No. 892,497. PATENTED JULY 7, 1908.

G. T. BARR.

WRENCH.

APPLICATION FILED AUG. 23, 1907.

FIG. 2.

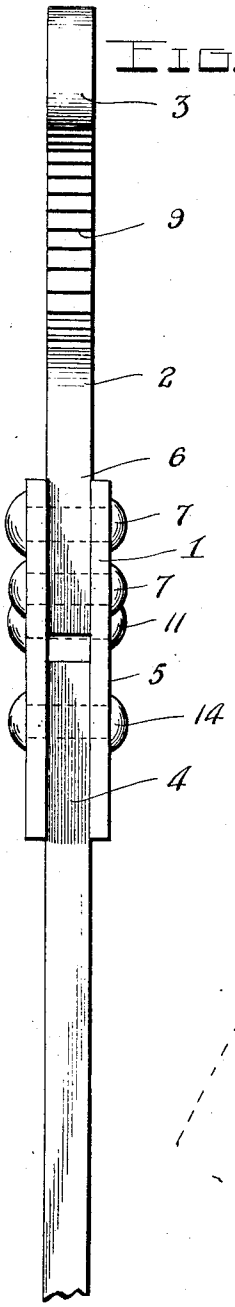



FIG. 1.

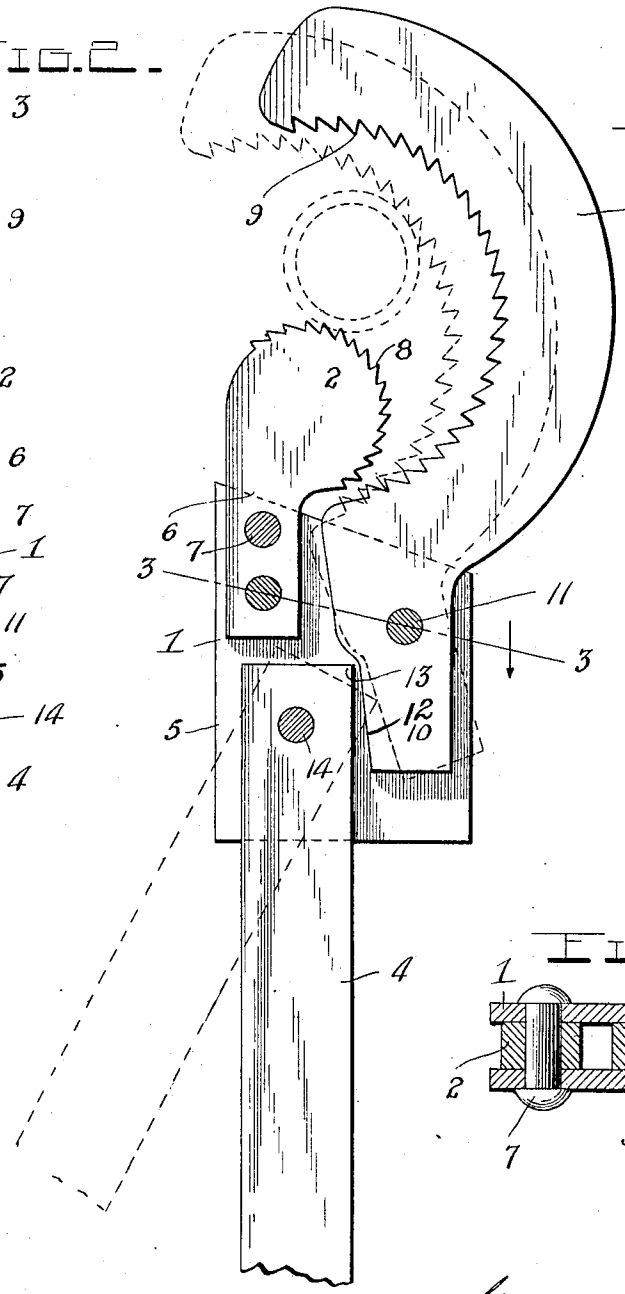
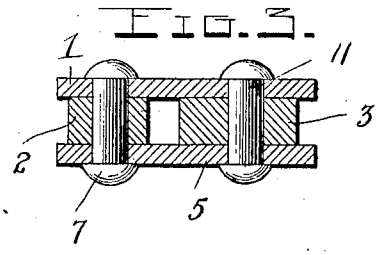



FIG. 3.




