## J. L. WHIPPLE. Wrench.

No.160,981.

Patented March 16, 1875.

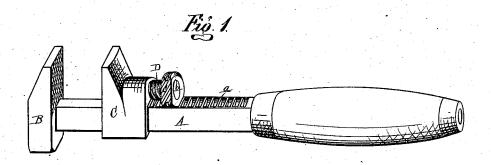
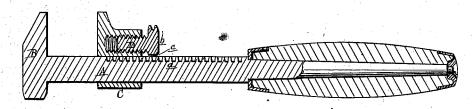


Fig. 2.



OxxesX: Edward Barthel James & Prim Diverstor: J. S. Whiffle Jog atty That S. Sprague

## UNITED STATES PATENT OFFICE.

JOE L. WHIPPLE, OF PAW PAW, MICHIGAN, ASSIGNOR TO HIMSELF AND CHANDLER W. WHIPPLE, OF SAME PLACE.

## IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. 160,981, dated March 16, 1875; application filed November 17, 1874.

To all whom it may concern:

Be it known that I, Joe L. Whipple, of Paw Paw, in the county of Van Buren and State of Michigan, have invented an Improvement in Monkey-Wrenches, of which the following is a specification:

The object of my invention is to provide a monkey-wrench which can be very quickly and closely adjusted to grasp the nut or bolt-head which is to be turned, and which will take a larger nut or bolt-head than any other wrench having a shank or bar of the same length.

Figure 1 is a perspective view. Fig. 2 is a

longitudinal section.

In the drawing, A represents the bar or shank of my wrench, having the usual stationary jaw B and a loose one, C, movable upon the shank, upon the back edge of which a rack, a, is formed by cutting in parallel transverse slots with concave or segmental bottoms. In the base of the back part of the movable jaw a screw, D, is tapped, having a head, b, in which one or more grooves are turned, so as to make two or more disks at such distance apart as that they will enter and rotate in the slots of the rack a, a flat place, c, being filed on one side of the head, partly to enter the disks, and

partly, when the flat place is turned to the rack, to allow the jaw to be slipped along to

adjust it to a nut or bolt-head.

When the object is embraced by the jaws, the movable one is locked by turning the screwhead until the disks engage with the rack, and the said jaw may be adjusted close up to the object by partially turning the screw in the right direction. In case the disks or flanges, when the jaw is moved up to a nut, will not enter the rack, the jaw may be moved back a little, and then adjusted up by the screw, whose threads are one-half less apart than the teeth of the rack.

What I claim as my invention, and desire

to secure by Letters Patent, is-

The combination, with the movable jaw C of a monkey-wrench, of the screw D, having the flanged head b flattened on one side, and rack a on the back of the shank of the wrench, said movable jaw being adapted to any adjustment by said screw, all constructed and arranged as and for the purpose set forth.

JOE L. WHIPPLE.

9012 II. W.

Witnesses:

CHARLES E. GALLIGAN, CHARLES P. GALLIGAN.