

No. 757,207.

PATENTED APR. 12, 1904.

J. KUHN.
WRENCH.

APPLICATION FILED FEB. 15, 1904.

NO MODEL.

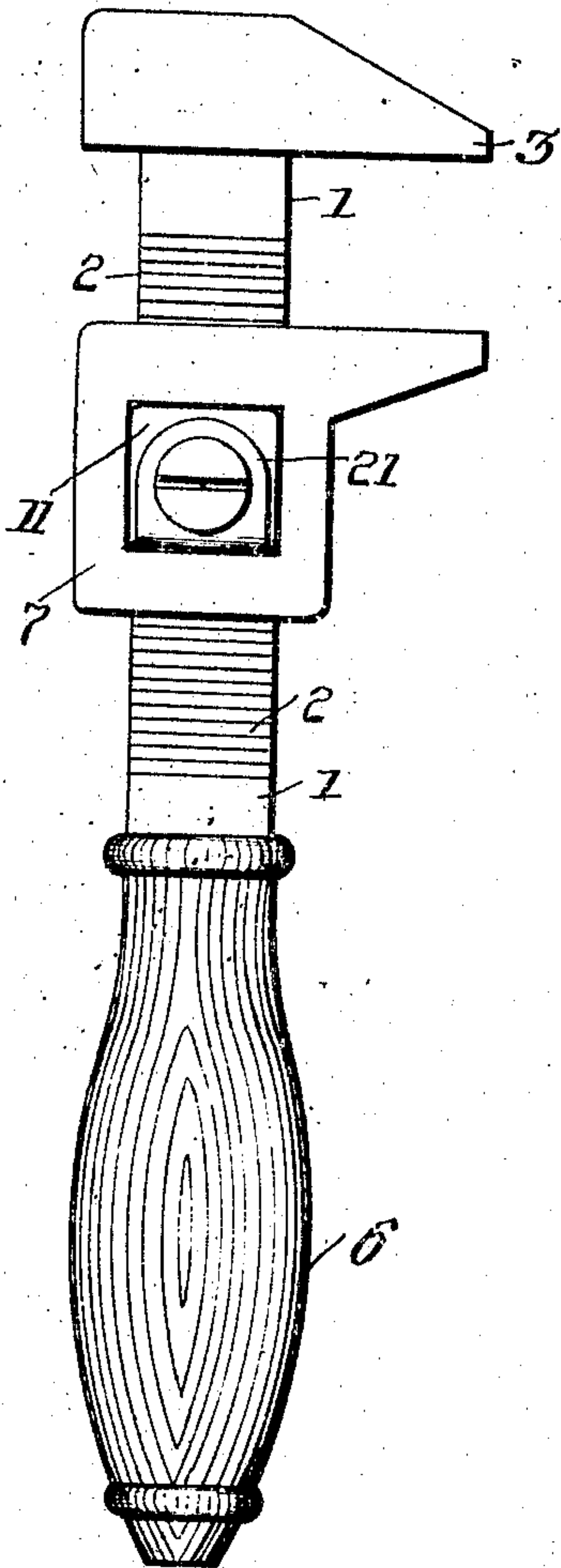


Fig. 1.

