

No. 762,762.

PATENTED JUNE 14, 1904.

S. M. ROWE.
WRENCH.

APPLICATION FILED JULY 9, 1903.

NO MODEL.

Fig. 1.

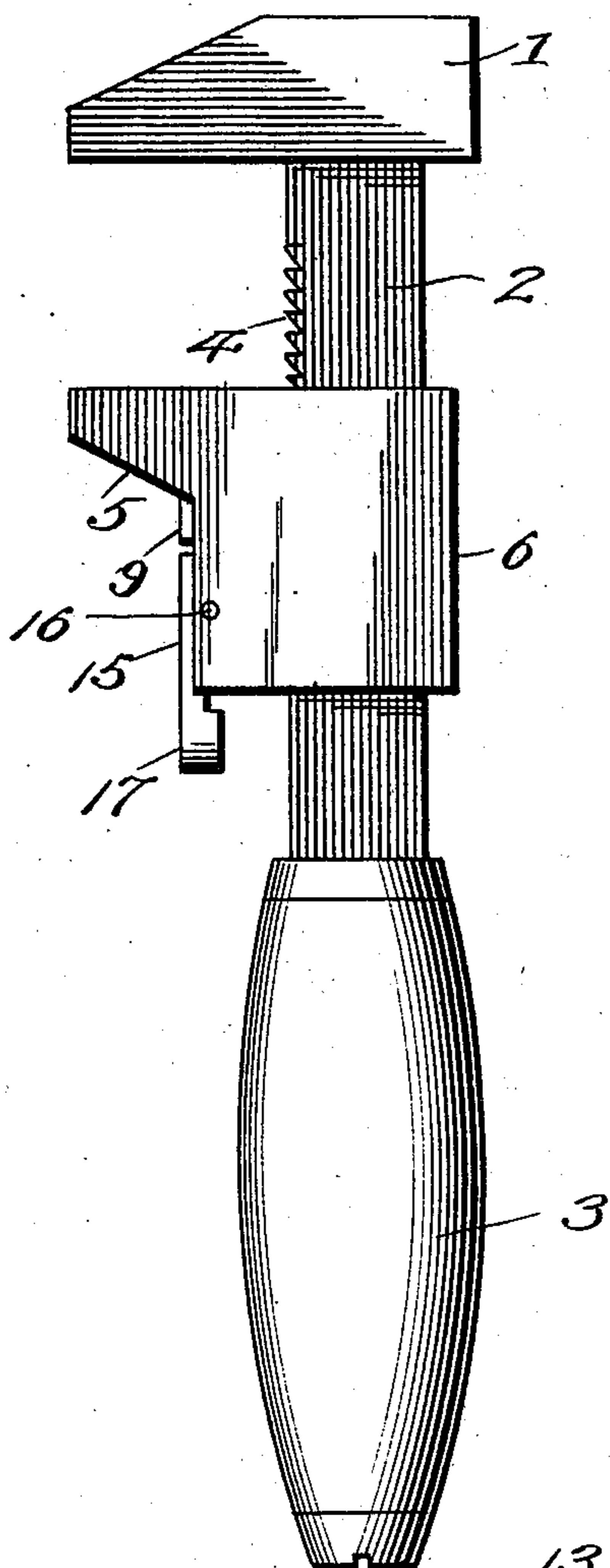


Fig. 2.

