

(No Model.)

T. SHERK.
WRENCH.

No. 459,241.

Patented Sept. 8, 1891.

Fig. 1.

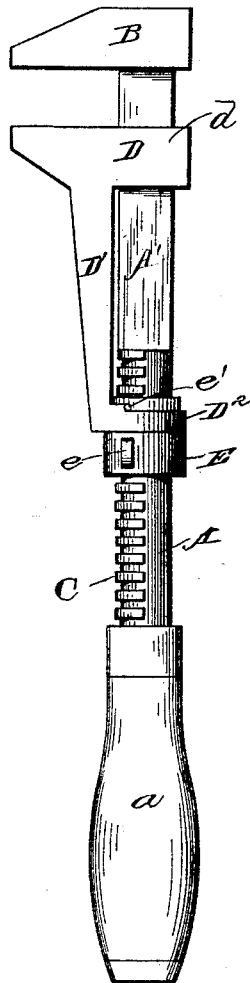


Fig. 3.

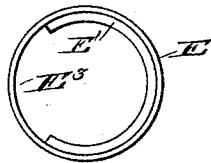


Fig. 2.

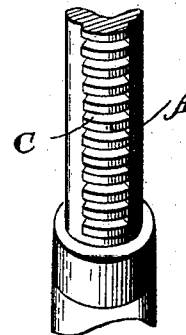
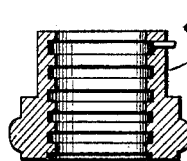


Fig. 4.



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SPECIFICATION forming part of Letters Patent No. 459,241, dated September 8, 1891.

Application filed January 2, 1891. Serial No. 376,522. (No model.)

To all whom it may concern:

Be it known that I, THOMAS SHERK, a citizen of the United States, residing at Fredonia, in the county of Wilson and State of Kansas, have invented certain new and useful Improvements in Wrenches; and I do hereby 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.

My invention consists in a new and improved wrench in which the moving jaw can be slid up or down freely and quickly and then firmly secured at the point to which it is adjusted, thus giving rapidity of adjustment, and at the same time firmly and effectively holding the nut or other object when the sliding jaw has been once adjusted.

The invention will be hereinafter fully described and claimed.

Referring to the accompanying drawings, Figure 1 is a side view of my new and improved wrench. Fig. 2 illustrates in detail the inner part of the handle-bar. Fig. 3 illustrates in detail the adjusting-nut. Fig. 4 is a sectional view of the adjusting-nut.

The same letters of reference indicate corresponding parts in the several figures.

Referring to the several parts by letter, A indicates the inner half, and A' the outer half, of the handle-bar. The outer half of the bar is square in cross-section, and is provided at its end with the usual fixed head B. The inner half A of the handle-bar is provided with a handle *a* and is round in cross-section, being formed with the double threads C, which extend around one-third ($\frac{1}{3}$) only of the circumference of the handle-bar, as clearly shown in the detail view, Fig. 2.

D indicates the moving jaw, which is formed with the square opening *d*, through which the handle-bar passes, and with the shank D', having at its lower end the collar D².

E indicates the tubular adjusting-nut, which fits and works on the inner half of the handle-bar. The interior of this nut is formed with a series of threads E', which extends around two-thirds ($\frac{2}{3}$) of its inner face, as shown in the detail view, Fig. 3, while the remaining third of the inside of the nut is left

clear, as shown. The lower end of the nut is formed for convenience in turning it with the opposite lugs *e*, and the upper reduced end E² of the nut fits up within the collar D² of the sliding jaw. A stop-pin *e'*, fastened in the upper end of the nut at the point shown, holds the nut to the sliding jaw and at the same time limits its movement, as when the nut is turned to either side for two-thirds of a revolution this pin will come in contact with shoulders D', formed on the upper side of the ring *d*², as shown. It will now be seen that in operation by turning the nut E until its inner open space E³ registers with the series of double threads C, the nut can be freely slid up or down on the threaded handle, so as to adjust the moving jaw D rapidly and instantly, according to the size of the object to be clamped between the jaws of the wrench. As soon as the moving jaw is thus brought to the desired point, the nut E is turned to cause its inner threads E' to engage with the thread C of the handle-bar, thus locking the sliding jaw at the point to which it has been moved. By turning the nut the sliding jaw can be adjusted for any less or greater distance than the width of one thread, and as the bar is formed with double threads this final adjustment can be very rapidly made.

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

In a wrench, the combination of the handle-bar having the stationary head B and formed with the series of threads C extending around one-third of its circumference, the adjusting-ring E, formed with the reduced shouldered upper end and having the stop-pin *e'*, and the sliding jaw D, having the long arm D' formed at its lower end with the integral ring D², which encircles the reduced upper end of the adjusting-ring E, and is formed with the stop-shoulders *d'*, substantially as set forth.

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

THOMAS SHERK.

Witnesses:

J. M. KENNEDY,
M. E. KENNEDY.