

No. 862,469.

PATENTED AUG. 6, 1907.

W. GODFREY.

WRENCH.

APPLICATION FILED AUG. 2, 1906.

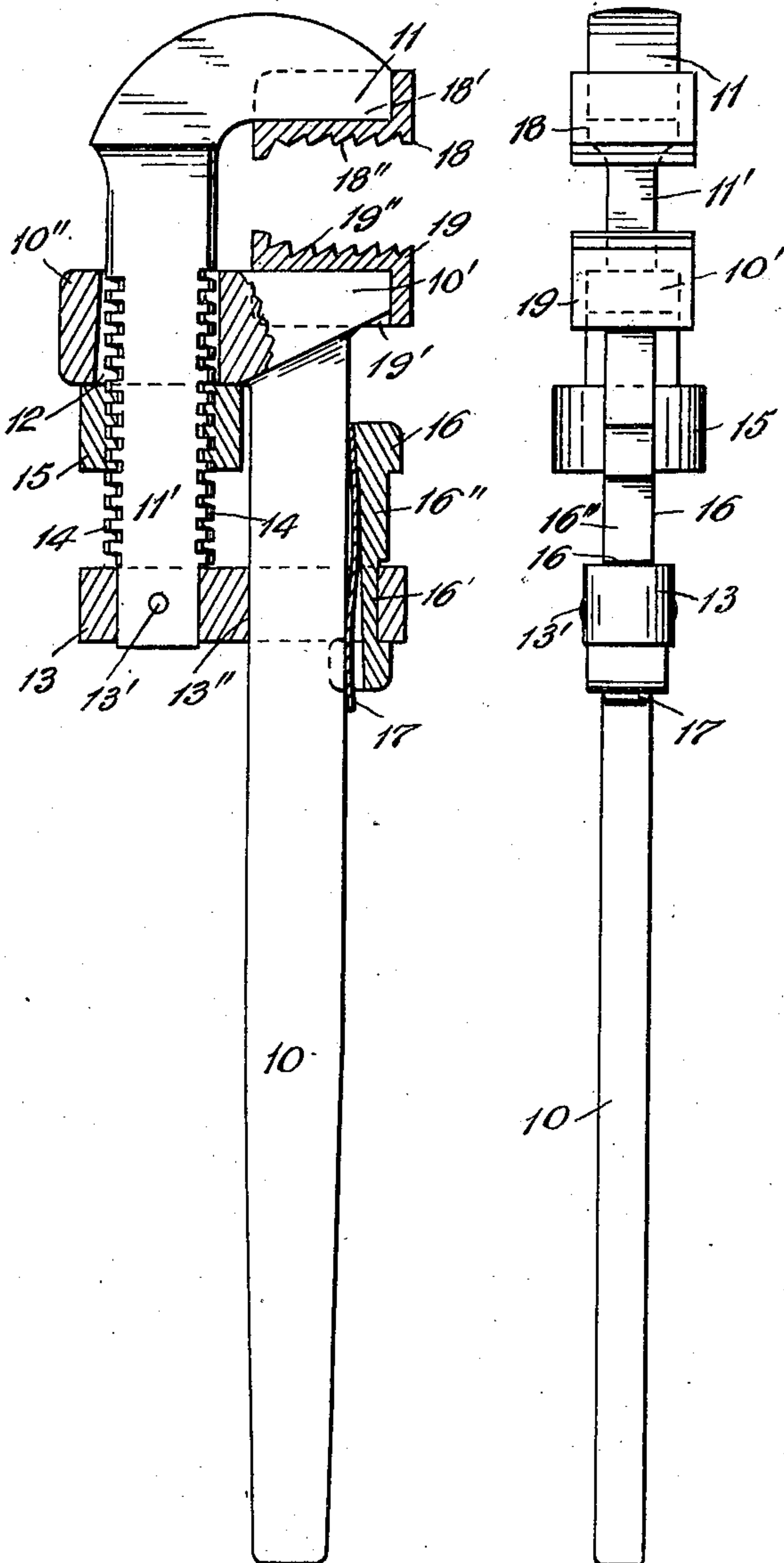


FIG. 2. FIG. 1

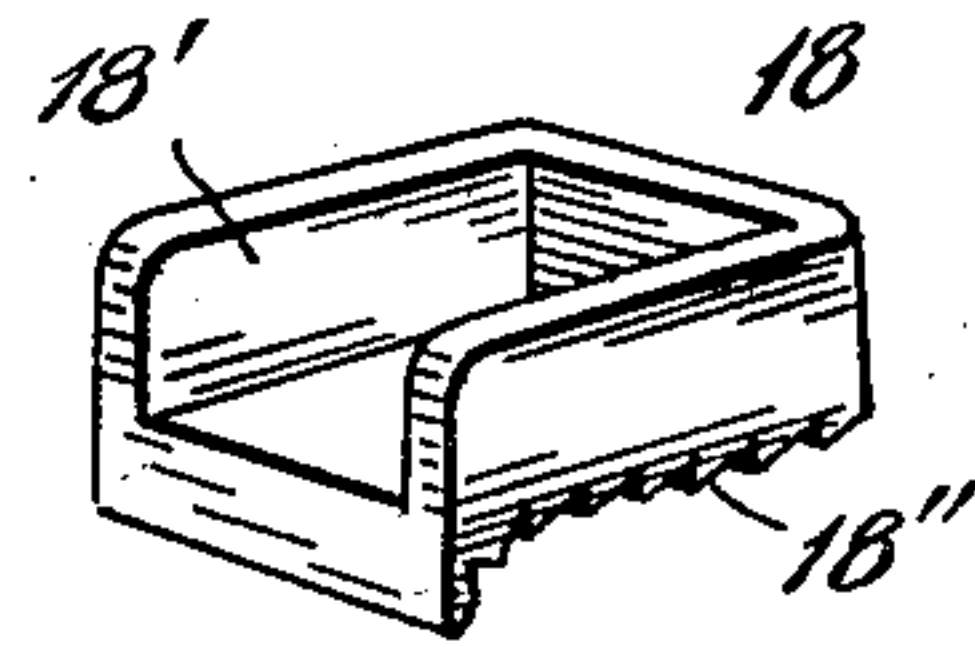


FIG. 5.