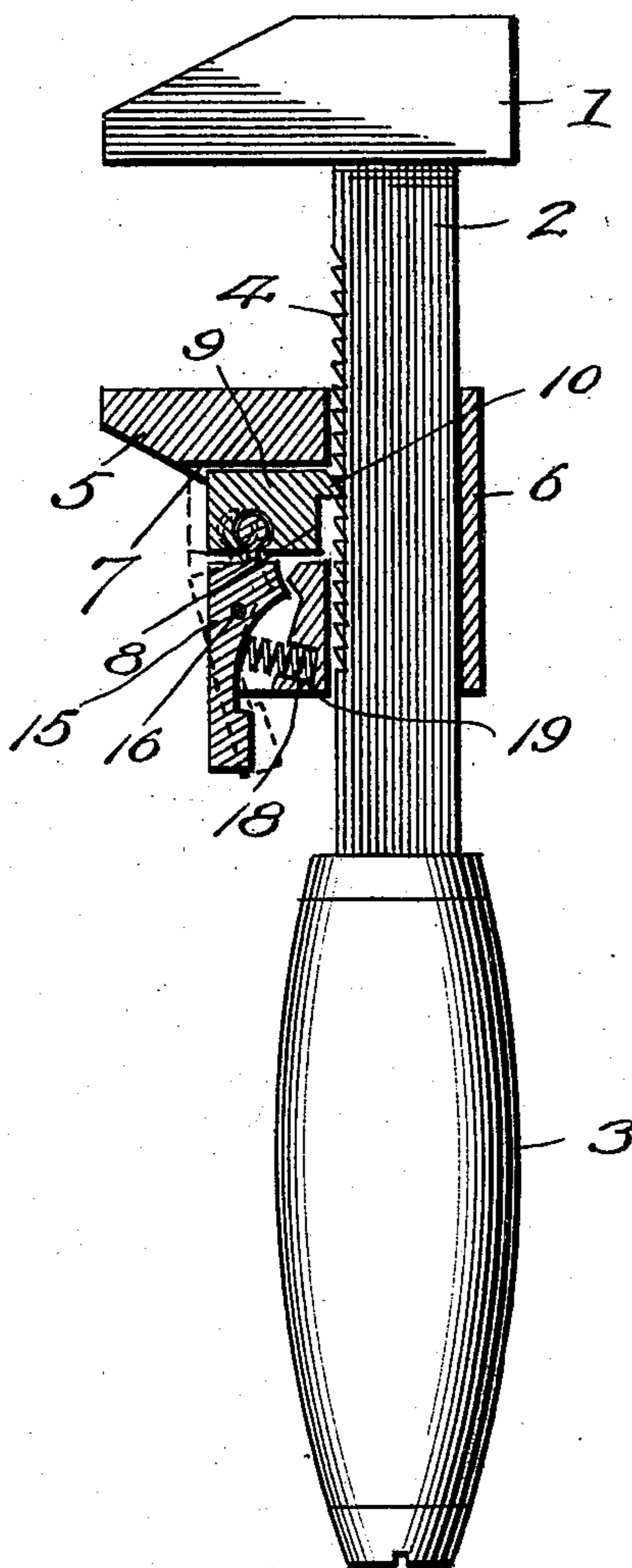


Fig. 3.

