

J. E. ROACHE.
Pipe-Tongs and Cutters.

No. 134,440.

Patented Dec. 31, 1872.

Fig. 1.

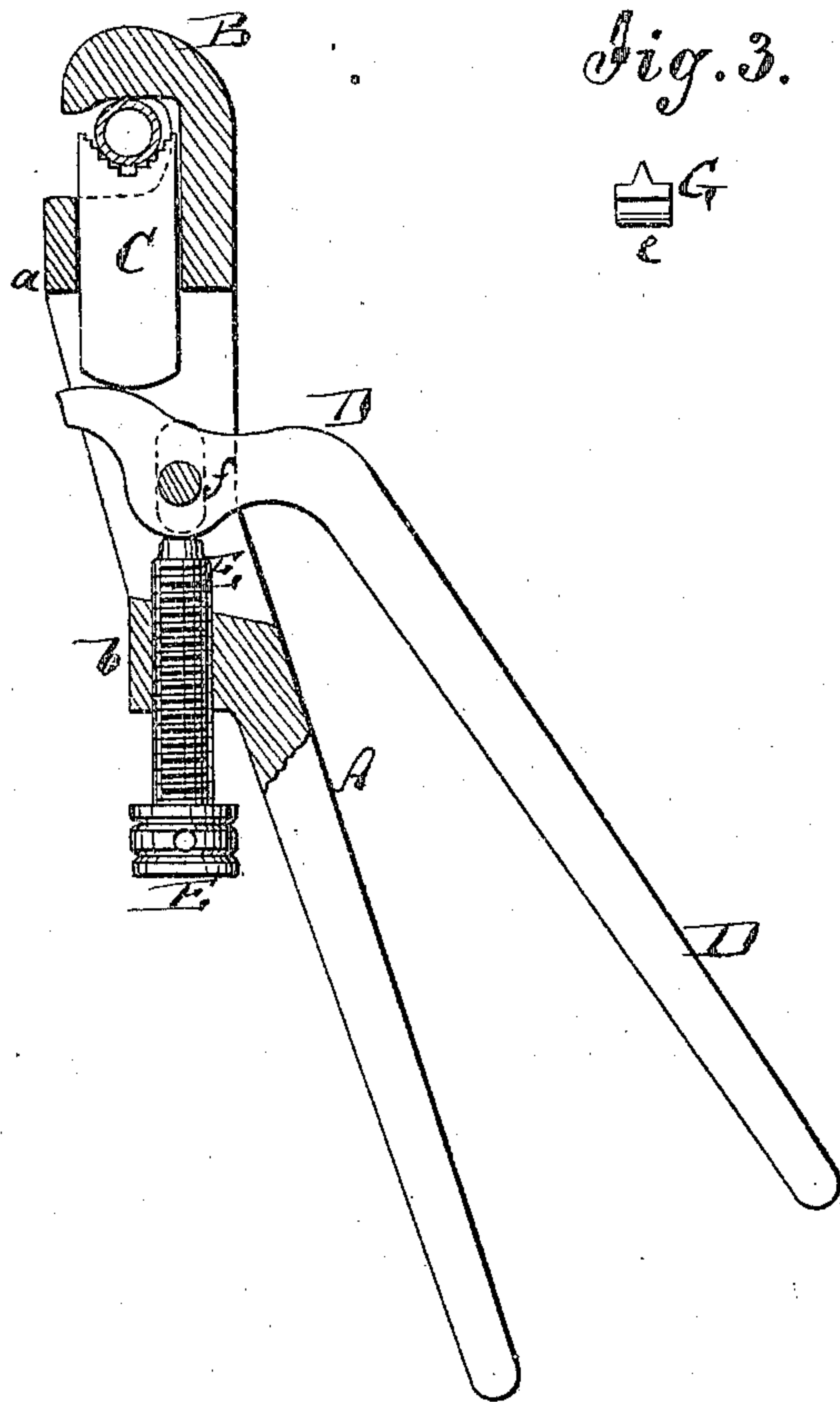


Fig. 2.

