(No Model.)

J. MACKERT.

ANVIL.

No. 327,566. Patented Oct. 6, 1885.

Fig 1

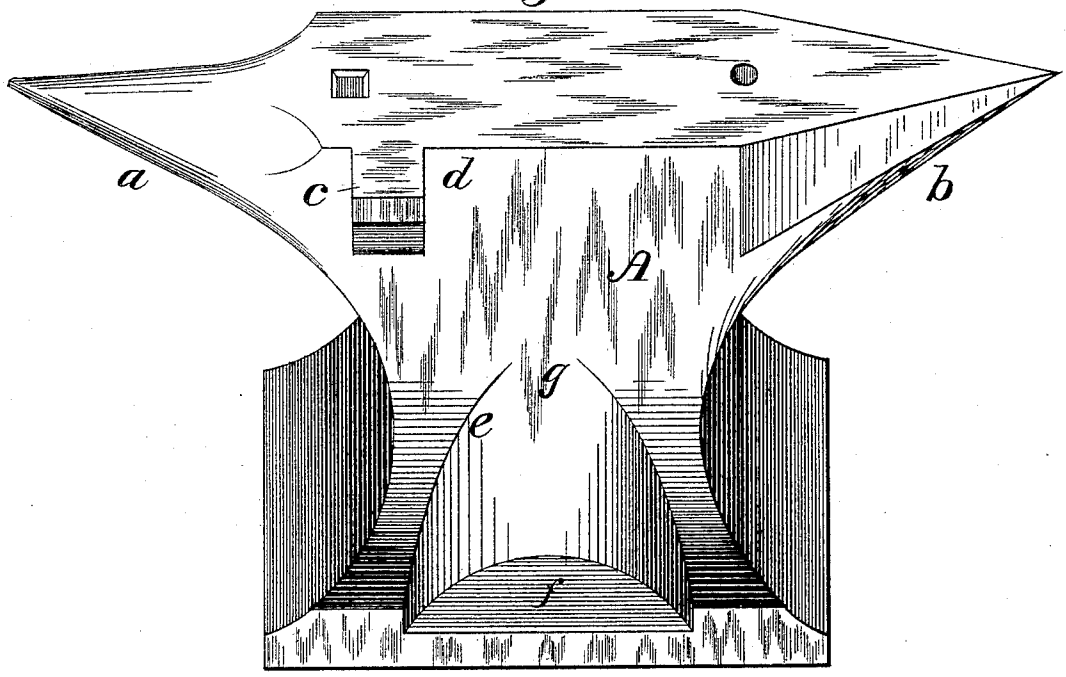
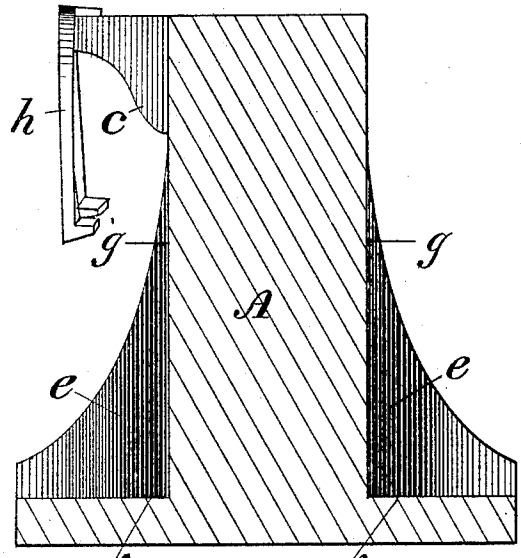


Fig 2



Witnesses

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JOHN MACKERT, OF SPRINGFIELD, OHIO.

ANVIL.

SPECIFICATION forming part of Letters Patent No. 327,566, dated October 6, 1885.

Application filed December 15, 1884. Serial No. 150,358. (No model.)

To all whom it may concern:

Be it known that I, JOHN MACKERT, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Blacksmiths' Anvils; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in anvils.

My invention relates to that class of anvils in use by blacksmiths for various kinds of forging; and it consists in an improved anvil constructed with a round taper horn at one end, and a square taper horn at the opposite end, and on either side of the body, about midway of the latter, is formed a staving or upsetting plate. At the top of the anvil, near the round horn, a substantially square part projects from one side. This part is in one piece with the anvil, and forms an integral part of the same, with its face in the same plane with that of the body.

