H. HAMMOND.

Shearing Dies for Carriage Wheel Boxes.

No. 161,956. Patented April 13, 1875.

Fig. 1.

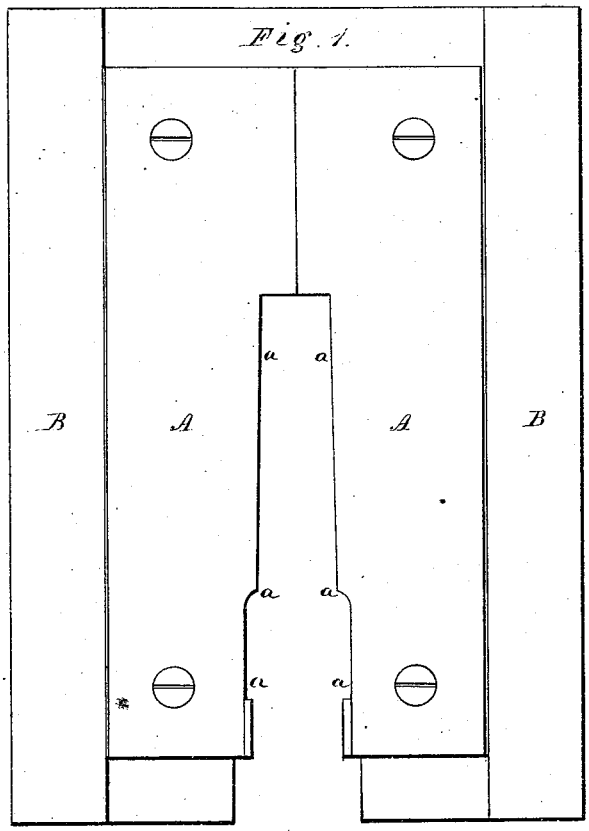


Fig. 2.

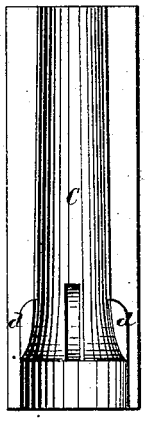


Fig. 3.

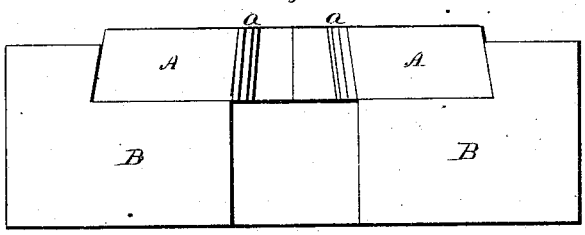
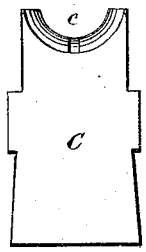


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

HENRY HAMMOND, OF HARTFORD, CONNECTICUT.

IMPROVEMENT IN SHEARING-DIES FOR CARRIAGE-WHEEL BOXES.

Specification forming part of Letters Patent No. **161,956**, dated April 13, 1875; application filed September 21, 1874.

To all whom it may concern:

Be it known that I, HENRY HAMMOND, of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Shearing-Dies for Carriage-Wheel Boxes; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

When wrought-iron carriage-wheel boxes are struck in dies to give them the desired form, a thick web or flange is left around the edge where the two parts of the die meet. The object of my invention is to shear off this web where it is not needed, so as to leave the outside of the box round and smooth, and to cut out and leave a portion of it to form the projections which enter the wood of the hub and prevent the box from turning within it.

My invention consists in the construction and arrangement of the parts of the dies necessary to effect the above-described objects.

In the accompanying drawing, Figure 1 is a top view of the lower die. Fig. 2 is a bottom view of the top die. Fig. 3 is an end view of the lower die. Fig. 4 is an end view of the top die.

A A are hardened steel plates with cutting or shearing edges *a a a*, of the exact form it is desired to give exterior outline of the wheel-box. These plates are secured to the block B, which holds them in position, and upon which they can be adjusted. The upper die, C, has upon its lower side a recess, *c*, of a form exactly fitting the wheel-box to be sheared or trimmed. This recess fits like a saddle over the wheel-box, and presses it downward through the opening in the lower die, between the cutting-edges *a a*. The lower portion of this die is of a form that will just pass through the space between the edges *a a* of the lower die, so as to form with them a shears or punch for separating the metal.

The wheel-box which is to be trimmed is placed upon the lower die with the projecting web resting upon the top of the plates A A, along the edges *a a*. The top die is then pressed downward by any suitable machinery usually applied to presses, and the metal is sheared off on the lines *a a*.

The lines *a a* do not follow exactly the contour of the circular portion of the wheel-box, but at the points marked *d d* (Fig. 2) certain parts of the web are cut around, leaving them attached to the central portion. These are for the purpose of holding the box from turning in the hub, and are cut out of the projecting web as the box is forced through the dies.

What I claim as my invention is—

The herein-described dies for shearing wheel-boxes and forming the projections *d*, substantially as specified.

HENRY HAMMOND.

Witnesses:

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