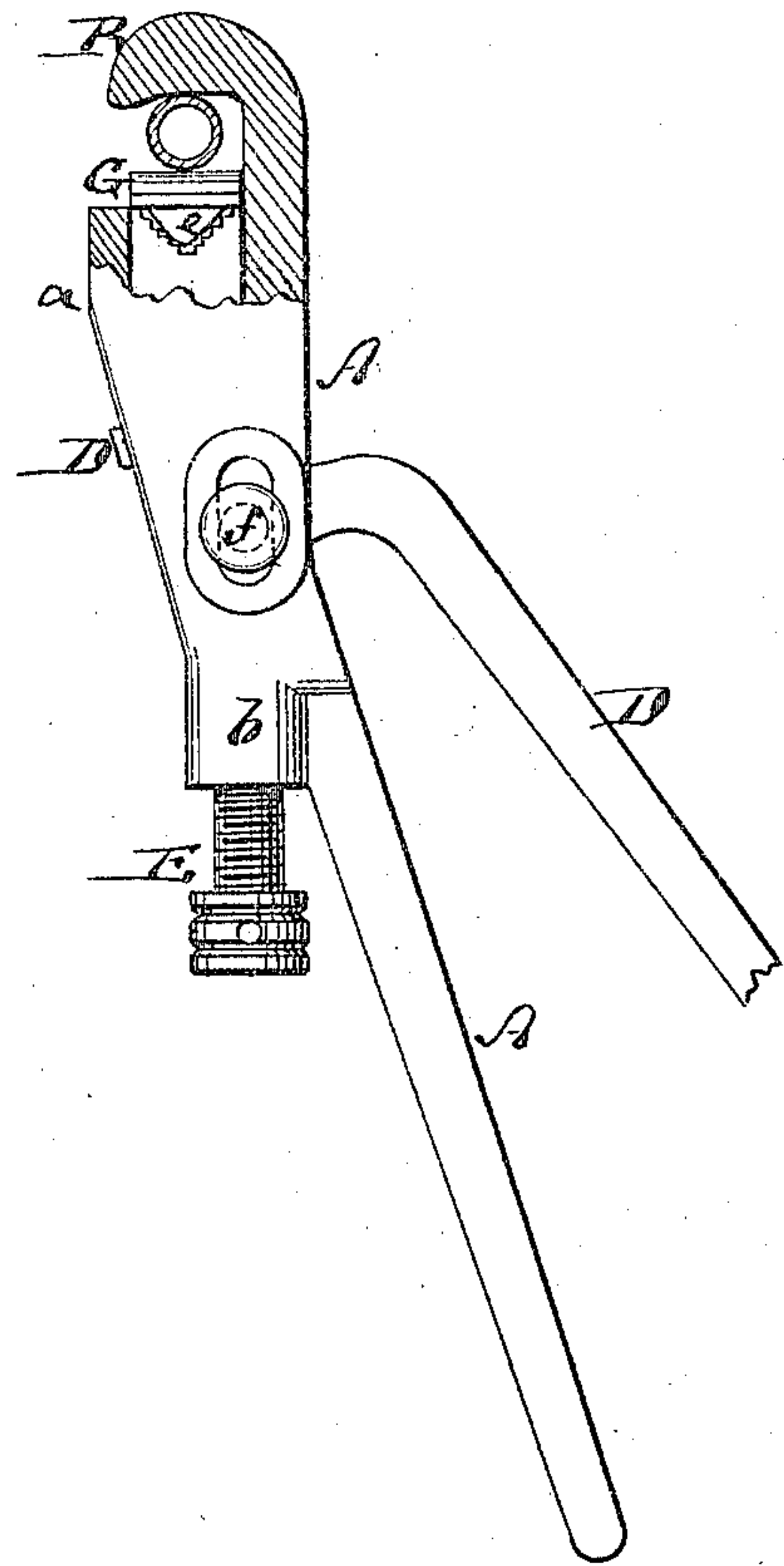
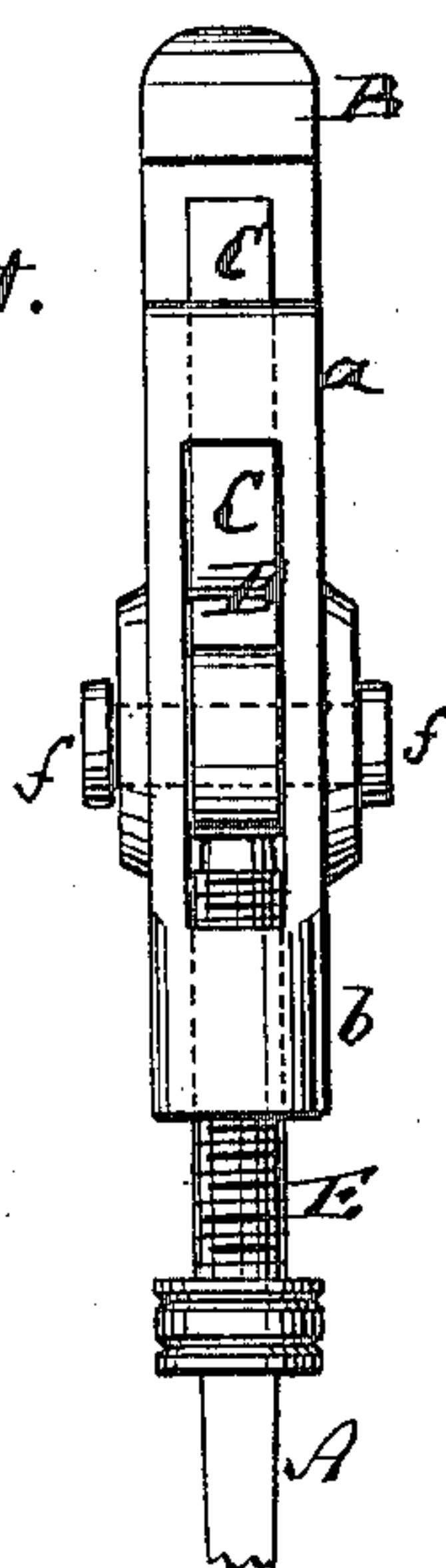


