

H. SHARP.
WRENCH.

No. 41,100.

Patented Jan. 5, 1864.

Fig. 1.

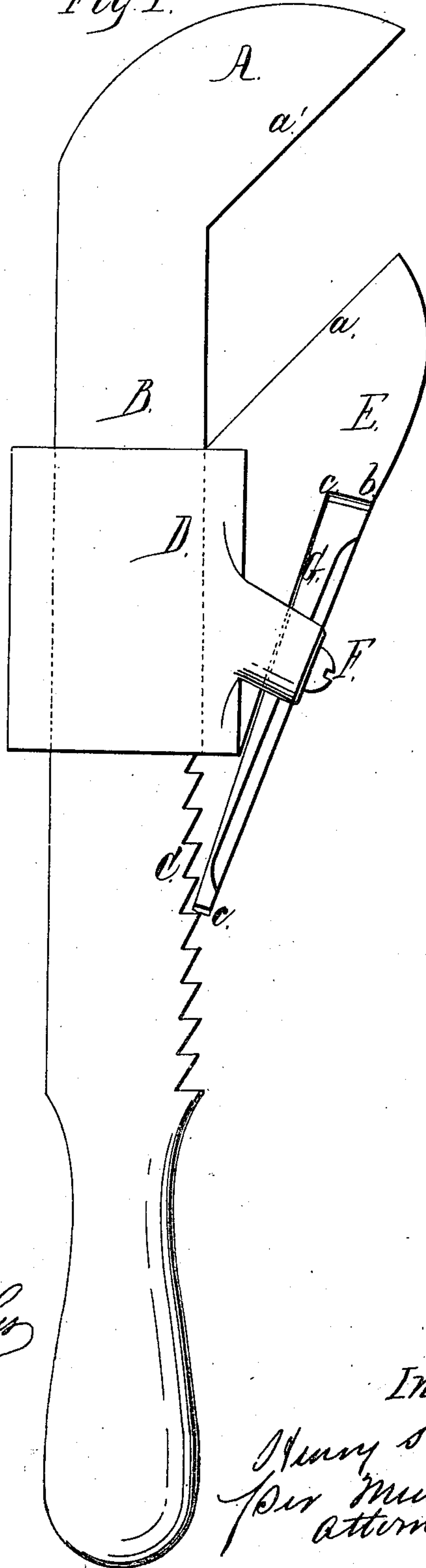
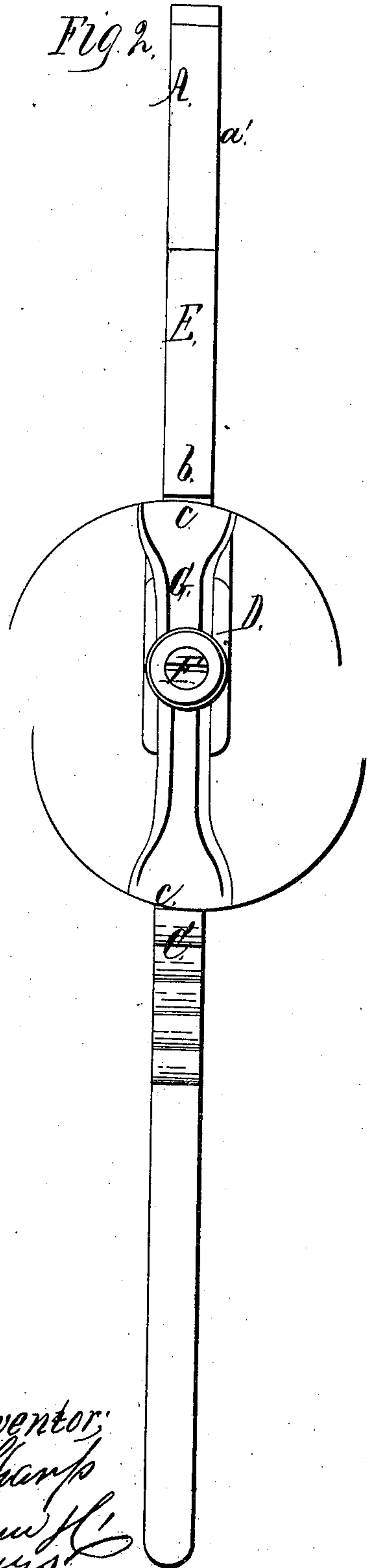


Fig. 2.



Witnesses;

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UNITED STATES PATENT OFFICE.

HENRY SHARP, OF PORT RICHMOND, NEW YORK.

IMPROVEMENT IN WRENCHES.

Specification forming part of Letters Patent No. 41,100, dated January 5, 1864.

To all whom it may concern:

Be it known that I, HENRY SHARP, of Port Richmond, in the county of Richmond and State of New York, have invented a new and Improved Wrench; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of my invention; Fig. 2, an edge view of the same.

Similar letters of reference indicate corresponding parts in the two figures.

This invention consists in having the movable jaw of the wrench attached to a slide which is fitted on the shank or bar of the stationary jaw, said shank or bar being provided at one edge with a rack into which a lever attached to the sliding jaw works, all being arranged in such a manner as to form a durable and economical wrench.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the stationary jaw of the wrench, which is formed at one end of a shank or bar, B, of rectangular or other suitable form, and having a rack, C, at its front edge. On the shank or bar B there is placed a slide, D, which is allowed to work freely on B, and has a jaw, E, connected with it, the face side, *a*, of the latter being parallel with the face side, *a'*, of the jaw A, as shown clearly in Fig. 1. To the outer side of the jaw E there is secured by a pivot-bolt, F, a lever, G, the bolt F passing through the lever a little at one side of its center. The front or outer end

of the lever G works under a shoulder, *b*, at the outer side of jaw E, and the inner end of said lever works in the rack C. The ends of the lever G are of curved form, as shown at *c*, said curves forming parts of circles which are eccentric with the pivot-bolt F, as indicated in red in Fig. 2. The sliding or movable jaw E is adjusted to the nut by turning the lever G so that its ends will be free from the shoulder *b* and rack C. The slide D and jaw E may then be moved freely, and when the latter is in contact with the nut the lever G is turned so that its curved ends *c* will pass one under the shoulder *b* and the other over a tooth of the rack C; and as said lever is adjusted in place its curved inner end will, in consequence of its eccentricity, press the jaw E firmly against the nut. The bearing or shoulder *b*, it will be seen, takes the strain off from the pivot-bolt F.

The wrench may be made of wrought or malleable cast-iron, and at a very moderate cost. It is not liable to get out of repair, and may be adjusted with the greatest facility to nuts.

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

The jaw E, attached to the slide D, in combination with the lever G and rack C, all arranged, substantially as shown, to form a new and improved wrench.

HENRY ^{his} X SHARP.
mark.

Witnesses:

L. H. HAGGERTY,
EDWARD STEERS.