No. 765,163. PATENTED JULY 19, 1904.

D. BOOKER.

WRENCH CONSTRUCTION.

APPLICATION FILED NOV. 12, 1903.

NO MODEL.

Fig. 1.

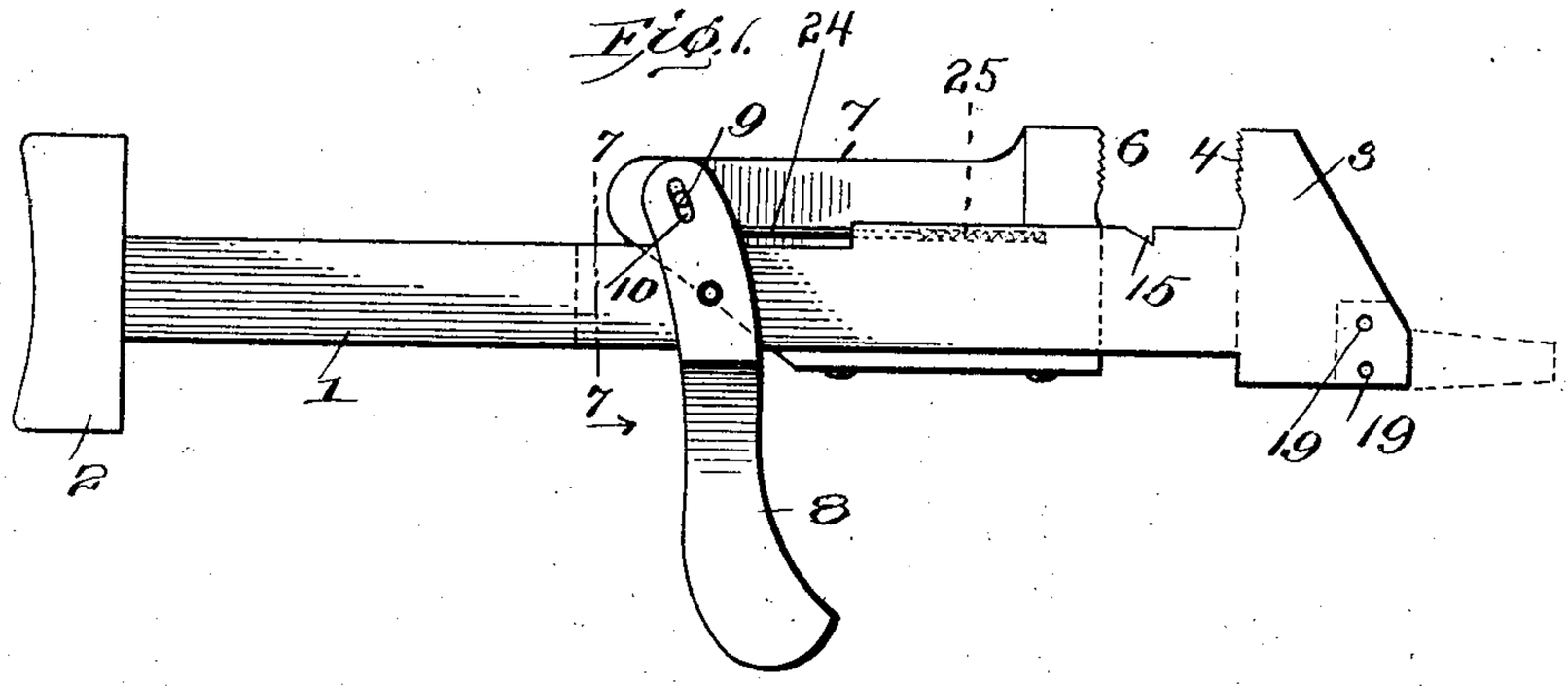


Fig. 2

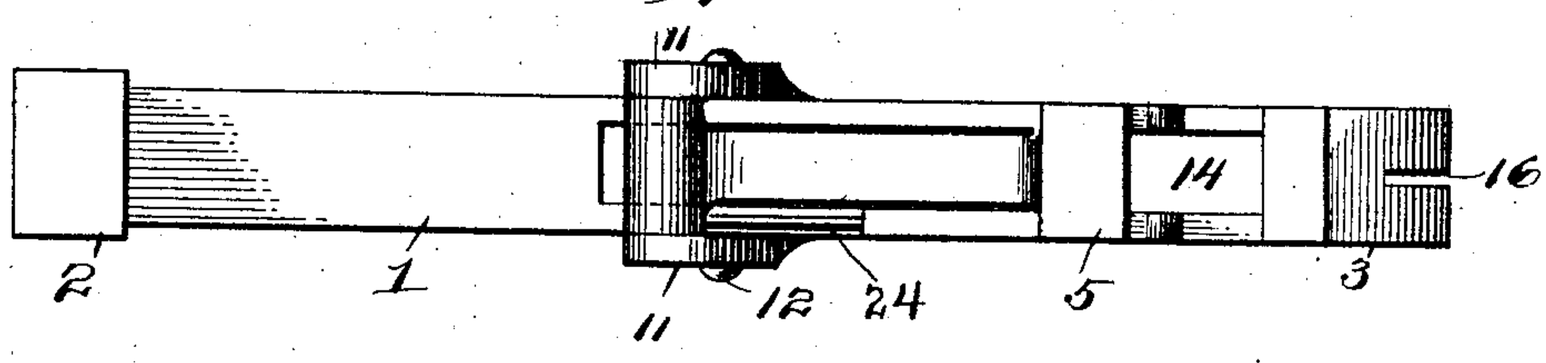


Fig. 3.

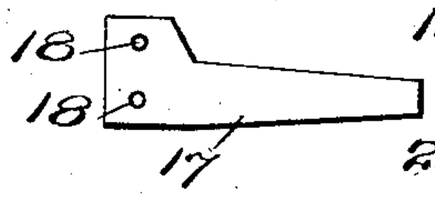


Fig. 4.

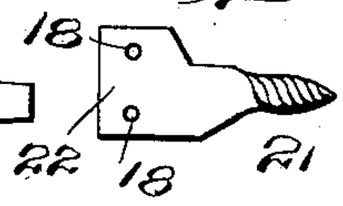


Fig. 5.

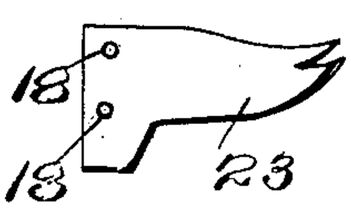


Fig. 6.

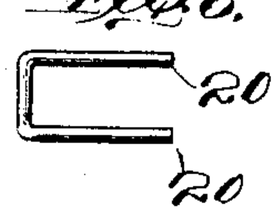
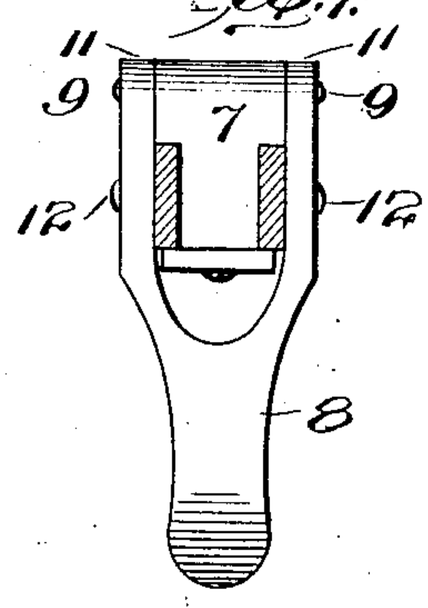


Fig. 7.



Witnesses
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No. 765,163. Patented July 19, 1904.

UNITED STATES PATENT OFFICE.

DANIEL BOOKER, OF HAMILTON, GEORGIA.

WRENCH CONSTRUCTION.

SPECIFICATION forming part of Letters Patent No. 765,163, dated July 19, 1904.

Application filed November 12, 1903. Serial No. 180,953. (No model.)

To all whom it may concern:

Be it known that I, DANIEL BOOKER, a citizen of the United States, residing at Hamilton, in the county of Harris and State of Georgia, have invented certain new and useful Improvements in Wrench Construction; 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 a wrench construction; and it consists of certain novel features of construction and arrangement of parts, the preferred form whereof will be hereinafter set forth.

The object of my invention is to provide a simple form of wrench which will be found useful and efficient for a great variety of purposes.

Other objects and advantages will be hereinafter made clearly apparent, reference being had to the accompanying drawings, which are made a part of this application, and in which—

Figure 1 shows a side elevation of my invention complete. Fig. 2 is an edge view thereof. Figs. 3, 4, 5, and 6 are detail views showing attachments for my instrument, while Fig. 7 is a transverse section of Fig. 1 on line 7 7.

