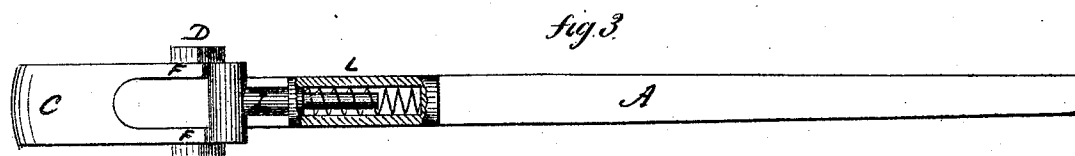
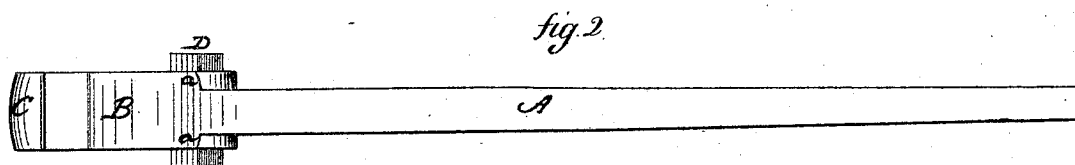
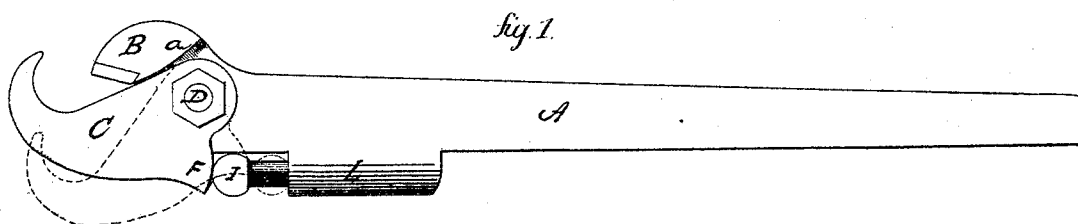


Walter S. & James A. Wilcox's *Impts in Pipe Wrench*

[45.]

No. 118,891.

Patented Sep. 12, 1871.



Witnesses.
John H. Shumway
A. J. Libbitt

Walter S. & James A. Wilcox
Inventors
By their Atty.
John E. Earle

UNITED STATES PATENT OFFICE.

WALTER S. WILCOX, OF HARTFORD, AND JAMES A. WILCOX, OF ROCKY HILL,
CONNECTICUT.

IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. 118,891, dated September 12, 1871.

To all whom it may concern:

Be it known that we, WALTER S. WILCOX, of Hartford, and JAMES A. WILCOX, of Rocky Hill, in the county of Hartford and State of Connecticut, have invented a new Improvement in Pipe-Wrench; and we do hereby declare the following, when taken in connection with the accompanying drawing and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawing constitutes part of this specification, and represents, in—

Figure 1, a side view; Fig. 2, a top or front view; and in Fig. 3, a rear view.

This invention relates to an improvement in that class of wrenches termed pipe-wrenches—that is, wrenches designed for turning cylindrical articles, as pipe, round rods, &c., and especially to the wrench patented to the said JAMES A. WILCOX, dated September 3, 1861, and a subsequent patent to the same, dated June 28, 1870; the object being to produce a wrench which is constructed to grasp cylindrical articles, with one of the jaws arranged to automatically yield for the purpose of taking a new grasp, required in the turning of such articles.

In both the above-named patents the fulcrum of the adjustable jaw was made movable longitudinally on the lever by means of the screw and nut, whereby the jaw was adjusted for different diameters. Some of the elements of these patents are retained in this invention, and this wrench is, to a certain extent, adjustable to grasp different diameters.

Our invention consists in the arrangement of a hooked or bill-shaped jaw upon a fixed fulcrum on the lever, which said lever is provided with a stationary jaw and projections to arrest the forward movement of the hook-shaped or adjustable jaw, combined with a follower acting in the rear of the said adjustable jaw, which, by means of a spring applied thereto, the said spring and follower arranged within a barrel on the lever as a guide for the said follower and the protection for the spring, forces the adjustable jaw forward toward the said shoulder to cause the said adjustable jaw, in connection with the fixed jaw, to grasp the article to be turned and allow the free return of the lever for a new grasp.

A is the bar or lever by which the wrench is operated, its one end constructed to form a fixed jaw, B, and the other as a handle. The jaw B is made thicker than the lever A, so as to form shoulders or projections, *a*, substantially the same as in the patents before referred to. C is an adjustable jaw attached to the lever by a bolt or pivot, D, which forms a fixed bearing upon which the jaw C swings, the projections *a* serving as a stop to arrest the approach of the movable jaw toward the fixed jaw. On the rear of the adjustable jaw C I form a projection or projections, F, and against these a slide, I, bears, as seen in Fig. 1, the said slide being arranged within a barrel, L, on the back of the lever A, the said barrel inclosing a spring, as in Fig. 3, the tendency of which is to force the slide outward, and thus pressing against the projections F on the said jaw C, force the jaw C forward against the projections *a*, as seen in Fig. 1, but allow the opening of the jaw for the purpose of grasping cylindrical articles, as denoted in broken lines, Fig. 1, which operation compresses the spring in the barrel.

In using the wrench it is only necessary to open the jaw sufficiently to place it on the article to be turned, the spring on the slide serving to force the jaw C forward to grasp the article between the two jaws, so that when the lever is drawn forward the article will be turned, but when the lever is drawn backward the jaw C will pass freely over the surface for a new grasp, and this without any effort on the part of the person using the wrench.

In the patents before referred to the spring is more or less exposed, whereas by the formation of the barrel on the back of the lever the spring is entirely protected and the slide supported.

We claim as our invention—

In a wrench, substantially as herein described, the arrangement of the slide or follower I within the barrel L, the said barrel serving to inclose the spring and form a bearing for the slide, as herein set forth.

WALTER S. WILCOX.
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Witnesses:

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