Witnesses

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# UNITED STATES PATENT OFFICE

GEORGE T. BARR, OF WACO, TEXAS.

## WRENCH.

No. 892,497. Specification of Letters Patent. Patented July 7, 1908.

Application filed August 23, 1907. Serial No. 389,892.

*To all whom it may concern:*

Be it known that I, GEORGE T. BARR, a citizen of the United States, residing at Waco, in the county of McLennan and State of Texas, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to improvements in nut and pipe wrenches of that class which has an outer pivoted jaw which may readily adjust itself upon objects of various sizes and which will be actuated toward the stationary jaw by the movement of the wrench handle.

The object of the invention is to improve and simplify the construction of wrenches of this character and to thereby render the same more convenient, effective and durable in use and less expensive to manufacture.

With the above and other objects in view, the invention consists in the novel construction and the combination and arrangement of parts hereinafter described and claimed, and illustrated in the accompanying drawings in which

Figure 1 is a side elevation of my improved wrench showing one of the side plates of its body or head removed; Fig. 2 is an edge view of the same; and Fig. 3 is a detail transverse section taken on the plane indicated by line 3—3 in Fig. 1.

In the drawing 1 denotes the body of the wrench which is constructed of two plates 5, and between these plates 5 is secured a shank 6 of a stationary jaw 2 which is secured to the plates by means of rivets 7. The shank of the jaw 2 is provided with a head having an inwardly disposed offset which is provided with teeth 8 arranged therein in semi-circular form. The forward edges of the two plates 5 are made inclined throughout their entire widths. This permits the shank of a movable jaw 3 to be pivoted between the two plates so that the lowermost teeth of the pivoted jaw will be opposite the lowermost teeth of the stationary jaw, and by this means I am enabled to utilize the teeth of both jaws along their entire lengths so that the wrench may be applied to a pipe or rod of the ordinary construction, or said teeth can be used for removing large or small nuts from bolts or the like. The teeth 9 of the jaw 3 are arranged on the concaved edge of said jaw and extend continuously from end to end thereof. The head of the stationary jaw 2 extends within the movable jaw 3 and is inclosed thereby and by this arrangement the entire teeth of the movable jaw serve to coöperate with the entire teeth of the stationary jaw 2. The rear portion of the shank of the pivoted jaw 3 is reduced and provided with an inclined inner edge 12. This permits of a handle lever 4 which is pivoted between the plates and provided with a straight upper end edge, one corner of which serves to contact with said inclined edge of said shank to permit the teeth of the pivoted jaw to be operated towards the teeth of the stationary jaw.

I wish it to be understood that by the arrangement above described that the teeth of the wrench are enabled to be utilized along the entire lengths of both jaws.

Having thus described my invention, what I claim is:

A wrench comprising a body with a plurality of spaced apart plates said plates having continuous inclined forward edges, a movable jaw having a shank pivoted between the plates and having a continuous toothed concaved inner edge, said shank being provided with a reduced rear end with an inclined inner edge, a stationary jaw having a shank secured between the plates and provided with a forwardly extended head having a semi-circular inwardly disposed toothed offset, said offset being inclosed wholly within the toothed portion of the movable jaw and serving to coöperate with all of the teeth of the movable jaw, a lever pivoted between the plates having a straight forward edge, one corner of which serves to contact with said inclined edge of the reduced portion of the movable jaw to operate the same, substantially as specified.

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

GEORGE T. BARR.

Witnesses:
L. OCKANDER,
P. F. MADDUX.