

H. W. KIP.

DIES FOR MAKING HAMMERS.

No. 175,356.

Patented March 28, 1876.

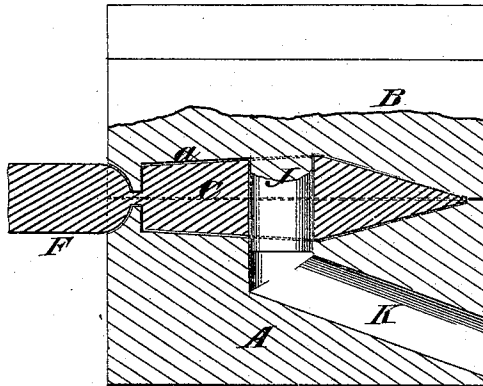


Fig. 1.

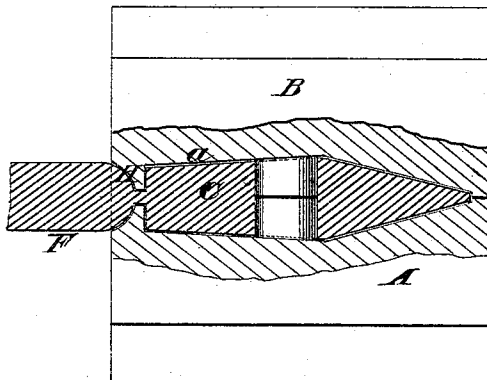


Fig. 2.

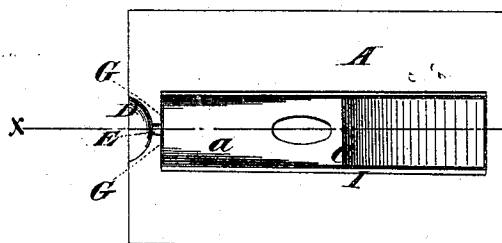


Fig. 3.

WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY W. KIP, OF BUFFALO, NEW YORK.

IMPROVEMENT IN DIES FOR MAKING HAMMERS.

Specification forming part of Letters Patent No. **175,356**, dated March 28, 1876; application filed February 5, 1876.

To all whom it may concern:

Be it known that I, HENRY W. KIP, of Buffalo, in the county of Erie and State of New York, have invented new and Improved Dies for Making Hammers, of which the following is a specification:

My invention consists of dies contrived in a novel way for shaping, riveting, and other like hammers, and punching the eyes in a drop-press at one blow, and also for partly separating them from the rod.

Figure 1 is a longitudinal sectional elevation of my improved dies. Fig. 2 is another similar section, showing a modification of the punch for making the eye, the sections being taken on line *x x* of Fig. 3. Fig. 3 is a plan of one of the parts.

Similar letters of reference indicate corresponding parts.

A is the bed-die, and B the one that is attached to the drop, in each of which is a half mold or die of the hammer C, to be made, together with a cavity, D, at the end, and a small groove, E, connecting said cavity with the die, the object of which is to prevent entire separation of the hammer from the rod F by the parts G between the hammer-mold and the end cavities, and to make a good shape, H, to the end of the rod.

Along each side of the die-cavities for the

hammer the metal is rabbeted, as shown at I, to prevent the fin from spreading out between the faces of the dies.

J is a punch for forming the eye at the same time that the hammer is shaped, said punch being formed in one piece only on one part of the dies, as shown in Fig. 1, or in two parts, one on each part of the die, as represented in Fig. 2. In the former case a slug will be punched out, which will be discharged through the channel K in the bed-die; but in the latter case the metal displaced to form the eye will be swaged out into the body of the hammer.

The dies are shaped so as to produce the required round or other equivalent form of the pole *a*, and the taper form of the other end, so that it only needs trimming and surface-finishing after coming out of the dies.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

An improved pair of hammer-dies, having the cavity D, groove E, parts G G, rabbets I, and punch J, all constructed and arranged as and for the purpose specified.

HENRY WELLS KIP.

Witnesses:

WM. GARDNER, Jr.,
JAMES L. RAZE.