

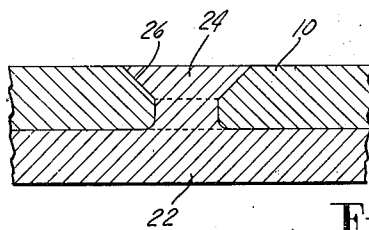
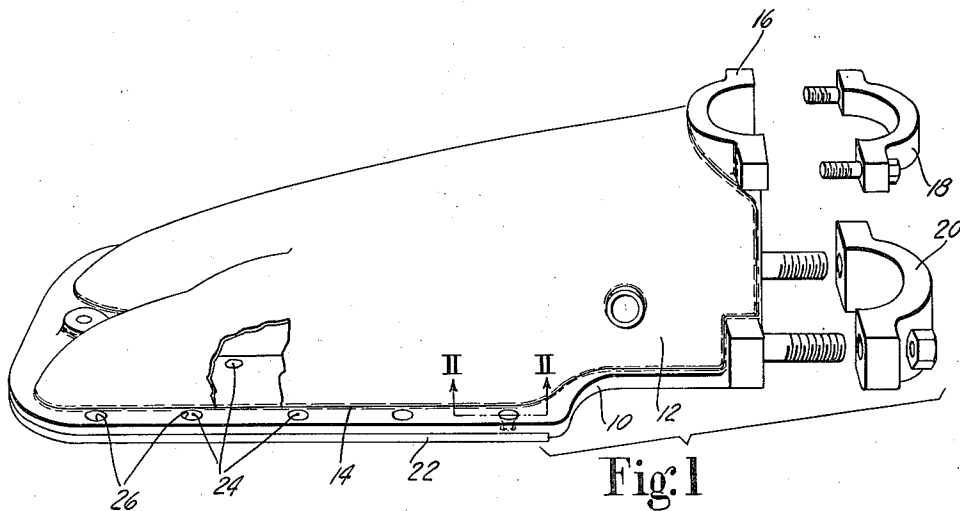
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F. P. HYDE

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PRESS

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PRESS

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2 Claims. (Cl. 164—23)

This invention relates to presses, and is herein illustrated as embodied in a beam for clicking machines.

In shoe factories, use is commonly made of clicking machines for cutting shoe parts from sheet material, such as leather. One type of such machine, which has come into extensive use, is that illustrated in United States Letters Patent No. 921,503, granted May 11, 1909 upon application of Arthur Bates. Such machines comprise a cutting bed and a presser member arranged to be movable transversely over the bed and toward and away therefrom, to force a cutting die through material positioned upon the bed. In recent years, considerable use has been made of double edged cutting dies which comprise an upstanding wall, corresponding to the shape of blanks to be cut and terminating in oppositely extending cutting edges capable of producing right and left blanks of the same size. In the use of such dies, one of the cutting edges is placed in contact with the material to be operated upon, and the presser member of the machine is brought down upon the other edge, forcing the die through the material. If the surface of the presser member which engages the upturned cutting edge is too hard, it is likely to cause die breakage. Consequently, it has been the practice to make use of an auxiliary striking plate upon the presser member, which can be penetrated slightly by the cutting edge during the pressure-applying operation, thus tending to eliminate breakage of the die, but which at the same time is sufficiently resistant to the wear caused by repeated blows struck by the presser member.

It is an object of the present invention to provide a beam of the type referred to having an improved striking plate which is highly resistant to wear and to rough usage and possesses other advantages. To this end and as illustrated, the invention provides a presser member having a base plate and a striking plate extending along the base plate and secured thereto by studs which are integral with the striking plate and extend through countersunk holes in the base plate. Preferably, the striking plate is composed of comparatively soft material, such as aluminum alloy, and is cast directly upon the base plate in such manner that portions of the metal flow into the countersunk holes in the base plate to form the securing studs. This construction is highly advantageous, for the reason that the studs securely hold the striking plate in position against the base plate, and any rela-

tive movement between the striking plate and the base plate is prevented by the studs, thus eliminating any likelihood of buckling of the striking plate when it is subjected to repeated shocks during operation upon the work.

These and other features of the invention are disclosed in the following specification and in the accompanying drawings, and are pointed out in the claims.

In the drawing,

Fig. 1 is a perspective view, partly in section, of a clicking machine beam embodying the invention; and

Fig. 2 is a cross sectional view along line II—II of Fig. 1, showing the means for securing the striking face to the base plate.

The beam shown in Fig. 1 comprises a base plate 10, and a body portion in the form of a hollow reinforcing shell 12, preferably of steel, welded together along their line of contact 14, the base plate and the shell each being welded to a bracket 16, which is arranged to be secured to the post of a clicking machine by clamping members 18 and 20. The base plate 10 is provided with a striking face in the form of a plate 22, preferably of aluminum alloy, which is secured to the base plate by studs 24.

Preferably, the plate 22 is formed by casting it directly upon the base plate 10, the beam being placed in a mold and metal caused to flow along the outer portions of the base plate. The base plate is provided with openings 26, best shown in Fig. 2, the upper portions of which are countersunk with the result that during the molding operation metal is caused to flow into the openings, thus forming the studs 24 which are integral with the plate 22 and which intimately secure the plates 10 and 22 together.

The base plate 10 is provided with an adequate number of holes 26 along its side and central surfaces, so that the plate 22 is secured thereto at a large number of different points, thus tending to prevent warping of the plate 22. In practice, when the plate 22 becomes worn to such an extent that it cannot be further used as a presser member, the plate can readily be removed by drilling out the material forming the studs 24. The plate can then be withdrawn and a new striking plate cast onto the base plate 10.

Having described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. As an article of manufacture, a beam for presses having a body portion terminating in a

base plate, openings extending through the base plate having countersunk portions on one side of the base plate, a striking plate cast upon the other side of the base plate, and members integral with the striking plate extending through the openings and completely filling the same for securing the striking plate in close relation to the base plate.

2. As an article of manufacture, a beam for

presses having a body portion terminating in a base plate, said base plate having extending therethrough openings which are countersunk upon one side of the base plate, a striking plate 5 upon the other side of the base plate, and studs integral with the striking plate extending through the openings and filling the same to secure the striking plate to the base plate.

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