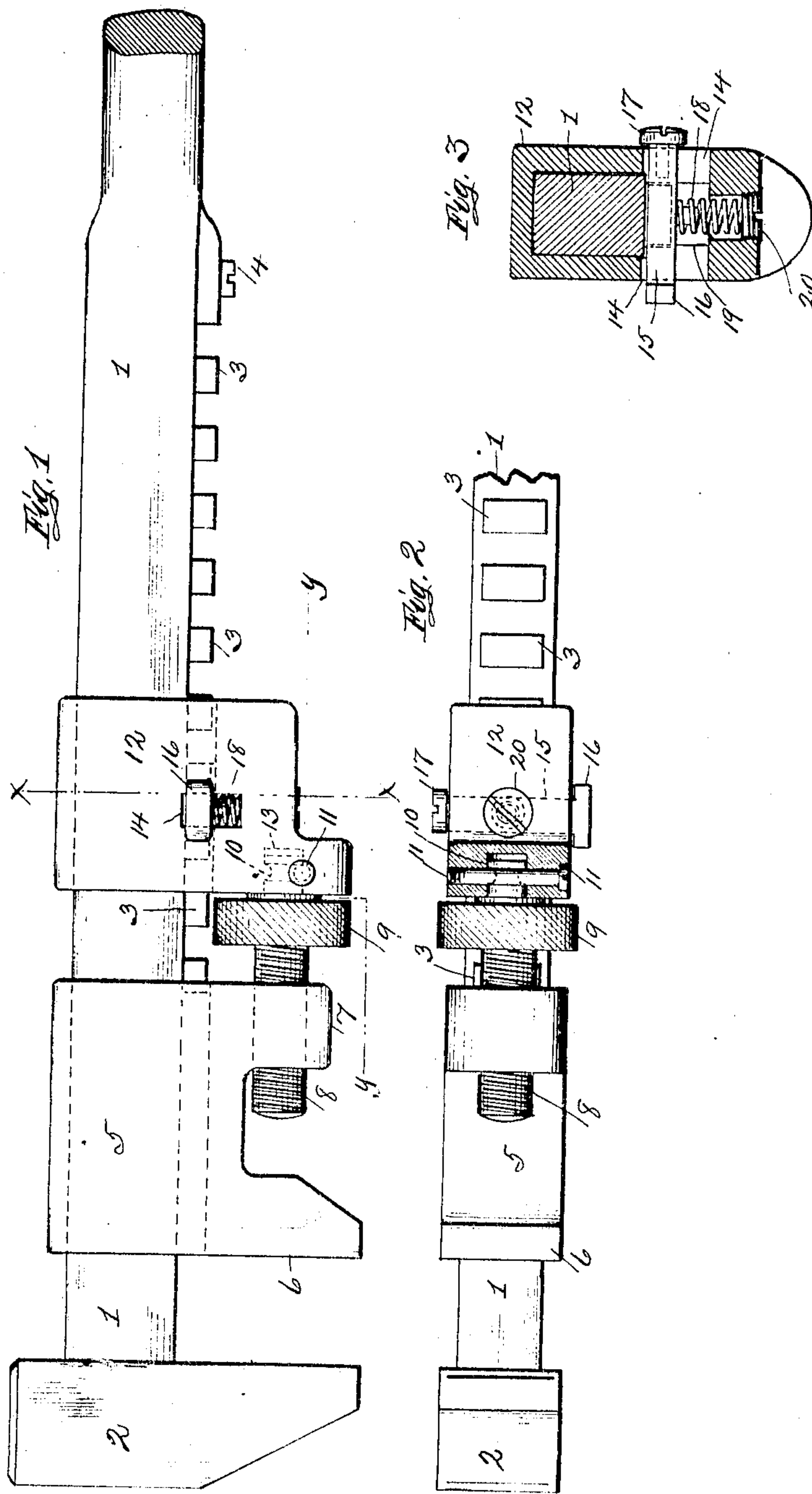


No. 881,937.

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G. W. MASON.  
WRENCH.

APPLICATION FILED JULY 25, 1906.



Witnesses:

*Wm. G. Walter*  
*Thomas E. Reddy*

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*George W. Mason.*  
*by his attorney*  
*M. E. Harrison.*



# UNITED STATES PATENT OFFICE.

GEORGE W. MASON, OF SHARON, PENNSYLVANIA.

