

W. I. NOEL.

WRENCH.

No. 176,338.

Patented April 18, 1876.

Fig 1

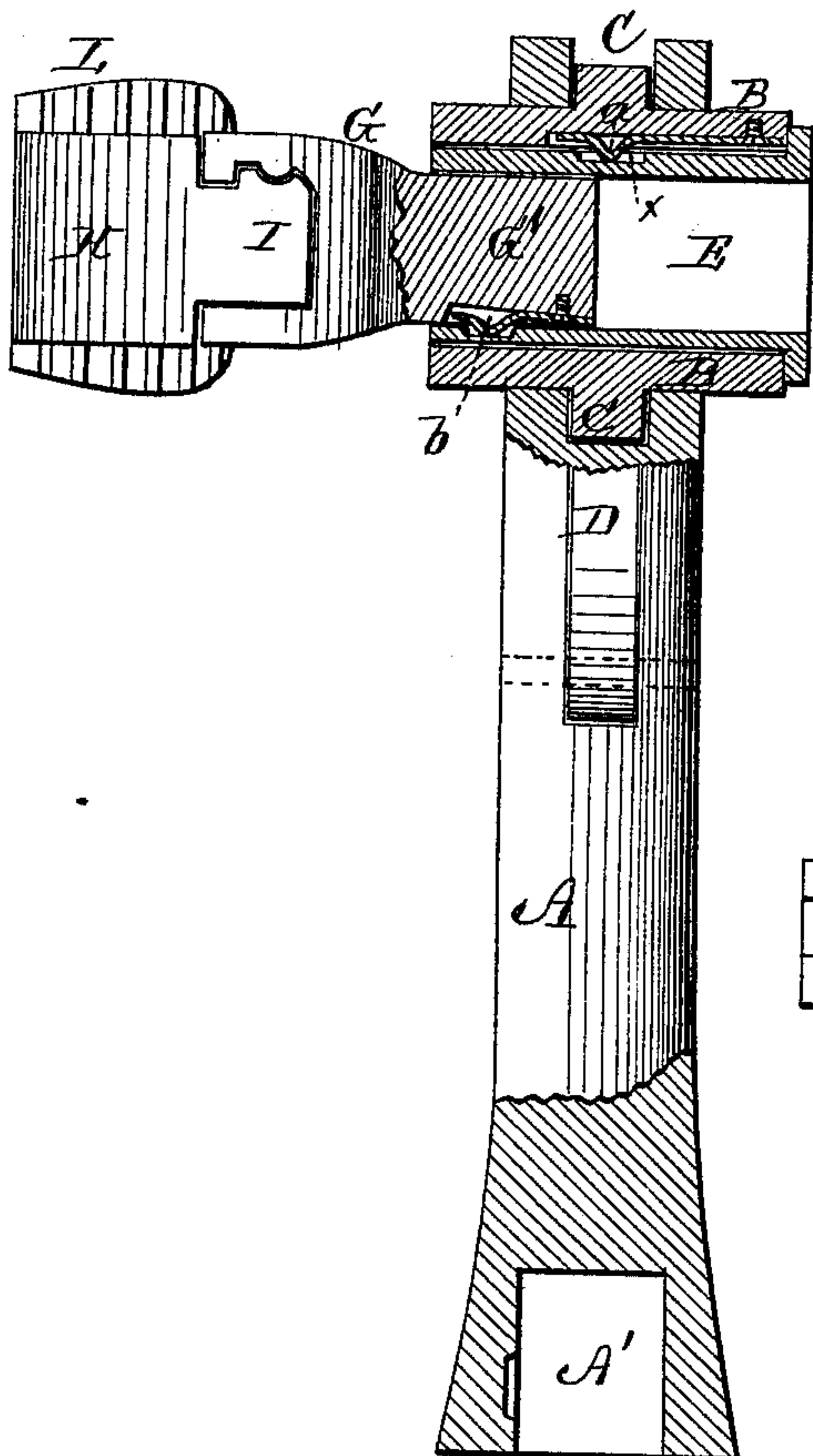
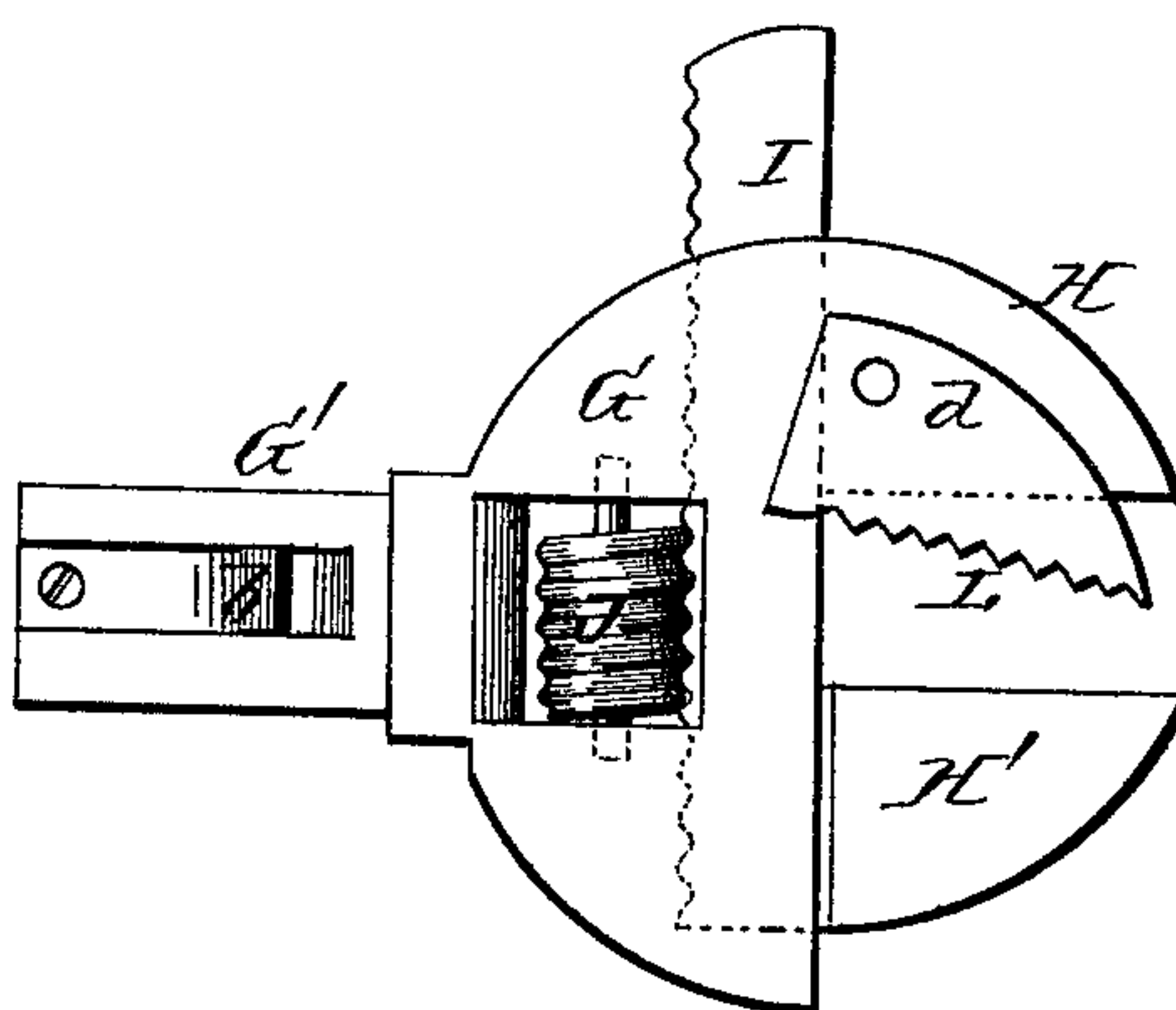


