

(No Model.)

J. M. IVERSON.
WRENCH.

No. 465,272.

Patented Dec. 15, 1891.

Fig. 1.

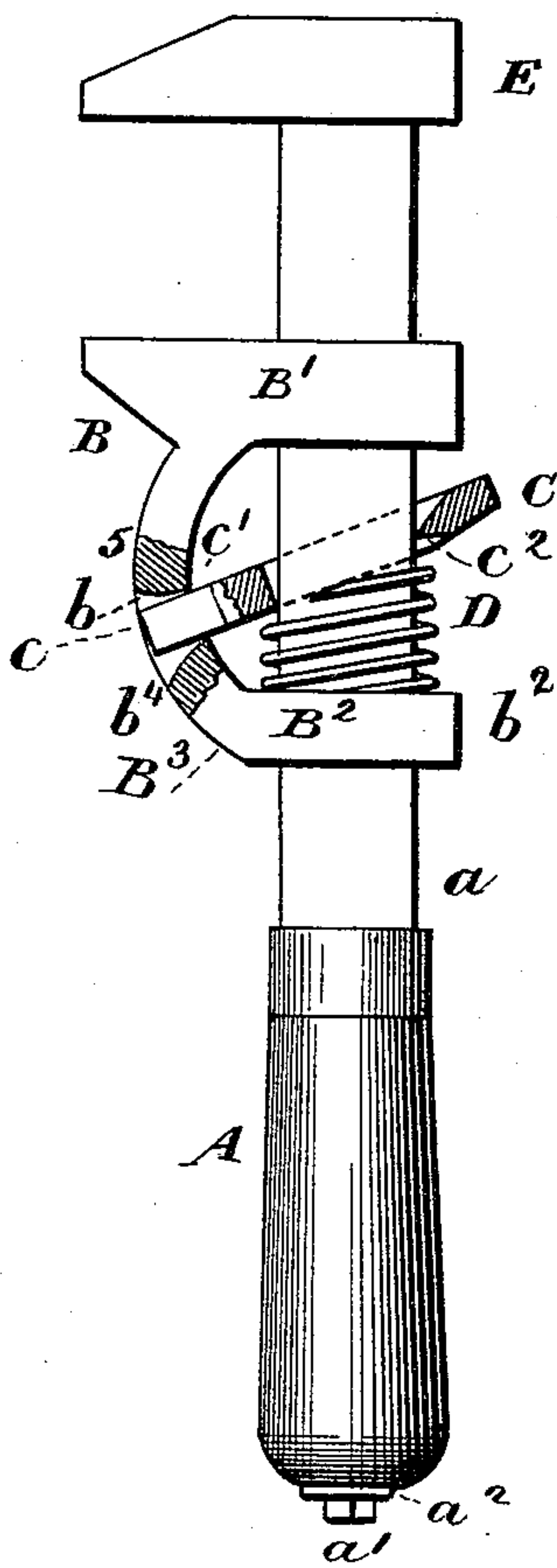


Fig. 2.

