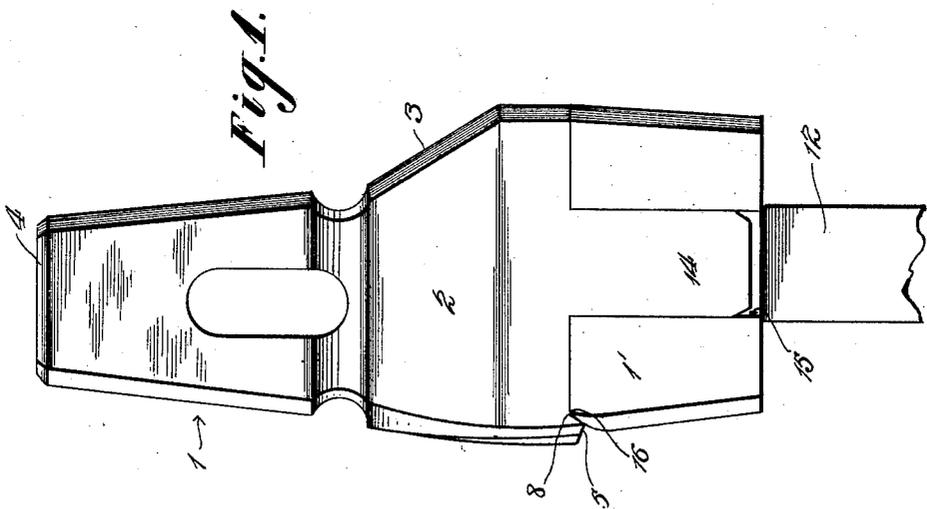
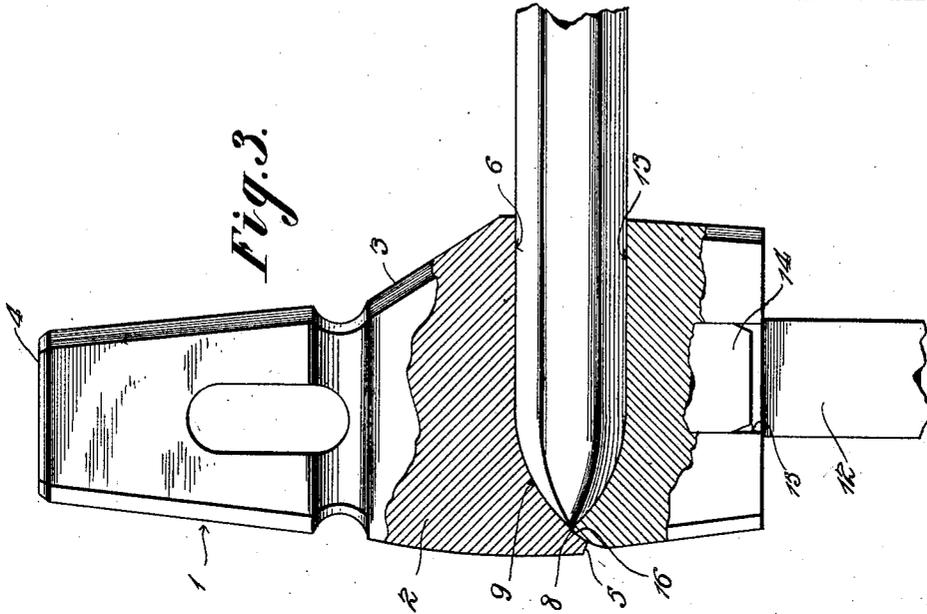


R. JAMIESON.
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 APPLICATION FILED JUNE 2, 1910.

1,003,048.

Patented Sept. 12, 1911.

2 SHEETS—SHEET 1.



Witnesses
C. C. Chandler.
Harry M. Test.

Inventor
Robert Jamieson.

