

H. PORT.
WRENCH.

No. 170,492.

Patented Nov. 30, 1875.

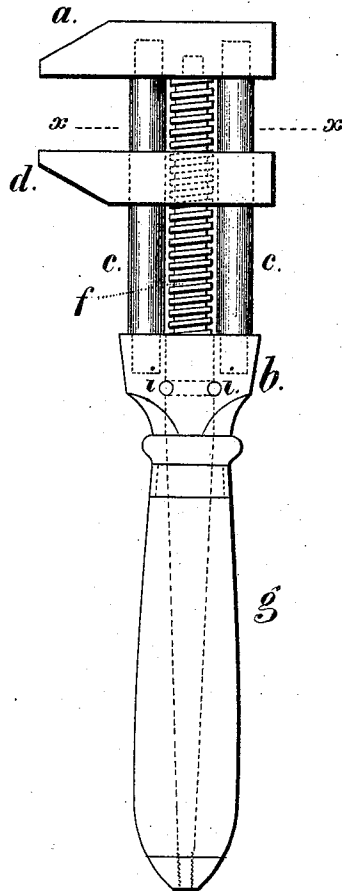
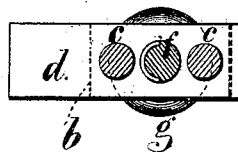


Fig. 1.

Fig. 2.



Witnesses.

Chas. V. Smith
Charles Ferrell

Inventor.

Henry Port
per *Lemuel W. Ferrell*
att'y.

UNITED STATES PATENT OFFICE.

HENRY PORT, OF STAPLETON, NEW YORK.

IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. **170,492**, dated November 30, 1875; application filed January 4, 1875.

To all whom it may concern:

Be it known that I, HENRY PORT, of Stapleton, in the county of Richmond and State of New York, have invented an Improvement in Wrenches, of which the following is a specification:

Screw-wrenches have been made with two bars passing as a fork from the handle through the moving jaw to the stationary jaw, and between these a screw has been placed, upon which a nut is fitted to adjust the moving jaw.

My invention is made for simplifying the construction, lessening the cost, obtaining greater strength, and facilitating the adjustment of the moving jaw. I provide a socket that is connected to the stationary jaw by two round bars that pass through the moving jaw, and on which the moving jaw slides, and I employ a screw that is connected directly with the handle, and passes through the socket and through a female screw in the moving jaw. By this construction the jaw is moved by revolving the handle and screw. The parts are constructed with but little hand-labor, and the wrench is very strong and durable.

In the drawing, Figure 1 is an elevation of the wrench complete, and Fig. 2 is a section at the line *x x*.

The stationary jaw *a* and handle-socket *b* are connected by the round parallel bars *c*,

upon which the moving jaw *d* slides. These bars *c* may be made with right-and-left handed screws at the ends, or provided with shoulders and secured by pins. Between the bars *c* is the screw *f* that is made as an extension from the handle *g* that passes through the socket *b*, and is retained so that it will be free to be rotated, but cannot move endwise. For this purpose the lower part of the screw may be made with a groove receiving the pins *i*, or the end of the screw *f* may pass through the jaw *a* and be provided with a head.

The handle is preferably of wood around the tang of the screw *f*, and the screw *f* should be made sufficiently strong where it passes through the socket *b* to prevent the metal bending when the wrench is in use.

I claim as my invention—

The round parallel rods *c*, uniting the socket *b* and jaw *a*, and upon which the jaw *d* slides, in combination with the screw *f* that passes through the socket *b* and jaw *a*, and the handle *g* that receives and is united with the tang of the screw, as and for the purposes set forth.

Signed by me this 30th day of December, A. D. 1874.

HENRY PORT.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.