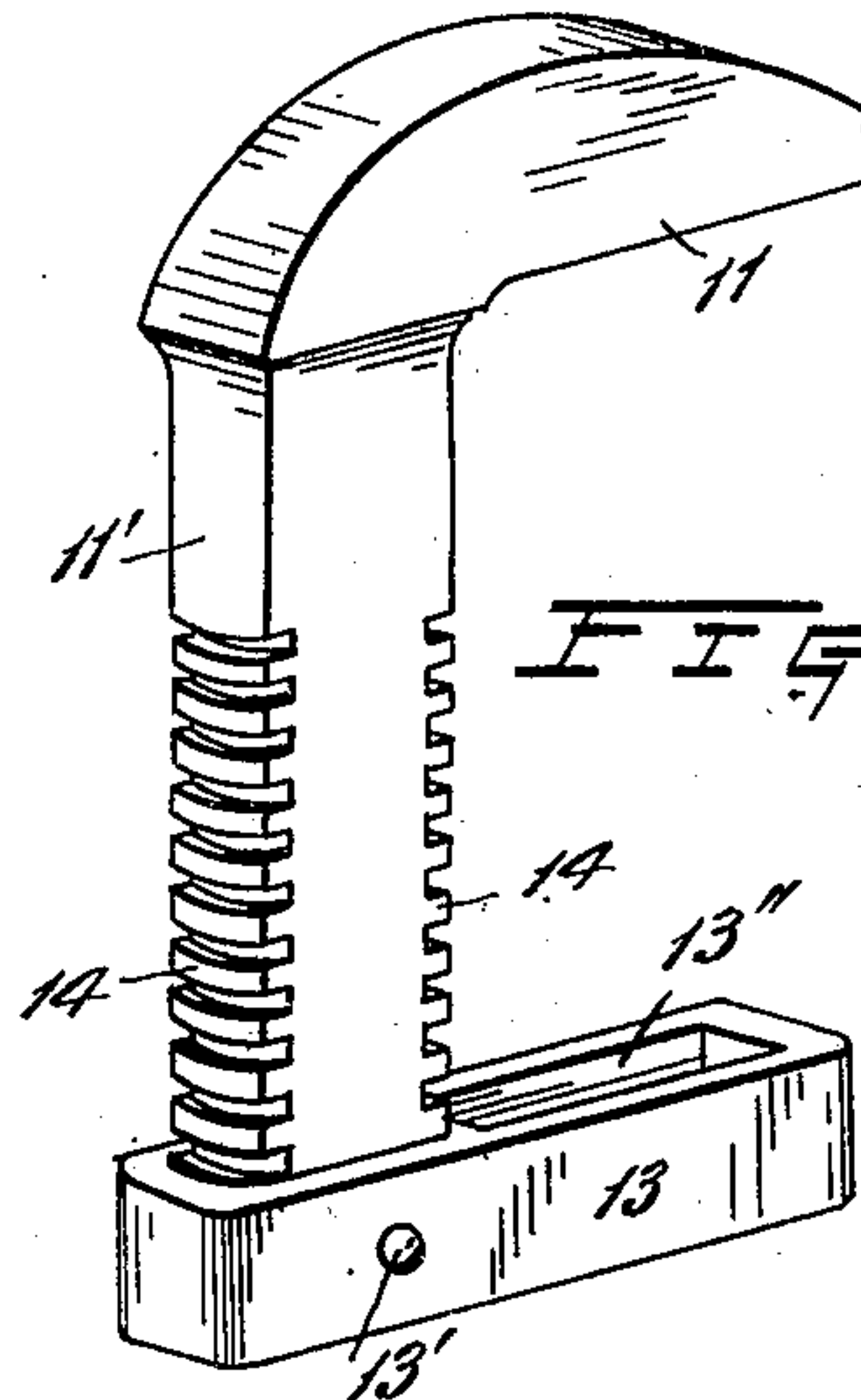


FIG. 3.

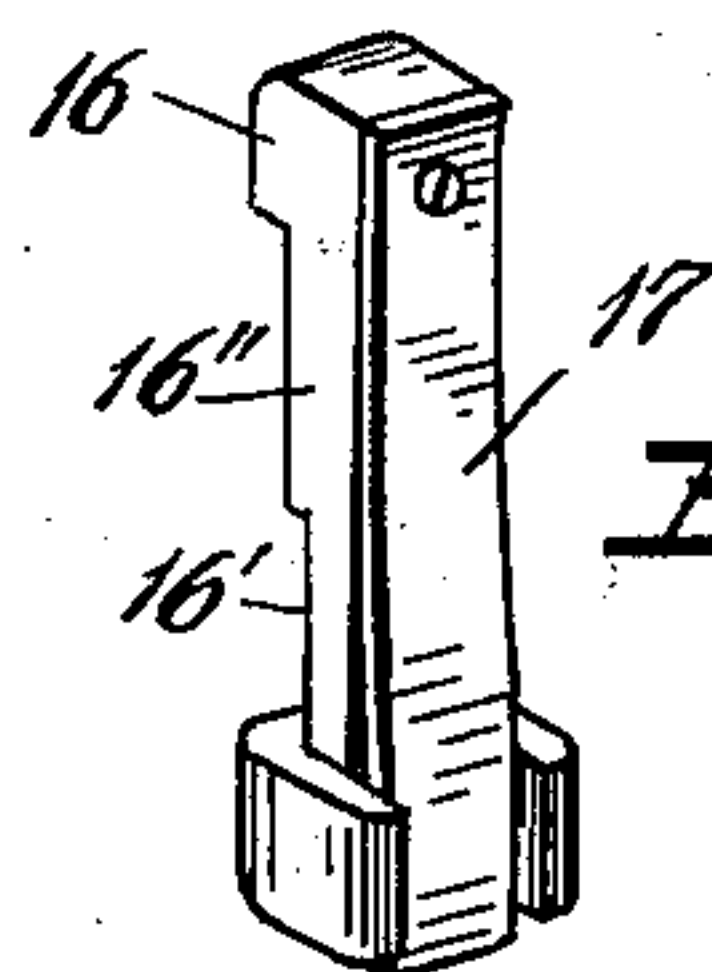


FIG. 4.

Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM GODFREY, OF SEATTLE, WASHINGTON.

WRENCH.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM GODFREY, a citizen of the United States of America, residing at Seattle, in the county of King and State of Washington, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates particularly to wrenches having an adjustable outer jaw; and its object is to provide an implement of this class which will be simple, strong, and easy of adjustment, and which will reliably engage the nut or pipe being operated upon. I attain this object by the novel construction and adaptation of parts which are hereinafter described and illustrated in the said drawings, in which—

Figure 1 is a front elevation of an implement embodying my invention; Fig. 2, a side elevation of the same; and Figs. 3, 4, and 5, perspective views of parts of the invention, shown detached.