Fig 2



WITNESSES
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UNITED STATES PATENT OFFICE

WILLIAM I. NOEL, OF WALTON, INDIANA.

IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. **176,338**, dated April 18, 1876; application filed January 28, 1876.

To all whom it may concern:

Be it known that I, WILLIAM I. NOEL, of Walton, in the county of Cass and State of Indiana, have invented certain new and useful Improvements in Wrenches; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification.

My invention relates to ratchet-wrenches; and it consists in the construction and arrangement of certain attachments thereto, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side view, partly in section, showing a ratchet wrench embodying my invention. Fig. 2 is a side view of one of the attachments.

A represents the handle, B the rotating sleeve with ratchet-wheel C, and D the spring, of an ordinary ratchet-wrench, constructed in any of the known and usual ways, and to which I lay no claim. E represents a square thimble, to be inserted in the sleeve B for the purpose of reducing its size, so that the wrench may be used for small as well as large burrs.

This thimble is held in the sleeve by means of a spring-catch, *a*, fastened within the sleeve, and engaging in a recess, *x*, on the exterior of one of the sides of the thimble. This spring-catch is so arranged that the thimble may be inserted from either end of the sleeve, and while it holds the thimble with sufficient friction to prevent its falling out, it will admit of the thimble being pulled out whenever required.

As an additional attachment, I have a head, G, with shank G', of sufficient size to fit in the thimble E, and be held therein, in the same manner, and for the same purpose, by a similar spring-catch, *b*, as shown.

At one end of the head G is formed a stationary jaw, H, while at the other end is a movable jaw, H', attached to a slide, I, operated by a worm-screw, J, in the head.

On the face of the stationary jaw H is placed a corrugated rocking jaw, L, having side flanges *d d*, which embrace the sides of the stationary jaw, and are pivoted thereto.

This attachment may be used for any and all purposes that an ordinary monkey-wrench can be used for; but by being applied to a ratchet-wrench, it is used in the same manner as a ratchet-wrench. By the addition of the corrugated rocking jaw L it forms a convenient pipe-wrench. When this attachment is not in use, the shank G' thereof is inserted and held in the end of the handle A, which has a square socket, A', formed therein for that purpose.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the head G, having sliding jaw H', fixed jaw H, rocking jaw L, and provided with shank G', spring-catch *b*, with the ratchet-wrench A, having sleeve B, spring-catch *a*, and thimble E, for the purposes shown and described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

WILLIAM I. NOEL.

Witnesses:

FRANKLIN S. CROCKETT,
W. C. MCARTHUR.