The various details of my invention and accessories will be designated by numerals, the same numeral referring to a similar part throughout the several views.

Referring to the numerals on the drawings, 1 indicates the body portion or shank of my invention, while 2 designates the cross-head or handle proper. Upon the end of the shank opposite the handle 2 I attach or form the jaw 3, which is preferably provided on its inner face with ratchet-teeth 4, fitting the same for use as a nut-wrench or pipe-wrench, as desired. I also locate upon the shank 1 the sliding jaw 5, which is preferably provided with a ratchet-face 6, the jaw having the controlling extension 7, the end of which is placed in pivotal relationship to the controlling-lever 8, as by means of the transversely-disposed rod 9, which passes through a slot 10.

It will be understood that the controlling-lever 8 is bifurcated at its upper end, the branches 11 being clearly indicated in Figs. 2 and 7, while the extension 7 of the jaw 6 is adapted to lie between said branches and receive the rod 9, as hereinbefore set forth.

The slots 10 are formed in the branches 11 in order to compensate for the relative movement of the parts 7 and 11. The controlling-lever 8 is pivotally connected to the shank, as indicated by the numeral 12.

It will be observed by reference to Fig. 2 that the outer end of the shank 1 is slotted, as indicated by the numeral 14, and a portion of the member 7 is so formed as to extend downward through said slotted opening, and thereby more securely hold the jaw 5 against lateral movement. I also form a recess 15 in the shank 1 near the jaw 3, the edge of said recess being properly sharpened, so as to readily cut a wire which may be placed in the recess by forcing the jaw 6 against the same by a proper movement of the lever 8, as will be readily understood. In the outer end of the jaw 3 I form a recess 16, adapted to receive the end of one of the attachments. (Shown in Figs. 3, 4, and 5.)

In Fig. 3 I have shown the screw-driver blade 17 provided with apertures 18, designed to register with the apertures 19, formed transversely in the jaw 3 and extending through the recess 16. After the recesses 18 have thus been brought into registration with the apertures 19 the shanks 20, which are made in the form of a staple, are entered therein, thus reliably holding the blade 17 in position. In like manner I have provided an augur or bit 21, having a flattened head 22 with apertures 18, said apertures being adapted to be brought into registration with the apertures 19 and secured in the manner hereinbefore explained.

I also provide the nail-puller or wire-stretching device 23, (shown in Fig. 5,) also having a flattened head provided with apertures 18, said head being adapted to be entered in the recess 16 and secured by the shanks or stems 20.

As best shown in Fig. 1 of the drawings, I have provided a means of restoring the movable jaw 6 to its normally open position, com-

prising a rod 24, one end of which is designed to engage the bifurcated end of the lever 8, while the opposite end thereof takes into a suitable opening or bore in the shank 1. A spring 25 (shown in dotted lines) is also located in said bore, so that when the jaw 6 is moved toward the stationary jaw 4 the rod will bear against said spring and compress the same, whereby when the pressure is removed from the lever 8 the tension of the spring will restore said jaw to its normally open position.

I desire it to be understood that the "attachments" herein shown and described form no part of my invention and are shown and described as adjuncts to my improved wrench only.

What I claim as new, and desire to secure by Letters Patent, is—

1. The herein-described instrument or tool, comprising a shank 1 provided with a cross-head or handle 2 at one end and a fixed jaw 3 at the other end, said shank also having an elongated slotted opening 14, a movable jaw having an extension 7 slidingly mounted in said slotted opening, a bifurcated controlling-lever pivotally secured to said shank, the bifurcated end having elongated slots into which takes a pin 9 and by which means said movable jaw is placed in pivotal contact with said lever, and means to automatically restore said movable jaw to its normally open position, as set forth.

2. In an instrument of the class described, comprising a shank 1 provided with a cross-head or handle 2 at one end and a fixed jaw 3 at the other end, a movable jaw slidingly mounted in a slot in said shank, a controlling-lever for said movable jaw, a spring located in a bore in said shank and a pin interposed between said spring and controlling-lever whereby, when the sliding jaw has been moved toward said stationary jaw, it will be restored to its normally open position when the controlling-lever is released, all combined substantially as specified and for the purpose set forth.

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

DANIEL BOOKER.

Witnesses:
H. E. DEAN,
J. B. BURNSIDE.