V. A. ANDERSON.

WRENCH.

APPLICATION FILED MAR. 30, 1921.

1,400,134.

Patented Dec. 13, 1921.

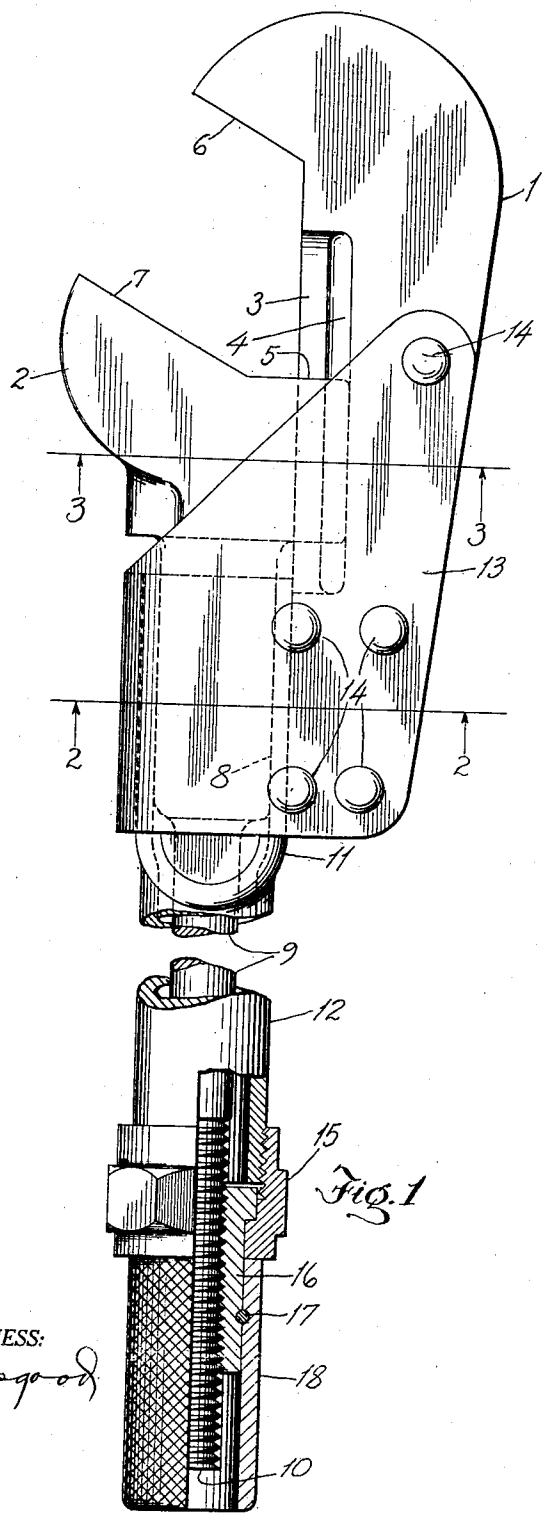


Fig. 1

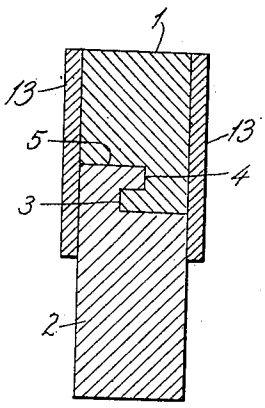


Fig. 3

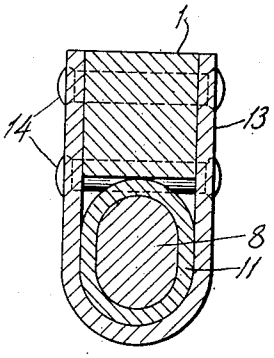


Fig. 2

WITNESS:

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WRENCH.

1,400,134. Specification of Letters Patent. Patented Dec. 13, 1921.

Application filed March 30, 1921. Serial No. 456,788.

To all whom it may concern:

Be it known that I, VICTOR A. ANDERSON, a citizen of the United States, residing at Elmwood Park, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to improvements in wrenches. One object is to provide a wrench of simple construction, positive and efficient in operation and one in which the parts can be readily assembled or easily replaced when broken or worn. A further object is to provide a wrench in which the relatively movable jaw operates in a positive manner, without play, thus making it possible to obtain a firm purchase upon the work. A further object is to provide a wrench so constructed as to make it applicable to work that may be located in places ordinarily difficult of access with the ordinary wrench.

With the foregoing and other objects in view the invention consists in the combination and arrangement of parts to be hereinafter fully described, pointed out in the appended claim and illustrated in the accompanying drawing which forms a part of this application and in which—

Figure 1 is a sectional view of my wrench in side elevation.

Figs. 2 and 3 are cross sections taken, respectively, on the lines 2—2 and 3—3 of Fig. 1, said sections being turned at right angles thereto.

Like reference characters denote corresponding parts throughout the several views.

My wrench comprises the fixed and movable jaws 1, 2, the fixed jaw being formed with the diminished edge 3 which terminates in the longitudinally extending groove 4 formed in one lateral face of the jaw and parallel to its front edge; the movable jaw 2 being formed with a lip 5 extending over the edge 3 of the jaw 1 and bent terminally at right angles to its main portion and disposed in the said groove 4, said lip serving as a guide for the jaw 2 in its movement. The jaws 1, 2 are formed with the parallel work-engaging surfaces 6, 7 preferably disposed at an oblique angle to the jaw bodies.

The jaw 2 is formed with the flattened shank portion 8 which terminates in the shank portion 9, round in cross section, which terminates in the threaded shank portion 10. The shank portion 8 is slidable in the flattened portion of a sleeve 11, said portion merging into the sleeve portion 12 which is round in cross section. The said flattened sleeve portion 11 is secured by the metal jacket 13 to the fixed jaw 1, two of the retaining bolts 14 engaging with said sleeve. The lower end of the sleeve is threaded exteriorly and connected by a nut 15 to a tubular interiorly threaded rotary core 16 through which the threaded end 10 of the aforesaid shank extends, said core being connected by the pin 17 to the knurled handle 18, one end of which abuts said nut 15 and the opposite end or free termination extending beyond the shank portion 10 and core 16. By rotating the handle 18 the core 16 is rotated and the shank portion 10 moved longitudinally of the core thus moving the jaw 2 toward or away from the jaw 1. The core rotates freely within the nut 15.

What is claimed is:—

In a wrench, a fixed jaw having its front edge diminished in thickness and an elongated groove terminating said edge, said groove being parallel to one of the edges of said jaw, a movable jaw operatively secured to said fixed jaw, said jaws being formed with parallel work-engaging surfaces disposed at an oblique angle to the jaw bodies, a lip integral with said movable jaw and projected over the diminished front edge portion thereof and into the said groove, and manually operable means for actuating said movable jaw, said means including a threaded core in engagement with the shank of said movable jaw.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two subscribing witnesses.

VICTOR A. ANDERSON.

Witnesses:
GUSTAF F. GUSTAFSON,
MAURITZ L. ERIKSON.