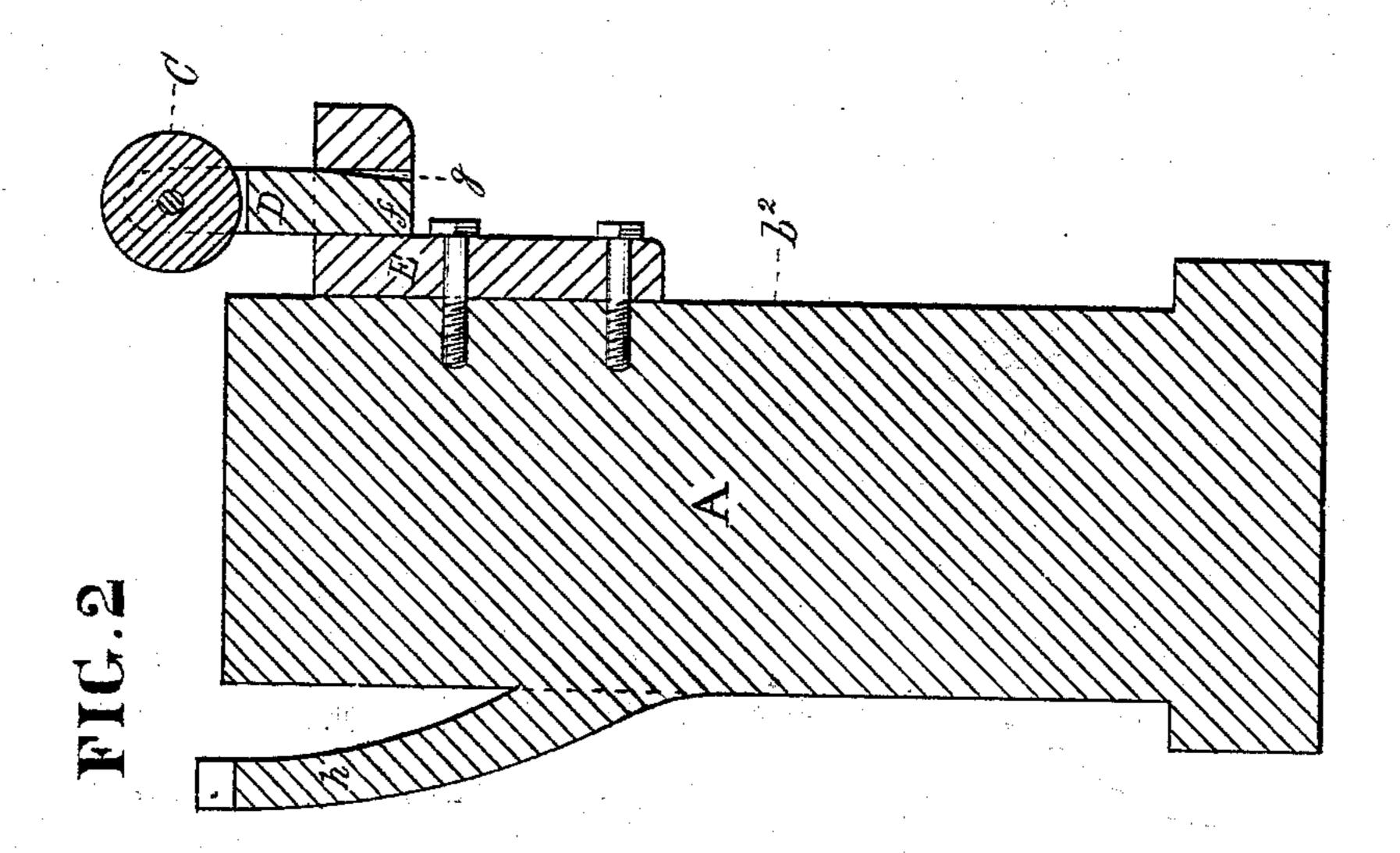
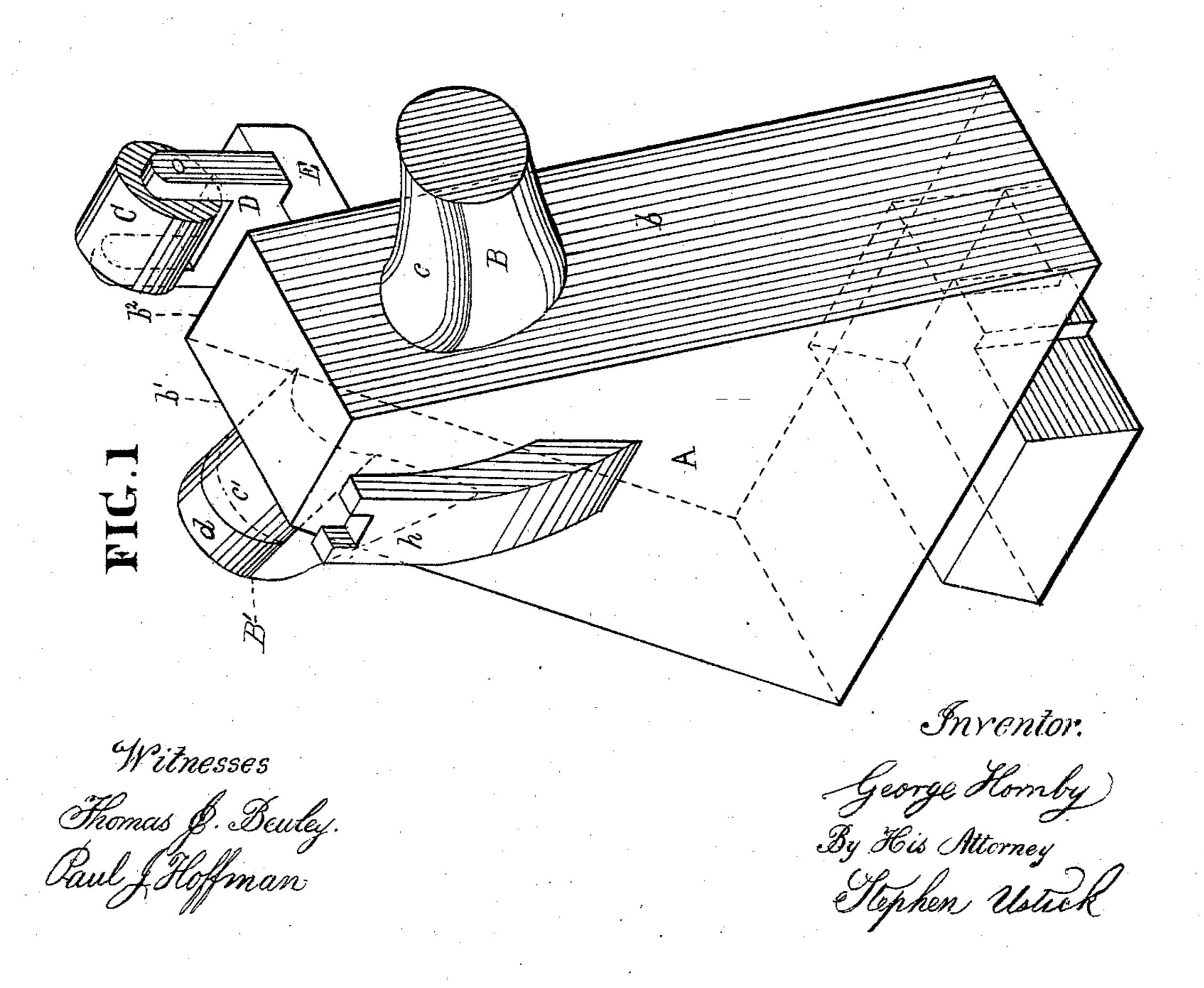
## G. HORNBY. Anvils.