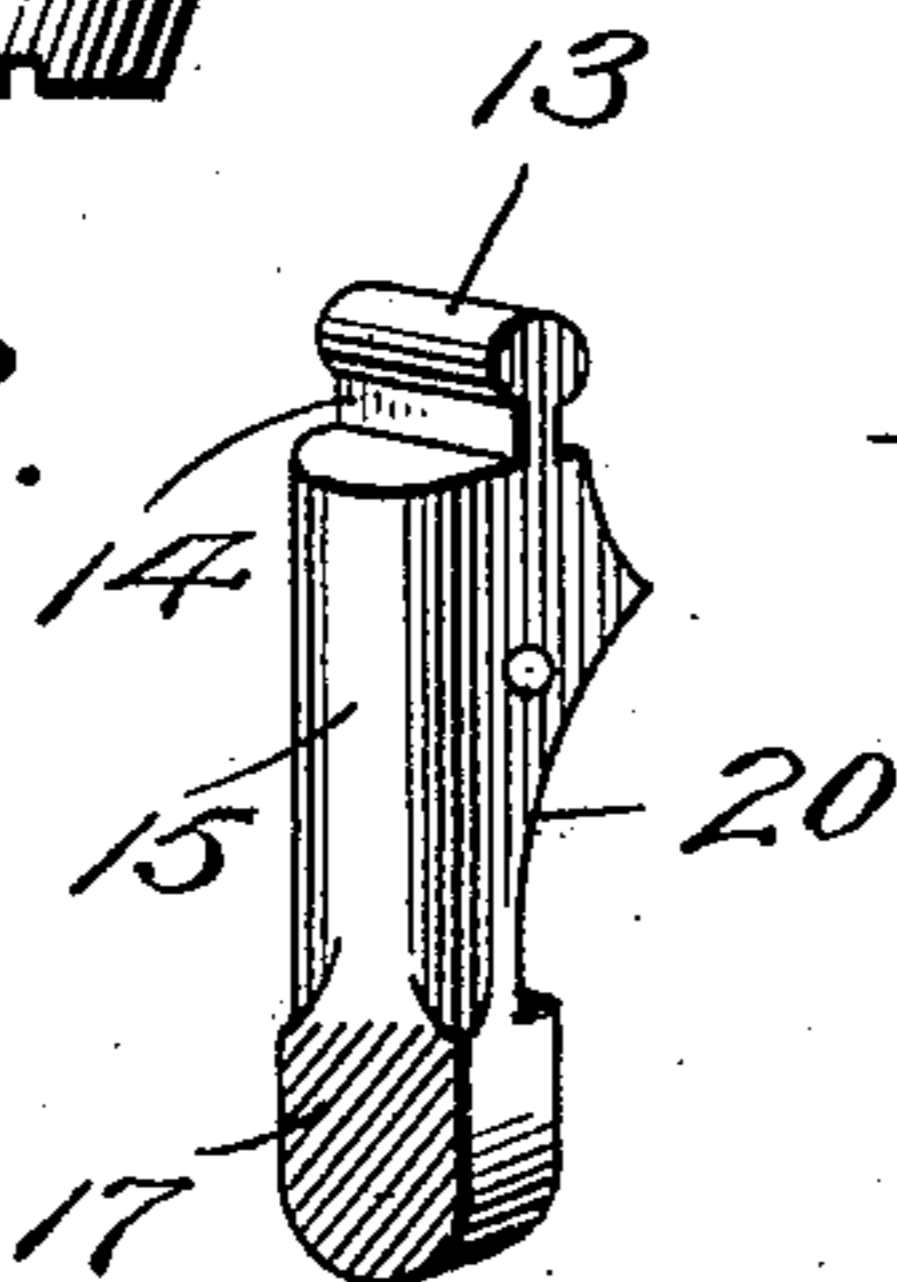
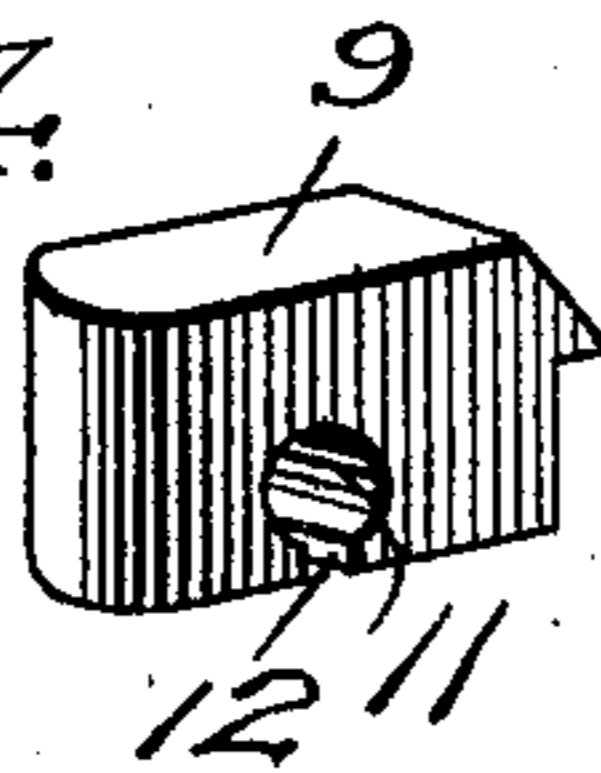


Fig. 4.



WITNESSES:

Geo. Ackema,
Chas. S. Hoyer.

INVENTOR
S. M. Rowe,

By

Victor J. Evans Attorney

UNITED STATES PATENT OFFICE.

SIDNEY M. ROWE, OF TELFORD, TENNESSEE.

WRENCH.

SPECIFICATION forming part of Letters Patent No. 762,762, dated June 14, 1904.

Application filed July 9, 1903. Serial No. 164,867. (No model.)

To all whom it may concern:

Be it known that I, SIDNEY M. ROWE, a citizen of the United States, residing at Telford, in the county of Washington and State of Tennessee, have invented new and useful Improvements in Wrenches, of which the following is a specification.

This invention relates to a wrench; and the primary object of the same is to provide a simple and effective device of this class having a fixed and a slidable jaw, the latter having means for positively holding it in adjusted position in relation to the fixed jaw and wherein also the parts are of such construction that they may be readily assembled.

A further object of the invention is to provide a wrench having a sliding jaw with adjusting means that may be easily operated from the handle of the wrench without requiring the tedious operation usually pursued in screws or revoluble adjusting attachments.

