

I. C. COLBERT.
Ratchet-Wrenches.

No. 145,399.

Patented Dec. 9, 1873.

Fig. 1.

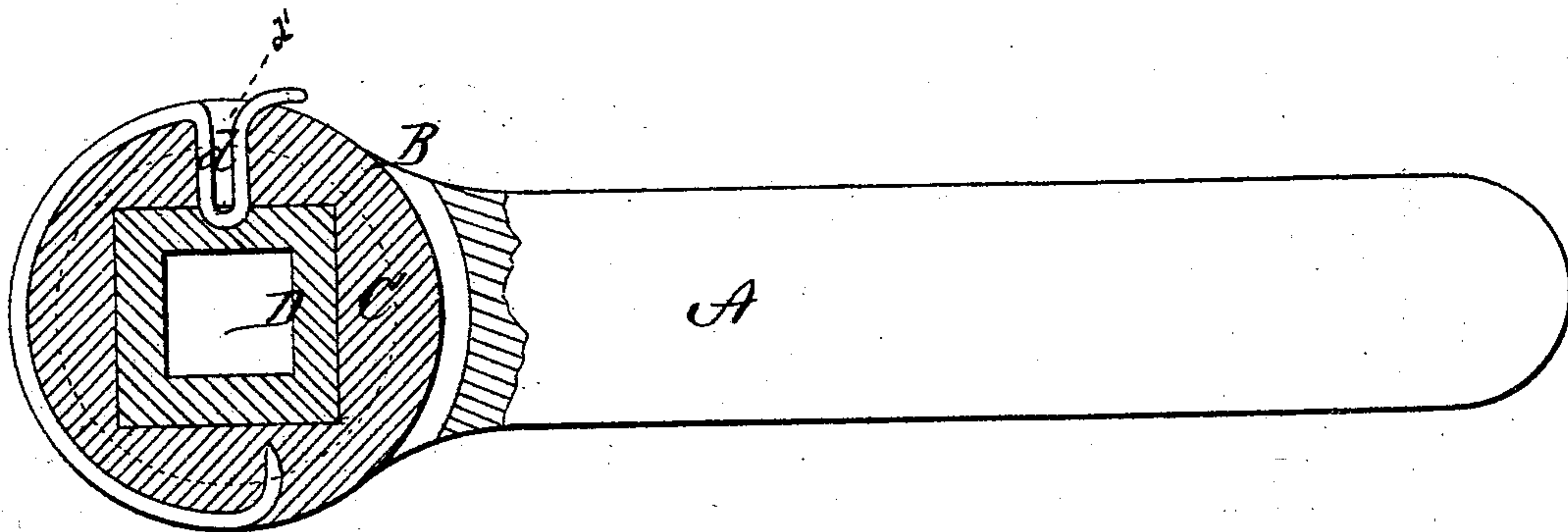
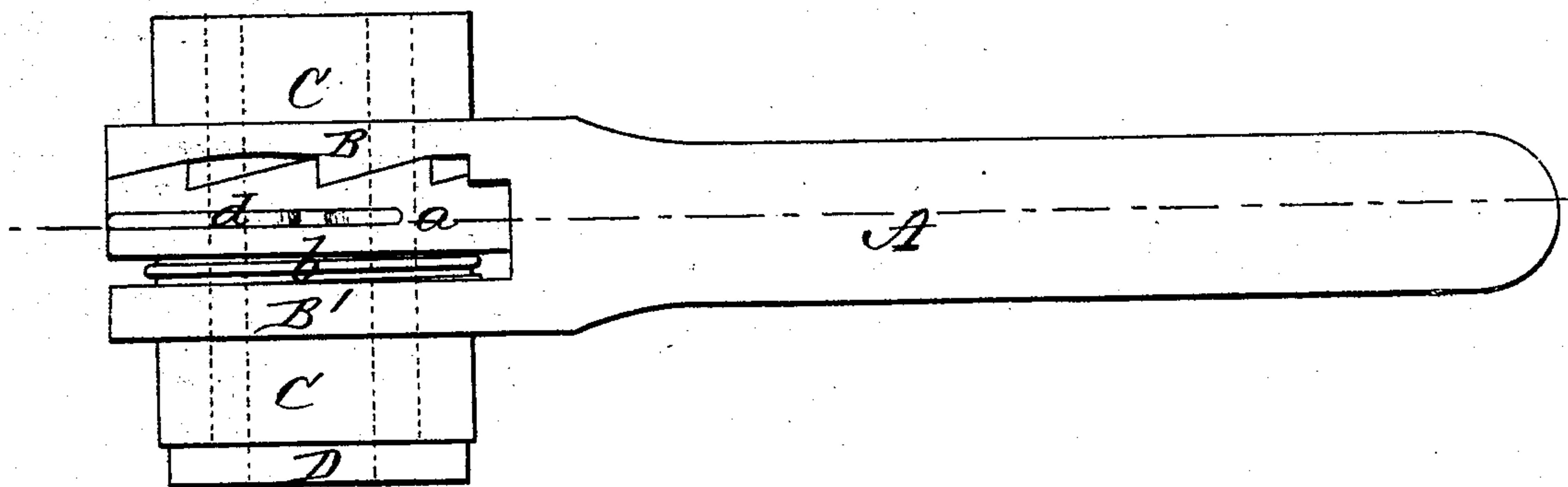


Fig. 2.



Witnesses.
E. W. Bates.
George E. Upham.

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UNITED STATES PATENT OFFICE.

ISAAC C. COLBERT, OF MARYSVILLE, OHIO.

IMPROVEMENT IN RATCHET-WRENCHES.

Specification forming part of Letters Patent No. **145,399**, dated December 9, 1873; application filed July 19, 1873.

To all whom it may concern:

Be it known that I, ISAAC C. COLBERT, of Marysville, in the county of Union and State of Ohio, have invented a new and valuable Improvement in Ratchet - Wrenches; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of my invention in section, and Fig. 2 is a side view of the same.

The nature of my invention consists in the construction and arrangement of a ratchet-wrench with movable bush-thimble inserted in the ratchet-barrel and spring-catch, as will be hereinafter more fully described.

In the accompanying drawing, like letters of reference indicate corresponding parts.

A represents the handle of my wrench, the end of which is forked, as shown in Fig. 2, forming two jaws, B B'. These jaws have each a large round hole through them for the passage of the barrel C. This barrel is, between the two jaws, provided with a collar, *a*, having ratchet-teeth upon one side, which engage with corresponding teeth on the inner side of the jaw B. A spiral spring, *b*, is placed around the barrel C, between the collar *a* and jaw B', which

spring acts to keep the ratchet-teeth together. In the barrel C is inserted a bush-thimble, D, with a square hole through its entire length. This thimble may be held in place by a spring, *d*, fixed by one end in the barrel, passing half around it, and bent at its free end for insertion through the opening *d'* into the bushing. The thimble D can thus readily be removed and another with different-sized aperture substituted, one handle and one ratchet-barrel answering for all.

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

1. The handle A, forming two jaws, B B', one of which is provided with ratchet-teeth, the barrel C, with its ratchet-collar *a*, and the spring *d*, in combination with a removable bush-thimble, D, substantially as and for the purposes specified.

2. The ratchet-barrel C, slotted at *d'*, and provided with a spring-catch, *d*, arranged to pass through said slot *d'*, to secure the bushing D, substantially as herein set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

ISAAC C. COLBERT.

Witnesses:

M. C. LAWRENCE,
H. W. MOREY.