WRENCH.

No. 881,937.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed July 25, 1906. Serial No. 927,639.

*To all whom it may concern:*

Be it known that I, GEORGE W. MASON, a citizen of the United States, residing at Sharon, in the county of Mercer and State of Pennsylvania, have invented certain new and useful Improvements in Wrenches, and 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to an improved quick-acting wrench, and it comprises a bar fitted with a stationary head, a rack formed along the length of said bar, a moving head carrying means for locking the same rigid with said bar, said head being formed in two parts with intermediate adjusting device, and the invention further consists of the certain details of construction and combination of parts, as will be fully described hereinafter.

In the accompanying drawings, Figure 1 is a side elevation of my improved wrench, the same being constructed and arranged in accordance with my invention. Fig. 2 is an inverted plan view of the same, a part of which is shown in section, said section being taken on the line *y, y*, of Fig. 1. Fig. 3 is a sectional end elevation of the wrench, the section being taken on the line *x, x*, of Fig. 1.

To put my invention into practice and thereby provide a quick-acting wrench, I provide a bar 1, of suitable length and material and at one end thereof form a head or jaw 2, the same being fixed and arranged at right-angles to the bar 1. This bar is provided along a portion of its length with a ratchet of integral projecting parts 3, and a portion of the end opposite to the head 2 formed into a handle.

Operating along the length of the bar 1, is a moving head 5, comprising a solid piece of metal with an opening to fit neatly about said bar and with a downward extension 6 to form the other jaw of the wrench. This moving head is formed with a boss 7 in which a screw thread is formed for the reception of a threaded adjusting screw 8, the said screw being formed with a thumb-nut 9, and is loosely connected to a supplemental head 12, capable of being moved along the length of the bar 1, and fitted with a means

for locking said supplemental head and bar rigidly at various points. The connection between these two heads 5 and 12, comprises the above-mentioned screw 8, which is formed with a reduced grooved end 10, which portion is confined in a cavity 13, by means of a transverse screw 11, as will be best seen by reference to Fig. 2 of the drawings. By means of this connection the moving jaw 6 of the wrench may be adjusted towards or away from the stationary jaw 2, by simply revolving or turning the thumb-nut 9 in the proper direction.

To hold these moving heads stationary or fixed to the bar 1, a transverse slot 14 is formed through the supplemental head 12, the said slot being located immediately beneath the bar 1, and is adapted to receive a lock bar 15 which enters between the teeth 3 of the rack. This lock bar 15 is formed at one end with a T head 16 and is fitted with a large headed screw 17 at the other, which arrangement will prevent end movement of the same. Arranged beneath this lock bar 15 is a spiral spring 18, which tends to keep said bar engaged with the ratchet, the said spring being arranged in a recess and confined therein by a short screw 20, as will be seen by reference to Fig. 3 of the drawings. This spiral spring 18 engages a lug carried by the bar 15 as is more particularly shown in Fig. 3.

The operation of the above described wrench is as follows. The projecting T head and screw head 17 is taken between the thumb and fore finger and pressed downward to free the lock bar 15 from the ratchet 3, and when held in this position the moving heads 5 and 12 may be freely moved along the length of the bar 1 in either direction, and when the two jaws are approximately sized to correspond with the nut to be operated upon the lock bar 15 is released to enter the adjacent space of said ratchet 3. The thumb nut 9 is now operated to move the jaw 6 in close relation with the nut operated upon.

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

In combination, a bar having a stationary jaw, teeth formed on said bar, a head movable on the bar, a supplemental head movable on the bar, means for moving the first named head independently of the supplemental head, said supplemental head hav-

ing a transverse opening, a bar extending through the transverse opening adapted to extend between the teeth of the bar, said second named bar having a cross head on  
5 one end, a screw head removably engaging the opposite end, a lug on the bar intermediate its ends, said supplemental head having an opening communicating with the transverse opening, said second opening being positioned above the lug of the bar when

the bar is in applied position, a spiral spring engaging the lug of the bar, and a closure for the second opening, said spiral spring contacting with said closure.

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

GEORGE W. MASON:

Witnesses:

WM. G. WALTER,  
THOMAS E. REDDY.