

Witnesses. Trank. A. Jackson. James Magee

By Mile Wood

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## Anited States Patent Office.

## JAMES MAGEE, OF USQUEPAUGH, RHODE ISLAND, ASSIGNOR TO HIMSELF AND S. A. ALPIN, OF SAME PLACE.

Letters Patent No. 98,393, dated December 28, 1869.

## IMPROVEMENT IN ADJUSTABLE WRENCH.

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, James Magee, of the village of Usquepaugh, county of Washington, and State of Rhode Island, have invented a certain new and use-

ful Adjustable Wrench.

My invention consists in the novel arrangement of the operative parts of the wrench, by means of which a simple, effective, durable, and economical adjustable wrench is produced; and I hereby declare that the following specification, taken in connection with the drawings furnished and forming a part of the same, is a true, clear, and exact description thereof, reference being had to the drawings.

Figure 1 represents, in perspective, one of my ad-

justable wrenches complete.

A is the handle, shank, and stationary jaw of the wrench, preferably, in practice, to be made of a single

piece of metal.

B is a ratchet-bar, connected at one end with the shank A, near the handle proper, and at the other end with the stationary jaw, by means of a mortise in its face.

The upper edge of the ratchet-bar is provided with ratchet-notches, the vertical sides of which are toward

the handle.

C is the adjustable jaw, mortised and fitted to slide loosely upon the bar B, and be capable of a slightly

rocking movement forward and back.

D is a steel spring, firmly fixed to the lower part of the jaw C, and arranged to so bear against the under side of the bar as to cause the jaw to lean backward slightly, causing the rear upper edge of the mortise in C, through which the bar B passes, to become engaged with the ratchet-notches, and be held firmly in place against any pressure from between the jaws of the wrench.

Figure 2 represents the same in vertical cross-section at line E E.

Figure 3 represents the adjustable jaw C with portion of bar B in longitudinal section, and exhibits more fully the form of the slot and its relation to the bar B.

To operate my wrench, it is only necessary, in closing the jaws, to apply simple pressure to the jaw C in the requisite direction.

To move it backward, the adjustable jaw C should be rocked forward slightly, thus bringing the upper rear edge of the slot out of the notch with which it

may have been engaged.

I am aware, that to a limited extent, adjustable wrenches-have been made, in which the notched sliding bar, adjustable jaw, and spring have been used; but I am not aware that an adjustable wrench was ever before constructed and so arranged that the jaw and handle will be constructed in one piece, and thereby afford for the adjustable jaw, when mounted upon a sliding bar, a firm and reliable support, by which great strength and effectiveness are secured, as well as admitting of great economy in its manufacture.

Having thus described my invention,

I claim as new, and desire to secure by Letters Patent of the United States—

The improved adjustable wrench, composed of handle and jaw A, guide-bar B, spring D, and adjustable jaw C, constructed as described.

Witnesses:

JAMES MAGEE.

JOHN G. CLARKE, JAMES E. BABCOCK.