W. B. MILLNER & J. M. COBB.

WRENCH.

APPLICATION FILED JAN. 17, 1911.

1,005,056. Patented Oct. 3, 1911.

Fig. 1.

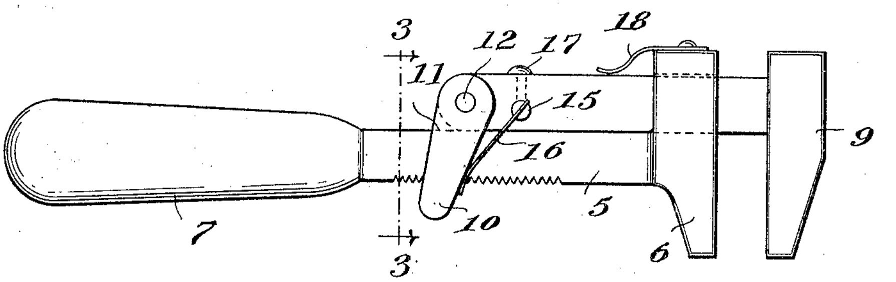
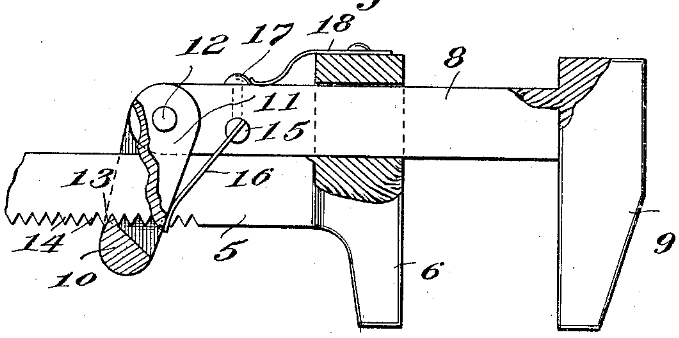


Fig. 2.



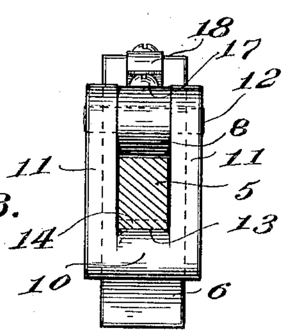


Fig. 3.

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Witnesses

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UNITED STATES PATENT OFFICE.

WALLACE B. MILLNER AND JAMES M. COBB, OF REIDSVILLE, NORTH CAROLINA.

WRENCH.

1,005,056. Specification of Letters Patent. Patented Oct. 3, 1911.

Application filed January 17, 1911. Serial No. 603,117.

To all whom it may concern:

Be it known that we, WALLACE B. MILLNER and JAMES M. COBB, citizens of the United States, residing at Reidsville, in the county of Rockingham and State of North Carolina, have invented new and useful Improvements in Wrenches, of which the following is a specification.

The invention relates to a wrench, and more particularly to the class of adjustable wrenches.

The primary object of the invention is the provision of a wrench in which the movable jaw thereof may be readily and quickly adjusted when designed to engage or disengage from a tap, nut or other piece of work to be acted upon.

Another object of the invention is the provision of a wrench in which accurate adjustment of one jaw with respect to the other may be had in a quick and convenient manner, and that will firmly grip the part to be turned by the wrench.

A further object of the invention is the provision of a wrench which is simple in construction, thoroughly reliable and efficient in operation, and inexpensive in manufacture.

With these and other objects in view, the invention consists in the construction, combination and arrangement of parts, as will be hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the claims hereunto appended.

In the drawings: Figure 1 is a side elevation of a wrench constructed in accordance with the invention. Fig. 2 is a similar view in fragmentary elevation, the same being partly in section. Fig. 3 is a transverse sectional view on the line 3—3 of Fig. 1, looking in the direction of the arrow.

Similar reference characters indicate corresponding parts throughout the several views of the drawings.

Referring to the drawings by numerals, the wrench comprises a shank 5 of rectangular shape in cross section for a greater portion of its length, and is formed at one end with a stationary jaw 6, while at its opposite end is mounted a handle 7 which may be of the required shape to suit the convenience of the user of the wrench.

The stationary jaw 6 is extended rearwardly beyond the rear face of the shank and is formed with a suitable guide opening receiving a slidable stem 8 formed with a jaw 9, the latter being termed the movable jaw of the wrench and is adapted to be shifted toward and away from the stationary jaw. Carried by the inner or free end of the stem 8 of the movable jaw 9 is a pivotal locking detent 10 in the form of a U-shaped yoke 11, the ends of which are connected to the end of the stem 8 by means of a pivot pin 12 and is adapted to straddle the shank 5 of the said wrench. This yoke 11 at its closed end is provided with a beveled rack tooth 13 adapted to engage any one of a series of rack teeth 14 formed on the shank 5 at one edge thereof. Thus, it will be seen that the detent 10 when engaged with the teeth 14 on the shank 5 of the wrench will prevent the movement of the jaw 9 away from the stationary jaw 6, thereby locking the movable jaw in relative position to the stationary jaw for clamping a nut, tap or other part to be turned by the wrench.

Secured in the stem 8 and projecting from one side thereof is a lug 15, in which is permanently engaged one end of a leaf spring 16, the opposite or free end of which works against the yoke 11 at one side of the shank 5, thus the spring will sustain the said yoke in position for its positive engagement with the teeth of the rack 14 on the said shank to retain the movable jaw against displacement in one direction from the stationary jaw of the wrench. The lug 15 is removably held in the stem 8 by means of a set screw 17 threaded in the said stem 8 of the movable jaw of the wrench.

Carried by the stationary jaw at the rear end thereof and fixed thereto in any suitable manner, is one end of a leaf spring 18, the free end of which is frictionally engaged with the stem to hold it contiguous and in contacting relation to the shank of the wrench.

What is claimed is:

1. A wrench comprising a pair of shanks arranged in sliding parallel relation to each other, jaws carried by the said shanks, one of said jaws being provided with a guide slot receiving one of the shanks, a plurality of rack teeth formed on one of the shanks, a yoke-like detent pivotally connected to the other shank and engageable with the rack teeth, a lug pivoted in the shank carrying said detent, leaf springs fixed in the said

lug and working against the detent, and means for locking the said lug in adjusted position.

2. A wrench comprising a pair of shanks arranged in sliding parallel relation to each other, jaws carried by the said shanks, one of said jaws being provided with a guide slot receiving one of the shanks, a plurality of rack teeth formed on one of the shanks, a yoke-like detent pivotally connected to the other shank and engageable with the rack teeth, a lug pivoted in the shank carrying said detent, leaf springs fixed in the said lug and working against the detent, means for locking the said lug in adjusted position and a spring member working upon one of the shanks to hold it in close relation to the other shank.

In testimony whereof we affix our signatures in presence of two witnesses.

WALLACE B. MILLNER.
JAMES M. COBB.

Witnesses:
A. D. MILLNER,
J. W. SAYARS.