(No Model.)

G. D. MORSE & M. CHASE.

TYPE PLATE AND BLANK FOR THE SAME.

No. 480,933. Patented Aug. 16, 1892.

Fig. 1

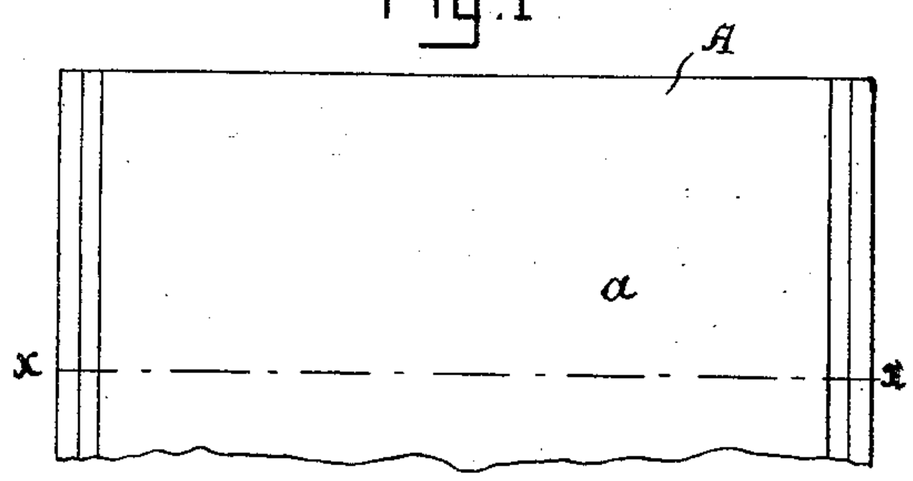


Fig. 2.

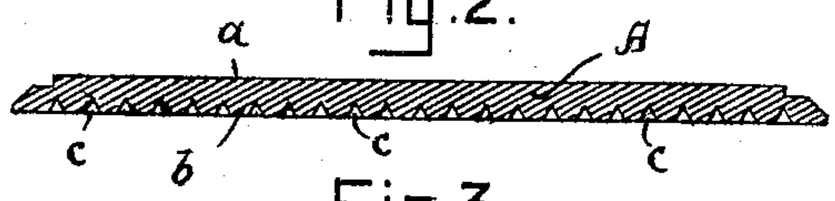


Fig. 3.

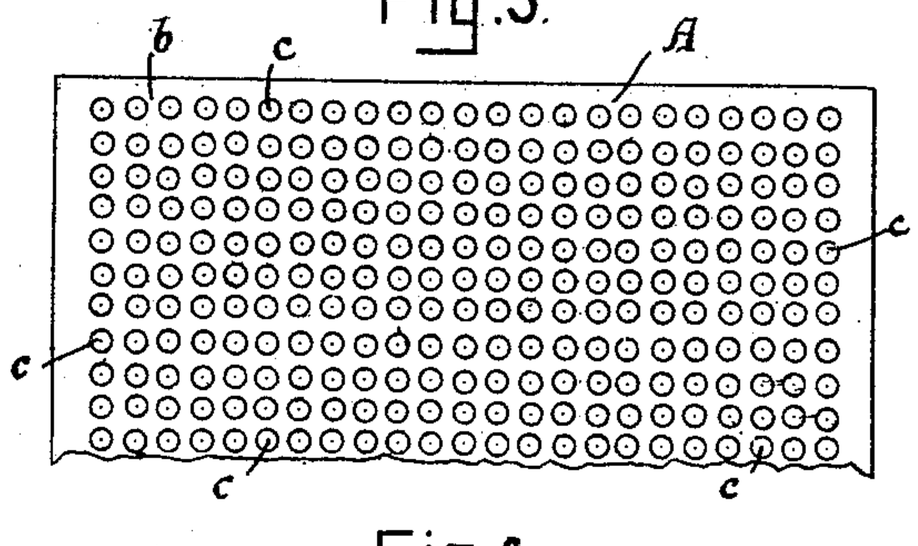


Fig. 4.

