

**No. 709,711.**

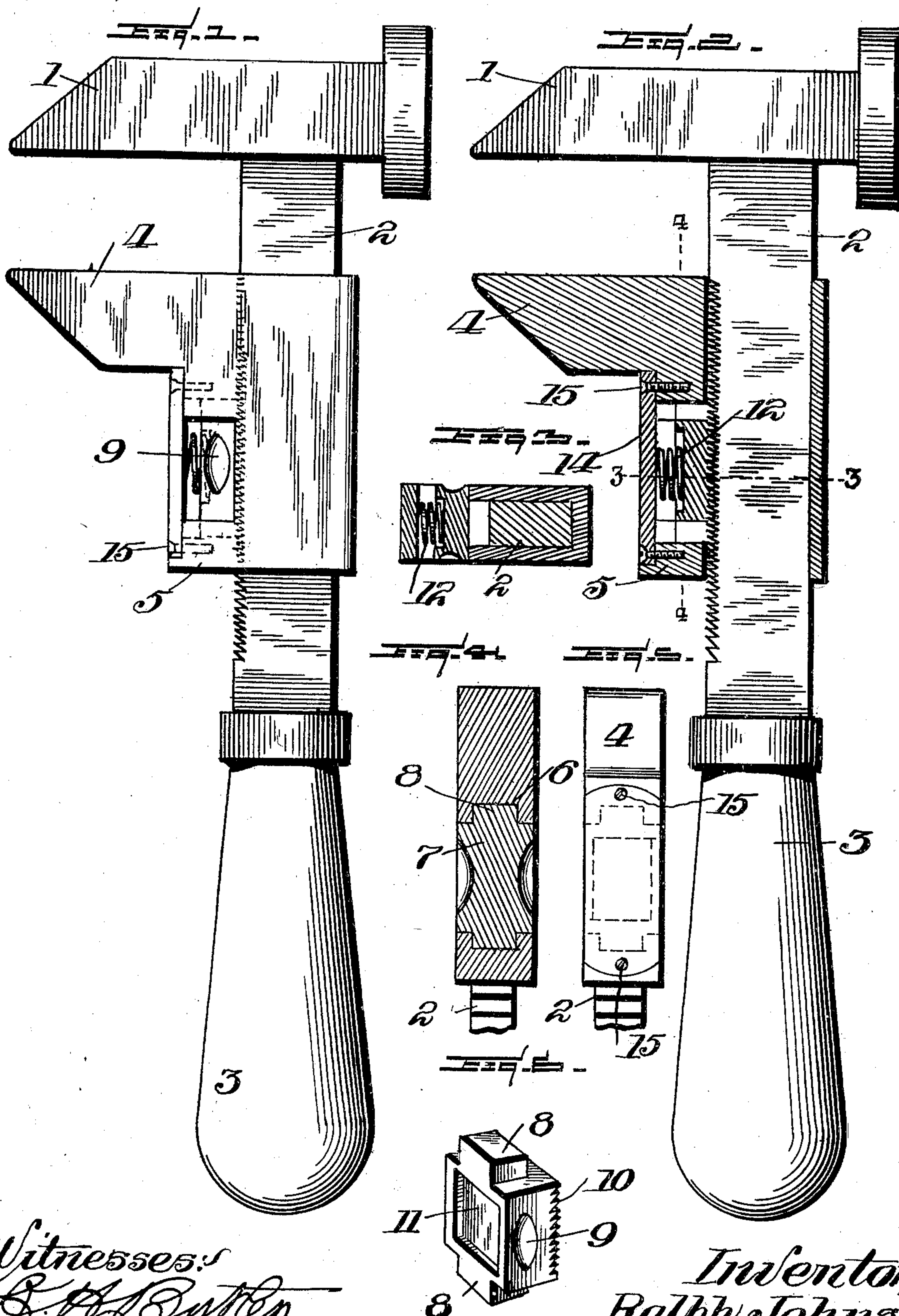
**Patented Sept. 23, 1902.**

**R. JOHNS.**

WRENCH.

(Application filed June 27, 1902.)

(No Model.)



Witnesses:  
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# UNITED STATES PATENT OFFICE.

RALPH JOHNS, OF ALLEGHENY, PENNSYLVANIA.

## WRENCH.

SPECIFICATION forming part of Letters Patent No. 709,711, dated September 23, 1902.

Application filed June 27, 1902. Serial No. 113,525. (No model.)

*To all whom it may concern:*

Be it known that I, RALPH JOHNS, a citizen of the United States of America, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Quick-Acting Monkey-Wrenches, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention relates to certain new and useful improvements in sliding-jaw wrenches, and relates more particularly to that class that may be quickly adjusted to grasp the object that is to be turned by the wrench.

15 The invention further aims to provide a device of the above-described character that will be extremely simple in construction, strong, durable, comparatively inexpensive to manufacture, and highly efficient in its use.

20 With the above and other objects in view the invention consists in the novel construction, combination, and arrangement of parts to be hereinafter more fully described, and specifically pointed out in the claim.

25 In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference indicate like parts throughout the several views, in which—

30 Figure 1 is a side elevation of my improved wrench. Fig. 2 is a similar view showing the sliding jaw in vertical section. Fig. 3 is a longitudinal sectional view taken on the line 3 3 of Fig. 2. Fig. 4 is a vertical sectional view taken on the line 4 4 of Fig. 2. Fig. 5 is a front view of the sliding jaw. Fig. 6 is a perspective view of the spring-pressed block.

40 In the drawings the reference-numeral 1 represents the stationary jaw, which is carried by the toothed rack-bar 2, at the lower end of which is secured the handle 3. Upon said toothed rack-bar is slidably secured the sliding jaw 4, having the lower extension 5, in which are formed substantially U-shaped guideways 6 for the reception of the spring-pressed block 7, said block carrying extensions 8 intermediate its sides, the extensions conforming to the shape of the guideways and which are adapted to engage in the latter, and has formed in its sides recesses 9 in order to easily engage the same. The said block is provided on its inner face with teeth

10, which are adapted to mesh with the teeth 55 of the toothed rack-bar 2, and upon the front face of the block 7 is formed a recess 11, which forms a seat for the spiral spring 12, the outer end of the spiral spring abutting against the inner face of the securing-plate 60 14, which is attached to the extension 5 by means of screws 15. When it is desired to operate the sliding jaw to adjust the wrench to grasp the object that is to be turned, the spring-pressed block may be easily engaged 65 in the recesses 9 and drawn outwardly, thereby compressing the spiral spring 12 and disengaging the teeth 10 from the teeth of the toothed rack-bar, thus allowing the sliding jaw a free and easy movement upon the rack-bar until the jaw has been properly adjusted to the desired position, when the spring-pressed block is released and by the extension of the spiral spring 12 the teeth of the block are forced into locking engagement 75 with the teeth carried by the rack-bar, thus placing the wrench in a position for operation.

The many advantages obtained by the use of my improved device will be readily apparent from the foregoing description, taken in connection with the accompanying drawings.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my 85 invention.

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

In a wrench, the combination with a fixed 90 jaw, a rack-bar rigidly secured thereto, a movable jaw, an extension formed to said movable jaw having approximately U-shaped guideways, a block having a seat formed therein, extensions carried by said block operating in said guideways, a plate detachably secured to the said movable jaw inclosing the outer ends of said guideways, and a spring arranged in said seat bearing against the inner face of said plate, all parts being arranged 100 and operating substantially as described and for the purpose set forth.

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

RALPH JOHNS.

Witnesses:

JOHN NOLAND,  
E. E. POTTER.