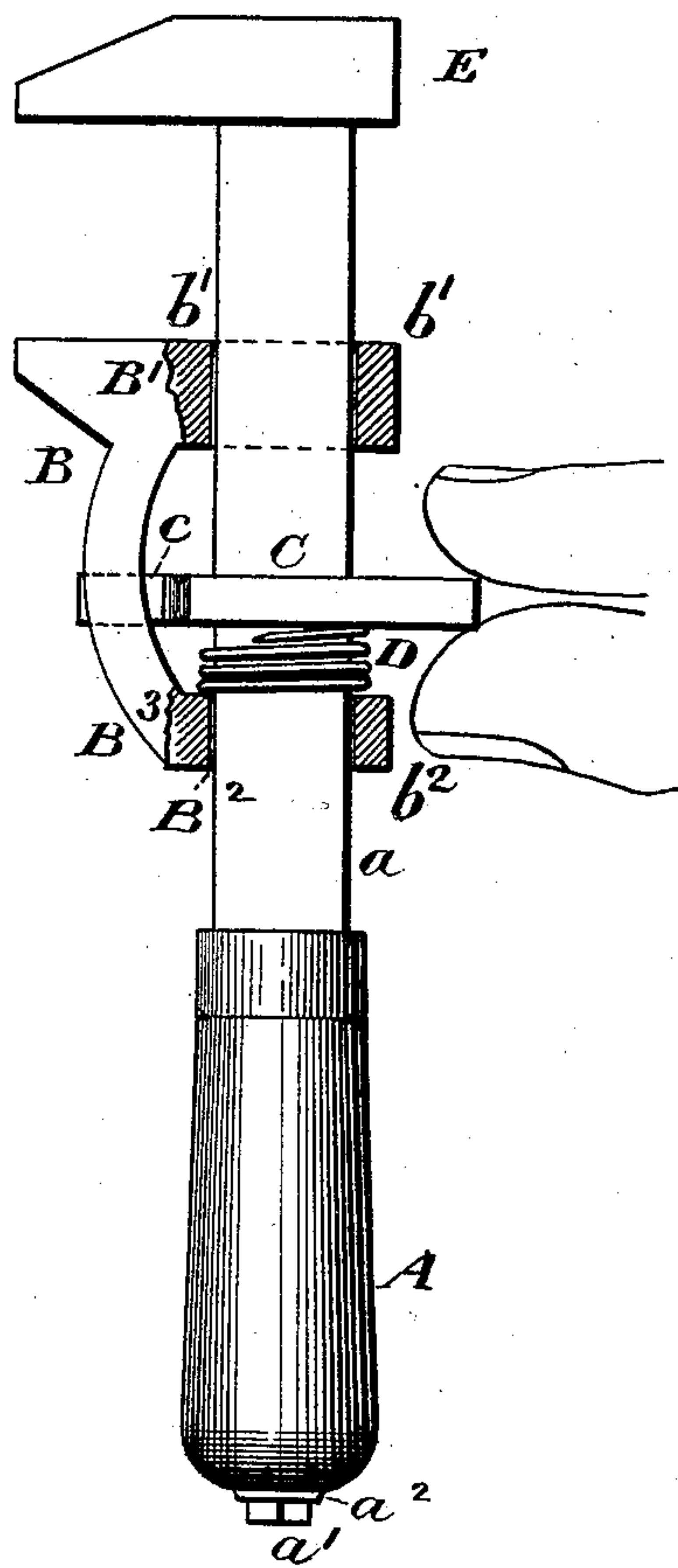
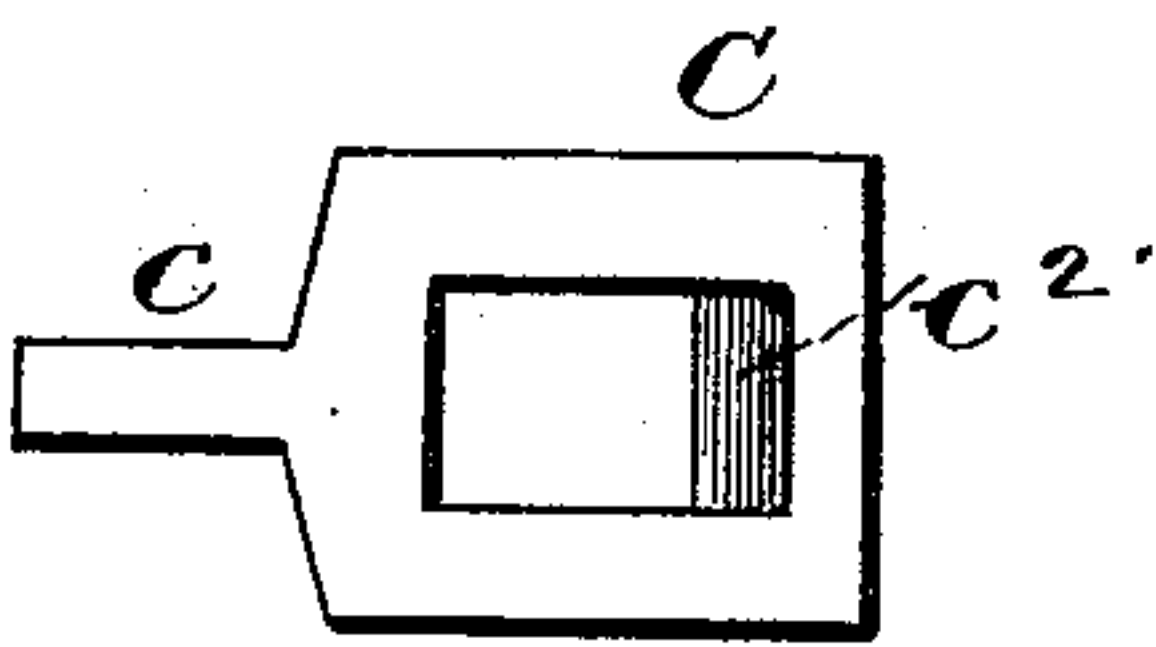