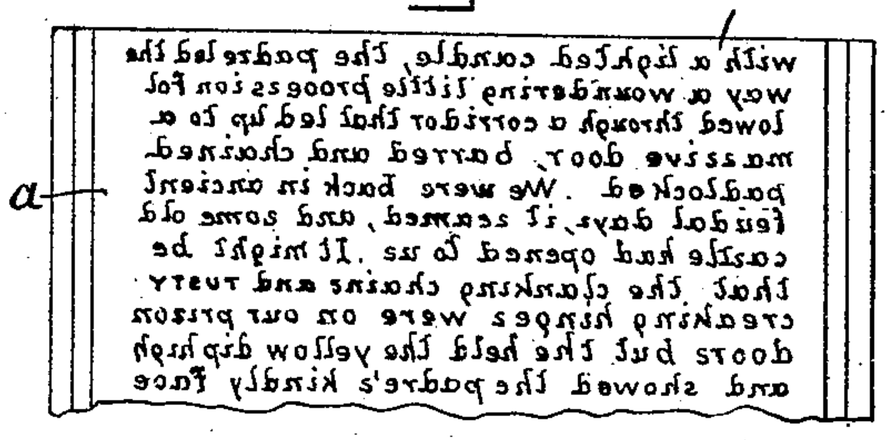
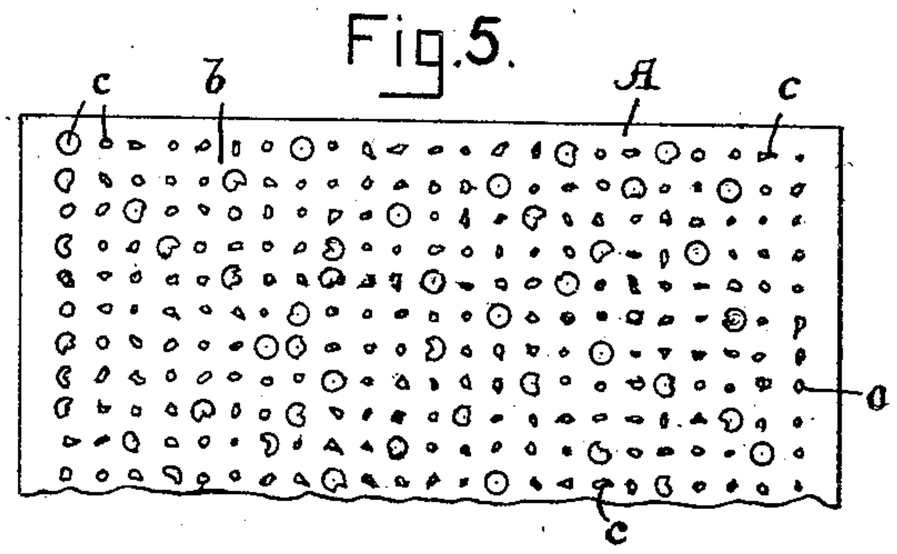


Fig. 5.



Witnesses.
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UNITED STATES PATENT OFFICE.

GEORGE D. MORSE AND MILTON CHASE, OF HAVERHILL, MASSACHUSETTS.

TYPE-PLATE AND BLANK FOR THE SAME.

SPECIFICATION forming part of Letters Patent No. 480,933, dated August 16, 1892.

Application filed July 20, 1891. Serial No. 400,052. (No model.)

To all whom it may concern:

Be it known that we, GEORGE D. MORSE and MILTON CHASE, citizens of the United States, residing at Haverhill, in the county of Essex and State of Massachusetts, have invented certain new and useful Improvements in Type-Plates and Blanks for the Same, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of our invention is to produce plates to be used for printing purposes; and it consists of plates capable of receiving and retaining the imprint of any letter or character from a die or matrix, and from which the printing is done directly, thereby dispensing with type and stereotypes or electrotypes, as are now usually employed, whereby plates for printing are produced much quicker and cheaper than by any process now known to us.

Referring to the accompanying drawings, Figure 1 represents a blank plate having its edges formed so as to be held in a printing-press. Fig. 2 is a cross-section of the same, taken on line *x x* of Fig. 1. Fig. 3 is a rear view of the plate before its face has received the imprint of the die or matrix. Fig. 4 is a front view of the plate after the face has been impressed by the die or matrix. Fig. 5 is a rear view of the same.

The blank plates A are smooth upon their face or side *a*, (see Figs. 1 and 2,) upon which the imprint of the die or matrix is to be imparted, and on the back side *b* they are formed with recesses or depressions *c*, preferably of conical form, (see Figs. 2 and 3,) so that when the die or matrix makes or forms an impression or raised letter upon the face *a* there will be plenty of room for the material displaced, thereby thus preventing any change or distortion of the general outline of the plate, and at the same time a great saving of material is effected, as plates thus made are much lighter than solid plates would be.

In Fig. 4 we have shown a portion of a plate with reading-matter impressed thereon, and Fig. 5 is a back view of same, showing how the superfluous material is taken up by the recesses or depressions *c*. The sides of the plates may be leveled, as shown, so that they can be readily clamped into the printing-press; but when used for column printing the sides of plates would be left square.

The plates are made of any material capable of receiving or retaining an impression from a die or matrix and of sufficient density to resist compression when printing from the same, or they may be made of two different materials, one at the back of the other, the facing material capable of receiving the impression and a backing of a cheaper material.

What we claim as our invention is—

A type-plate blank consisting of a plate having a smooth surface *a* to receive the imprint from a die or matrix and the under side having a series of recesses *c*, whereby the superfluous material is taken up when an imprint is made upon the face *a*, substantially as set forth.

In testimony whereof we have signed our names to this specification, in the presence of two subscribing witnesses, on this 9th day of July, A. D. 1891.

GEO. D. MORSE.
MILTON CHASE.

Witnesses:
ALBERT L. BARTLETT,
ADALINE E. FROST.