(No Model.)

J. R. CUMMINGS.

STEREOTYPE PLATE AND BASE.

No. 472,474. Patented Apr. 5, 1892.

Fig. 2.

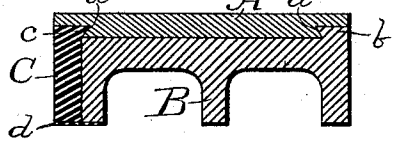
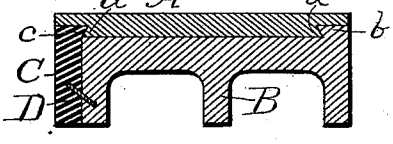


Fig. 1.



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STEREOTYPE PLATE AND BASE.

SPECIFICATION forming part of Letters Patent No. 472,474, dated April 5, 1892.

Application filed January 4, 1889. Serial No. 295,468. (No model.)

To all whom it may concern:

Be it known that I, JOHN R. CUMMINGS, of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Stereotype Plates and Bases; of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention relates to that class of stereotype plates and bases which are extensively used by newspaper-publishers through the country in making up the form from which their respective papers are printed. The plates are only for temporary use; but the bases upon which said plates are mounted are for more permanent use. It is necessary, therefore, that the base be so constructed that it can easily lock the plate upon it when in the form and at the same time be light and strong; and it is also necessary that the plates be simple in construction and easy of manufacture. I accomplish all of these requirements by the plate and base hereinafter fully described, and illustrated in the drawings, in which—

Figure 1 is a cross-section of my improved plate and base. Fig. 2 is a cross-section of a modification of the same, showing slightly-different means for connecting the two parts of the base.

Referring to the drawings, A represents the plate, having on its upper surface the usual type formations and having longitudinal rabbets cut in its under surface next to its longitudinal side edges, the inner walls or shoulders *a a* of which are inversely beveled, as shown.

B represents the base, of a width corresponding to the width of the plate less the width of a dog C, which is used in conjunction with said base, and of which more will be said hereinafter. The base has a plain upper surface and is provided with a ledge *b* alongside and parallel with one side edge, the inner wall of which is inversely beveled at an angle corresponding to that of wall *a* of the plate. The height of the ledge *b* is preferably a little less than the depth of the rabbets of the plate, and the width of its upper surface corresponds to the distance from the side edge of the plate to the vertex of the inner angle of the inversely-beveled walls *a* of said rabbets. The dog C below the plane of the upper surface of the plate A is of a width corresponding to the difference between the width of base B and plate A, or, which is the same thing, to the distance between the vertical plane of the vertex of the outer angle of the inversely-beveled wall *a* and the adjacent side edge of the plate. Above the plane of the upper surface of the base the top of said dog is provided with an offset on that side next to the adjacent side edge of base B, the inner side of which is inversely beveled from the upper surface of the dog to the side thereof intersected by the horizontal plane of the upper surface of said base at an angle corresponding to the inverse angle of wall *a*, which it opposes, forming, as it were, a beak *c*.

The operation of the plate and base as thus described is as follows: The plate A is placed upon the base so that its under surface rests on the upper surface of the base, and it is then moved laterally, so that the inversely-beveled wall *a* nearest thereto will bear against and interlock with the inversely-beveled inner side of the ledge *b* by the base. The dog C, which is of a length corresponding to that of the base, is then placed flat against that side of the base farthest from ledge *b*, so that the beak *c* thereof opposes and interlocks with the inversely-beveled wall *a* of the plate adjacent thereto. The plate and base are then locked in a form, which effectually prevents the release of the plate while in the printing-press.

The dog C can be used as hereinbefore described but I prefer to have it connected to the base in such way that its upper end can oscillate outward from the base, so as to permit the plate to be placed on the same. This I accomplish by means of a flexible metallic strip or feather D, which is set in a longitudinal groove cut downward into the side of the base contiguous to said dog at an angle of about forty-five degrees, so that about one-half its width projects therefrom. This projecting part of the feather enters a suitable groove made in register therewith in the in-

ner surface of said dog C. When it is desired to oscillate said dog, as hereinbefore alluded to, it is lifted in a laterally-upward direction away from the base and then oscillated so as to bend the flexible feather D. This lifting may be done by the raising of the plate A in a direction necessary to lifting the dog, as specified, or by hand. In either event the result is the same.

In Fig. 2 I secure a flexible sheet-metal strip *d* to the under surface of said dog and the contiguous leg of the base B. This mode of connecting is not as desirable as that shown in Fig. 1, because of the difficulty of so securing it that it would not raise that side of the stereotyped matter under which it is placed.

What I claim as new is—

1. A stereotype-plate having corresponding longitudinal rabbets in its under surface adjacent and parallel to its longitudinal side edges and the inner walls of which are inversely beveled, in combination with a base having a longitudinal ledge alongside one side thereof, the inner side of which is inversely beveled, a dog placed longitudinally against the opposite side of said base, having a beak *c*, as described, the under surface of which is beveled at an angle corresponding to the bevel of the inner wall of the rabbet in the plate which it opposes, and a flexible strip for connecting said dog to said base, as set forth.

2. A stereotype-plate having corresponding longitudinal rabbets in its under surface adjacent and parallel to its longitudinal side edges, the inner walls of which are inversely beveled, in combination with a base having a longitudinal ledge alongside one side edge thereof, the inner side of which is inversely beveled, a dog having a beak *c*, as described, and a sheet-metal strip or flexible strip for connecting said dog to said base and seated in corresponding angular grooves in longitudinal and transverse register with each other in the meeting surfaces of said dog and base, respectively, as and for the purpose set forth.

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