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H. WARD

2,197,283

WRENCH

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Fig. 1.

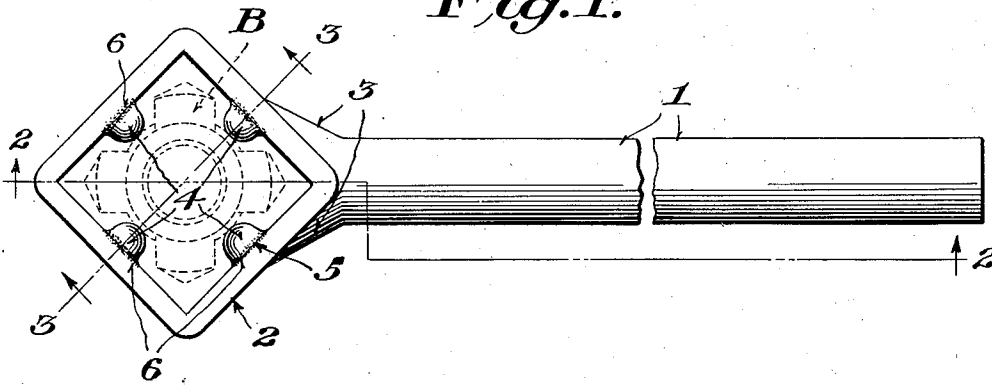


Fig. 2.

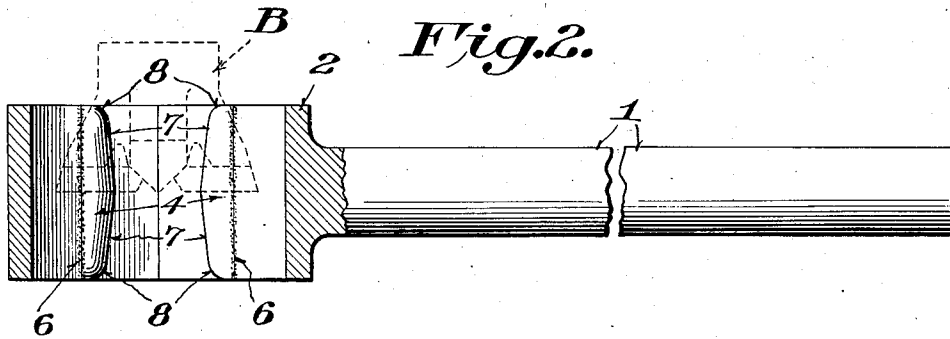
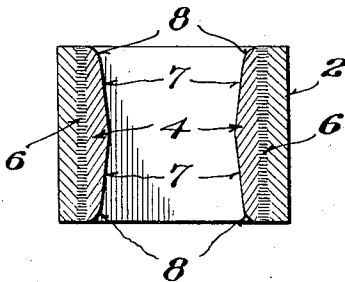


Fig. 3.



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1 Claim. (Cl. 81—121)

This invention relates to wrenches, and more particularly to wrenches for use with jack-hammer bits, although not so restricted.

Jack-hammer bits, employed in drilling vary in size, covering a range of from one and one-eighth inches to two and one-half inches; the primary object of the invention being to provide a wrench especially adapted for use with such bits, regardless of size, and which is also useable on mud bits, having a single cutting edge.

Further, the invention aims to provide a wrench of this type which is reversible, or otherwise stated, is equally applicable from either end thereof, thus facilitating use and eliminating care in application from one end only, with consequent convenience to the user.

Still further, the invention aims to provide a wrench possessed of superior strength, and wherein the jaws contribute to and reinforce the ruggedness of the wrench head.

The invention also aims to provide a simplified wrench structure, and one wherein a more effective engagement thereof with the bit is provided.

The invention has still further and other objects, which will be later set forth, and manifested in the course of the following description.

In the drawing:

Fig. 1 is a top plan view of the invention.

Fig. 2 is a section on line 2—2 of Fig. 1, and Fig. 3 is a section on line 3—3 of Fig. 1.

In proceeding in accordance with the invention, a handle 1 is provided with a head 2, preferably of square or box-like form, open at each end thereof. The handle and head may be formed in a single casting, the handle being connected to the head at one of the corners thereof. The handle is formed with outwardly flaring portions 3, which merge into the sides of the head that form the corner, and function to brace, reinforce and strengthen the connection between the handle and head.

The jaws 4 are preferably formed of steel bars or rods, and have flat faces 5, which are rigidly affixed, for example by welding, as indicated at 6, centrally of the width of the sides 2 of the head.

The jaws have similar oppositely tapering faces 7, which latter are curved or rounded, as depicted in Fig. 1, and also have curved or rounded ends 9 to facilitate their engagement with the bit B, shown in dotted lines as of the jack-hammer type.

The tapering of the faces 7, of the jaws is for the purpose of effecting wedge-like engagement with the parts of the bit B lying between the cutters thereof, as illustrated in Figs. 1 and 2, thus enabling the wrench to be more effectively and conveniently employed, in the instance of where applied to a bit lying above the wrench, as evidenced by Fig. 2.

The jaws, it will be observed, are similar at each end portion thereof, likewise the opposed open ends or faces of the head, thus providing for application of the wrench from either end face thereof.

The tapered portions of the jaws, it will be noted, extend from a point substantially central of the lengths of the jaws outwardly of the head. Obviously, the entire structure could be made in a single casting, and other changes resorted to without departing from the spirit of the invention, as set forth in the appended claim.

What is claimed is:

A wrench for use with jack-hammer bits having cutters of cruciform arrangement, composed of a handle, a four sided box-like head connected to the handle and having similar open ends, and a jaw of bar-like form rigidly secured to the inner face of each of the sides of the head so as to lie in confronting relation to each other, the jaws having similar end portions and having their extremities extending to substantially the open ends of the jaws, whereby to enable the wrench to be applied to the bits from either of said ends of the wrench, and with the jaws received in the spaces between the cutters, the end portions of the outer faces of the jaws being similarly tapered in a direction from substantially the centers of the lengths of the jaws outwardly of the head, the faces of the tapered end portions and the extremities of the jaws being rounded.

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