

1,368,966.

Patented Feb. 15, 1921.

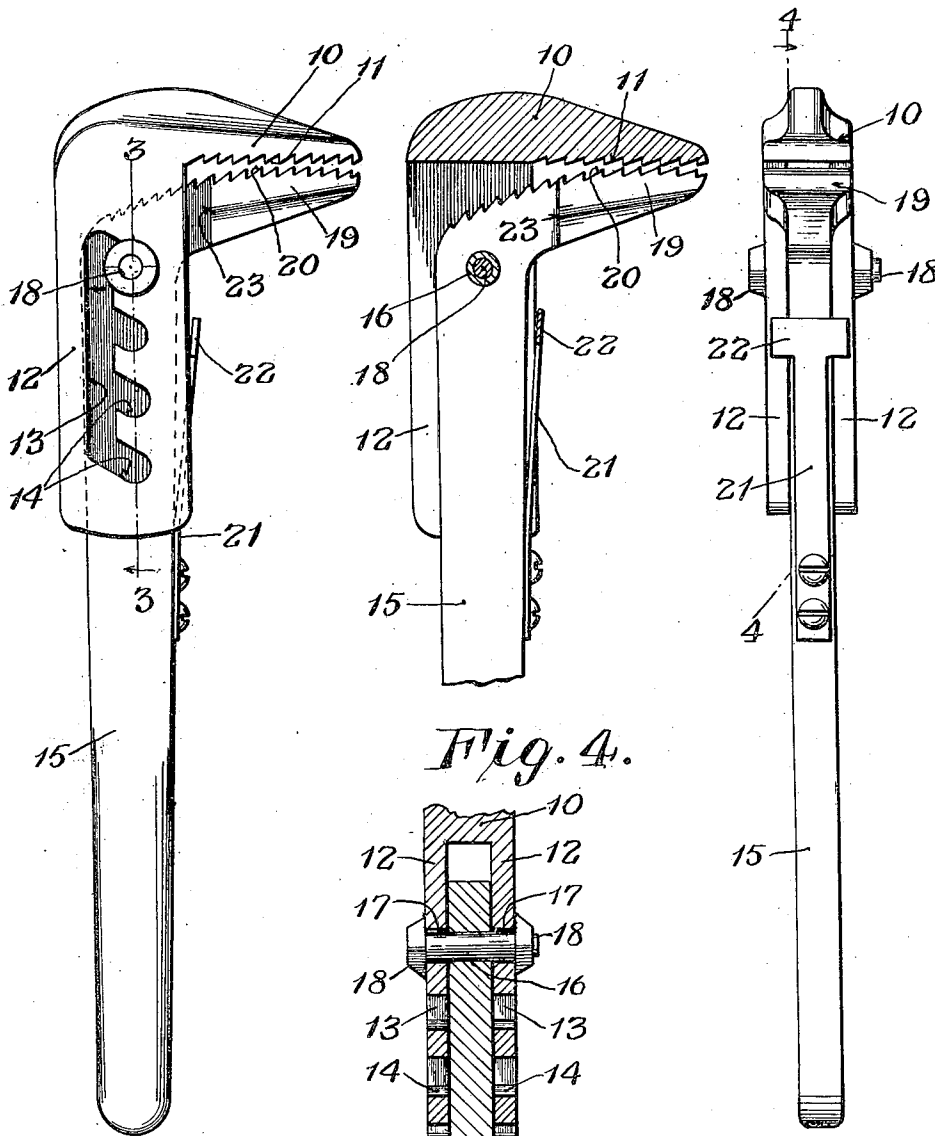


Fig. 1.

Fig. 4.

Fig. 2.

Fig. 3.

Inventor
Welker V. Ooley.

By *Charles G. Gaudin*
Attorneys

UNITED STATES PATENT OFFICE.

WELKER V. OOLEY, OF LINBY, IOWA.

PIPE-WRENCH.

1,368,966.

Specification of Letters Patent. Patented Feb. 15, 1921.

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To all whom it may concern:

Be it known that I, WELKER V. OOLEY, a citizen of the United States, residing at Linby, in the county of Jefferson, State of Iowa, have invented certain new and useful Improvements in Pipe-Wrenches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to new and useful improvements in wrenches and particularly to wrenches for turning round objects, such as pipes, bars, and the like.