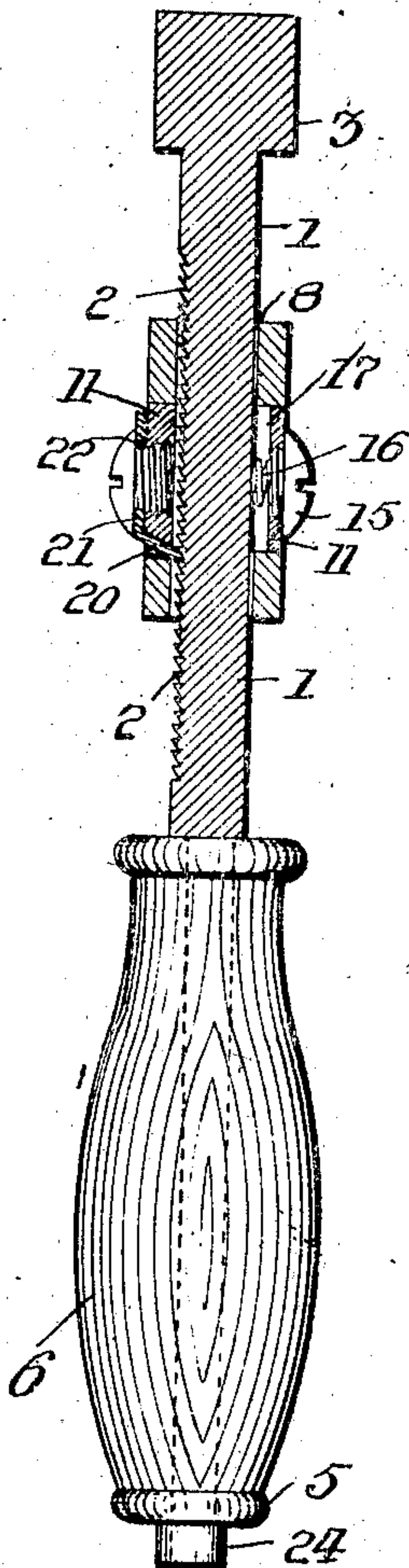


Fig. 2.

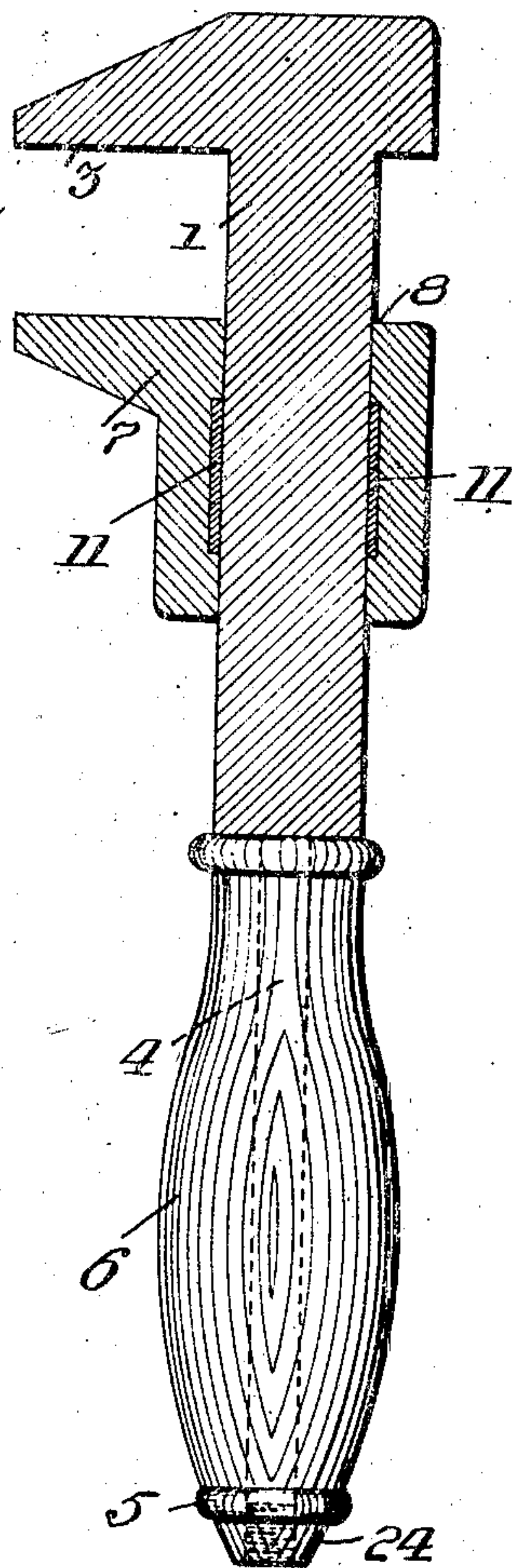


Fig. 3.

