

(No Model.)

J. C. GREGORY.
WRENCH.

No. 556,049.

Patented Mar. 10, 1896.

FIG. 1.

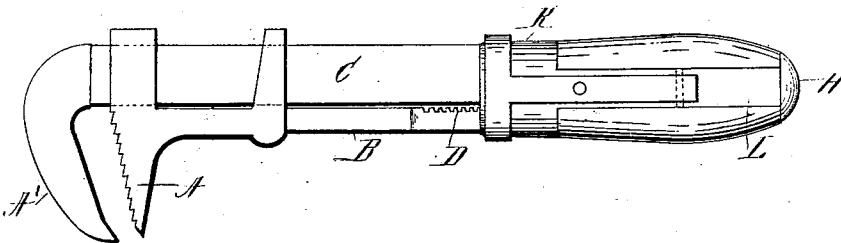


FIG. 2.

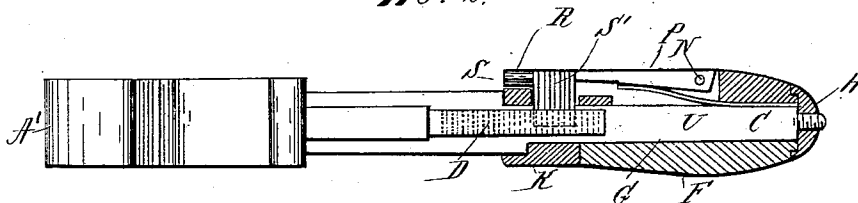


FIG. 3.

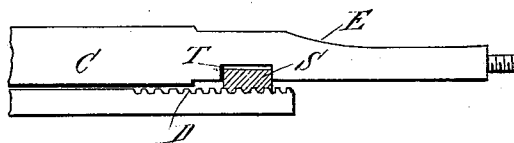


FIG. 4.

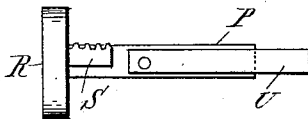
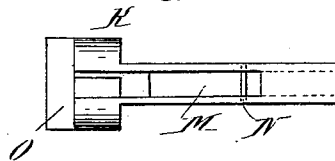


FIG. 5.



WITNESSES:

John Buckler,
C. Ernst

INVENTOR

James C. Gregory,
BY
Edgar Tate & Co
ATTORNEYS

UNITED STATES PATENT OFFICE.

JAMES CARLOSS GREGORY, OF PLEASANT HILL, NEBRASKA, ASSIGNOR OF
ONE-HALF TO EDWARD BARNES, OF SAME PLACE.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 556,049, dated March 10, 1896.

Application filed May 24, 1895. Serial No. 550,500. (No model.)

To all whom it may concern:

Be it known that I, JAMES CARLOSS GREGORY, a citizen of the United States, and a resident of Pleasant Hill, county of Saline, and State of Nebraska, have invented certain new and useful Improvements in Wrenches, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to wrenches, and particularly to that class known as "monkey-wrenches," and the object thereof is to produce a wrench of this character in which the means for holding the sliding jaw of the wrench in any desired position is connected with a handle and is operated by the hand as and when desired to fix the location of the sliding jaw.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a view in elevation of my improved wrench; Fig. 2, a similar view at right angles to the position shown in Fig. 1, the handle of the wrench being shown in section. Fig. 3 is a detail view of the ends of the jaw A and main bar C. Fig. 4 is a plan view of the piece R, spring V, and pivoted plate P with the projection S. Fig. 5 is a top plan view of the band K and the strip L.

In the practice of my invention I provide the sliding jaw A of the wrench with a shank B, the inner surface of the end of which adjacent to the main bar C of the wrench is provided with ratchet-teeth D formed into a rack-bar, as clearly shown in Figs. 1 and 3.

