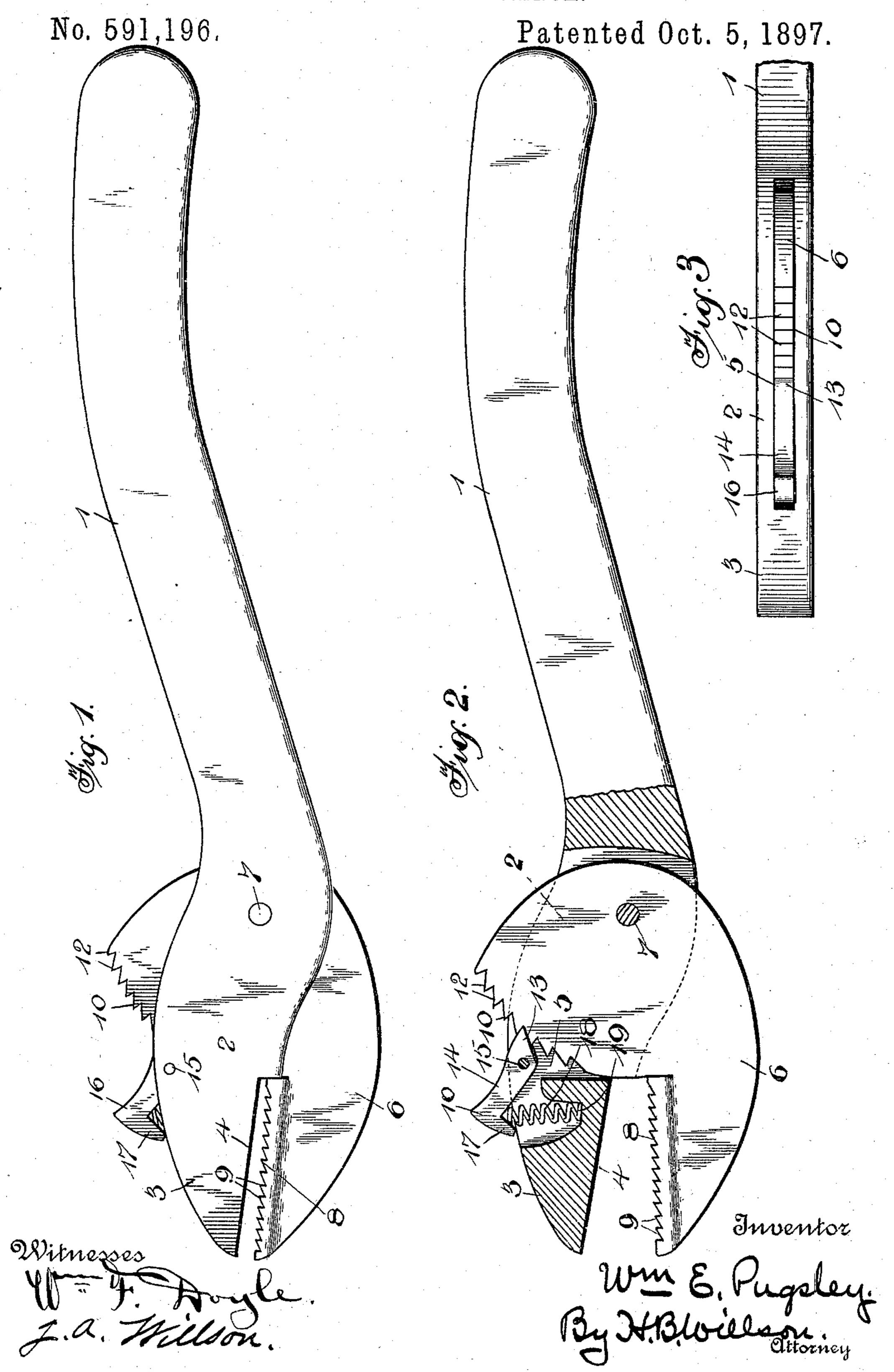
W. E. PUGSLEY.
NUT AND PIPE WRENCH.



## United States Patent Office

## WILLIAM EDWARD PUGSLEY, OF LINCOLN, NEBRASKA.

## NUT AND PIPE WRENCH.

SPECIFICATION forming part of Letters Patent No. 591,196, dated October 5, 1897.

Application filed February 27, 1897. Serial No. 625, 359. (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 Nut and Pipe 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 nut and pipe wrenches; and the object is to provide a simple, durable, and convenient wrench of this kind. 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 claim.

In the accompanying drawings the same reference-characters indicate the same parts of the invention.

Figure 1 is a side elevation of my improved wrench. Fig. 2 is a longitudinal section of the head, and Fig. 3 is an edge view.

1 represents the S-shaped handle, formed with an integral head 2 and a longitudinal jaw 3, having an inclined plane face 4. A 30 transverse slot 5 extends entirely through the head 2, and in this slot is pivoted a movable jaw 6, mounted on the rivet 7. The inclined face 8 of this jaw is provided with a series of serrations 9, and it is adapted to close parallel with the plane face 4 of the opposite jaw 3. The shank of this movable jaw 6 is formed with a curved face 10, arranged concentric with the rivet 7, and it is formed with a series of forwardly-projecting ratchet-teeth 12, 40 which engage the toothed end 13 of the pawl

14, pivoted on the rivet 15 in the slot 5. The projecting end 16 of this pawl 14 is roughened or milled to conveniently engage the thumb and prevent slipping while being manipulated to adjust the movable jaw. The outer 45 end of the pawl 14 is formed with an inwardly-projecting lug 17, which engages the outer end of a spiral spring 18, the opposite end of which is seated in a retaining-recess 19 in the fixed jaw 3, and which serves to hold 50 the pawl in engagement with the ratchetteeth on the movable jaw when the wrench is in use.

Although I have specifically described the construction and relative arrangement of the 55 several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention without departing from the spirit thereof.

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—

An improved wrench, comprising the han-65 dle 1 provided with the integral slotted head 2, and the inclined-face jaw 3, provided with the recess 19, in combination with the movable jaw 6, fulcrumed in the slotted head and provided with the curved serrated face 10, 70 the pivoted pawl 14 having an inwardly-projecting lug 17, and the spiral spring 18, seated in the recess 19 in said jaw 3, substantially as shown and described.

In testimony whereof I hereunto affix my 75 signature in presence of two witnesses.

Witnesses:

Witnesses:

W. H. Honts, J. A. Blair.