

United States Patent Office.

JOHN V. H. SECOR, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND
JAMES D. SECOR, OF SAME PLACE.

Letters Patent No. 66,177, dated June 25, 1867.

IMPROVEMENT IN WRENCHES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. V. H. SECOR, of the city, county, and State of New York, have invented a new and improved Wrench, and that the following description, taken in connection with the accompanying drawings, hereinafter referred to, forms a full and exact specification of the same, wherein I have set forth the nature and principles of my said improvements, by which my invention may be distinguished from all others of a similar class, together with such parts as I claim and desire to have secured to me by Letters Patent.

This invention relates to a new and improved wrench of that class which is provided with a sliding-jaw; and it consists in a novel manner of applying the sliding-jaw to the shank of the wrench, whereby the former may be readily moved on the shank and adjusted to the nut to be turned, and firmly secured in position after being thus adjusted, and while operating upon and turning the nut. In the accompanying sheet of drawings—

Figure 1 is a side view of my improved wrench with the sliding-jaw in section.

Figure 2, a section of the same taken in the line *x x*, fig. 1.

Similar letters of reference indicate like parts.

A represents the shank of the wrench, of quadrilateral form, and having a fixed jaw, B, at its outer end. The handle C may be formed on the same piece or bar of metal as the shank, or a wooden handle may be used, the inner part of the shank-bar being tapered down to form a tang to pass through the wooden handle, and have a screw-nut on its end to secure the handle on the tang. D represents the sliding-jaw, which has an oblique or inclined opening, *a*, passing vertically through it, as shown clearly in fig. 1, the upper edge, *b*, on the rear side of the shank A, and the edge *d*, at the lower edge of the front side of said opening, forming a pawl to engage with a rack, *e*, on the front side of the shank, said edges being kept engaged with the racks *e e* by a spring, E, of bow shape, attached to the sliding-jaw at the rear side of the opening *a*, and having both ends fitted in a groove, *f*, in the rear side of the shank. There is a groove, *g*, made in each side of the shank A, to receive pins or screws, F, which pass through the sides of the sliding-jaw D, said screws and grooves serving as guides for the sliding-jaw.

From the above description it will be seen that by pressing the lower part of the sliding-jaw D at its rear side towards the shank A, said jaw will be free from the racks *e e*, and may be moved freely on the shank, so as to be adjusted to the nut to be turned by the simple action of the thumb upon it, and when the jaw D is relieved of this pressure the spring E instantly throws said jaw in contact with the racks, which will hold the jaw in position, however much pressure may be exerted against it in turning the nut.

Having thus described my invention, I claim as new, and desire to secure by Letters Patent—

The sliding-jaw D, provided with the inclined or oblique opening *a*, and having the spring E attached, and the screws F passing through the sides of the jaw into the grooves *f*, in the sides of the shank A, in combination with the racks *e e* in the rear and front sides of the shank, substantially as and for the purpose set forth.

JOHN V. H. SECOR.

Witnesses:

WM. F. McNAMARA,

ALEX. F. ROBERTS.