In the drawings, the reference numeral 10 designates the stock or handle part of a wrench having at its outer end a jaw 10' which may be either serrated, when intended for use as a pipe-wrench directly, or made with a plane face as shown, when it is to be employed in its other function. Said jaw is desirably of greater width than the stock to afford an increased bearing surface for the work and is protruded to the rear, as at 10'' in Fig. 2. The other jaw 11 may also be formed with a plane or serrated face and is provided with a shank 11' which extends through an aperture 12 of the said protruding part of the stock. A yoke 13 is slidably mounted upon the stock 10 and is fixedly connected to the end of the jaw-shank 11' by a pin 13', or its equivalent, so that both of these parts will move as a single piece.

The shank 11' is desirably made of an approximately oblong shape in cross-section and has the two narrower opposite faces cut or formed with segmental screw threads 14 which register with the female threads of a nut 15 interposed between said yoke and the stock part 10''. The aperture 13'' through which the stock 10 extends is made somewhat larger than the latter for the inclusion of a retaining block 16. This block, intermediate of its length, is formed with two steps or portions of unequal thickness, as 16' and 16'', and has secured to its inner side a spring 17 adapted to yieldingly hold the stock 10 against the inner end of the yoke-aperture 13''.

18 and 19 are removable jaw-plates, which are respectively recessed, as at 18' and 19', to receive the aforesaid jaws of the wrench and are intended to furnish renewable wearing surfaces therefor and, more particularly, to furnish means to vary the face presented to the work, that is to say, where the jaws 10' and 11 are formed with plane gripping faces, as illus-

trated in the drawings, the jaw plates would be serrated as at 18'' and 19'', or vice versa, thus adapting the implement to be used most advantageously either as a pipe-wrench or for nut turning.

The manner of adjusting the wrench is to retract the nut 15 from contact with the stock part 10'' and then, while rearward pressure is exerted upon the yoke, slide the latter length-wise of the shank toward or away from the nearer of the jaws to cause them to be further separated or brought into closer relation, whereupon the nut 15 is rotated to cause it to bear against the stock part 10'' and lock the jaws in their adjusted position.

When the device is to be utilized as a pipe wrench the block 16 is positioned as shown in Figs. 1 and 2 with the thinner portion 16' thereof within the aperture of the yoke, thus allowing of a limited amount of play between the two jaws which is essential to the successive processes of this character of work; while for nut turning or work presenting plane surfaces and where the jaws are to be desirably maintained in a non-yielding condition, the block is thrust down to bring the thicker portion 16'' thereof within the yoke aperture.

The advantages of the present invention reside principally in its adaptability to a wide scope of operations, the ease and rapidity with which it may be adjusted to present various size openings of the jaws, and its susceptibility to being interchangeably and efficiently used in a double capacity, and which, it is believed, constitute a decided advance in the art.

What I claim is:

1. A wrench comprising, in combination, a stock having a jaw upon its outer end and provided with a rearwardly protruding apertured portion, an outer jaw provided with a shank extending through the aperture of said stock portion, a yoke slidably mounted upon the said stock and secured to said shank, a stepped-block adjustably positioned within an aperture of said yoke, and a spring secured to said block whereby the latter is normally held yieldingly against the end of said yoke aperture.

2. A wrench comprising a stock having a jaw upon its outer end and provided with a rearwardly protruding apertured portion, an outer jaw provided with a screw threaded shank extending through the aperture of said stock portion, a nut on said shank, a yoke slidably mounted upon said stock and secured to said shank, a stepped-block adjustably positioned within an aperture of said yoke, and a spring secured to said block whereby the latter is normally held yieldingly against the end of said yoke aperture.

3. A wrench comprising a stock having a jaw upon its outer end and provided with a rearwardly protruding apertured portion, an outer jaw provided with a shank extending through the aperture of said stock portion, a yoke slidably mounted upon the said stock and secured to said shank, a stepped-block adjustably positioned within an aperture of said yoke, a spring secured to said block whereby the latter is normally held yieldingly against the end of said yoke aperture, and a removable recessed plate for each of said jaws.

4. A wrench comprising, in combination, a stock having
a jaw upon its outer end and provided with a rearwardly
protruding apertured portion, an outer jaw provided with
a screw threaded shank extending through the aperture of
5 said stock portion, a nut on said shank, a yoke slidably
mounted upon said stock and secured to said shank, a
stepped-block adjustably positioned within an aperture of
said yoke, a spring secured to said block whereby the lat-
ter is normally held yieldingly against the end of said yoke

aperture, and a removable recessed plate for each of said 10
jaws.

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

WILLIAM GODFREY.

Witnesses:

PIERRE BARNES,
JAMES J. GODFREY.