

(No Model.)

W. E. PUGSLEY.  
WRENCH.

No. 596,825.

Patented Jan. 4, 1898.

Fig. 1.

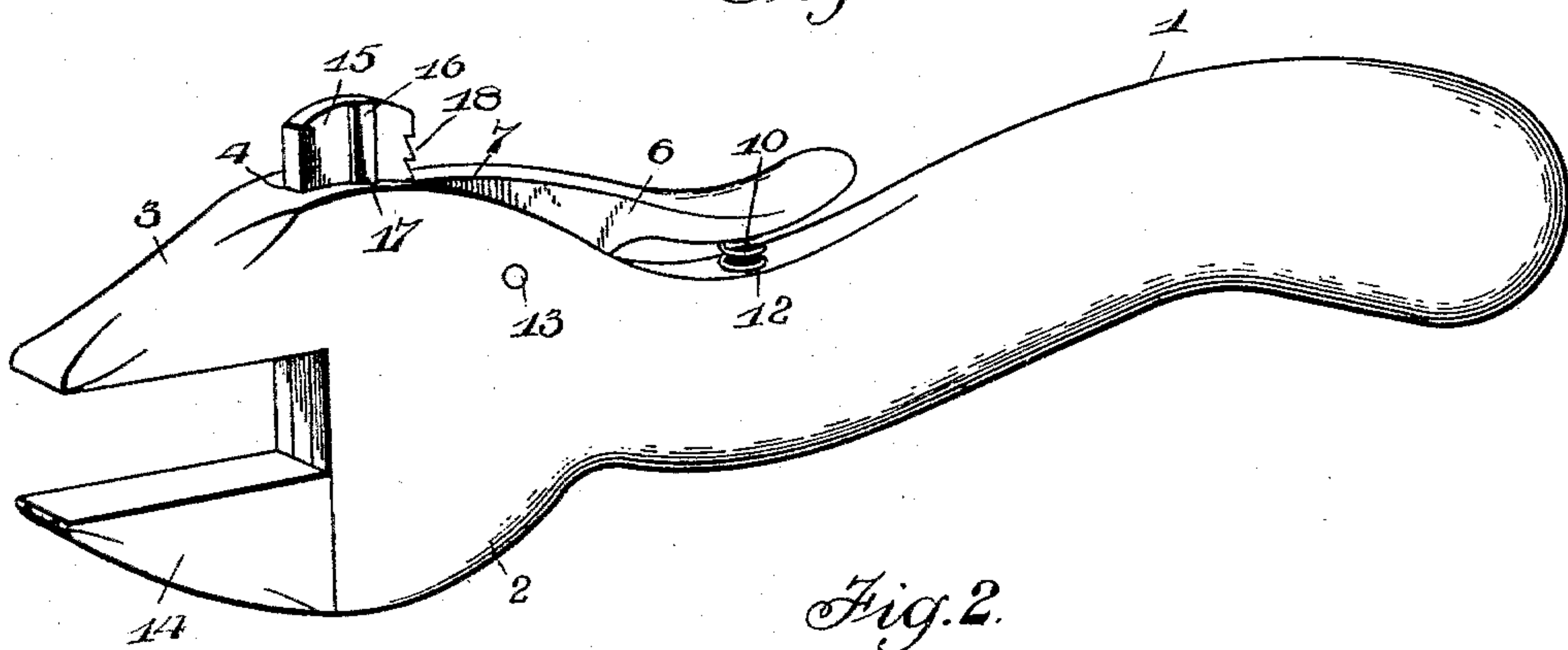


Fig. 2.

