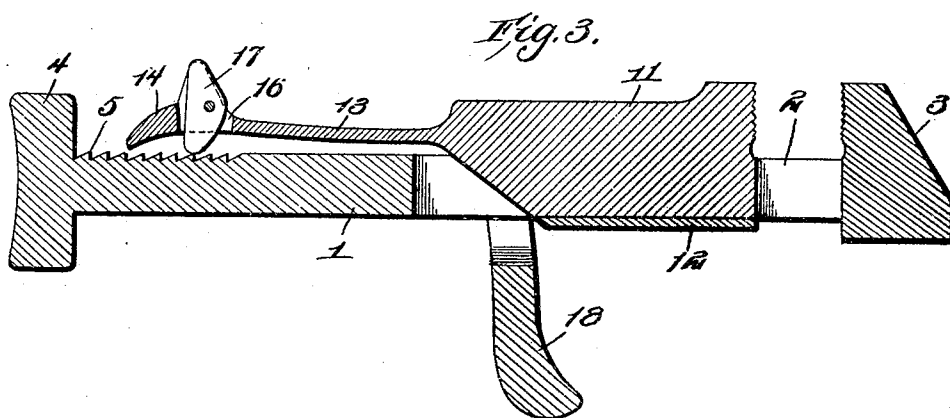
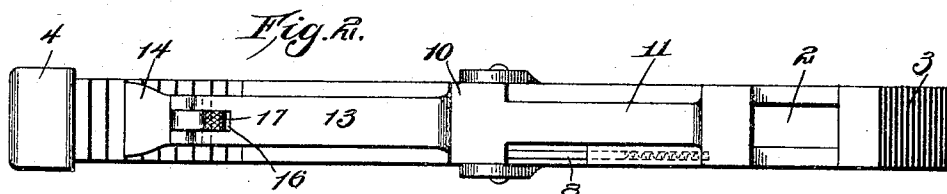
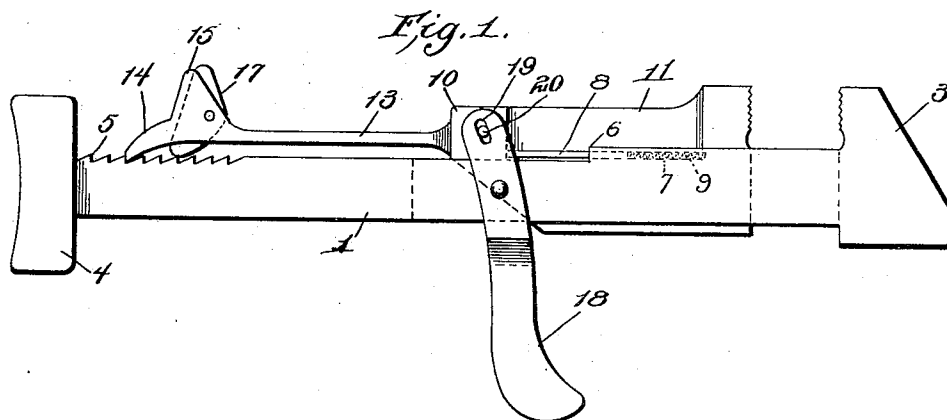


No. 823,155.

PATENTED JUNE 12, 1906.

D. L. BOOKER.
WRENCH.

APPLICATION FILED OCT. 30, 1905.



Daniel L. Booker ^{Inventor}

Witnesses

Louis R. Heinichs
Herbert D. Lawton

W. J. Fitzgerald & Co. ^{Attorneys}

UNITED STATES PATENT OFFICE.

DANIEL L. BOOKER, OF GIRARD, ALABAMA.

WRENCH.

No. 823,155.

Specification of Letters Patent.

Patented June 12, 1906.

Application filed October 30, 1905. Serial No. 285,138.

To all whom it may concern:

Be it known that I, DANIEL L. BOOKER, a citizen of the United States, residing at Girard, in the county of Russell and State of Alabama, have invented certain new and useful Improvements in Wrenches; and I do hereby 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 relates to wrenches; and its object is to provide a device of this character having means whereby the movable jaw can be moved tightly into engagement with any article disposed between the jaws and can be held in any position to which it is adjusted.

A still further object is to provide novel means for releasing the movable jaw when it is desired to detach the wrench from the article gripped thereby.