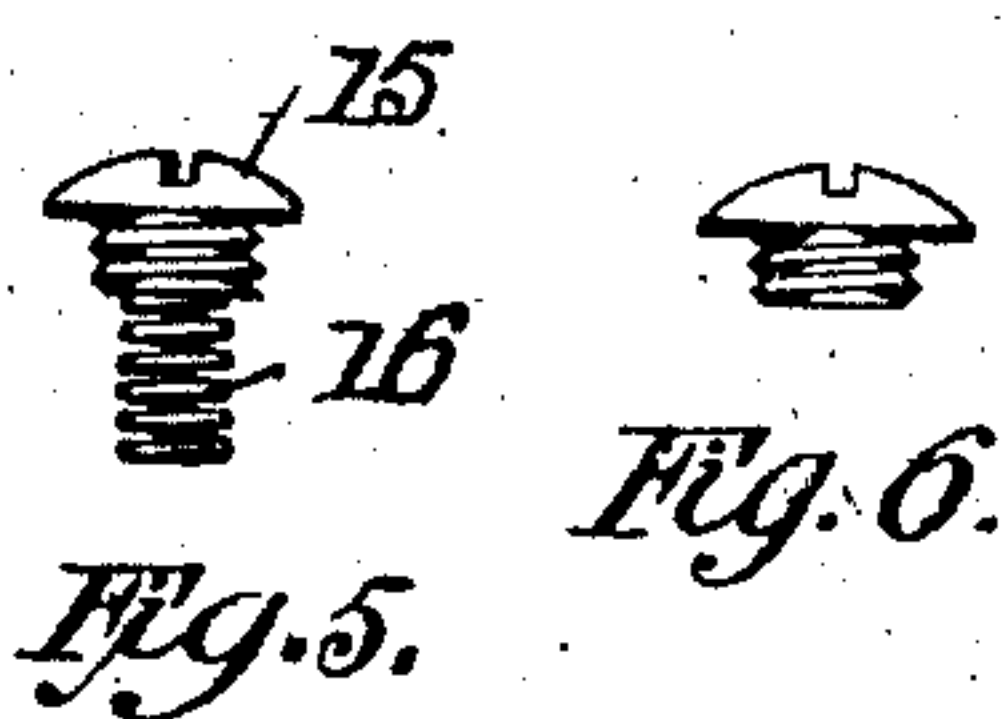


Fig. 5.

Fig. 6.

