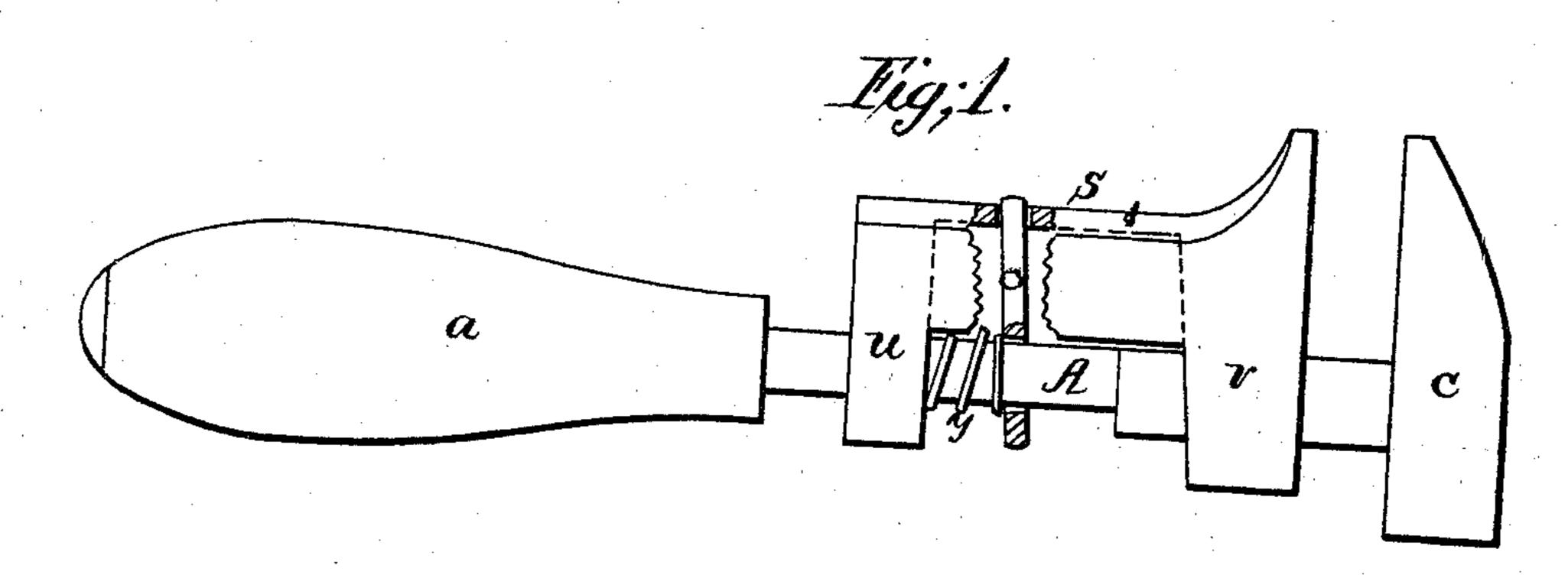
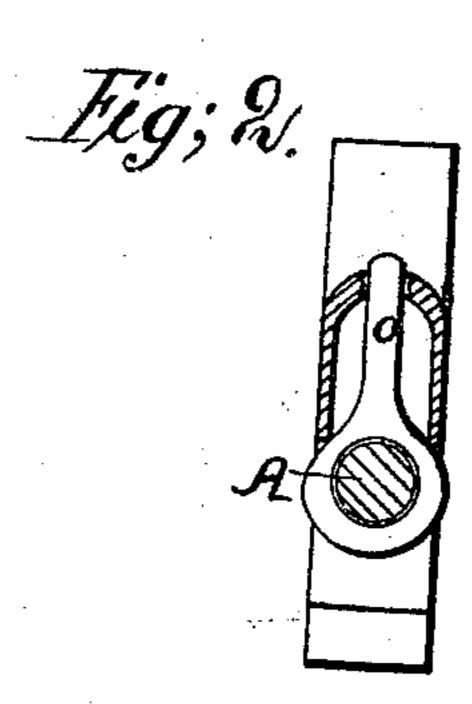
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Witnesses; Habrith James P. Greves Inventor; Min 26 Sille Chifman Hoomer afor attys



WILLIAM H. SIBLE, OF HARRISBURG, PENNSYLVANIA.

Letters Patent No. 86,597, dated February 2, 1869.

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, WILLIAM H. SIBLE, of Harrisburg, in the county of Dauphin, and State of Pennsylvania, have invented a new and valuable Improvement in Wrenches; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a plan view, with a portion broken off, to show the thumb-screw and spring, and

Figure 2 is a detail.

My invention relates to wrenches designed for use in turning nuts, and for other similar purposes; and

It consists in providing novel and efficient means for moving and holding the adjustable jaw thereof to and at any point that may be desirable.

The letter A of the drawings represents the main bar of my wrench, upon which I affix a wooden handle, a, and at the opposite end attach firmly the fixed jaw c.

This bar A has a quadrilateral shape from the point where it is united with the jaw c to a point about two-fifths of the distance from said jaw to the handle a, while between said last-mentioned point and said handle it is constructed in a circular form.

The letter s is a sliding jaw, constructed in the form represented, and having double flanches or bearings, u and v, which rest and slide on the bar A.

The opening in the flanch u is round, and the opening in the flanch v is square, each adapted to the re-

spective portions of the bar A upon which they rest and upon which they are moved.

The letter o is a thumb-piece, passing through the jaws and clasping the bar A in the manner shown.

The letter y represents a wire spring coiled around the bar A, the lower end of which is attached to the inner side of the flanch u, while the upper end thereof is attached to and rests against the lower side of thumb-piece o.

My wrench is operated as follows, namely:

The jaws are separated to any required distance by pressing a thumb upon the upper side of thumb-piece o. The required position being reached, the thumb is removed, when the spring y presses against the thumb-piece, and crowding it against its shoulder in the jaw s, holds said jaw from moving downward.

I am aware that springs have been used in wrenches, in combination with ratchets; but my device contemplates the use thereof upon a cylindrical rod, upon which there is no ratchet whatsoever.

What I claim as my invention, and desire to secure by Letters Patent. is—

The thumb-clasp a and spring y, in combination with the smooth cylindrical shank of a wrench, substantially as described.

In testimony that I claim the above, I have hereunto subscribed my name, in the presence of two witnesses:

WILLIAM H. SIBLE.

Witnesses:

ROBT. SNODGRASS, J. N. CLARK.