(No Model.)

M. E. WORDEN.

PLUMBER'S TOOL.

No. 441,347. Patented Nov. 25, 1890.

Fig. 1.

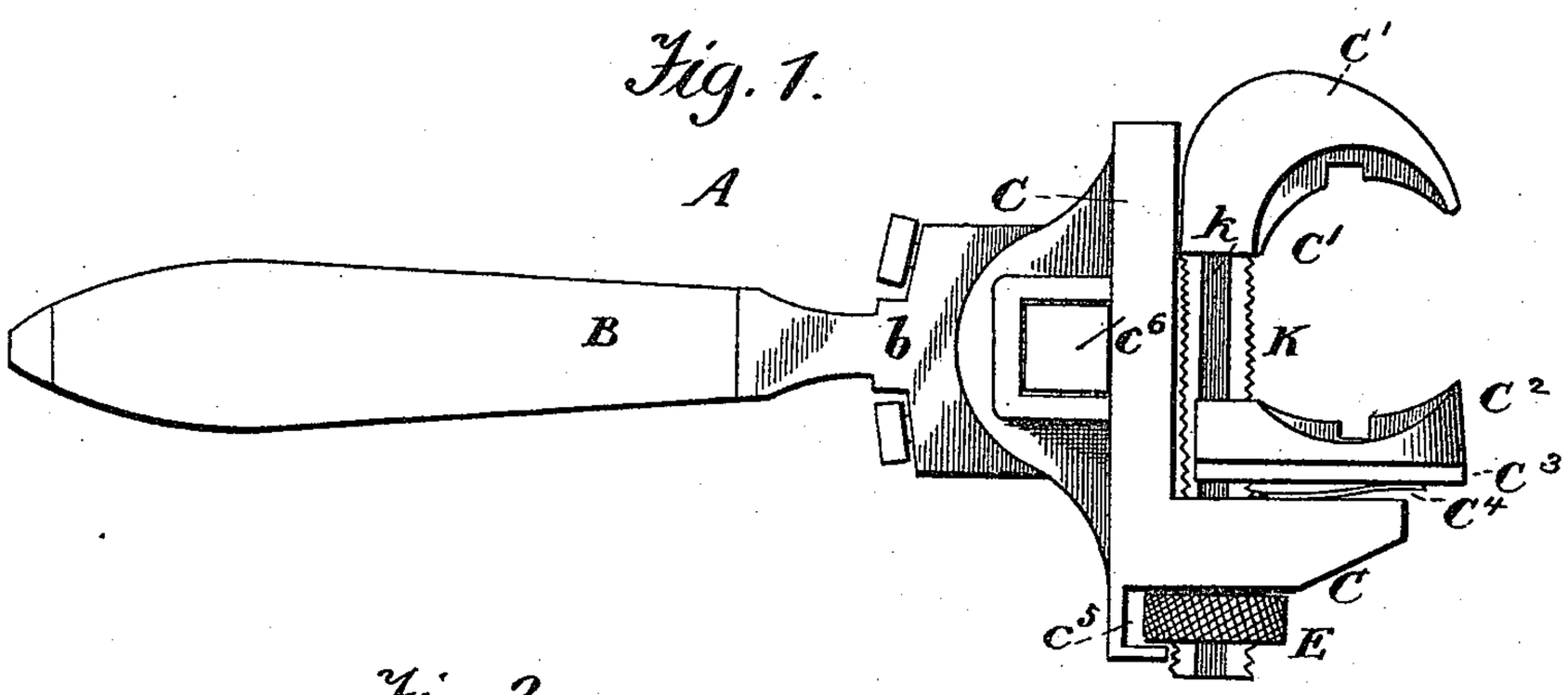


Fig. 2

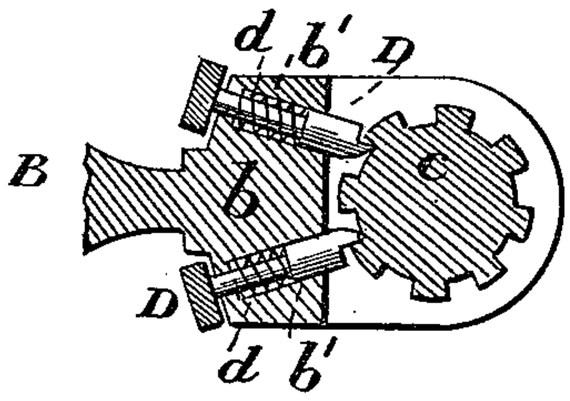


Fig. 3.

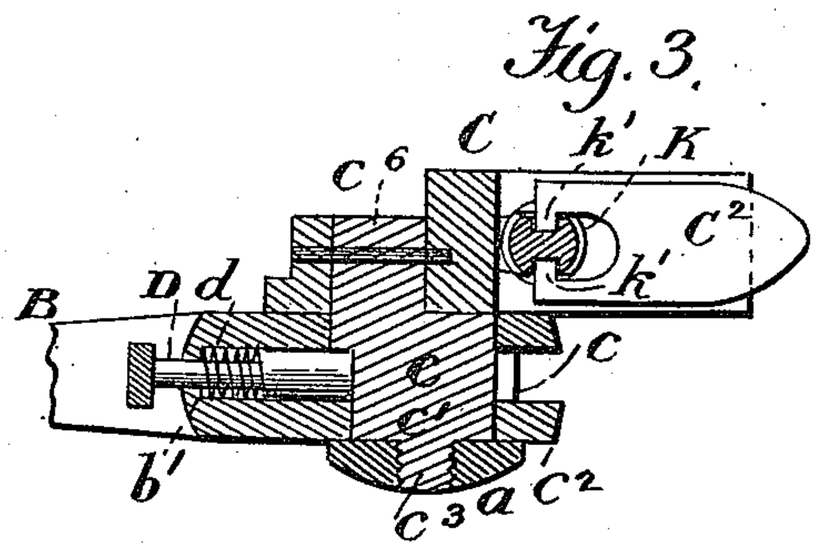


Fig. 4.