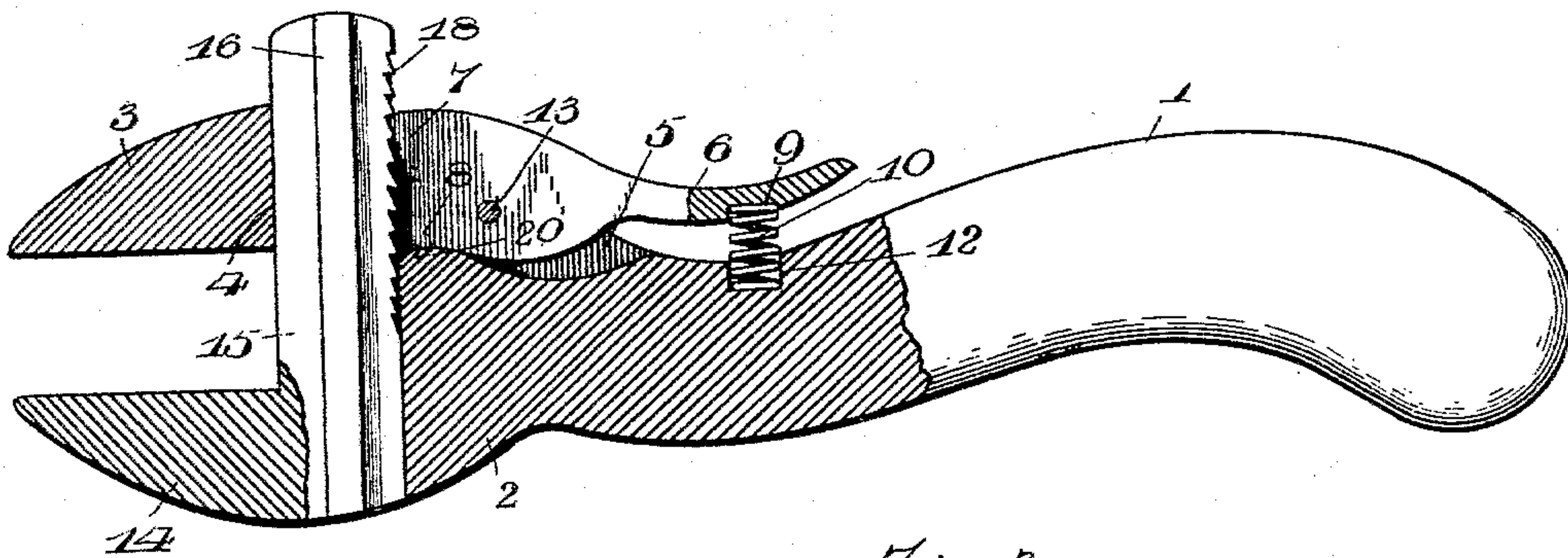


Fig. 3.

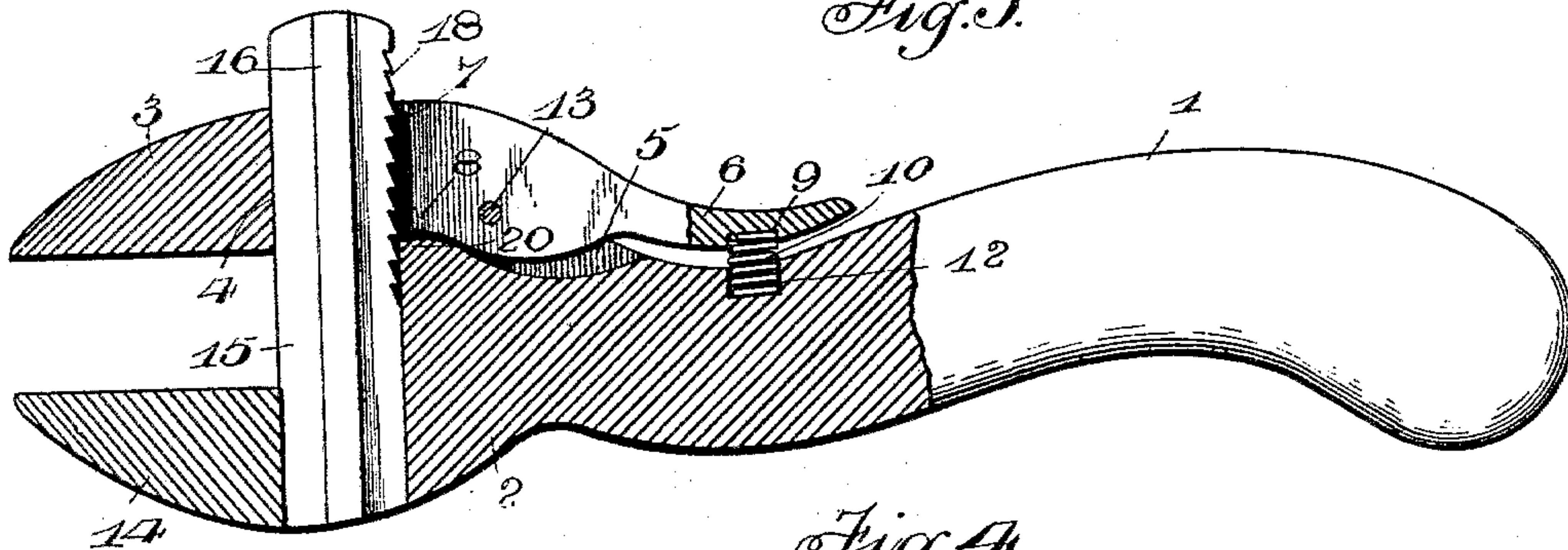
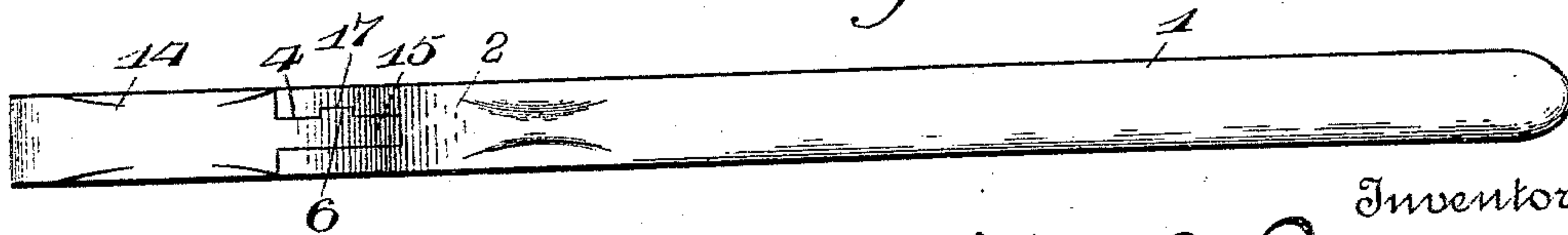


Fig. 4.



