

(No Model.)

J. A. McCawley.
WRENCH.

No. 576,602.

Patented Feb. 9, 1897.

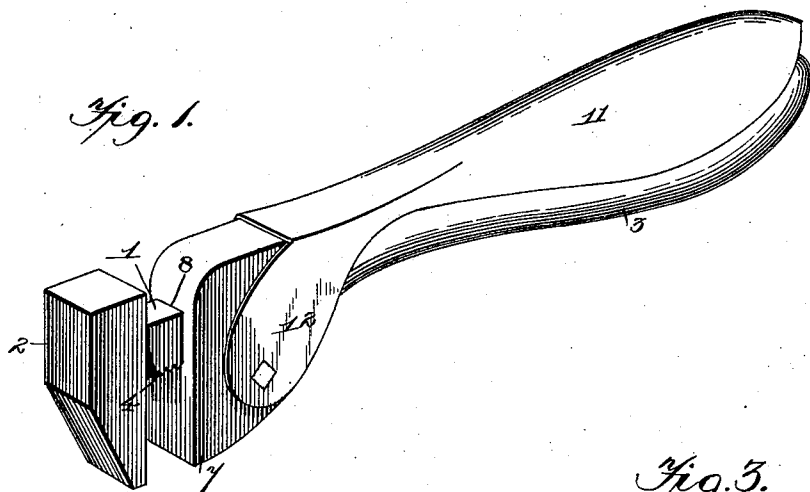


Fig. 3.

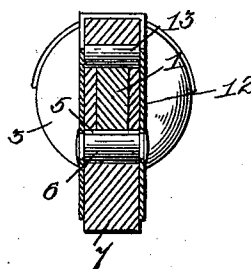
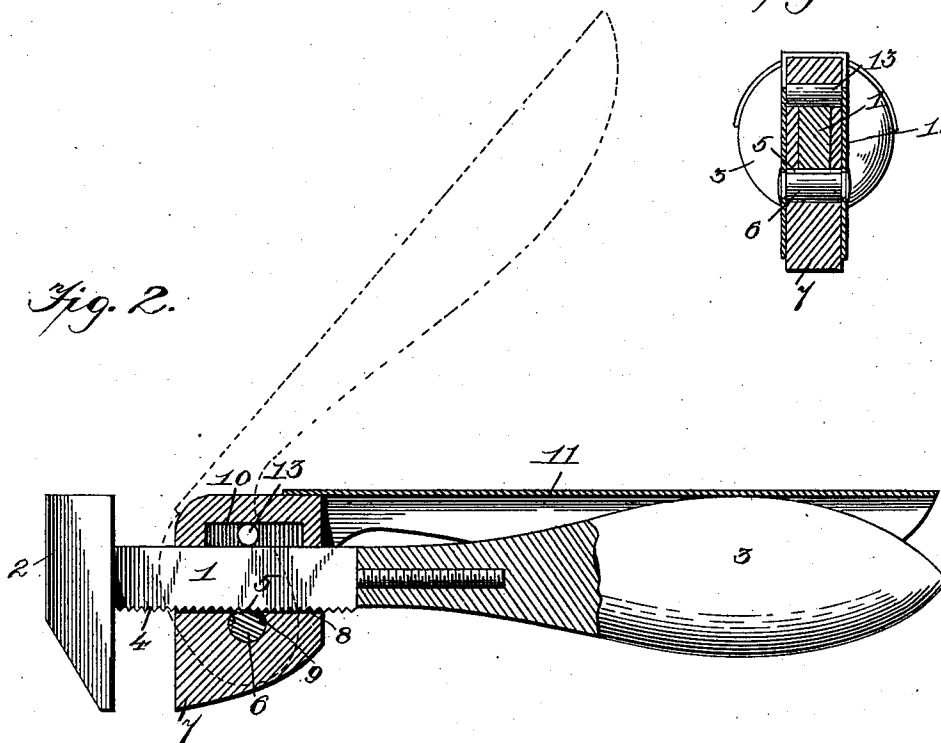


Fig. 2.



Inventor
Joel A. McCawley

Witnesses

D. L. Mockait

By *H. S.* Attorneys,

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UNITED STATES PATENT OFFICE.

