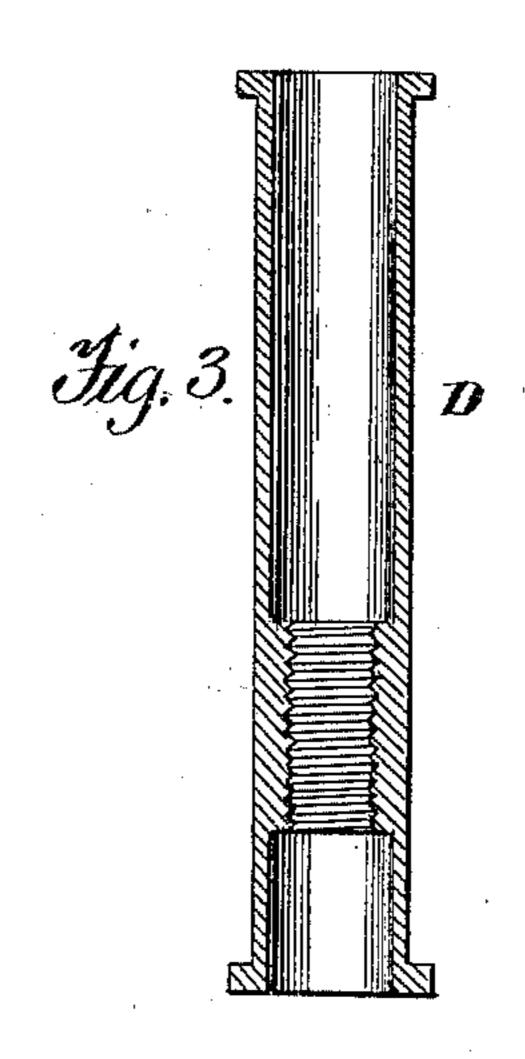
## V. J. VAN HORN.

WRENCH.

No. 370,507.

Patented Sept. 27, 1887.

Witnesses. A. Ruppect. Mostavus



Inventor.

V. T. Van Horn

Fer Simpson

Otty

## United States Patent Office.

VANDIVER J. VAN HORN, OF SHANNON, KANSAS.

## WRENCH.

SPECIFICATION forming part of Letters Patent No. 370,507, dated September 27, 1887.

Application filed February 25, 1887. Serial No. 228,827. (No model.)

To all whom it may concern:

Be it known that I, VANDIVER J. VAN HORN, a citizen of the United States, residing at Shannon, in the county of Atchison and State of Kansas, have invented certain new and useful Improvements in Monkey-Wrenches; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

The special object of the invention is to improve those wrenches which have a sliding jaw, and are generally termed "monkey-wrenches," so that they will never require to be lifted from a nut where only a part-revolution can be made, but may be turned back like a carrying-pawl on a ratchet. This saves time, labor, and trouble over such wrenches as are described in Patents Nos. 36,389, 168,360, and 274,545.

Figure 1 of the drawings is a side elevation showing the wrench applied to a nut; Fig. 2, a similar view of the fixed jaw and screw-shank, and Fig. 3 a longitudinal section of the screw-sleeve.

In the drawings, A represents the wrench as an entirety; B, its fixed jaw provided with an end-threaded shank, b; C, a tubular jaw sliding on the shank b and provided with a spring-lever, C'; D, a sleeve which screws on the end thread of shank b, and E a spiral spring arranged on shank b between the movable jaw C and the sleeve D. The latter has end collars, d d', behind which, respectively, are held the lever-shoulder c and end c'.

The operation is as follows: Turn the sleeve,

as shown in Fig. 1 of the drawings, to the right on the screw of shank b and against the spring Euntil the sliding jaw Cis closed firmly upon the nut F. The latter, as shown on Fig. 1 of the drawings, is close to the perpendicular 45 side of an object, G, so that in order to give the greatest arc movement to the wrench it is adjusted on the nut at right angles to the object G. I then grasp the lever and sleeve tightly, so as to bring the free end of lever 50 against the collar d' and turn the wrench in the quadrant of a circle. Now, instead of lifting the wrench off and readjusting it on the nut, I let up the end of lever, so that it will rise above the collar d' and carry the wrench 55 back to the position at right angles to the object G, as is done with the carrier-pawl on a ratchet. The movable jaw being no longer held, except by spring-pressure, readily yields as it is turned. In practice the wrench works 60 easily.

What I claim as new, and desire to protect by Letters Patent, is—

A monkey-wrench provided with an endthreaded shank on its fixed jaw, an end-col- 65 lared screw-sleeve, a sliding jaw, a springlever arranged on said jaw, having a stud that fits behind the collar d, and provided with a free end that fits in front of collar d', and a spiral spring arranged on the shank of the 70 fixed jaw between the movable jaw and the sleeve, all substantially as shown and described.

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

VANDIVER J. VAN HORN.

Witnesses:

V. E. MINSKER,

J. W. RILEY.