Fig. 3.



Fig. 4.



Witnesses:

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PER

UNITED STATES PATENT OFFICE.

JAMES E. ROACHE, OF NEW YORK, N. Y.

IMPROVEMENT IN PIPE TONGS AND CUTTERS.

Specification forming part of Letters Patent No. 134,440, dated December 31, 1872.

To all whom it may concern:

Be it known that I, JAMES E. ROACHE, of New York city, in the county and State of New York, have invented a new and Improved Pipe Tongs and Cutter, of which the following is a specification:

Figure 1 is a sectional side view of my invention, showing it in form of tongs. Fig. 2 is a similar view of the same, showing it as a cutter. Fig. 3 is a detail end view of the cutter; Fig. 4, an edge view of the tongs.

Similar letters of reference indicate corresponding parts.

This invention relates to an adjustable and very simple instrument for clamping pipes, tubes, and other objects of varying diameters, and to means whereby the same instrument can be converted into a cutting-tool for pipes and cylindrical or prismatic rods or tubes. The invention consists in the new general arrangement of parts whereby the tongs will be operated by a strong jaw resting on a lever that is vertically adjustable, and has its fulcrum on the end of a screw, so that, by turning said screw and raising or lowering the lever, the size of the tongs will be adjusted for smaller or larger articles. The invention also consists in the arrangement of a cutting-tool, which is placed upon the recessed gripping-edge of the movable jaw, and thereby held with sufficient firmness to operate in the desired manner.

The letter A in the drawing represents the handle of the fixed jaw B of my improved pipe-tongs. This handle is rigidly connected to the jaw B, which is in form of a hook at the upper end of A, as shown. C is the movable jaw, vertically adjustable under the jaw B, and guided in a chamber, *a*, which is formed on the handle-part A. The upper end of the jaw C is made with a V or other-shaped gradated recess, as usually done in pipe-tongs. The

lower end of the jaw C rests on a lever, D, which is supported on a screw, E, that enters a shoulder, *b*, projecting from the handle A. Pins *f*, projecting from the sides of the lever D, and passing through slots in the hollowed part of the handle A, in which the upper part of the lever D is arranged, serve as guides for said lever when the same is being moved up or down by means of the screw E. The fulcrum of the lever D is thus on the screw E, and when it is swung thereon it serves to raise or lower the jaw C so as to clamp or release the tube or other thing to be held. By working the screw E up or down, more or less, the lever D and jaw C will be adjusted to adapt the tongs to smaller or larger articles. G is a cutter, having a V or other-shaped projection or shank, *e*, which projection fits the V or other shaped recess of the jaw C, so that the cutter may, as in Fig. 2, be placed upon the jaw C, and be firmly held thereon, to serve as a cutting instrument whenever moved up by the action of the lever D.

This simple and inexpensive cutter attachment increases materially the value and utility of the instrument without increasing, to any great extent, the expense of the same.

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

1. The pipe-tongs, composed of the fixed jaw B, sliding jaw C, up-and-down adjustable lever D, and fulcrum-screw E, all arranged substantially as specified.

2. The cutter G, formed with the V or other-shaped shank *e*, and arranged, in combination with the vertically-adjustable jaw of a pipe-tongs, as set forth.

JAS. E. ROACHE.

Witnesses:

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