R. L. WALTERS.

QUICK ADJUSTING WRENCH.

APPLICATION FILED FEB. 14, 1910.

959,436. Patented May 24, 1910.

Fig. 1.

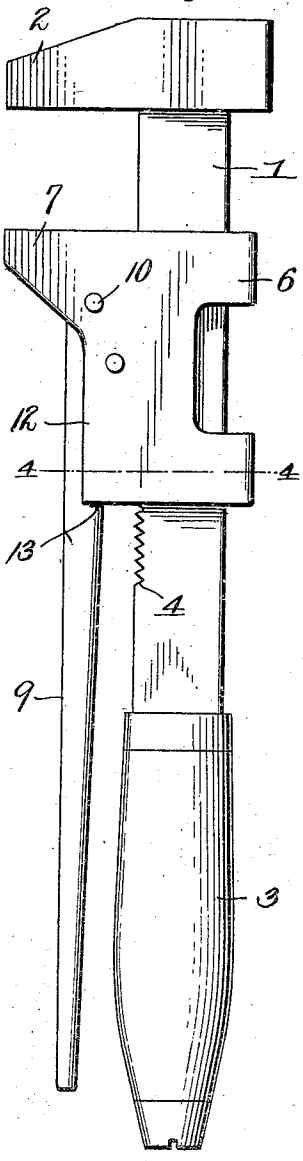


Fig. 2.

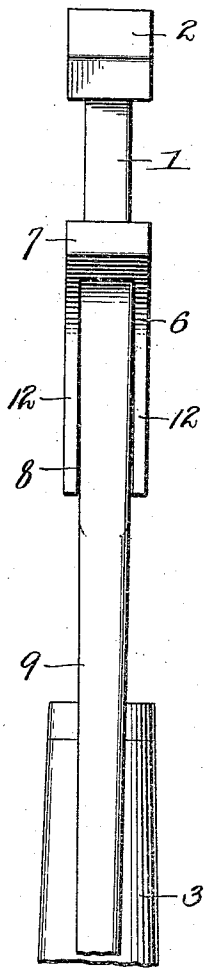


Fig. 3.

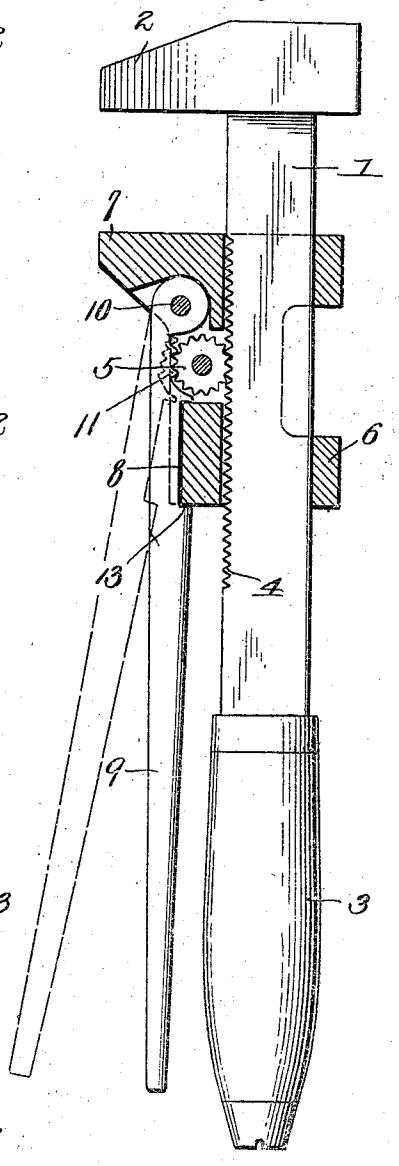
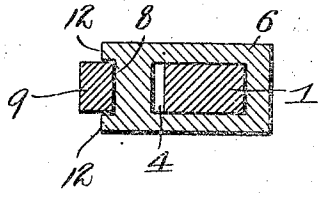


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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QUICK-ADJUSTING WRENCH.

959,436. Specification of Letters Patent. **Patented May 24, 1910.**

Application filed February 14, 1910. Serial No. 543,671.