Witnesses

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# UNITED STATES PATENT OFFICE.

WILLIAM EDWARD PUGSLEY, OF LINCOLN, NEBRASKA, ASSIGNOR OF ONE-HALF TO FRANK A. BOEHMER AND NESTOR RUMMONS, OF SAME PLACE.

## WRENCH.

SPECIFICATION forming part of Letters Patent No. 596,825, dated January 4, 1898.

Application filed July 2, 1896. Serial No. 597,858. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM EDWARD PUGSLEY, a citizen of the United States, residing at Lincoln, in the county of Lancaster and State of Nebraska, have invented certain new and useful Improvements in Wrenches; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to certain new and useful improvements in wrenches, and more particularly to that class of sliding-jaw wrenches in which the handle, the head, and the rigid jaw are made of a single piece, the head being formed with a rectangular slot extending through it to receive the sliding jaw, the bar of which is provided with a series of locking-teeth which are engaged by a pawl-lever to lock said sliding jaw in place.

The object of the invention is to provide a simple, convenient, practical, and durable tool of this kind; and to this end the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawings the same figures of reference indicate the same parts of the invention.

Figure 1 is a perspective view of my improved wrench. Fig. 2 is a longitudinal section of the same, showing the thumb-lever in position for adjusting the sliding jaw. Fig. 3 is a similar view showing said lever in position to lock the sliding jaw, and Fig. 4 is a bottom plan view.

1 is the handle, 2 the head, and 3 the rigid jaw. The head 2 is formed with a rectangular transverse slot 4, extending through the head at a right angle to the handle, and the upper end of said slot is cut away in the same plane as the slot to form a recess 5, in which is pivoted a thumb-lever 6, the free end of which forms a pawl 7, and below said pawl is located an integral toe 8. The under side of the opposite end of said lever 6 is provided with a circular recess 9, which engages one end of a spiral spring 10, the opposite end of which is secured in a pocket 12 in the handle 1 in line with the recess 9 in said lever. This le-

ver is fulcrumed on a rivet 13, secured in the handle between the walls of the recess 5.

14 is the sliding jaw, formed with an integral rectangular bar 15, conforming in cross-section to the shape of the slot 4, in which it freely slides, one side of the bar being formed with a longitudinal parallel web 16, sliding in a guideway or corresponding groove 17 in the slot 4. The rear portion of said bar 15 is formed with a series of ratchet-shaped teeth 18, which are engaged by the pawl 7 on the free end of the thumb-lever 6 to rigidly lock the sliding jaw 14 in position when the wrench is in operation, and when the thumb-lever is so engaged its toe 8 rests upon the anvil 20 in the bottom of the recess 5, so that the whole strain on the pawl 7 is transferred from the rivet 13 to the anvil 20, which, being an integral part of the solid handle, will stand any ordinary strain to which the wrench may be subjected.

A very important feature of this novel construction is the fact that the wear, as well as the strain, is taken from the fulcrum-rivet, thereby prolonging the life of the tool and greatly contributing to its durability and usefulness.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

1. A wrench consisting of a handle, an integral or stationary jaw extending longitudinally from one end of said handle, a jaw movable to and from the stationary jaw, an integral guide-rod for said movable jaw projecting through, and adapted to reciprocate in, the stationary jaw, and provided with teeth on the side thereof adjacent the handle, and a spring-actuated lever fulcrumed in the handle on the toothed side of said rod and opposite to the stationary jaw and adapted to engage the toothed rod, substantially as described.

2. A wrench consisting of a handle, an integral or stationary jaw extending longitudinally from one end of said handle, a jaw movable to and from the stationary jaw, an integral guide-rod for said movable jaw projecting through, and adapted to reciprocate in, the stationary jaw, and provided with teeth



on the side thereof adjacent the handle, said handle being provided with a longitudinal slot exposing the toothed side of, and arranged in the same plane with, said rod and situated  
5 opposite the stationary jaw, and a flat spring-actuated lever fulcrumed in the handle and adapted to engage any tooth thereof, said lever, when so engaged, being adapted to seat in the bottom of said slot approximately be-

neath the engaged tooth and close to the rod, so substantially as described.

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

WILLIAM EDWARD PUGSLEY.

Witnesses:

A. D. BORGELT,

CLAUS J. HINRICHS.