One object of the invention is to provide a novel and improved wrench which is effective in its operation and simple in its construction, the same being formed from few and simple parts.

Another object is to provide a novel and improved device of this character of such construction that the adjustment for different sizes of work can be accomplished in a very short time.

Other objects and advantages will be apparent from the following description when taken in connection with the accompanying drawing.

In the drawing:

Figure 1 is a side elevation of a wrench made in accordance with the invention.

Fig. 2 is a front elevation of the same.

Fig. 3 is a transverse sectional view through the wrench, on the line 3—3 of Fig. 1, the line passing longitudinally and centrally through the adjusting pin.

Fig. 4 is a longitudinal sectional view on the line 4—4 of Fig. 2, just inside of one side plate of the stationary jaw member.

Referring particularly to the accompanying drawing, 10 represents the outer or relatively stationary jaw of the wrench which has the teeth 11 on its inner face. Carried by the opposite side of the jaw 10 and extending in parallel relation to each other and at right angles to the toothed face of the jaw are the two side plates 12. In each of the plates 12 there is formed a longitudinal slot 13, in one wall of which are formed the inclined notches or recesses 14. The slot and recesses of one plate aline with the slot and recesses of the other plate, as clearly seen in the drawing.

One end of a handle bar 15 is disposed between the plates 12, and carried trans-

versely through this end of the bar is disposed a pin 16, the opposite ends of which are arranged for movement longitudinally in the slots 13, and to receive interchangeably in the notches or recesses 14. The said ends of the pin 16 have threaded sockets 17 which receive the threaded stems of the screws 18. The heads of the screws 18 bear against the outer faces of the side plates 12, as clearly seen in the drawing, and by removing the screws, the pin may be withdrawn and the bar 15 removed from between the plates.

The end of the bar 15, which is disposed between the plates 12 is turned outwardly to form the movable jaw 19 of the wrench, and has teeth 20 on its face for coöperation with the jaw 10 for gripping a round object such as a pipe, round bar, or like object.

A leaf spring 21 is secured to the front edge face of the bar 15, as seen in Fig. 2, and said spring extends into the space between the side plates 12, the free end of the spring having a transverse head 22 which bears on the outer edge faces of the side plates 12, as shown in Figs. 1 and 2.

The jaw 19 has the side shoulders 23 which bear on the said outer edge faces of the plate 12, as the bar 15 is moved longitudinally in the space between said plates. The pressure exerted by the spring 21 serves to maintain the end portions of the pin 16 within the proper and corresponding notches or recesses of the plates 12, it being necessary to depress the lever toward the back of the wrench to move the pin into the slots 13.

The lever or bar 15 is adapted to rock on the pin 16 to bring the jaw 19 into engagement with one side of the work, while the other side of the work is engaged with the jaw 10.

By depressing the bar 15, against the tension of the spring 21, the pin 16 is moved into the slots 13, and the bar may then be slipped into the position desired, and opposite the required notches for the size of work to be operated upon. Upon release of the bar 15, the spring will seat the pin 16 in the proper notches or recesses, when the wrench may be operated in a manner well understood in devices of this class.

What is claimed is:

1. A wrench comprising a shank having a jaw at one end and a transversely extending pin adjacent the jaw, a movable jaw having

parallel extensions straddling the shank for
slidable movement thereon, said extensions
each having a longitudinal slot in one wall
of which are formed a longitudinal series
5 of notches inclining in a direction away
from the longitudinal slot, means on the
first jaw to hold the movable jaw and ex-
tensions against excessive rocking movement
on the pin, and resilient means on the shank
10 engaging with the extensions to normally
urge said extensions into position to main-
tain the pin in certain of the notches.

2. A wrench comprising a jaw having a
pair of parallel plates extending from one
15 end of the working face thereof and each
formed with a longitudinal slot one wall of
which is formed with a series of commonly

inclined notches, a lever disposed within the
space between the plates and having a trans-
verse pin slidable in the slots and engageable 20
in the notches, a spring carried by the lever
and engaging with the plates to normally
hold the pin in the notches, the portion of
the lever within the space between the plates
being formed with a jaw having shoulders 25
engaging with corresponding edge faces of
the plates.

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

WELKER V. OOLEY.

Witnesses:

OSCAR B. PALMER,
FRANK A. ROBERTS.