

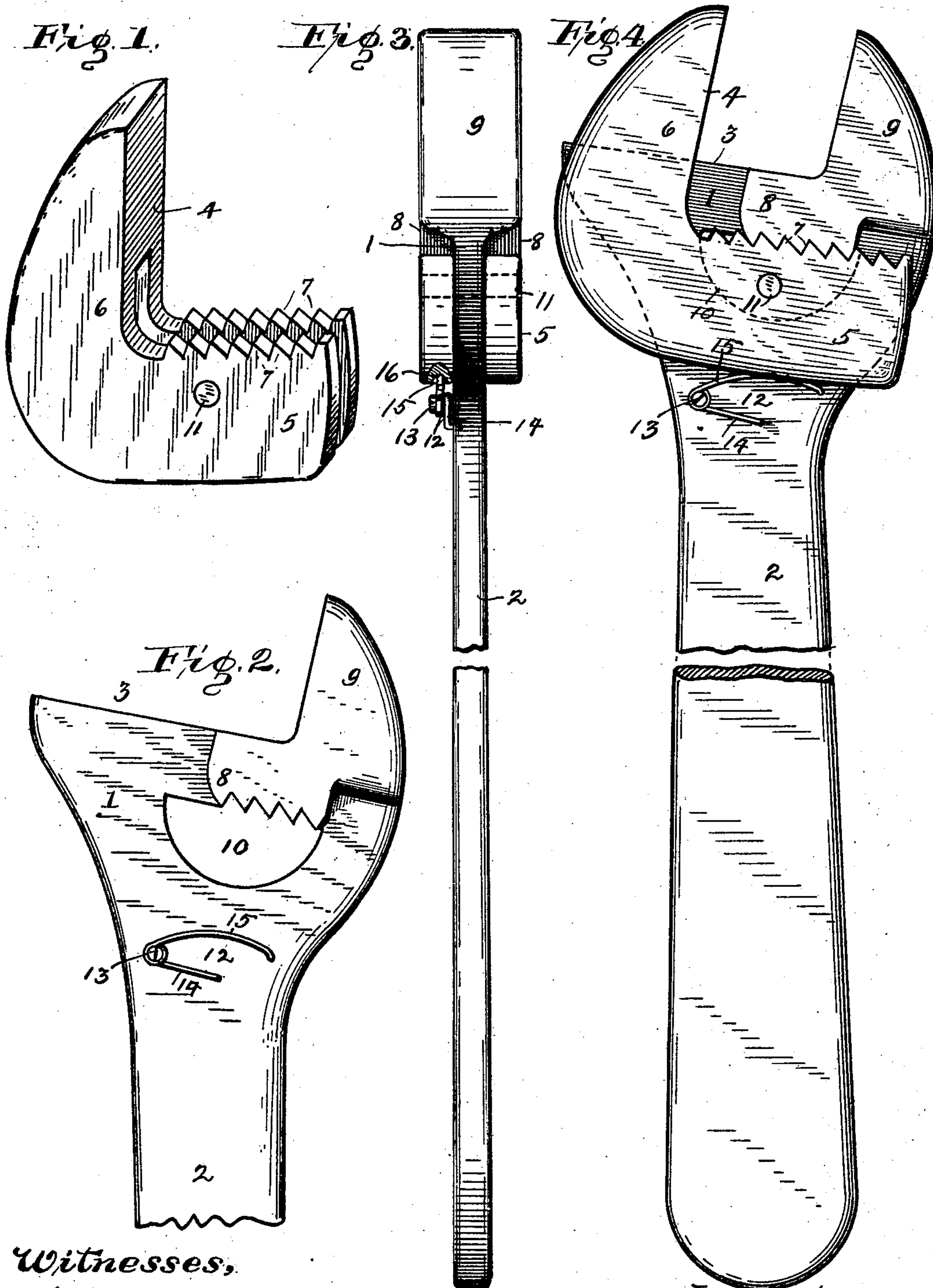
No. 710,382.

Patented Sept. 30, 1902.

J. T. VILES.  
ADJUSTABLE NUT WRENCH.

(Application filed Mar. 14, 1902.)

(No Model.)



