly secured to the blocks or base-pieces without the danger of becoming loose or the necessity of using high or otherwise specially-constructed furniture, while at the same time the plates may be easily and quickly detached and directly lifted from the blocks upon unlocking the form to permit a slight play of the parts.

To these ends my invention consists in providing the lower side of the plate with two parallel undercut projections or bearing-faces and in making the block or base-piece in two or more independent sections, each having one undercut projection or bearing-face corresponding to the faces on the plate. These block-sections are then reversed in position below the plate, so that the bearing-face of one will engage and interlock with one bearing-face of the plate, while the bearing-face of the other section will engage and interlock the other or second bearing-face of the plate, the parts being thus secured together when held against independent lateral movement, all as more fully hereinafter set forth.

In the drawings, Figure 1 is an end view of a stereotype-plate and its block, the parts being secured together according to my invention. Fig. 2 is a similar view with the plate slightly elevated at one side. Fig. 3 is a perspective view with the plate detached and above the base. Fig. 4 is an end view showing a different application of the invention. Fig. 5 is a similar view with the plate slightly elevated; and Fig. 6 is a perspective view, the plate being detached and above the base.

Referring to the drawings, A designates a printing-plate, and B its supporting base or block, the latter being divided transversely into two or more independent sections, as may be most convenient.

In the embodiment of the invention shown in Figs. 1 to 3 the plate A is thickened or otherwise provided at each side edge with a depending shoulder or flange *a*, extending the length thereof. The lower face *b* of each flange is preferably flat, while the inner face *c* is undercut or beveled to constitute a locking-face. The base-sections *d* are each recessed at *e* along the upper side of one end,

and this recessed portion has a lower flat face *f* and an undercut or beveled locking-face *g*, these parts corresponding with the similar faces on the flanges of the printing-plate, as will be understood. The opposite end of each base-section is preferably rabbeted at *h*, the vertical side of the rabbet constituting a guide-face *i* and the horizontal portion a shoulder or seat *j* for the flat portion of the flange *a*. In the construction thus described the plate is fitted upon and locked to the base by reversing the positions of the sections *d d*, as clearly shown in Fig. 3, the projecting lip or locking-face *g* of one base-section being preferably adjacent to the rabbeted portion *h* of the next section, and so on throughout the entire length of the base. When thus arranged, the base-sections are successively inserted between the flanges *a a* of the plate, the beveled face *g* of one section engaging and interlocking with the corresponding face *c* upon one of said flanges, while the guide-face *i* at the opposite end of the section prevents independent movement when the parts are fully and finally adjusted to position, as indicated in Fig. 1. The next base-section is then brought into position in like manner, the lip or beveled face *g* thereof engaging with the flange *a* at the opposite side of the plate, while its rabbeted portion *h* receives the opposite flange, as will be understood.

In the form of the device shown in Figs. 4, 5, and 6 the plate and base-sections have interlocking parts, which are in effect the same as those already described; but instead of the side flanges on the plate the latter is provided with a central offset or rib *k*, of any suitable width, the rib being preferably formed by thickening the plate. The edge faces *l l* of the rib are undercut or beveled in opposite directions to form locking faces or lips *m m*, and these lips extend the entire length of the plate. The base-sections *d d* in this instance are each centrally grooved at *n* to receive the rib on the plate, the width and depth of the groove being such as to insure a neat joint. One side face *o* of the groove in each section is beveled or inclined inwardly to engage with the corresponding face on the rib *k* when the parts are engaged, the opposite side *p* of the groove being by preference parallel with the face *o* to guide the rib to its seat, and thus facilitate the interlocking of the parts. The face *p* may, however, be vertical, if desired, as indicated in dotted lines, Fig. 6. The parts when arranged as just described may be secured together substantially in the manner previously explained, the base-sections being reversed in position to bring the locking-faces *o* on the alternate sections successively into engagement with the like faces *l* on opposite sides of the rib *k* when the latter is inserted and seated in the groove *n* and the parts are fully adjusted to position, as shown in Fig. 4.

It will be apparent that when the plate is

fully seated upon the base-sections, with the parts placed and interlocked as stated, the plate and sections are held against independent lateral and vertical movement by the contacting faces, and when the base is locked up in any printing-form of ordinary construction the plate will be securely fastened to the base without danger of displacement while in use. It will also be seen that the employment of special leads, column-rules, or other similar furniture is dispensed with, while upon unlocking the form to permit a slight play of the base-sections the plate may be easily and quickly detached and lifted directly from its base.

While I have thus set forth the preferred embodiments of my invention, it will be apparent that the details may be varied somewhat without departing from the spirit of the invention, and I therefore do not wish to be limited to the exact constructions shown.

I claim—

1. The combination, with the plate having two locking-faces oppositely arranged, of a base or block consisting of two or more independent sections of substantially the width of the plate, each section provided with a locking-face adapted to engage one of said locking-faces on the plate, the sections being reversed in position when in normal engagement with the plate, substantially as described.

2. The combination, with the plate having two oppositely-arranged inclined locking-faces on its under side, of a base composed of two or more independent sections of substantially the width of the plate, each section provided with a similar locking-face adapted to engage one of said locking-faces on the plate, and a guide-face to engage the other of said locking-faces thereon, the sections being reversed in position when in normal engagement with the plate, substantially as described.

3. The combination, with the plate provided with edge flanges, each having an undercut locking-face, of a base composed of two or more independent sections, each having an undercut locking-face at one end and a rabbet at the opposite end, substantially as described.

4. The combination, with the plate having depending flanges, each provided with an inner inclined locking-face, of a base consisting of two or more independent sections, each having an undercut locking-face at one end and a vertical guide-face at the other, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

MARK BENNITT.

Witnesses:

GEO. S. HULL,
CHAS. W. STUART.