By *Howard & Chandler.*
 Attorneys

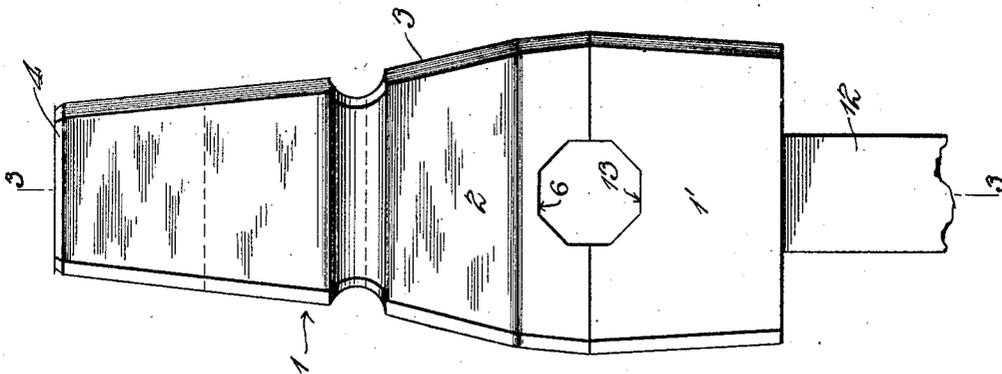
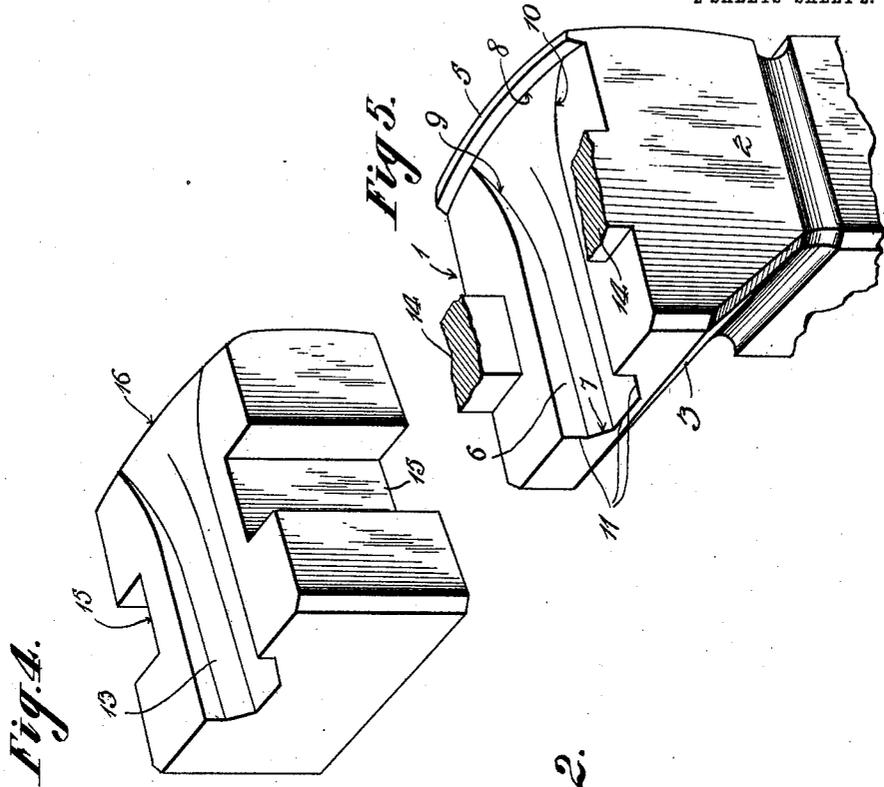
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Robert Jamieson.

Witnesses
C. C. Chandler.
Harry M. Test.

By *Woodward & Chandler.*
 Attorneys

UNITED STATES PATENT OFFICE.

ROBERT JAMIESON, OF ANACONDA, MONTANA.

DRILL-SWAGE.

1,003,048.

Specification of Letters Patent. Patented Sept. 12, 1911.

Application filed June 2, 1910. Serial No. 564,596.

To all whom it may concern:

Be it known that I, ROBERT JAMIESON, a citizen of the United States, residing at Anaconda, in the county of Deerlodge and State of Montana, have invented certain new and useful Improvements in Drill-Swages, of which the following is a specification.

This invention relates to improvements in swages, and more particularly to swages used to sharpen rock drills.

One object of the invention is to provide a swage, which will sharpen the cutting bit of a drill with more efficiency and less labor than at present.

