

J. E. CAMPBELL.
ANVIL.
APPLICATION FILED SEPT. 9, 1912.

1,065,918.

Patented July 1, 1913.

Fig. 1.

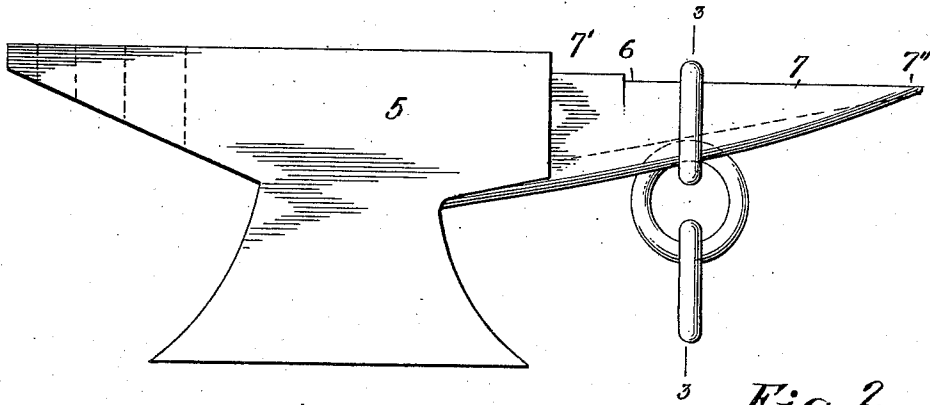


Fig. 2.

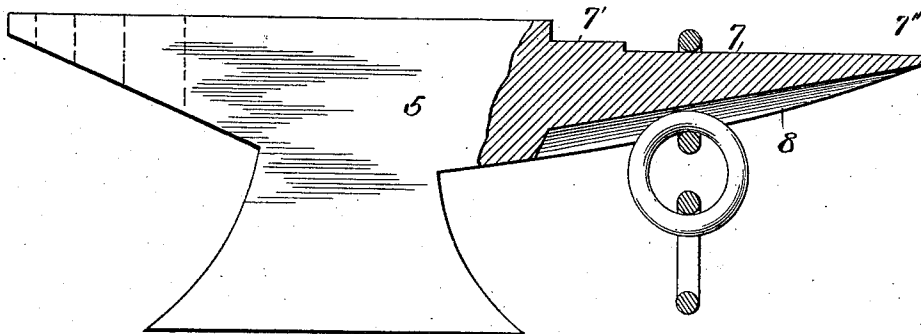


Fig. 3.

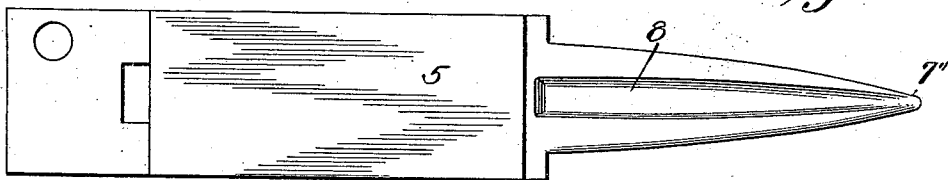
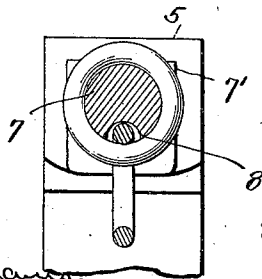


Fig. 4.



Witnesses
John H. Ballin
Myron H. Adams

Inventor
Joseph E. Campbell

By *E. J. Harkness*

Attorney

UNITED STATES PATENT OFFICE.

JOSEPH E. CAMPBELL, OF UPPERVILLE, VIRGINIA, ASSIGNOR OF ONE-HALF TO A. L. WADDELL, OF RECTORTOWN, VIRGINIA.

ANVIL.

1,065,918.

Specification of Letters Patent.

Patented July 1, 1913.

Application filed September 9, 1912. Serial No. 719,321.