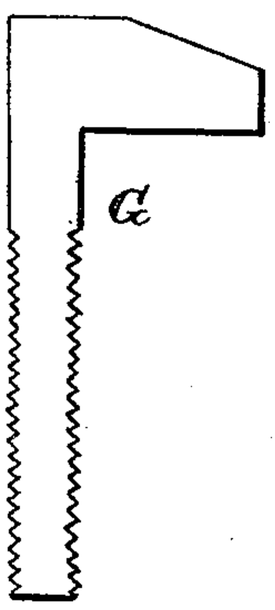
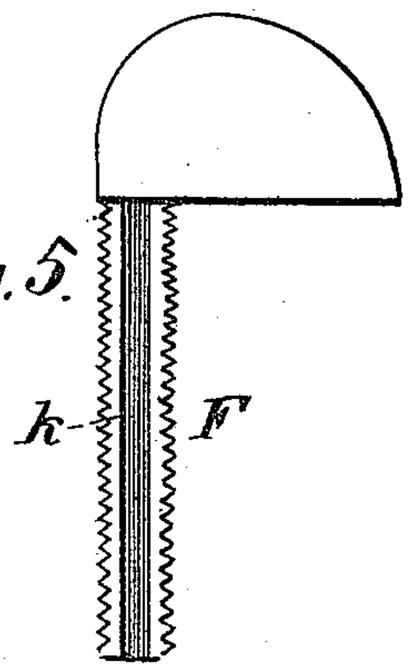


Fig. 5.



Witnesses.
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atty.

UNITED STATES PATENT OFFICE.

MINER ELLSWORTH WORDEN, OF SCRANTON, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO GEORGE B. CARSON, OF SAME PLACE.

PLUMBER'S TOOL.

SPECIFICATION forming part of Letters Patent No. 441,347, dated November 25, 1890.

Application filed May 23, 1890. Serial No. 352,869. (No model.)

To all whom it may concern:

Be it known that I, MINER ELLSWORTH WORDEN, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Plumbers' Tool-Stocks; 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 special object of the invention is to make a plumber's tool-stock which shall, by a simple change of jaws, serve as a monkey-wrench, a pipe-wrench, or a pipe-cutter.

Figure 1 of the drawings is a perspective view showing the stock used to cut pipes; Fig. 2, a horizontal section through the handle-head to show the detents with their springs; Fig. 3, a cross-section through jaw and handle; Fig. 4, a detail view of the nut-wrench jaw; Fig. 5, a detail view of the pipe-wrench jaw.

In the drawings, A represents the tool-stock, consisting of the handle B and fixed jaw C. The handle B has a metallic head *b*, with the slot *b'*, in which turns the ratchet-wheel *c*. This ratchet-wheel is on a post journaled in the end of the handle and having a square upwardly-extended end c^6, fitting a square opening in the flange of the fixed jaw C. Integral with the post are the ratchet-wheel *c*, disk *c'*, and the threaded end c^3, on which screws the cap-nut *a*. Through the handle-head *b* and on each side of handle project into slot *b'* the detents D D, which are held to the ratchet-wheel *c* by the springs *d d*. When these are pulled back with the fingers from the outside, the jaw C may be placed in any desired position with respect to the handle.

In the jaw C is a rectangular hole, through which slides the shank K of the movable jaw C', the threaded shank being moved by the circular thumb-nut E, which rotates on the shank K in the groove c^5. The shank K is only threaded on the top and bottom, while both sides are grooved at *k*. The movable cutting-jaw C^2 and the backing-plate C^3 are provided with open slots at the bottom, and in these with the side studs *k' k'*, which work in the grooves *k*. The spring C^4 presses the plate C^3 against the jaw C^2. Each of the jaws C' C^2 has a cutter, concaved to give a suitable bearing on the tube and notched at the middle to take a good bite on the metal.

The jaws C' C^2, plate C^3, and spring C^4 may be quickly removed and a pipe-wrench or nut-wrench jaw F or G substituted. Thus it will be seen that the plumber will need but one tool-stock, (which is necessarily a heavy article,) with its attachments, for three purposes, thus rendering it unnecessary to carry about with him two out of three of the ordinary stocks.

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—

1. In wrench-stocks, the handle B, having the head *b* slotted at *b'* and carrying the spring-pawls D D, the sliding jaw C', and the right-angled fixed jaw C, having a square opening in a flange thereof, in combination with a post having the ratchet-wheel *c*, the disk *c'*, the threaded end c^3, the cap-nut, and the square upwardly-extended end c^6 to fit the square opening in the flange of the jaw C, all constructed and arranged substantially as shown and described.

2. In pipe-cutters, the combination, with a fixed jaw C, having rectangular hole, of the cutter-jaw C', having a shank K in said hole threaded on the top and bottom and side-grooved, as at *k k*, the cutter-jaw C^2 and plate C^3, open-slotted at the bottom and provided with the side studs *k' k'*, and the spring C^4, the plate C^3 being arranged behind the jaw C^2 and the spring C^4 behind the plate C^3, substantially as and for the purpose described.

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

MINER ELLSWORTH WORDEN.

Witnesses:
GEORGE MARSHALL,
F. H. STEPHENS.