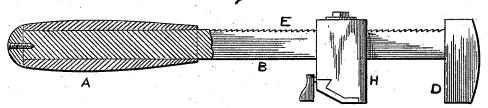
(No Model.)

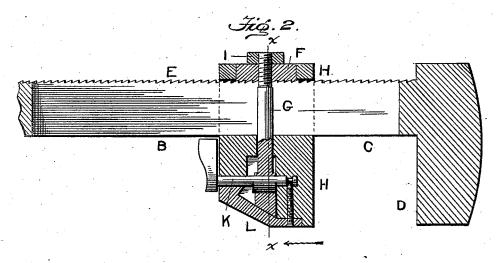
## J. A. REYNOLDS. WRENCH.

No. 525,282.

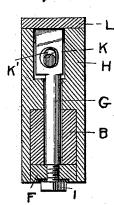
Patented Aug. 28, 1894.

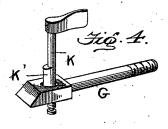












Witnesses:

GA. Woodhery

Joerph A Prynolds.
By C. B. Hoodbury.

## United States Patent Office.

JOSEPH A. REYNOLDS, OF SANTA FÉ, TERRITORY OF NEW MEXICO, ASSIGNOR OF ONE-HALF TO JOHN H. VAUGHN, WILLIAM L. JONES, AND GEORGE W. KNOEBEL, OF SAME PLACE.

## WRENCH.

SPECIFICATION forming part of Letters Patent No. 525,282, dated August 28, 1894.

Application filed April 24, 1894. Serial No. 508,850. (No model.)

To all whom it may concern:

Be it known that I, Joseph A. Reynolds, a citizen of the United States, residing at Santa Fé, in the county of Santa Fé and Territory of New Mexico, have invented a new and useful Improvement in Wrenches, which is made and used substantially as set forth hereinafter, and as shown in the accompanying drawings, in which—

Figure 1 is a view of the apparatus in position for adjustment for use. Fig. 2, shows the device in longitudinal section, with its parts locked in position for use. Fig. 3, is a cross section on lines X—X of Fig. 2. Fig. 4, illustrates bar G. and key K. in detail.

The object of this invention is to improve wrenches of the class having movable jaws adjustable to fit nuts of different sizes, to simplify the parts and enable them to be made durable and readily replaced.

The invention consists in the peculiar construction and arrangement of parts and features and in certain parts thereof substantially as illustrated and as set forth hereinafter.

The handle A, is attached to the main bar B, which bears a head D, in much the usual way of monkey wrenches. The bar B, has a slot C, which extends nearly from the head o D, to the handle A; and the movable jaw H, is made to inclose and fit and move freely upon this slotted part of bar B, as may be required to fit nuts of different sizes. On the back side of bar B on both sides of its slot 5 are ratchet teeth E, arranged, so as to hold movable jaw H, to oppose jaw D, when in use. There is a sectional part F having teeth and set in the jaw H, so as to engage with these ratchet teeth E, at any point at which it may be set. This part F, fits into a recess in jaw H, made just to fit its ends closely so as to hold that jaw solid. The jaw H, also bears a connecting bar G which passes through slot C, and section F, and bears a threaded nut ; I, arranged to turn thereon to force the section F, into solid engagement with the ratchet teeth E, on the bar B so as to hold the jaw H, firmly at any point at which it is set for

use. The other end of bar G, forms a yoke over a key K, which is seated in the jaw H, 50 in bearings allowing it to turn freely, and bears a part projecting eccentrically to one side at the place where it passes through the yoke of bar G, which is so arranged that when the crank handle of key K is turned away 55 from bar B as in Fig. 1, this eccentric part will turn the other way and release the yoke of bar G, so it may move lengthwise to release the teeth of section F, from ratchet teeth E, so the jaw H, can be moved to set at any 60 point on bar B; and so that when the handle of the key is turned toward bar B, as in Figs. 2, 3, and 4, the action will be reversed and the eccentric part of the key will draw up bar G, and draw section F, into firm engagement 65 to hold the jaw H, firmly in position for use, locking the parts in position. A removable section L, gives access to the parts in jaw H. These parts may be modified.

I claim—

1. A wrench having a movable jaw H, with a key K, bar G, toothed section F, and nut I, and a fixed head or jaw D, with a lever bar B, bearing ratchet teeth E, adapted to engage with section F, and hold the jaw H wher- 75

2. In a wrench having a movable jaw and ratchet teeth on its handle bar adapted to hold the jaw in place in use, a toothed section F. adapted to fit onto such handle bar 80 having a bar G. with a key K. to tighten it connected with such section and having a threaded nut I. on said bar, adapted to hold the said section in place adjustably.

3. In a wrench having a movable jaw and 85 ratchet teeth on its handle bar adapted to hold the jaw in place in use, a toothed section F. adapted to fit onto such handle bar, and set into a recess in the movable jaw, fitting its ends closely and having a bar G. bearge ing a threaded nut I. on said bar, adapted to hold the said section in place adjustably.

JOSEPH A. REYNOLDS.

Witnesses:
ERNST A. MECKE,
WILLIAM A. MCKENZIE.