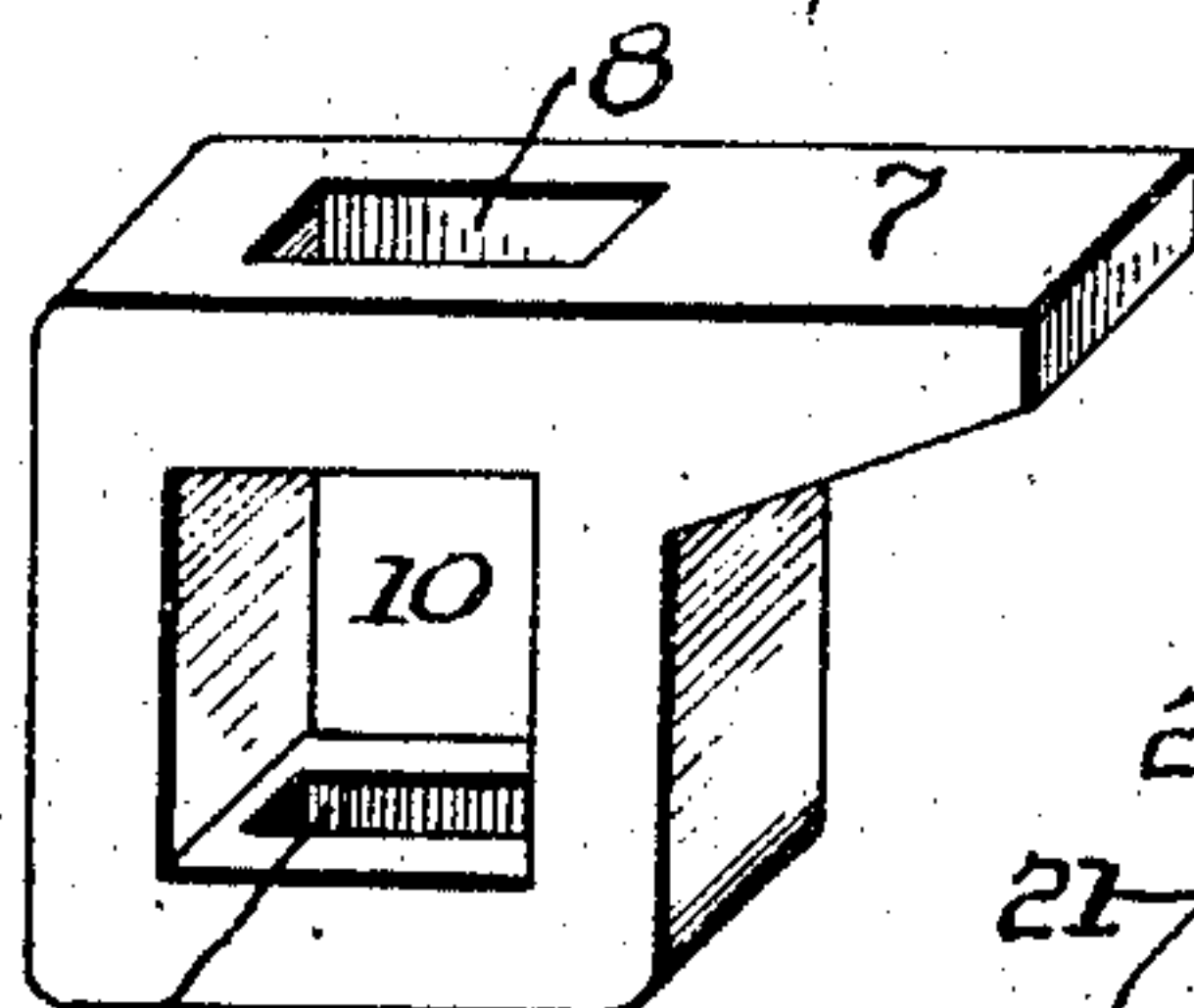


Fig. 4.

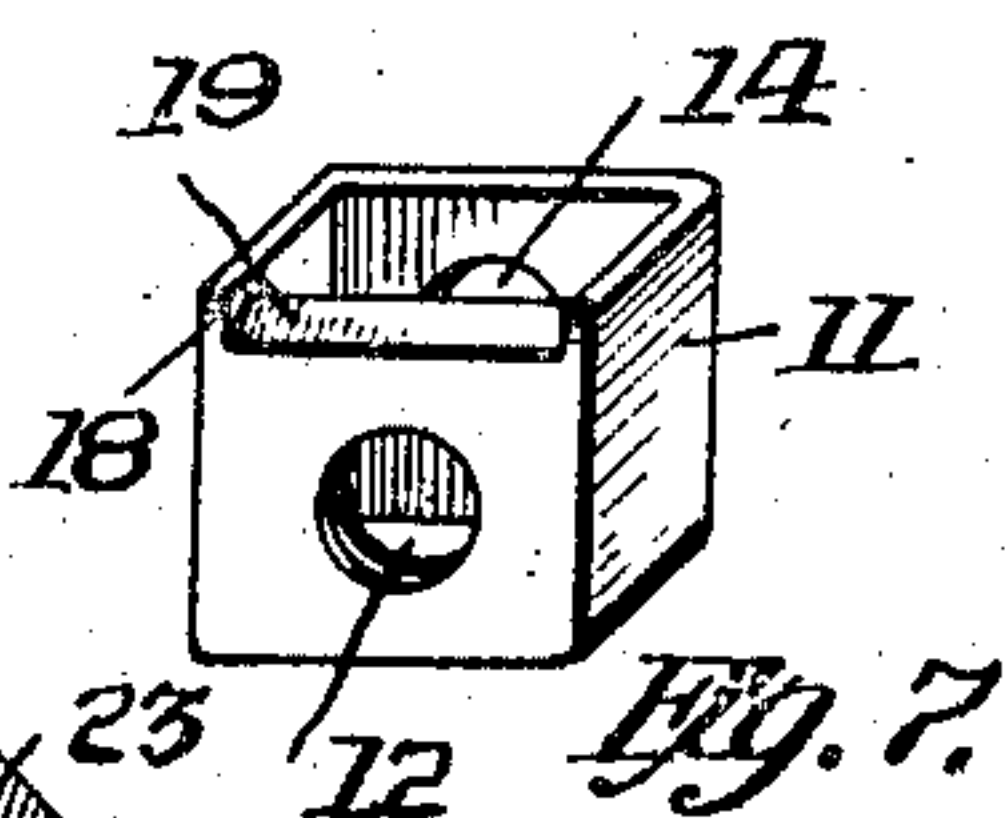


Fig. 7.