JOEL A. McCAWLEY, OF CANTON, KENTUCKY, ASSIGNOR OF ONE-HALF TO
G. W. COBB, OF SAME PLACE.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 576,602, dated February 9, 1897.

Application filed September 28, 1896. Serial No. 607,217. (No model.)

To all whom it may concern:

Be it known that I, JOEL A. McCAWLEY, a citizen of the United States, residing at Canton, in the county of Trigg and State of Kentucky, have invented a new and useful Wrench, of which the following is a specification.

The invention relates to improvements in wrenches.

The object of the present invention is to improve the construction of that class of wrenches having a stationary jaw, a shank, and a movable jaw to slide along the shank toward and away from the stationary jaw to suit the part to be gripped, and to enable the movable jaw to be readily adjusted and securely locked against an accidental movement when the wrench is in use.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a wrench constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same, the segment being shown in engagement with the shank in full lines and out of engagement in dotted lines. Fig. 3 is a transverse sectional view.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

1 designates a shank provided at one end with a stationary or fixed jaw 2 and having a handle 3 detachably secured to its other end, and the shank is provided at its front edge with a series of teeth 4, adapted to be engaged by corresponding teeth 5 of a pivoted segment 6, which is carried by a movable jaw 7. The movable jaw is slidingly mounted on the shank of the wrench, being provided with an opening 8 to receive the shank, and it has recesses 9 and 10, located in front and in rear of the shank 1. The recess 9 is substantially circular and receives the segment 6, which is provided at opposite faces with rounded portions or journals arranged in corresponding bearing-openings of the movable jaw.

The teeth 5 of the segment 6 are arranged

at the curved edge or periphery thereof, and when they are in engagement with the shank 1 the movable jaw is locked against movement thereon. The segment is operated by a lever 11, having ears or extensions 12, embracing the movable jaw and secured to the journals of the segment 6.

The operating-lever 11, which is arranged at the back of the wrench, is substantially semitubular or curved in cross-section to conform to the configuration of the handle of the wrench, whereby when the operating-lever is arranged adjacent to the handle it will fit snugly against the same and enable the operator to grasp both the handle of the wrench and the lever without any inconvenience. When the operating-lever is moved inward toward the handle of the wrench, the teeth of the segment engage those of the shank and cause the movable jaw to slide upward or outward on the shank slightly, whereby the wrench firmly grips a nut or other part operated on in the act of engaging the same. When the operating-lever is swung outward, the jaws automatically release the nut or other part to which the wrench is applied, as the sliding jaw is moved away from the fixed jaw a short distance by the pivotal movement of the segment. When the straight edge of the segment is brought opposite the shank, the movable jaw is adapted to slide freely on the latter.

A transverse pin 13 is mounted at the rear side of the movable jaw and extends across the recess 10 and supports the back of the shank when the segment is in engagement with the same. By means of the recess 10 and the pin 13 the bearing-surface of the movable jaw at the back of the shank is reduced, thereby lessening the friction of the parts.

It will be seen that the wrench is exceedingly simple and inexpensive in construction; that it is capable of ready adjustment to engage or release a nut or other part, and that it firmly grips the same as it is applied thereto.

What I claim is—

1. In a wrench, the combination of a shank provided with teeth, a fixed jaw arranged in one end of the shank, a sliding jaw mounted on the shank, a pivoted segment arranged within and carried by the movable jaw and

provided at its curved edge with teeth for engaging those of the shank, said segment being journaled on and extended through the sides of the movable jaw, and an operating-lever provided with ears or extensions embracing the sides of the movable jaw and secured to and operating the said segment, substantially as and for the purpose described.

2. In a wrench, the combination of a shank provided with teeth, a fixed jaw, a movable jaw slidingly arranged on the shank and provided in front and in rear of the same with recesses, a pivoted segment mounted in the front recess of the movable jaw and provided

at its curved edge with teeth, a pin located in rear of the shank and extending across the rear recess of the movable jaw in position for supporting the shank, and an operating-lever connected with the segment, substantially as described.

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

JOEL A. MCCAWLEY.

Witnesses:

R. H. MIZE,

T. H. FUQUA.