

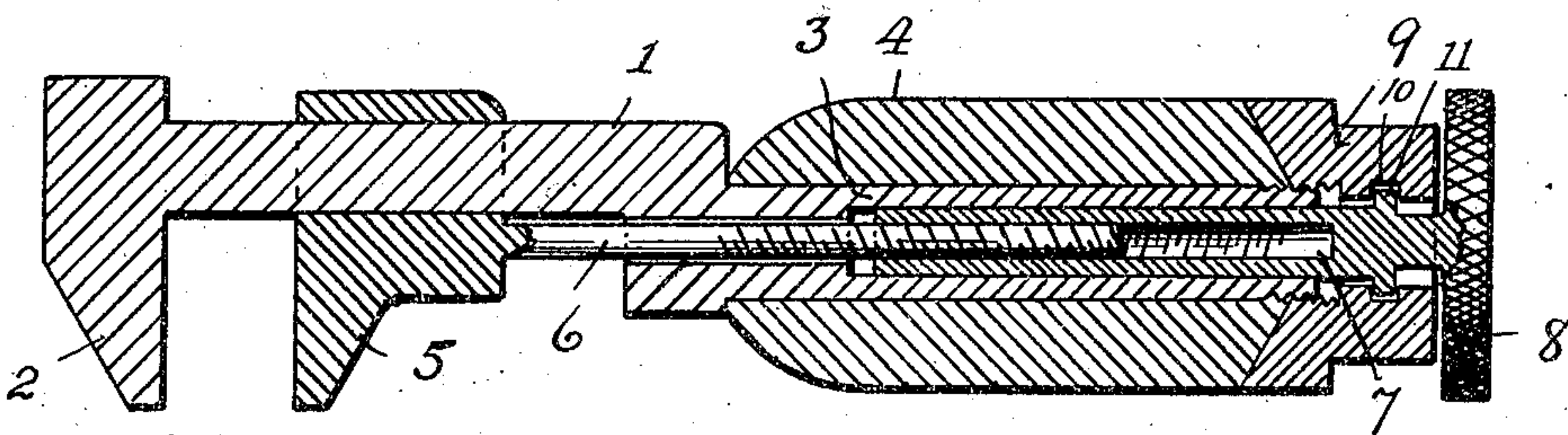
W. S. BOWERS.

WRENCH.

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903,440.

Patented Nov. 10, 1908.



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Witnesses  
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# UNITED STATES PATENT OFFICE

WILSON S. BOWERS, OF BLANDON, PENNSYLVANIA.

## WRENCH.

No. 903,440.

Specification of Letters Patent.

Patented Nov. 10, 1908.

Application filed May 22, 1905. Serial No. 434,221.

*To all whom it may concern:*

Be it known that I, WILSON S. BOWERS, a citizen of the United States, residing at Blandon, in the county of Berks and State of Pennsylvania, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to improvements in wrenches and the object is to provide a device in which the operating screw for the movable jaw member is protected and one in which access may be easily had to the operating parts.

The invention is more fully described in the following specification and clearly illustrated in the accompanying drawing, which shows a longitudinal central sectional view of my wrench.

The numeral 1 designates the body and 2 the stationary jaw member; the body is formed with an integral sleeve 3, which sleeve is screw-threaded externally at its extremity and adapted to enter the handle 4.

The numeral 5 designates the movable jaw member, which, as usual is adapted to slide on the body portion 1. This jaw is provided with an externally screw-threaded rod 6 projecting from its rear and entering the sleeve 3 on the body portion.

From the rear end of the handle I insert an internally screw-threaded sleeve 7 adapted to engage the screw-threaded end of the rod 6. This sleeve is provided with an operating thumb screw 8 at its extremity by means of which the sleeve is given rotary motion.

The numeral 9 designates a nut. This nut screws onto the end of the body sleeve 3 which projects slightly beyond the rear end of the handle 4. This nut is recessed at the rear, indicated by numeral 10, and the sleeve 7 is formed with a collar 11 which rests against the base of this recess.

The operation of the wrench is as follows:—When the operating thumb screw 8 is turned, the sleeve 7 will, through its screw connection with the rod 6, move said rod and also the movable jaw member 5 in either direction. To take the device apart, the nut 9 is removed and the entire device may be taken apart by turning the operating thumb screw 8 and sliding the handle 4 off the sleeve.

It will be noted that in my construction the screw and other parts are thoroughly protected, being housed in the handle; that the operation is easy and the action effective, while the construction is at the same time comparatively simple and of low cost.

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

In a wrench a body portion having a stationary jaw member at one end and a hollow sleeve at the other end, said sleeve being screw-threaded externally; a handle adapted to incase said sleeve; a movable jaw member slidably arranged on said body; a rod, externally screw-threaded at its extremity, secured to said movable member and passing through said body portion and entering said sleeve; an operating thumb screw; a sleeve formed on said thumb screw and adapted to enter the sleeve in the handle and to engage the screw-threaded end of the rod, and a nut engaging the screw-threaded end of the body sleeve.

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

WILSON S. BOWERS.

Witnesses:

O. H. HINNERSHITZ,  
G. HENRY HEINLY.