Witnesses,  
John B. Shermood,  
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# UNITED STATES PATENT OFFICE.

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## ADJUSTABLE NUT-WRENCH.

SPECIFICATION forming part of Letters Patent No. 710,382, dated September 30, 1902.

Application filed March 14, 1902. Serial No. 98,193. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH T. VILES, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Adjustable Nut-Wrenches, of which the following is a specification.

This invention relates to improvements in wrenches for turning nuts on threaded bolts; and the object of the invention is to provide an adjustable jaw that can be quickly moved to suit different sizes of nuts and bolts and that will be strong and serviceable to withstand the strain of moving the most obstinate of those parts. The object also is to provide an inexpensive and convenient wrench.

I accomplish the objects of the invention by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the adjustable jaw used in my invention; Fig. 2, a detail in side elevation of the end of the wrench having the stationary jaw; Fig. 3, a side or edge view, and Fig. 4 a front view, of my complete invention.

Like characters of reference indicate like parts throughout the several views of the drawings.

1 represents the head of the wrench, having a handle 2 of any desired length. The head has the straight edge 3, which forms a guideway for the movable jaw 4. The jaw 4 is L-shaped, the lower member 5 being slotted longitudinally to receive the head 1. This slot extends part way up the member 6. The slotted jaw rides upon the straight edge 3. The inner edges of the member 5—that is, the edges on either side of the slot in said member—are serrated in the manner clearly shown. These teeth are indicated by the numeral 7 and are to engage teeth on lugs 8 8, which project laterally from both sides of the head 1. This head 1 has the stationary jaw 9, which works in conjunction with the adjustable jaw 4. Below the lugs 8 is the semicircular slot 10, through which is projected the restraining-pin 11. The pin 11 connects the two members formed by slotting the member 5, and while allowing said member 5 to be lowered to disengage its teeth from the teeth

on the lugs it prevents the separation of the adjustable jaw from the balance of the wrench.

In order to hold the adjustable jaw in locking engagement with the toothed lugs normally, I provide the spring 12, which is secured by screw 13 to the handle 2. The spring consists of a wire bent into a coil around the screw 13 and having the end of the outer arm 14 of the wire seated in a socket in the handle, while the opposite arm 15 bears against the lower or outer edge of the member 5 of the jaw 4. Said edge of the movable jaw is provided with a groove 16 to prevent the displacement of the spring.

To set the adjustable jaw of the wrench in or out, it is only necessary to grasp the member 5 between the fingers and press it against the spring until the teeth are disengaged, when the jaw can be slid on the straight edge into the desired position.

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

1. In a wrench, a body portion comprising a handle, a head flat on each side integral therewith said head having a straight edge and a stationary jaw at one end of said straight edge and lateral lugs on said head, an opening through the head between the lugs and the handle said lugs being toothed, a slotted jaw working on said head and having teeth to engage the teeth of the lugs.

2. A wrench comprising a body portion consisting of a handle expanded at one end to form a flat head, said head having a straight edge opposite the handle, an integral jaw at one end of the straight edge, lugs with inner serrated edges, adjacent to said straight edge, a slot or perforation through the head adjacent to the lugs, an adjustable jaw slotted to receive the flat head and adjustable along the straight edge of said head, said head having a right-angled inner portion taking under said lugs and having serrations to engage those of the lugs, a pin passing through the adjustable jaw and through the opening in the head and resilient means for holding the serrated jaw against the serrated lugs.

3. A wrench comprising a handle, an expanded end forming a flat head, said head

having a straight edge opposite the handle  
and an integral jaw, lugs with inner serrated  
edges adjacent to the straight edge, a perfor-  
ation between the lugs and the handle, an  
5 L-shaped jaw slotted to receive the flat head  
and adjustable along the straight edge, ser-  
rations of the jaw to engage those of the lugs,  
a pin connecting the slotted members of the  
jaw and passing through the perforation of  
10 the head and a spring carried by the body

and pressing the adjustable jaw against the  
shoulder.

In witness whereof I have hereunto set my  
hand and seal, at Indianapolis, Indiana, this  
5th day of March, A. D. 1902.

JOSEPH T. VILES. [L. S.]

Witnesses:

J. A. MINTURN,  
S. MAHLON UNGER.