The object of my improvement is to facilitate the forming of special work, notably that of horseshoes, the calks of which are more easily and quickly shaped thereon, as the extended part allows of the manipulation of the shoe with the tongs more readily than it can be done on the ordinary anvil.

Figure 1 is a perspective view of my improved anvil. Fig. 2 is a cross-section through the middle of the same, the view showing the left section. In this view a horseshoe is seen in the position for forming up the toe-calk after being welded on.

A is the anvil, which has a round horn, *a*, on the left end, and a square horn, *b*, on the opposite end, both of which are of about equal taper. The square vertical hole for the "hardy" is about the middle longitudinal line of the face near the base of the round horn, and a round vertical hole near the base of the square horn in the same longitudinal line.

Projecting from the near side of the anvil, (toward the operator,) close to the base of the round horn, is a square bracket-shaped piece, *c*. The face of the body and of the part *c* are in the same horizontal plane, that of the latter being really an extension of the former. The piece *c* is of considerable depth where it joins the side *d* of the body part, and is inclined from thence to its end, leaving the latter about an inch in thickness. The sides of the part *c* are at right angles with the side *d* of the body part, to allow of forming true right angles to special pieces, such as bolster-straps, stirrup-irons, and other irons for wagon-work.

The cavities *e* upon either side of the anvil have vertical walls and a horizontal bottom, the former being semicircular. A cavity is made upon each side to allow the helper (on the outside) to stave up a bar, as well as the smith, in doing rapid work. By thus forming a staver-cavity upon both sides the anvil is also more evenly balanced. The bottom *f* is used in staving or upsetting. In staving up a bar the vertical side *g* of the body, at the middle of the latter, forms a guide-line for the end of the bar, which in staving up is always liable to bend, and by turning the bar during the process of staving or upsetting it the side *g* will prevent it from bending out of line.

By reference to Fig. 2 it will be noticed that the part *c* projects far enough from the body to allow the smith to hold the shoe *h* readily in the tongs with the latter in line with the body of the anvil while forming up the toe of the shoe on this projecting part. To perform this work upon the ordinary anvil, the shoe must be grasped by the tongs at right angles thereto, thus requiring a clamp-link on the handles of the tongs to hold it, or a powerful grip of the hand. It is, moreover, liable to slip from the tongs in manipulating it. The projecting part allows of forming up many special pieces for which additional forming-tools are now used with the ordinary anvil; but with my improved anvil these forming-tools can, many of them, be dispensed with. The part *c* may be formed on the opposite side of the anvil, or it may be near the base of the square horn, in which latter position it would be adapted to a left-handed smith. I prefer to have the projected part on the side next the operator, as it is out of the way of the helper, who might strike it with the sledge

in forging; besides this, it is out of the way of plowshares, which are always sharpened on the outer edge of the anvil-face, as are also other kinds of tools and implements. The projection may for some kinds of special work have its end rounded or with the angles cut off. I therefore do not confine myself to a square-ended bracket part, but to a projecting part overhanging the base at right angles to the body of the anvil and having its face in the same plane with the face of the latter.

I claim as my invention—

1. An anvil having an extension of the face at right angles with the body part formed by a bracket-shaped piece overhanging the base and integral with said body part, the face of said bracket-shaped piece being in the same plane with the face of the latter, as and for the purpose set forth.

2. The combination, in an anvil, of the body having a round horn at one end and a square horn at the opposite end, of a part projecting at right angles from the body and having its face in the same plane with the face of the latter, substantially as and for the purpose set forth.

3. In an anvil, a staving or upsetting plate formed on one or both sides of the same with vertical side walls, a part of the latter being in line with the side wall of the body of the anvil, as and for the purpose set forth.

4. In an anvil, the combination of one or more stave-plates formed in the side or sides of the same and a bracket-shaped piece extending from the top part at right angles with the face of said extended part in the same plane with the face of the body part and formed in a single piece with the latter, as and for the purpose hereinbefore set forth.

5. In a smith's anvil, a round horn at one end, a square horn at the opposite end, a stave-plate formed in either side of the same with its face parallel with the base, a bracket-shaped part projecting at right angles from the body with its face in the same plane with the anvil-face, and the latter having a round hole at one end and a square hole at the other, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN MACKERT.

Witnesses:
B. C. CONVERSE,
PETER O. KELLEY.