

No. 712,586.

Patented Nov. 4, 1902.

S. J. PETTY.  
WRENCH.

(Application filed July 3, 1902.)

(No Model.)

Fig. 1.

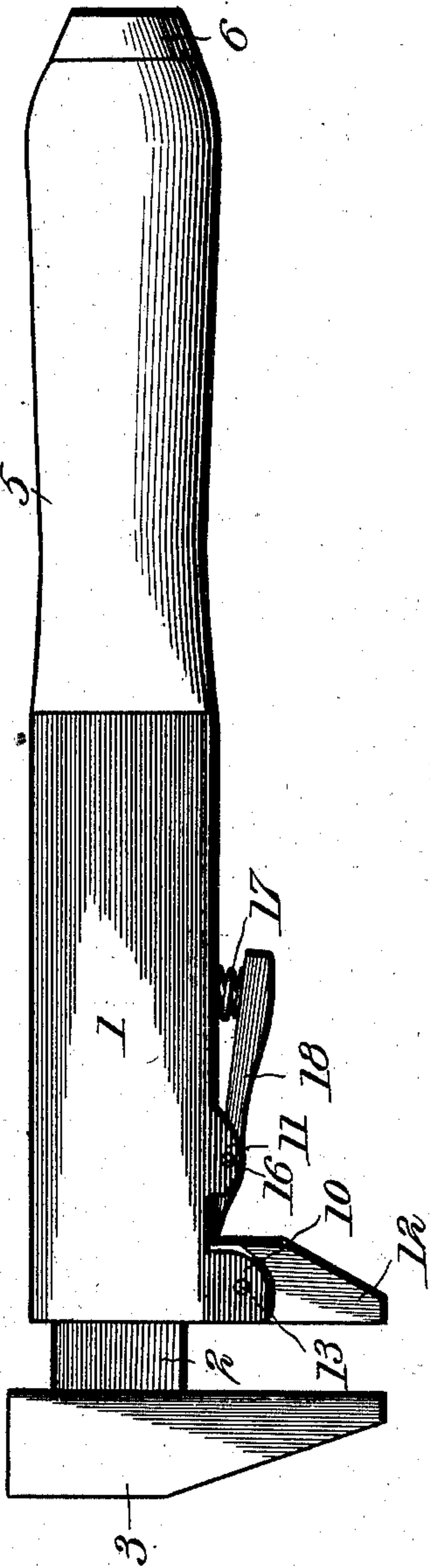
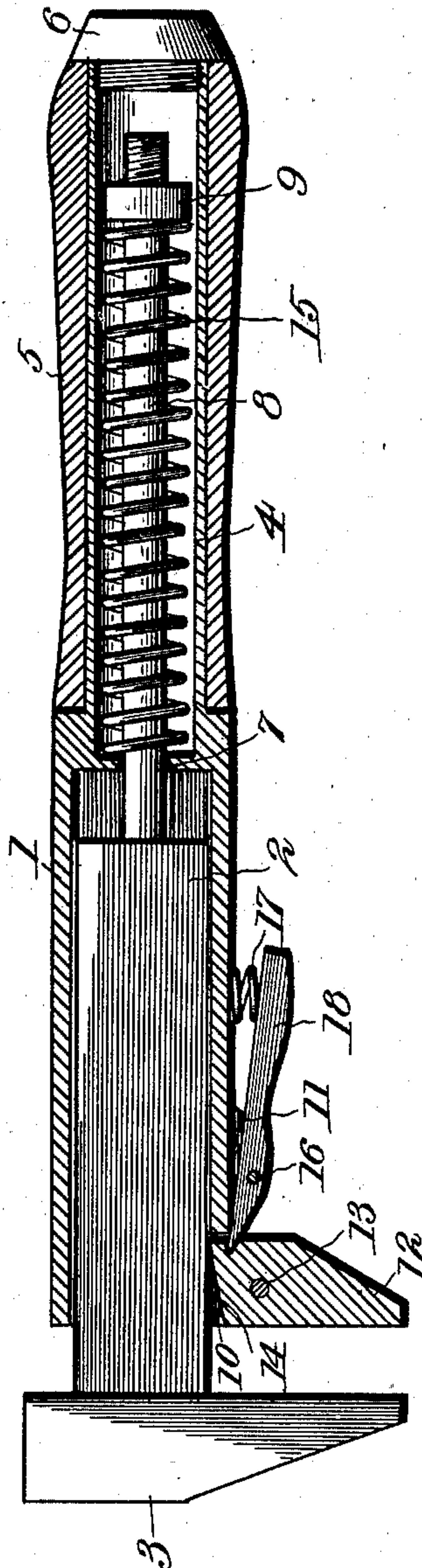


Fig. 2.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## WRENCH.

SPECIFICATION forming part of Letters Patent No. 712,586, dated November 4, 1902.

