Feb. 11, 1930. J. A. ISBELL 1,746,946

STEREOTYPE MATRIX

Filed Sept. 7, 1927

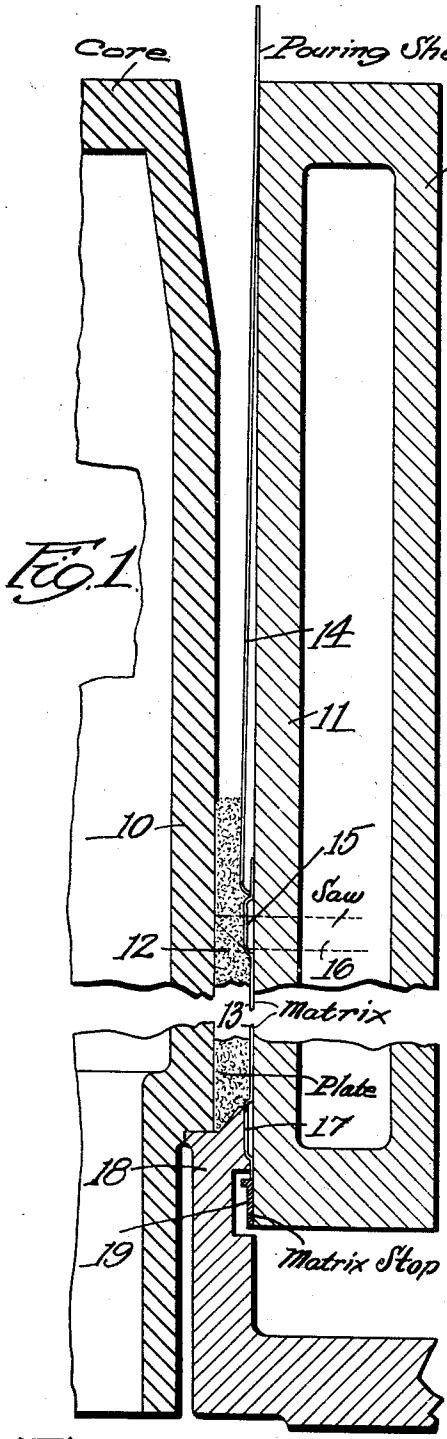


Fig. 1.

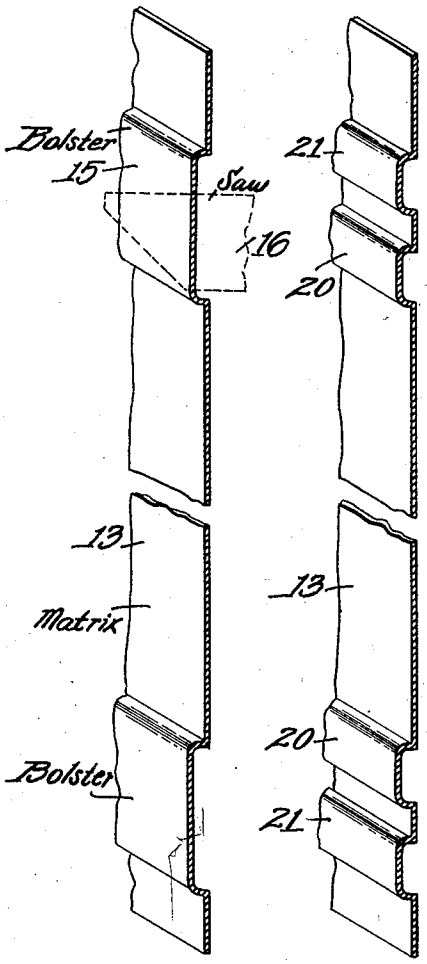


Fig. 2.

Fig. 3.

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UNITED STATES PATENT OFFICE

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STEREOTYPE MATRIX

Application filed September 7, 1927. Serial No. 217,893.

This invention relates to a matrix for use in casting stereotype printing plates. The principal object of the invention is to provide a matrix with a special bolster on the end which can be reversed end for end.

Reference is to be had to the accompanying drawings in which—

Fig. 1 is a radial sectional view of a stereotype printing plate mold with a matrix shown thereon constructed in accordance with this invention;

Fig. 2 is a perspective view of the matrix sectioned longitudinally; and

Fig. 3 is a similar view of another form in which the matrix can be made according to this invention.

The matrix ordinarily used in casting stereotype printing plates is provided with a bolster, or inwardly extending ridge, along each of its four edges. The upper horizontal edge is covered during the casting operation by a pouring sheet to prevent the metal from getting behind the matrix. The joint made between the matrix and pouring sheet provides an insulating spot between the molten metal and the casting box which considerably affects the cooling of the plate at that point. It has been common therefore for stereotypers to mold the matrices with an extra wide bolster, or an additional one, at the top so as to move the point at which the pouring sheet touches the matrix to a level higher than that at which the plate is sawed after it is taken out of the box.

This arrangement, however, has prevented the reversal of the matrices which it is often desired to do.

By the present invention I avoid this difficulty and at the same time secure the advantages of the additional bolster or extra wide one as the case may be.

In the drawings I have shown a casting box having a core or cylinder 10 and a back 11 between which the casting 12 is formed. The matrix 13 is shown in place and a pouring sheet 14 of the usual construction. The matrix is shown as provided with an extra wide bolster 15 which is so located that the saw 16 which cuts off the tail after the plate is removed will cut through the cast stereotype plate at a level below said insulating spot, as shown in dotted lines in Figs. 1 and 2.

In addition to the extra wide bolster 15, I provide another bolster 17 at the bottom of the same size as the one at the top. This bolster fits in behind the bottom ring 18 of the casting box and the edge of the matrix as usual comes up against the matrix stop 19.

It will be seen that with this construction the matrix can be reversed end for end, if it is desired. When several matrices are being used, any of them can be turned the opposite end around from the others and still the usual results of the extra wide bolster are retained.

In the form shown in Fig. 3, the advantages are the same except that I have shown in addition to the usual bolster 20 at the top and bottom a second bolster 21 which also is located at the bottom as well as the top. This bolster has the same advantages and the matrix is reversible. The two ridges 20 and 21 constitute a wide bolster in effect.

Although I have illustrated and described only two forms of the invention, I am aware of the fact that other modifications can be made therein by any person skilled in the art without departing from the scope of the invention as expressed in the claims. Therefore, I do not wish to be limited to all the details of construction herein shown and described, but what I do claim is:—

1. As an article of manufacture, a matrix for a stereotype printing plate mold having at the top an inward ridge around it constructed and adapted for raising the point at which the pouring sheet engages the bolster and provided with a similar ridge at the bottom of substantially the same dimensions.

2. As an article of manufacture, a matrix for a stereotype casting mold having a double bolster at the top and at the bottom, so that the matrix is reversible.

In testimony whereof I have hereunto affixed my signature.

JOHN A. ISBELL.