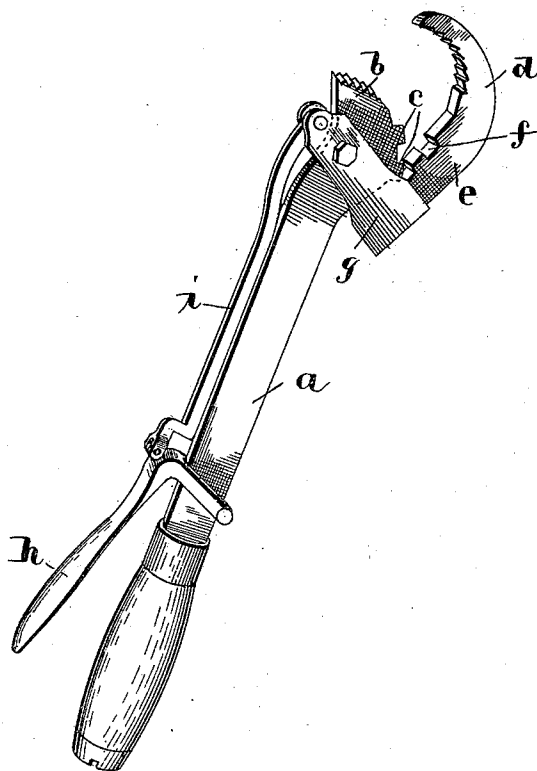


(No Model.)

J. D. WILSON.
WRENCH.

No. 555,797.

Patented Mar. 3, 1896.



Witnesses:

Geo. E. Truch.
James W. Curran

Inventor.

J. D. Wilson:
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UNITED STATES PATENT OFFICE.

JAMES D. WILSON, OF SAN DIEGO, CALIFORNIA.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 555,797, dated March 3, 1896.

Application filed May 24, 1895. Serial No. 550,572. (No model.)

To all whom it may concern:

Be it known that I, JAMES D. WILSON, a citizen of the United States of America, residing at San Diego, in the county of San Diego and State of California, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had therein to the accompanying drawing.

10 This invention relates to certain improvements in wrenches.

The object of the invention is to provide an improved wrench having a swinging spanner and rigid jaw, and so arranged and constructed with a hand operating device that one hand can be employed to tightly grip the spanner on the pipe or other object and to throw or move the wrench.

15 The invention consists in certain novel features of construction and in combinations and arrangements of parts more fully and particularly described, and pointed out hereinafter.

The accompanying drawing shows the improved wrench in perspective.

25 On the drawing, *a* is the wrench-bar having a suitable handle end and at its opposite end provided with the curved toothed rigid jaw *b*, and with the enlargement in rear of said jaw provided with cogs or gear-teeth *c*.

30 *d* is the movable jaw or spanner having the curved toothed portion extending over the rigid jaw and the straight shank *e* provided with gear-teeth *f* at its inner edge meshing with the teeth *c* of the wrench-bar, arranged in a segment.

35 *g* is a yoke which embraces the rear end of said shank and extending across both sides of the wrench-bar beyond the front edge thereof. This yoke is pivoted to the sides of the wrench-bar so that as the rear end of the yoke swings up and down the movable jaw will move toward and from the rigid jaw and

its shank will rock on the said rear edge enlargement of the wrench-bar as the gear-teeth or projections *c f* intermesh and separate.

45 *h* is a hand-clip extending beside and normally a distance from the handle end of the wrench-bar, with its angular end pivoted to the wrench-bar. The elbow of the clip is connected pivotally with the front end of the yoke by the connecting-rod *i*. It will thus be seen that the operator, grasping the handle and drawing the hand-clip in toward the handle, swings the movable jaw toward the rigid jaw to grasp the pipe or other body, while all the heavy and direct strain between the two jaws is taken up by the intermeshing gear-teeth or projections and not transmitted to the hand-clip which merely brings the jaws to grasp the pipe so that one hand can be used to grasp the pipe and to swing the wrench.

60 The many and material advantages of my invention are obvious, and it is evident that I do not limit myself to the construction here shown and set forth, but consider myself entitled to all such changes as fall within the spirit and scope of my invention.

What I claim is—

A wrench comprising a wrench-bar having a rigid jaw and gear-teeth or projections at one end, a swinging movable jaw having its shank provided with corresponding intermeshing teeth, a yoke secured to the movable jaw and pivoted to the bar, an elbow hand-lever pivoted to the handle end of the bar, and a connecting-link from said elbow-lever to said yoke.

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

JAMES D. WILSON.

Witnesses:

W. F. BROWN,
N. J. RICE.