The main bar C of the wrench is tapered, as shown at E, Fig. 3, and the outer end thereof is screw-threaded, by which means it is connected with the corresponding screw-threaded handle F, which is hollow or provided with a central longitudinal cavity G, as shown in Fig. 2, and provided at the outer end with a metal cap H, and at the inner end with a metal band K, said cap and band being united by a metal strip L on one end or both sides thereof. Formed within the metal strip L is a longitudinal slot M, which also extends through the band K, the end of the band K being cut away, as shown at O, and

mounted in said slot M by means of a pivot N is a spring-operated plate or bar P, said plate being also provided with a segmental piece R, adapted to fit within and conform to the cut-away portion O of the band K. The pivoted plate P is also provided on the under or inner surface thereof with an inwardly-directed shoulder or projection S, adapted to enter or pass into a slot T, formed in the side of the main bar C of the wrench adjacent to the sliding shank B of the movable jaw A, said shoulder or projection S being rectangular in cross-section and provided on the side adjacent to the shank B with teeth S', adapted to engage with the teeth D on said shank B when the pivoted plate P is depressed, as is clearly shown in Figs. 2 and 3.

The shoulder or projection S is arranged to fit snugly in the slot T, so that the strain thereon will be partly on the walls of the slot, whereby the shoulder or projection is protected against any unusual jerk or strain.

Secured at one end of the under side of the pivoted plate P is a spring U, the free end of which extends backward into the handle and rests upon the main bar C of the wrench, as is clearly shown in Fig. 2, and the operation of this spring U normally is to keep the plate P depressed or even with the surface of the handle and the teeth S' on the shoulder or projection S in engagement with the teeth D on shank B.

In operation the sliding jaw A may be adjusted to any desired position by grasping the segmental piece R with the finger and thumb and raising the pivoted plate P till the teeth on the shoulder or projection S are free from engagement with the teeth D on the shank B, and then sliding said jaw and shank in the required direction, and when the sliding jaw is in position releasing the hold on the piece R and allowing the pivoted plate and the shoulder or projection thereon to return to the normal position, when the sliding jaw will be securely held in place by the teeth S' on the shoulder S engaging with the teeth D on the shank B. It will also be observed that the space between the sliding jaw A and the fixed jaw A' is wedge shape in form, and that the fixed jaw is provided with an inwardly directed or inclined point, as

shown in Fig. 1. This construction is important for the reason that I am thereby enabled to grasp and securely hold a pipe, bar or rod, and the wrench will be retained thereon after the operator has released the handle thereof, which is often of great assistance to the operator, as will be readily understood by those familiar with plumbing or similar work.

It will thus be seen that I accomplish the object of my invention by means of a device which is simple in construction, application and operation, which does not add materially to the cost of the wrench, and which is perfectly adapted to accomplish the result for which it is intended.

Having fully described my invention, I claim and desire to secure by Letters Patent--

1. In a wrench the combination of a sliding jaw, a shank B provided with a rack on its inner face, a main bar having a slot therein, a plate P pivotally secured within the handle and provided with a segmental piece R on its forward end, and a projection S on the inner side of said plate having teeth S' adapted to engage the rack on the shank B when the plate is depressed, substantially as described.

2. In a wrench, the combination of a main bar having a slot therein, a shank, a rack on the inner face of said shank adjacent to the slot, a handle to receive the ends of said bar and shank, a cap on the end of said handle, a band K, a strip connecting said cap and

band and provided with a longitudinal slot, a plate or bar pivotally secured within the handle and operating in said slot, a spring to maintain said plate in position, a segmental piece on the free end of the plate adapted to enter a slot in said band, and a projection carried by the plate and provided with teeth to engage the rack, substantially as described.

3. A wrench, the main bar of which is provided with a handle having a central cavity through which the main bar extends, a sliding jaw provided with a shank adjacent to and which slides upon the main bar, said handle being provided with a slot in which is pivotally mounted a plate or section, having an inwardly-directed shoulder or projection provided with teeth or serrations adapted to engage corresponding teeth or serrations formed on the shank of the sliding bar, said section or plate being provided with a spring, connected therewith within the handle, by which the shoulder or projection is normally held in engagement with the shank of the sliding jaw, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 18th day of May, 1895.

JAMES CARLOSS GREGORY.

Witnesses:

EDWARD BARNES,
JOHN BARNES.