Application filed July 3, 1902. Serial No. 114,267. (No model.)

*To all whom it may concern:*

Be it known that I, STONEWALL J. PETTY, a citizen of the United States of America, residing at Gillham, in the county of Sevier and State of Arkansas, have invented certain new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to nut and pipe wrenches, and particularly to that class of wrenches known as "sliding jaw."

The object of the invention is, first, the construction of a wrench whereby the adjustment of the movable or outer jaw is had by spring-operated means situated in the handle of the wrench; second, whereby the said adjustment of the movable jaw by the spring-operated means is controlled by the inner jaw of the wrench, which is stationary with relation to the adjustment, but so pivoted as to frictionally counteract the action of the spring on the movable jaw.

A further object of the invention is to produce a wrench wherein the several parts may be easily assembled and when so assembled will possess sufficient strength for the purpose intended.

A still further object of the invention is to produce a wrench in which the several parts will possess advantages in points of simplicity, durability, and inexpensive structure.

With the above and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts, to be hereinafter more fully set forth and claimed.

In describing the invention reference will be had to the accompanying drawings, forming part of this specification, and wherein like characters denote corresponding parts in the several views, in which—

Figure 1 is a side view of a wrench embodying the invention. Fig. 2 is a section showing the adjusting means.

In the drawings, 1 indicates the forward end of the handle of the wrench, said forward end being hollow, so as to receive the primary stem 2 of the outer jaw 3, and has the ears 10 and 11 cast therewith. Integral with the forward end of the handle is cast the rear tubular handle 4. Said rear handle 4 is considerably smaller than the forward handle, so as to allow a grip 5 of sufficient stoutness to be

slid thereon and secured in place by the screw 6, and thereby completing the uniform shape of the wrench. Between the forward and rear portions of the handle there is provided a flange 7 for a purpose to be hereinafter described.

The outer jaw 3 is provided with the primary stem 2 and a secondary stem 8, said secondary stem being cast integral with the primary stem and when in place extending into the tubular portion of the handle. On the outer end of the secondary stem is secured the thumb-nut 9. A spiral spring 15 is secured around the secondary stem, said spring abutting the flange 7 and the thumb-nut 9.

The inner jaw 12 is pivoted to the ears 10 by means of the shaft 13. The side 14 of the inner jaw which is adjacent to the primary stem is inclined, so that it only contacts with the primary stem at its inner edge. A spring-tongue 18 is journaled to the ears 11 by the shaft 16. One end of said tongue is embedded in the inner jaw 12, and the other end is held normally elevated by means of the spring 17, and the inner jaw thus held in frictional contact with the primary stem for the purpose hereinbefore described.

If it is desired to adjust the wrench, it is only necessary to depress the spring-tongue 15 at its elevated end, thereby removing the frictional contact between the primary stem and the inner jaw, pull out the movable jaw a distance greater than the size of the object it is desired to operate upon, release the spring-tongue, and place the jaws of the wrench so that the stock will fall between them. Again depress the tongue, and the movable jaw will adjust itself precisely as desired by reason of the expansion of the spring 15.

It will be noted that various changes in the proportions and construction may be resorted to without departing from the scope of the invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a wrench, a movable jaw, a handle, means within the handle for holding the movable jaw normally closed and a pivoted jaw forming means for maintaining the movable jaw at a desired adjustment.

2. In a wrench, a movable jaw, a handle,



means within the handle for spring-actuating the jaw-bar, a pivoted jaw and spring-actuated means acting on the pivoted jaw, whereby frictional contact is had between  
5 said pivoted jaw and the jaw-bar of the movable jaw.

3. In a wrench, a movable jaw, a handle, means within the handle for spring-actuating the jaw-bar, a pivoted jaw journaled in  
10 ears on the handle, one side of which frictionally engages the jaw-bar and means for normally holding the pivoted jaw in frictional engagement with the jaw-bar.

4. In a wrench, a movable jaw, a handle,  
15 means within the handle for spring-actuating the jaw-bar, a pivoted jaw and spring-actuated means for maintaining the pivoted jaw in frictional contact with the jaw-bar, said means consisting of a pivoted tongue

having one end embedded in the pivoted jaw 20 and the other held normally elevated by a spring, substantially as described.

5. In a wrench, a movable jaw, a handle, means within the handle for spring-actuating the jaw-bar, a pivoted jaw journaled in  
25 ears on the handle, the pivot of said jaw being situated at a point below the center whereby the force of operating the wrench will be simultaneously utilized to increase the frictional contact between the pivoted jaw and  
30 the jaw-bar.

In testimony whereof I affix my signature, in the presence of two witnesses, this 30th day of June, 1902.

STONEWALL J. PETTY.

Witnesses:

BENJAMIN E. HENDRIX,  
JOHN S. HENDRICKS.