To all whom it may concern:

Be it known that I, ROBERT L. WALTERS, citizen of the United States, residing at Lavonia, in the county of Franklin and State of Georgia, have invented certain new and useful Improvements in Quick-Adjusting Wrenches, of which the following is a specification.

The present invention relates to certain new and useful improvements in wrenches, and has for its object to provide a device of this character embodying a novel construction whereby the same may be easily and quickly adjusted and rigidly locked in an adjusted position.

The invention further contemplates a wrench which is inexpensive in its construction, which embodies few and durable parts, and which can be used to advantage on all kinds of work where an ordinary wrench could be employed.

With these and other objects in view the invention consists in certain novel combinations and arrangements of the parts as will more fully appear as the description proceeds the novel features thereof being pointed out in the appended claims.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawings in which:

Figure 1 is a side elevation of a wrench constructed in accordance with the invention. Fig. 2 is a front view of the same. Fig. 3 is a side elevation of the wrench, the sleeve and movable jaw being shown in section and the lever being shown by dotted lines in inoperative position. Fig. 4 is a transverse sectional view on the line 4—4 of Fig. 1.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawing by the same reference characters.

Specifically describing the present embodiment of the invention, the numeral 1 designates the shank of the wrench, the fixed jaw 2 being located at one end of the said shank while the usual handle 3 is applied to the opposite end thereof. One of the edges of the shank 1 is provided with a rack 4 which meshes with a pinion 5 journaled upon a slide 6 mounted upon the shank. This slide is illustrated as being in the nature of a sleeve through which the shank 1 passes, and is formed with a movable jaw 7 which is designed to coöperate with the fixed jaw 2 in the usual manner. The sleeve is cut away at a point under the movable jaw 7 to provide a recess 8 which communicates with the interior of the sleeve and within which the pinion 5 is journaled. A lever 9 has one end thereof pivotally mounted upon a pin 10 which passes transversely through the recess 8, the opposite end of the lever extending along the handle 3 and being slightly spaced therefrom. This lever is provided toward the pivot end thereof with a series of teeth 11 which are designed to engage the pinion 5 to lock the same against rotary movement and thereby prevent any sliding of the sleeve 6. However, by moving the lever 9 away from the handle the teeth 11 may be disengaged from the pinion 5 and the slide 6 then moved freely upon the shank 1 to adjust the position of the movable jaw 7. The swinging end of the lever 9 preferably has a slight spring action so as to be moved against the handle 3 when the wrench is in operation and both the handle and lever are grasped by the hand of the operator. When the lever is in operative position it is held securely against lateral movement by means of the two longitudinal flanges 12 which project from the slide 6 and receive the lever between them. The lever is also held securely against longitudinal movement by means of a notch 13 therein which engages the portion of the slide 6 between the recess 8 and the end of the slide. In this manner the pivot pin 10 is relieved of all strain and the lever is securely held against either lateral or longitudinal displacement.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:

1. In a wrench, the combination of a shank, a fixed jaw carried by the shank, a slide mounted upon the shank and provided with a movable jaw adapted to coöperate with the fixed jaw, a wheel journaled upon the slide and engaging the shank so as to be rotated when the slide is moved thereon, and a lever pivoted upon the slide and adapted to engage the wheel to lock the same against rotation, the said lever being notched for engagement with the slide whereby it is locked against longitudinal movement when in an inoperative position.

2. In a wrench, the combination of a shank, a fixed jaw carried by the shank, a

slide mounted upon the shank and formed with a movable jaw adapted to coöperate with the fixed jaw, the said slide being also provided with a pair of spaced flanges, a wheel journaled upon the slide and engaging the shank so as to be rotated when the slide is moved upon the shank, and a lever pivoted upon the slide and adapted to engage the wheel to lock the same against rotation, the said lever being notched for engagement with the slide whereby it is held against longitudinal movement, and being received between the before mentioned spaced flanges whereby it is held against lateral movement when in an inoperative position.

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

ROBERT L. WALTERS.

Witnesses:

R. C. DAVIS,

E. H. MARET.