

UNITED STATES PATENT OFFICE.

CHARLES BUSBY, OF FOSSIL, OREGON.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 709,742, dated September 23, 1902.

Application filed April 13, 1901. Serial No. 55,778. (No model.)

To all whom it may concern:

Be it known that I, CHARLES BUSBY, a citizen of the United States, residing at Fossil, in the county of Wheeler and State of Oregon, have invented new and useful Improvements in Wrenches, of which the following is a specification.

The invention consists in providing the sliding jaw of a wrench with a sleeve having a pair of ears at each end on one side in which are journaled antifriction-rollers which bear upon the shank to enable the sliding jaw to reciprocate freely while being held by one hand.

The invention further consists in the novel construction of sleeve of the sliding jaw, adapting it to support a novel form of locking-dog on the other side of the shank, whereby the sliding jaw is reciprocated.

Generally the invention comprises the novel construction, arrangement, and combination of parts, as will be hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a view, partly in longitudinal section and partly in elevation, of a wrench clearly illustrating the sliding jaw embodying my invention. Fig. 2 is a side elevation of the sliding jaw detached from the shank. Fig. 3 is a transverse section on the line 3 3, Fig. 1.

Referring now to the drawings by reference-numerals, 2 designates the shank of a wrench having its inner face formed with recesses 3, leaving teeth 3^a, and provided at one end with a fixed jaw 4 and at the opposite end with a handle 5.

6 designates the sliding jaw, having a sleeve 6^a and projecting from its outer side at each end a pair of ears 7 and 8, having alining perforations 9 and 10, in which are mounted shafts 11 and 12, carrying antifriction-rollers 13 and 13^a, which are adapted to travel upon the smooth or outer surface of the shank.

From the inner side of the sliding jaw 6, opposite the pair of ears 7, project a pair of perforated ears 14, which support a transverse pivot-pin 15, upon which is mounted a dog 16, formed with a single catch-lug 17,

adapted to engage the recesses 3 between the teeth 3^a in the shank, a transverse finger-bar or unlocking-handle 18 at its outer end, and a lip 19 at its inner end. This dog is also provided with a recess 16^a, conforming to a projection 6^b on the sleeve. The sleeve is provided with a leaf-spring 20, one end of which is secured to the sliding jaw 6 by a screw 21, while the opposite free end engages within the lip 19 of the dog, the tendency of said spring being to hold the catch-lug 17 in engagement with the teeth in the shank.

To operate the sliding jaw, the wrench is grasped with one hand, and the thumb and a finger are caused to bear on the ends of the finger-bar of the dog and the finger-bar held away from the shank, and the sliding jaw is advanced and retracted by the dog by pushing or pulling on the dog, while the other hand is free.

Having described my invention, what I claim is—

In a wrench, the combination with the toothed bar having a handle and a removably-fixed jaw therewith, of a movable jaw having a sleeve therein mounted on said bar, the rear lower portion of the movable jaw having a dog pivoted thereto with a catch-lug thereon to coact with the teeth of the bar, an offset on said dog at right angles with the catch-lug so as to coact with the under surface of said teeth, a lip with a recess therein, a leaf-spring secured at one end to the movable jaw, the opposite end loosely connected in the recess of said lip and the sleeve of the movable jaw having spaced rollers at opposite ends to coact with the upper surface of the bar, and one of said rollers mounted above the movable jaw, the other above the dog whereby to equalize the movement of said dog and said movable jaw, substantially as specified.

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

CHARLES BUSBY.

Witnesses:

W. W. HOOVER,
G. O. BUTLER.