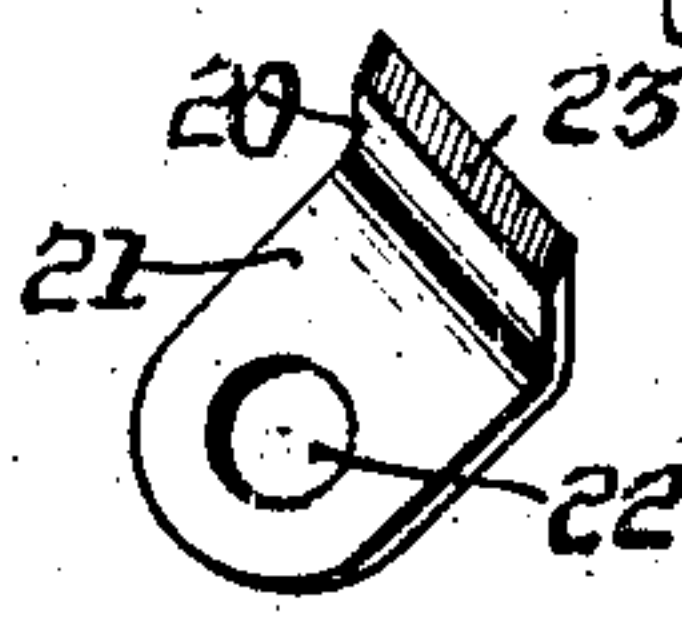


Fig. 8.

Witnesses:
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UNITED STATES PATENT OFFICE.

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WRENCH.

SPECIFICATION forming part of Letters Patent No. 757,207, dated April 12, 1904.

Application filed February 15, 1904. Serial No. 193,853. (No model.)

To all whom it may concern:

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

This invention relates to certain new and useful improvements in wrenches, and relates more particularly to quick-acting wrenches having sliding jaw.

The present invention has for its object the provision of novel means for the rapid, quick, and accurate adjustment of the sliding jaw.

My invention aims to provide a tool of the above-described character that will be extremely simple in its construction, strong, durable, and comparatively inexpensive to manufacture.

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

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—

Figure 1 is a side elevation of my improved wrench. Fig. 2 is a transverse vertical sectional view thereof. Fig. 3 is a longitudinal section of the same. Fig. 4 is a perspective view of the sliding jaw. Fig. 5 is a detail view of one of the screw-caps and spiral spring. Fig. 6 is a detail view of the opposite screw-cap. Fig. 7 is a perspective view of a sleeve secured within the sliding jaw. Fig. 8 is a similar view of the locking-lug which is detachably secured to the sleeve.

In the drawings the reference-numeral 1 indicates the shank of a wrench, which has formed on its one side a toothed rack 2. Said shank carries at its upper end a stationary jaw 3 and at its lower end a shaft 4, which is screw-fitted at its free end, as indicated at 5. Upon this shaft 4 is secured a suitable handle 6. A sliding jaw 7 is arranged upon the shank 1

and is adapted to freely slide thereupon, the shank extending through the openings 8 and 9 formed in the sliding jaw. This sliding jaw 7 has also formed therein a transverse opening 10, which is adapted to receive the sleeve 11. This sleeve has formed therein screw-threaded openings 12 and 14, which are arranged opposite each other. The said opening 14 receives a screw-cap 15, which is adapted to retain in position a spiral spring 16, which is normally expanded and operates in an opening 17, formed between the inner wall of the sleeve 11 and outer face of the shank 1. The sleeve 11 has one of its walls slightly cut away, as shown at 18, and forms a beveled face 19, upon which is seated the beveled side 20 of the movable lug 21. This lug is also formed with an opening 22, and the beveled side is also formed with a beveled heel portion 23, which extends inwardly a slight distance beyond the inner wall of the sleeve 11 and is adapted to engage in the toothed rack 2, formed upon the shank 1, the spring 16 serving to form a locking engagement of the sliding jaw upon the shank. A nut 24 engages the end of the shaft 4 and serves to retain the handle securely in position.

It will be seen that all the parts of the wrench are constructed that the same may be readily accessible and that any of the parts may be easily renewed should occasion require it.

The operation of my improved wrench is as follows: By exerting a pressure upon the side of the sleeve carrying the screw-cap 15 the beveled heel 23 will be released from engagement with the toothed rack and will permit the sliding jaw to be easily operated upon the shank, and when the pressure is released the spring 16 will tend to automatically lock the sliding jaw by forming a locking engagement of the bevel 23 with the toothed rack.

The many other advantages presented by my improved wrench will be readily apparent from the foregoing description, taken in connection with the accompanying drawings.

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

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

In a wrench, the combination of a shank carrying a toothed rack and a stationary jaw, a sliding jaw having a central and transverse opening formed therein, a sleeve fitting in said transverse opening and embracing said shank, said sleeve having formed therein screw-threaded apertures, a spring arranged in said sleeve, an apertured lug carrying a beveled

heel adapted to engage said toothed rack, and screw-threaded caps secured in said screw-threaded apertures, all parts being arranged substantially as described and for the purposes set forth. 15

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

JACOB KUHN.

Witnesses:

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