No.151,028.

Patented May 19, 1874.





## UNITED STATES PATENT OFFICE.

GEORGE HORNBY, OF LEWISTOWN, ASSIGNOR OF ONE-HALF HIS RIGHT TO MILTON L. BROSIUS, OF PHILADELPHIA, PENNSYLVANIA.

## IMPROVEMENT IN ANVILS.

Specification forming part of Letters Patent No. 151,028, dated May 19, 1874; application filed January 2, 1874.

To all whom it may concern:

Be it known that I, GEORGE HORNBY, of Lewistown, in the county of Mifflin and State of Pennsylvania, have invented an Improved Combination-Tool for Punching and Becking Tire-Blooms, of which the following is a specification:

Heretofore the punching and becking of blooms have required two heatings. The object of my invention is the accomplishment of both operations with but one heating.

The invention relates, in the first place, to providing the front part of the anvil, near its face, with a fulcrum for a lever, and the rear of the anvil with a roller, which projects above the face of the same, so that, as the periphery of the ingot rests upon the anvil and against the roller, an attendant, by the manipulation of the lever, causes a continuous change in the position of the ingot for the hammering of its periphery, to solidify it before the punching operation. When this process is finished the roller is removed by detaching its standard from the anvil, so as to admit of the ingot being laid on its end for flattening previous to punching. The invention, in the second place, relates to the providing one side of the anvil with a horn having a rabbet for forming a lip on the punched bloom, as hereinafter fully described.

Figure 1 is an isometrical view of the improved anvil A. Fig. 2 is a vertical cross-section at the line x x of Fig. 1.

Like letters of reference in both figures in-

dicate the same parts.

A is the anvil, which is provided with an ordinary horn, B, at angle side b, having its upper edge c concave longitudinally to correspond with the rounded inner periphery to be given to the bloom. In addition to the horn B, there is, at the opposite side b¹ of the anvil, a horn, B', having its upper edge c' straight, or nearly so, longitudinally, and at right an-

gles to the said side  $b^1$ , to form a square inner periphery to the bloom when desired. At the outer end of the horn there is a depression or rabbet, d, for forming a flange to the said in-

ner periphery.

In order to facilitate the continuous turning of the ingot on its periphery for hammering, before it is punched, to solidify the same, there is a roller, C, in the standard D, at the rear side  $b^2$  of the anvil, against which the inner periphery of the ingot bears as it rests upon the anvil. The standard is connected with the arm E of the anvil by means of the tenon f and mortise g, to make it detachable for the purpose of removing it with the roller out of the way, so that the ingot may be laid upon the anvil when it is ready to be flattened.

The arm E may be made detachable, as represented, or cast fast to the anvil, as may be

desired.

The movement of the ingot on its edge is given by means of a lever, which rests on the fulcrum h at the front side of the anvil.

I claim as my invention—

1. The arm  $\check{E}$  on the rear vertical side  $b^2$  of the anvil, for holding the detachable roller-standard D, substantially in the manner and for the purpose above described.

2. The combination of the fulcrum h with the anvil A and roller C, substantially as and

for the purpose set forth.

3. The horn B' of the anvil, having a depression or rabbet, d, for forming a flange on the inner periphery of the ingot, substantially as described.

4. The anvil for punching and becking tire ingots and blooms, having horns B and B', arm E, standard D, roller C, and fulcrum h, substantially as described.

Witnesses: GEORGE HORNBY.

JNO. D. L. BEAR, W. E. FOLTZ.