Fig. 3.



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WRENCH.

SPECIFICATION forming part of Letters Patent No. 465,272, dated December 15, 1891.

Application filed April 28, 1891. Serial No. 390,766. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. IVERSON, a citizen of the United States, residing at Worthing, in the county of Lincoln and State of South Dakota, 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.

The invention relates to wrenches which are provided with sliding jaws; and it consists in the improvement hereinafter described, and pointed out in the claim.

Figures 1 and 2 of the drawings are side elevations, partly in section, the former showing the sliding jaw locked, so that it cannot move back, while the latter shows the same jaw held so that it can be slid backward or forward; and Fig. 3 is a detail view of the yoke, showing its construction as seen from the front or rear thereof.

In the drawings, A represents the handle, arranged on the bar *a*, which carries at its other end the fixed jaw E. On this bar *a* is loosely fitted the sliding jaw B, through whose apertures *b'* *b*² the bar has been passed before the handle was put on, and held in place against a shoulder of the bar by a nut and washer *a'* *a*² in the usual and well-known way.

C is a yoke having the shank *c*, rectangular hole *c'* to fit the similarly-shaped bar *a*, and the pivotal edge *c*², which "bites" on the bottom of bar *a*. Between this yoke and the part B² of the sliding jaw B, I arrange on the bar *a* the spiral spring D, which normally presses the yoke into a diagonal position, as shown in Fig. 1 of the drawings, so as to lock the jaw on the bar *a*. By pressing the yoke with the hand, as shown in Fig. 2 of the drawings, so as to bring the yoke at right angles to the bar *a*, the jaw B may be freely slid

back and forth. In order that the yoke may be used in this way, I make the jaw B, with the parts B' B² respectively apertured and constructed to sit at right angles to the bar *a* and connect them by an arch B³, in which I make a vertical hole *b*³, through which passes the shank *c* of the yoke. This hole *b*³ has the inclined rear wall *a*⁴ and the perpendicular front wall *a*⁵, so that when the shank is made to bear against the rearwardly-inclined wall *b*⁴ the jaw B is locked to the bar; but when it is forced by hand against the tension of spring D to rest against the perpendicular front wall *b*⁵ the jaw is loose on bar *a* and free to move or be moved in either direction. It will readily be seen how convenient it is to move the jaw up in close contact with a nut or other object which is to be turned and then hold the nut while the yoke is let go. This gives an automatic lock from which the jaw is not liable to slip under any ordinary circumstances.

Having thus described all that is necessary to a full understanding of my invention, what I claim as new, and desire to protect by Letters Patent, is—

In a wrench, the combination, with the fixed jaw E, having bar *a*, of the sliding jaw B, having two parts B' B², through which said bar passes and connected by an arch B³, having the hole *b*³, the yoke C, having a shank *c*, which presses either against a front perpendicular wall *b*⁵ or a rearwardly-inclined wall *b*⁴ of the hole *b*³, and a spiral spring D, arranged between the yoke and the part B² of the jaw B, as and for the purpose set forth.

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

JOHN M. IVERSON.

Witnesses:

MATH HANSON,
GEO. OLSON.