With the above and other objects in view the invention consists of a shank having a fixed jaw at one end, and this shank is provided with a series of ratchet-teeth adapted to be engaged by a dog which is formed at one end of a spring-arm extending rearwardly from the sliding jaw of the wrench. A lever is so disposed upon the shank as to move the sliding jaw toward the fixed jaw, so as to draw the dog over the ratchet-teeth, and said dog by engaging the teeth will lock the sliding jaw against return movement.

The invention also consists of providing means whereby the dog can be quickly released from the ratchet-teeth, so as to permit the sliding jaw to return to its initial position.

The invention also consists of certain other novel features of construction and combination of parts, which will be hereinafter more fully described, and pointed out in the claims.

In the accompanying drawings I have shown the preferred form of my invention.

In said drawings, Figure 1 is a side elevation of my improved wrench. Fig. 2 is a plan view thereof, and Fig. 3 is a longitudinal section therethrough, showing the dog supported out of engagement with the shank.

Referring to the figures by numerals of reference, 1 is a shank having a slot 2 therein for a portion of its length, said slot extending from a fixed jaw 3, which is formed integral with one end of the shank and is of any suitable contour. A head 4 is located at the other end of the shank, and disposed upon one side of the shank adjacent the head are ratchet-teeth 5. A shoulder 6 is formed

upon one face of the shank 1 at one side of slot 2, and extending into this shoulder is a recess 7, in which is slidably mounted a rod 8, and a spring 9 is located within the recess and is interposed between the end thereof and the end of rod 8. This rod is adapted to bear against a shoulder 10, which extends laterally from a jaw 11, a portion of which extends through the slot 2 and is held therein by means of a plate 12, which is secured to the jaw and extends under the side walls of slot 2. The end of the jaw 11 overlaps the side walls of slot 2 at the other side of the shank 1, as do also the shoulders 10, and therefore the sliding jaw is held in proper relation to the shank at all times. A spring-arm 13 extends rearwardly from the sliding jaw and terminates in a dog 14, which normally engages one of the ratchet-teeth 5. This dog has parallel ears 15 extending upward from it, and between the ears is a slot 16, through which extends a release device 17, which is a substantially triangular plate having rounded corners. A forked lever 18 straddles the shank 1 and is pivoted thereto, and slots 19 are formed in the ends of the fork and receive lugs 20, which extend laterally from the shoulders 10 of sliding jaw 11.

In using the herein-described wrench the article to be gripped thereby is placed between the jaws, and the operator presses against the head 4 and at the same time pulls backward on lever 18. Jaw 11 will therefore be slid forward in slot 2 and will press rod 8 ahead of it, so as to compress the spring 9. The two jaws will therefore clamp upon the article therebetween and will be held thereon, because during the forward movement of the sliding jaw the dog 14 slips over the teeth 5 and prevents backward movement of the sliding jaw. When it is desired to release the article gripped by the wrench, the operator presses down on the outwardly-extending end of the release device 17, so that the other end thereof will contact with the toothed shank and spring the dog out of engagement with it. The spring 9 will then expand and return all the parts to their initial positions.

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

1. In a wrench, the combination with a toothed shank having a fixed jaw; of a slidable jaw mounted on the shank, a spring-arm integral with and extending from the slidable

jaw, a dog integral with the free end of said arm and adapted to normally engage the toothed shank.

2. In a wrench, the combination with a
5 toothed shank having a fixed jaw; of a slidable jaw mounted upon the shank, a spring-arm integral with and extending from the slidable jaw, a dog integral with the free end of said
10 arm and adapted to normally engage the toothed shank, and means movably mounted within the spring-arm for holding the dog out of engagement with the shank.

3. In a wrench, the combination with a
15 toothed shank having a fixed jaw at one end; of a slidable jaw mounted upon the shank, a spring-arm integral with and extending from

the slidable jaw and projecting longitudinally of the toothed shank, a dog formed by the free end of said arm and adapted to engage the toothed shank, said arm having a
20 slot therein, ears extending from the sides of the slot, and a releasing device pivotally mounted between the ears and adapted to contact with the shank and hold the dog from engagement therewith.

25 In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DANIEL L. BOOKER.

Witnesses:

JOHN R. FLOURNOY,
I. H. MOORE.