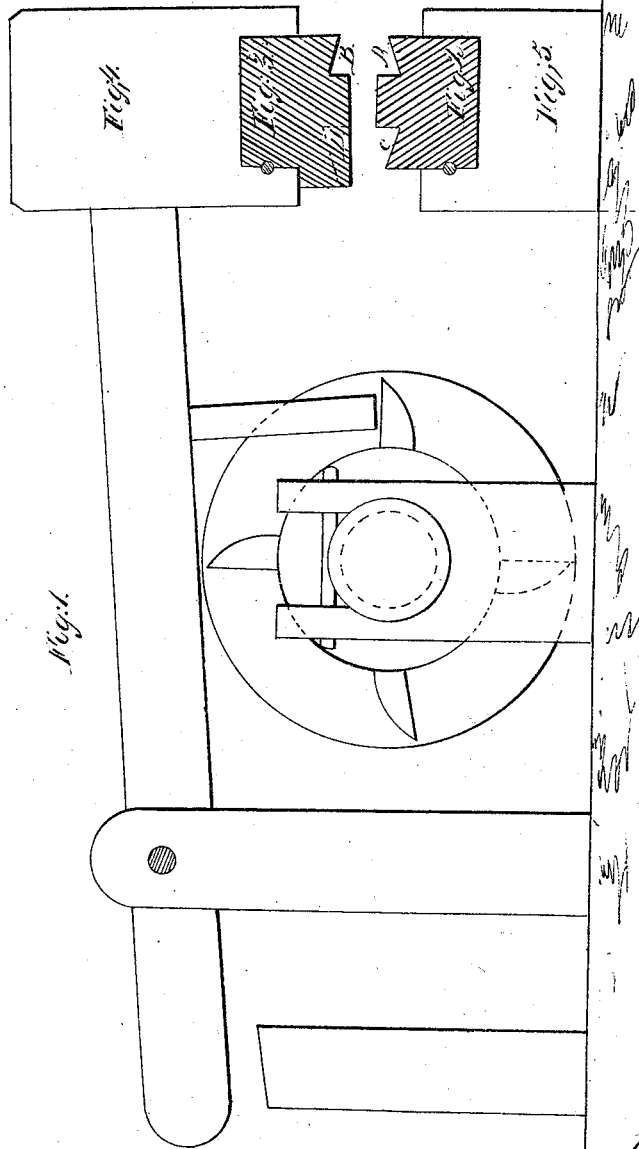
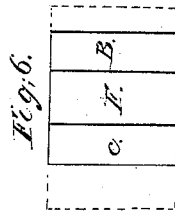
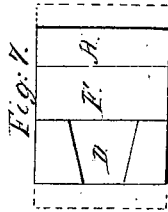
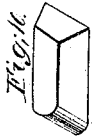
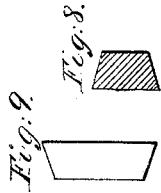


B. Hull.

Forging Hammers' Irons.

Nº 54,356.

Patented May 1, 1866.



*Witnesses,
W. H. Fine
Alfred Hamp*

*Inventor,
Bradley Hull*

UNITED STATES PATENT OFFICE.

BRADLEY HULL, OF WESTPORT, CONNECTICUT.

IMPROVEMENT IN DIES FOR MAKING HATTERS' IRONS.

Specification forming part of Letters Patent No. **54,356**, dated May 1, 1866.

To all whom it may concern:

Be it known that I, BRADLEY HULL, of the town of Westport, county of Fairfield, and State of Connecticut, have invented a new and useful Improvement in the Mode of Manufacturing Wrought-Iron Heaters for Hatters' Irons; and I do hereby declare that the following is a correct description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in the construction and arrangement of two dies to form and shape wrought-iron heaters for the use of hatters' irons.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same.

It is known, by experience, that cast-iron heaters are much inferior to wrought-iron, because they will not retain the heat so long as wrought-iron, and are not so durable.

The labor of making the wrought-iron heaters by hand-work is considerable, and to lessen the labor and increase the facility for shaping the same is the object of this my present improvement.

The drawings accompanying and forming part of this specification are as follows:

Figure 1 represents a side view of the trip-hammer arrangements for operating the dies. Fig. 2 is an end view of the lower die when it is fixed to the anvil for operation. Fig. 3 is the upper die when fixed in the hammer-head for operation; Fig. 4, the hammer-head; Fig. 5, the anvil-block; Fig. 6, a face view of the lower die; Fig. 7, a face view of the upper die; Fig. 8, end view of the long bar after having been beaten in the channels of the dies. Fig. 9 is a view of a heater as it stands vertically between the dies to form both ends; Fig. 10, a view of the heater when completed.

I construct the trip-hammer arrangements, as shown in Fig. 1, with the anvil-block, Fig. 5, and hammer-head, Fig. 4.

The dies, Figs. 2 and 3, are composed of iron and steel, in the usual mechanical manner. The lower die, Fig. 2, is attached to the anvil-block, Fig. 5. The upper die, Fig. 3, is attached to the hammer-head, Fig. 4. These dies have properly-beveled corresponding transverse channels A and B, to receive the bar of iron to be operated on by the action and force of the trip-hammer arrangements of Fig. 1. The bar, being properly heated, is passed along between the beveled channels A and B while being beaten, by the action of the hammer, which produces the required beveled sides to the same, as shown in Fig. 8. When the bar has passed through its whole length I cut off a piece the proper length required for one heater and place the same in a vertical position in the back channel, C, of the lower die, Fig. 2, and under the circular-shaped indentation D in the back part of the upper die, Fig. 3. While in this position the two ends are formed, one end a bevel and the other end a round and bevel, as shown in Fig. 9. The middle space of the dies is a plain parallel surface, F F, which hammers the heaters on the upper and lower faces smooth and even to finish them for use. (See Fig. 10.)

What I claim as my invention, and desire to secure by Letters Patent, is—

The pair of dies, Figs. 2 and 3, constructed and arranged in the manner and for the purpose substantially as herein described.

BRADLEY HULL.

Witnesses:

WM. VINE,
ALFRD. H. CAMP.