To all whom it may concern:

Be it known that I, JOSEPH E. CAMPBELL, citizen of the United States, residing at Upperville, in the county of Fauquier and State of Virginia, have invented certain new and useful Improvements in Anvils, of which the following is a specification.

This invention relates to improvement in anvils and its leading object is to provide an improved anvil for welding broken chain links.

It is the common practice at present to place a chain link to be welded upon the nose or horn of the anvil, and to subject the end portions of the chain link to the necessary heat and welding operation. Anvils are now constructed with noses or horns which project from one end thereof, and which may be formed integral with the anvil or detachable therefrom. The upper surface of the nose or horn extends in a horizontal plane and the lower surface thereof inclines downwardly and inwardly toward the body of the anvil from the tip of the horn or nose. In cross section the nose or horn is usually circular, increasing in diameter from the tip to the attached end thereof. When a chain link is placed on an anvil nose of this construction the end portion of the interfitting chain link engages the nose so as to prevent the link to be welded from closely fitting around the nose, and thus having a good bearing contact therewith. Unless there is a close bearing contact of the chain link embracing the anvil nose it is difficult to manipulate the link so that the necessary welding operation can be properly and quickly done.

The object of my invention is to overcome this difficulty. This is accomplished by providing an anvil with a longitudinal pocket or groove on its underside to receive the end portion of the interfitting link, so that the link to be welded will closely embrace the anvil nose and have a good bearing contact therewith, and easily movable thereon.

With the above and other objects in view the invention comprises certain combinations, constructions and arrangements of parts, clearly described in the following

specification and clearly illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation of the improved anvil, showing a chain having a broken link positioned on the nose thereof to be welded. Fig. 2 is a side elevation showing the nose in longitudinal section. Fig. 3 is a bottom plan view showing the longitudinal pocket or groove in the anvil nose. Fig. 4 is a cross section taken on line 3—3 of Fig. 1, showing the depth of the longitudinal pocket or groove.

Referring to the accompanying drawings illustrating the preferred embodiment of the invention 5 denotes the body of the anvil, which is formed with the usual face 6, and which is provided with the nose or horn 7, which may be formed integral with the anvil or detachably secured thereto. The inner portion of the nose or horn 7 is formed with squared corners 7', which are adapted to form bearing surfaces for square chain links to be welded. The portion between the corners 7' is flat and forms a satisfactory bearing surface. Outwardly of the flat portion between the squared corners 7' the surface of the nose is rounded, in accordance with the usual custom, and tapers to a point 7'', while the underside of the nose inclines downwardly and inwardly.

In order to prevent an interfitting link from holding the link embracing the nose from fitting snugly on said nose, a longitudinal pocket or groove 8 is formed in the underside of the nose, which deepens inwardly from the point 7'' to the body 5, and may be of less length.

When it is desired to weld a broken link, the link is positioned on the nose, with the inner or interfitting portion or end of the adjacent chain link disposed in the pocket or groove 8. In this way the broken link has a close bearing contact with the surface of the nose, and can be turned with ease, and properly hammered. The longitudinal pocket or groove 8 may be semi-circular, as shown, squared, or of any other shape.

If desired a series of detachable noses or horns may be provided for each anvil, each nose or horn being formed with a different shaped pocket or groove. Or a strip may

be formed with a pocket or groove therein, which is adapted to be detachably secured to the anvil.

It is obvious that the improved anvil can
5 be used for mending or welding any kind of rings, whether they form links in chains or not.

Having thus described my invention I claim:—

10 1. A blacksmith's anvil provided with a longitudinal groove extending in the direction of the length of the horn of the anvil.

2. A blacksmith's anvil provided with a longitudinal groove extending in the direction of the length of the horn, said groove

being gradually deepened inwardly from the point of the horn.

3. A blacksmith's anvil provided with a longitudinal cut-away portion on its underside, designed to receive interfitting links 20 and to permit free movement of link to be welded, said cut-away portion extending in the direction of the length of the horn of the anvil.

In testimony whereof I affix my signature 25 in presence of two witnesses.

JOSEPH E. CAMPBELL.

Witnesses:

E. J. CLARKSON,

J. A. JOHNSTON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."