Nov. 11, 1941. L. C. HAUER 2,262,180

DIE HOLDER

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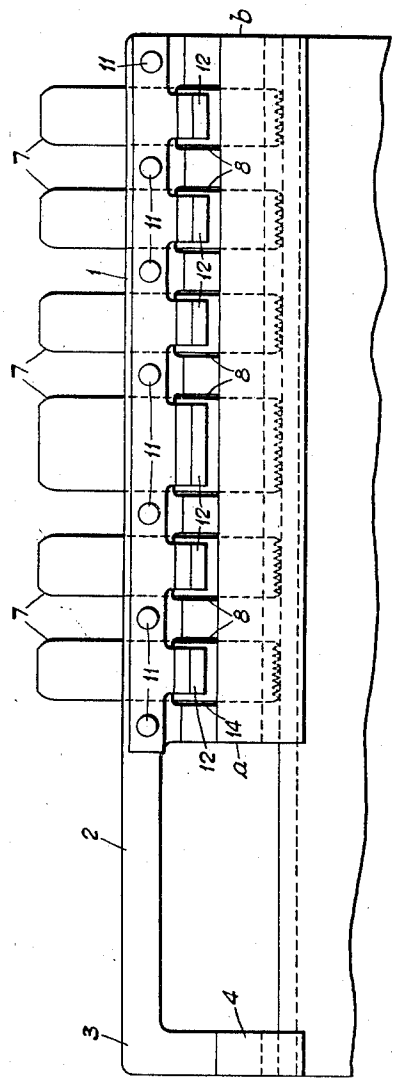


Fig. 1.

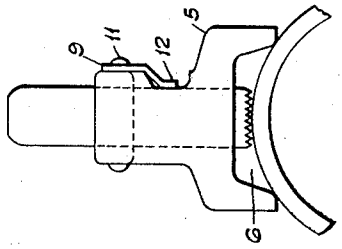


Fig. 2.

INVENTOR

Leon C Hauer

by J. E. Ackerman

his Attorney

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DIE HOLDER

Leon C. Hauer, Pittsburgh, Pa., assignor to M. E. Cunningham Company, Pittsburgh, Pa., a corporation of Pennsylvania

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1 Claim. (Cl. 101—28)

This invention relates to metal stamping or impression dies and more particularly to an improved form of holder for such dies.

One of the principal objects of the invention is to provide a holder of the character referred to which comprises a minimum of parts so constructed as to insure its being easily and accurately held in place when used and in which the dies are so located that the user can readily set and operate them.

Another object is to adapt such a holder for use in stamping both flat and round surfaces and for doing so in such a way as to reduce the effort necessary to accurately locate the die on the work to a minimum.

These and various other objects, as well as the various other novel features and advantages of invention will be apparent when the following detailed description is read in conjunction with the attached drawing in which Figure 1 is a side elevation and Figure 2 an end view of a die holder embodying the invention and showing it in Figure 2 being applied to the making of a tubular article.

Referring in detail to the holder as illustrated in this drawing, the numeral 1 designates the frame of the holder. This frame consists of one integral piece of metal or other suitable material. The portion 2 thereof between the letters *a* and *b* comprise the holder proper. To provide a convenient handle for the holder, a projection 3 is provided at one end of the body 2 being extended outwardly therefrom in line with the top of the holder and made of sufficient size as to be easily gripped by one hand and sufficiently strong to have the necessary strength and rigidity. At its outer end this handle projection is provided with an integral strut 4 that is formed in the same shape as the body 1, as may be readily seen in Figure 2.

In order to adapt the holder to hold the dies in place when they are being actuated, the base 5 of the body 1 and the handle strut 4 is extended outwardly on both sides from the body proper to form a supporting surface so that the holder is effectively prevented from tipping when rested on the article being stamped. To further enhance this feature so that it is as effective when used on rounds as on flats, a recess 6 is provided in the bottom of the base directly below the dies 7. Thus two lines of contact are provided for straddling the round and not only holding the frame from tipping, but also assisting in maintaining it in proper alignment on the article. A further advantage of this recess is to permit the impression end of the dies being retained in a position so as to protect them against exposure when not being used.

The dies as shown are mounted in holes 8 extending from the top of the holder to the recess 6 running through the bottom of the base 5. Preferably these dies are made with a plurality of sides and the holes 8 of the same shape whereby the dies are held against turning, but the holes, of course, are just large enough to readily receive the dies.

To prevent the dies dropping out of the holes 8 when the holder is moved about, a strip of spring steel 9 is secured to one side of the body 1 and held in place by suitable pins or rivets 11. This strip of steel is provided with downwardly extending fingers 12 that bend inwardly so as to resiliently bear against one side of the dies 7. To this latter end the body 2 is cut away at 14 sufficiently to expose the holes 8 directly opposite the fingers 12.

From the foregoing it will be readily seen that a holder is provided which except for the dies 7 comprises essentially only the body 1, and the die retaining spring strip 9. In addition it is effectively adapted to facilitate its being readily handled and accurately positioned for use, as well as to permit easy change of the dies. Also it affords clear vision of the dies thereby facilitating location of the holder and operation of the dies, which latter is effected by striking their upper ends.

The advantages of a holder constructed in accordance with this invention will be readily appreciated by those skilled in the art and obviously the shape and detail may be varied without departing from the spirit of the invention as defined in the appended claim.

I claim:

A die holder comprising an elongated frame, a handle integral with said frame and projecting in line with the top of the frame, a strut affixed to the outer end of said handle and having an end formation disposed to engage the workpiece at a spaced point to assist in holding the frame rigidly on the workpiece, a centrally disposed longitudinal extending recess running centrally of the work-engaging face of said frame and strut whereby providing spaced supporting surfaces on opposite sides of the die for locating the frame on curved workpieces, and a removable die mounted in an opening provided therefor in said frame.

LEON C. HAUER.