Another object is to provide a swage having a hammer and anvil parts formed with registering recesses adapted to receive and hold the drill from turning.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts, as will hereinafter be more fully described and pointed out in the claim, but it will be understood that changes in the specific structure, may be made within the scope of the claim, without departing from the spirit of the invention.

In the drawings, Figure 1 is a side elevation of the swage, Fig. 2 is a rear elevation, Fig. 3 is a view similar to Fig. 1, partly broken away. Fig. 4 is a perspective view of the lower or anvil member, and Fig. 5 is a perspective view of the upper or hammer member.

Referring to the drawings it will be seen that the invention consists of the upper or hammer member and the lower or anvil member.

The upper or hammer member 1 is formed of very highly tempered steel, and comprises a body portion 2, of rectangular shape in cross section and slightly tapered upwardly as at 3, and terminates in a striking lug 4, which is adapted to be struck with a hammer. One of the lower edges of the body of the hammer body 2 is formed with a downwardly projecting cutting lip 5, extending clear across said edge. A socket or recess 6, for the reception of the drill bit shank is formed in the central portion of the lower face of the body 2, and extends from the edge 7 opposite the cutting lip to a point 8, adjacent the said lip, where it inclines downwardly at 9, and at the same time flares outwardly at 10. The portion 6 of the

recess is formed with a plurality of side walls 11 to engage the like number of sides on the shank of the drill bit, the inclined and flared portion being adapted to receive the widened portion of said bit. The lug 4 is formed integrally with the body 2, and extends vertically above it and is tapered, its upper end being adapted to be struck with a sledge hammer.

The lower or anvil member is formed similarly to the hammer member, except that it has the lug 12 formed integrally with its lower portion and depending vertically therefrom and adapted to be inserted in the opening in an anvil usually made for that purpose. A socket or recess 13, identical with that in the hammer member is formed in the upper face thereof, and when said hammer member is positioned on the anvil member 1', the recesses will register and form a polygonal socket for the drill. The upper or hammer member is guided and positioned on to the anvil member by the depending ears 14 on either side thereof and adapted to slide into the grooves 15 in the sides of the anvil member. By means of these lugs and grooves the hammer member is positively guided in its vertical movement and insures the proper register of the cutting lip 5 against the drill end. Where the socket 13 in the anvil member inclines upwardly, and at the upper edge of the side adjacent the cutting lip of the upper member is a cutting lip 16, the outer portion of which inclines inwardly, so that when the hammer member is brought down on to the anvil the cutting lip 5 will overlap the cutting lip 16 and produce a shearing action on the end of the drill.

It will be seen from the foregoing that when a drill, which has been previously heated, is placed in the recess of the anvil member, with its cutting edge projecting slightly beyond the cutting lip 16, and the hammer member positioned onto the anvil and given a few blows with a sledge hammer, that the edge of said drill will be given the right taper and bevel. The fact that the lip 5 overlaps the lip 16, it is obvious that the edge of the cutting end of the drill will be sheared off, and the sides made smooth and perfectly finished.

What is claimed is:

A swage comprising a hammer member and an anvil member, said hammer member consisting of a body portion having an

elongated recess formed in its upper face,
 a cutting lip projecting downwardly from
 one edge of the body portion, the bottom
 wall of the recess inclining upwardly from
 5 a point adjacent said lip and terminating
 at said lip, and laterally arranged depend-
 ing guiding ears on the body portion and
 said anvil member consisting of a body
 portion formed with a recess similar and
 10 adapted to register with the recess in the
 hammer member, the bottom wall of said
 recess inclining upwardly and terminating
 in a cutting lip, a striking lug on the ham-
 mer member and a stem adapted to be seat-

ed in an opening in an anvil, said body por- 15
 tion of the anvil member having vertical
 grooves in its side faces to receive the said
 depending ears, the cutting lip of the ham-
 mer member adapted to overlap the cutting
 lip of the anvil member to produce a shear- 20
 ing action therewith.

In testimony whereof I affix my signa-
 ture, in presence of two witnesses.

ROBERT JAMIESON.

Witnesses:

VERNE ERICKSON,
 GEORGE C. CUMMOCK.

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