

J. YERKES.
Dies for Forming Hammers.

No. 142,070.

Patented August 19, 1873.

Fig. 1.

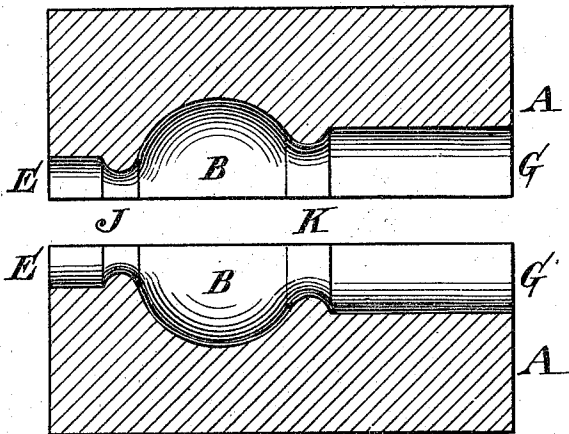


Fig. 2.

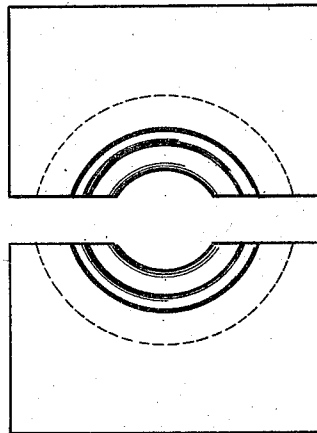


Fig. 3.

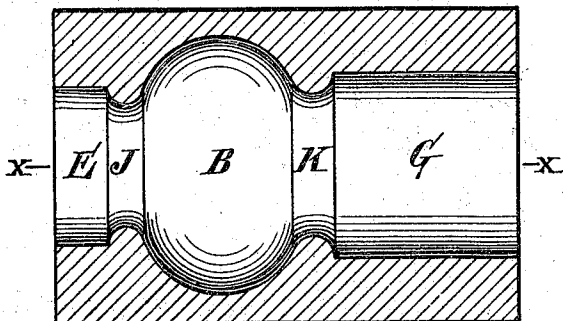


Fig. 4.

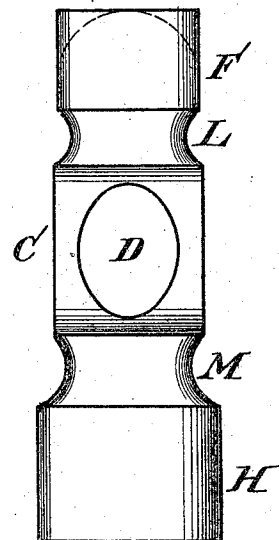
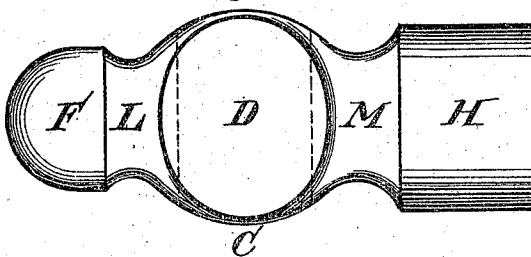


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

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IMPROVEMENT IN DIES FOR FORMING HAMMERS.

Specification forming part of Letters Patent No. **142,070**, dated August 19, 1873; application filed
July 18, 1873.

To all whom it may concern:

Be it known that I, JONATHAN YERKES, of the city and county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in the Manufacture of Hammers; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings making part of this specification, in which—

Figure 1 is a central longitudinal vertical section of the dies embodying my invention. Fig. 2 is an end view thereof. Fig. 3 is a view of the inner face of one of the dies. Fig. 4 is a top view of a hammer partly finished. Fig. 5 is a top view of a finished hammer.

This invention consists in dies adapted for the manufacture of double-headed hammers, whereby a superior article will be produced at less expense than by means heretofore employed.

Referring to the drawings, A A represent the two parts or sections of the die. The working-face of each section is formed with a cavity, B, corresponding to the portion C of the hammer, surrounding its eye D with a cavity, E, corresponding to one head, F, of the hammer and with a cavity, G, corresponding to the opposite head H. The cavity E is separated from the cavity B by a ridge, J, and the cavity G from the cavity B by a ridge, K. The ridge J is adapted to work down and form the neck L of the hammer between the head F and eye portion C. The ridge K is adapted to work down and form the neck M of the hammer

between the eye portion C and head H. One section of the die will be properly secured to a plunger, to which reciprocating motion is imparted in any well-known manner, and the other section is fixed to a suitable bed, the two sections being arranged that the depressions will be coincident.

The operation is as follows: The bar of metal to be worked into hammer-heads is properly punched for the eye portion of the head, and the eye thus punched is occupied by a pin or filling for preventing the closing of the eye. The bar is now laid sidewise on the lower or stationary die and power communicated to the plunger to which the other or upper die is secured. The metal or stock will be worked into the various depressions in the faces of the dies and worked down at the portions corresponding to the necks L M, and by turning or rotating the bar when the upper plunger is elevated the metal will gradually assume the form or contour of the depressions and be worked down by the ridges J K.

The pin or filling in the eye portion of the metal, as aforesaid, is now removed, and the hammer-head as formed is in condition for grinding, polishing, and finishing.

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

The dies A A for the manufacture of hammers, constructed and operating as herein set forth.

JONATHAN YERKES.

Witnesses:

JOHN A. WIEDERSHEIM,
MILLARD F. WALTON.