With these and other objects and advantages in view the invention consists in the construction and arrangement of the several parts, which will be more fully hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation of a wrench embodying the features of the invention. Fig. 2 is a transverse vertical section through the slidable jaw, showing the construction thereof. Fig. 3 is a detail perspective view of an operating-dog forming part of the complement of the sliding jaw. Fig. 4 is a detail perspective view of a locking-block movably held by the sliding jaw and engaged by the locking-dog.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

The numeral 1 designates a fixed jaw, having a shank 2, with a handle or grip 3 secured thereto. A portion of the inner edge of the shank 2 is formed with teeth 4, and adjustably mounted on the said shank is a sliding jaw 5, having an angular sleeve member 6, movable on the said shank, and a socket 7, which opens out through the inner edge thereof. The socket 7 also has an opening 8 there-through close to the teeth 4, and slidably mounted in the said socket and opening is a

locking-block 9, having a projection or tooth 10 extending transversely across the forward extremity thereof to engage the teeth 4. The locking-block 9 is also formed with a circular bore or seat 11, extending transversely through the rear portion thereof, and communicating with said bore or seat is a rearwardly-opening slot 12. The bore 11 is exposed at opposite sides of the block 9, and therein is movably and detachably fitted a cylindrical fulcrum projection 13, connected by a reduced neck 14 with an operating-dog 15, the latter being pivotally held in the socket 7 by a cross-pin 16, inserted through opposite sides of the socket and the said dog. The cylindrical fulcrum projection 13 is connected to the block 9 by slipping the same endwise into the bore or seat 11, and during this operation the neck 14 moves through the slot 12, and in assembling these parts in connection with the movable jaw they are both simultaneously inserted in the socket 7 and the pin 16 thereafter applied. The dog 15 has a rear finger-engaging extension 17 with an outer roughened surface, the said extension being projected backward from the rear end of the socket. A spring 18 is held in a seat 19 in the inner portion of the wall of the socket 7 adjacent to the rear end of the latter and projects outwardly at an angle across the rear portion of the socket and bears against an inner arcuate edge 20 of the dog 15. The outer end of the spring 18 engages the dog in rear of the position of the pivot-pin 16, and by such arrangement the locking-block 9 is always forced inwardly to cause its projection or tooth 10 to engage the teeth 4 of the shank 2.

In adjusting the sliding jaw the operator presses inwardly on the finger extension 17 of the dog 15 against the resistance of the spring 18, and by such movement of the dog the block 9 is forced outwardly to disengage the projection or tooth 10 from the teeth 4, and while said block is thus held in disengaged position the sliding jaw may be easily moved over the shank to any point desired with relation to the fixed jaw 1. After the desired adjustment of the sliding jaw has been attained the locking-block is released by withdrawing the fingers from the dog, and immediately

diately the spring 18 will restore the parts to normal position and cause the projection or tooth 10 of the locking-block to engage the teeth 4.

5 The number of parts employed for locking the sliding jaw and for releasing the locking means is reduced to a minimum. The locking-block 9 and the dog 15 are also of a strong and durable construction and have such di-
10 mensions as to render them efficient in serving their intended purpose. A great advantage ensues from the assemblage of the dog and locking-block and the united disposition of both of these parts in the socket 7, as heretofore explained. The dog and locking-block
15 may also be easily detached from the socket of the sliding jaw for repair or the replacement for one or the other of a similar new part. It will also be understood that changes
20 in the proportions and dimensions may be resorted to without in the least departing from the spirit of the invention.

Having thus fully described the invention, what is claimed as new is—

25 1. A wrench having a fixed jaw with a shank provided with teeth on the inner edge, a sliding jaw on the shank having a socket fully open from the sliding jaw to the rear end of said shank at the outer edge, a locking-
30 block movable in the socket close to the sliding jaw and having a projection to engage the teeth of the shank, the said block being formed with a circular seat extending transversely therethrough and having a rearwardly-open-
35 ing slot, and a spring-actuated dog exposed

through the open side of the socket and having at its front end a transversely-extending rounded head and a flat shank to respectively engage the seat and slot in the dog and also provided with a rear engaging member pro- 40
jecting through the rear end of the socket.

2. A wrench consisting of a shank having a rigid jaw and teeth at the inner edge, a sliding jaw on the shank having a socket opening out through the inner edge of the jaw in 45
rear of the latter, a locking-block slidably mounted in the socket and having a projection to engage the teeth of the shank, the rear side of the locking-block being also provided with a transversely-extending circular seat 50
having a rear entrance-slot, the said slot being of materially less width than the diameter of the seat, a spring-actuated dog separably connected to the block and having a transversely-extended rounded head and a flat 55
shank connecting the head to the dog, the said head and shank removably engaging the seat and slot in the block, the rear end of the dog being projected from the rear end of the socket, and a pivot extending transversely through 60
the dog and opposite portions of the socket and forming the sole means for preventing the dog and block from becoming accidentally separated from the socket.

In testimony whereof I affix my signature in 65
presence of two witnesses.

SIDNEY M. ROWE.

Witnesses:

JAS. H. PROPST,
I. A. CAMPBELL.