

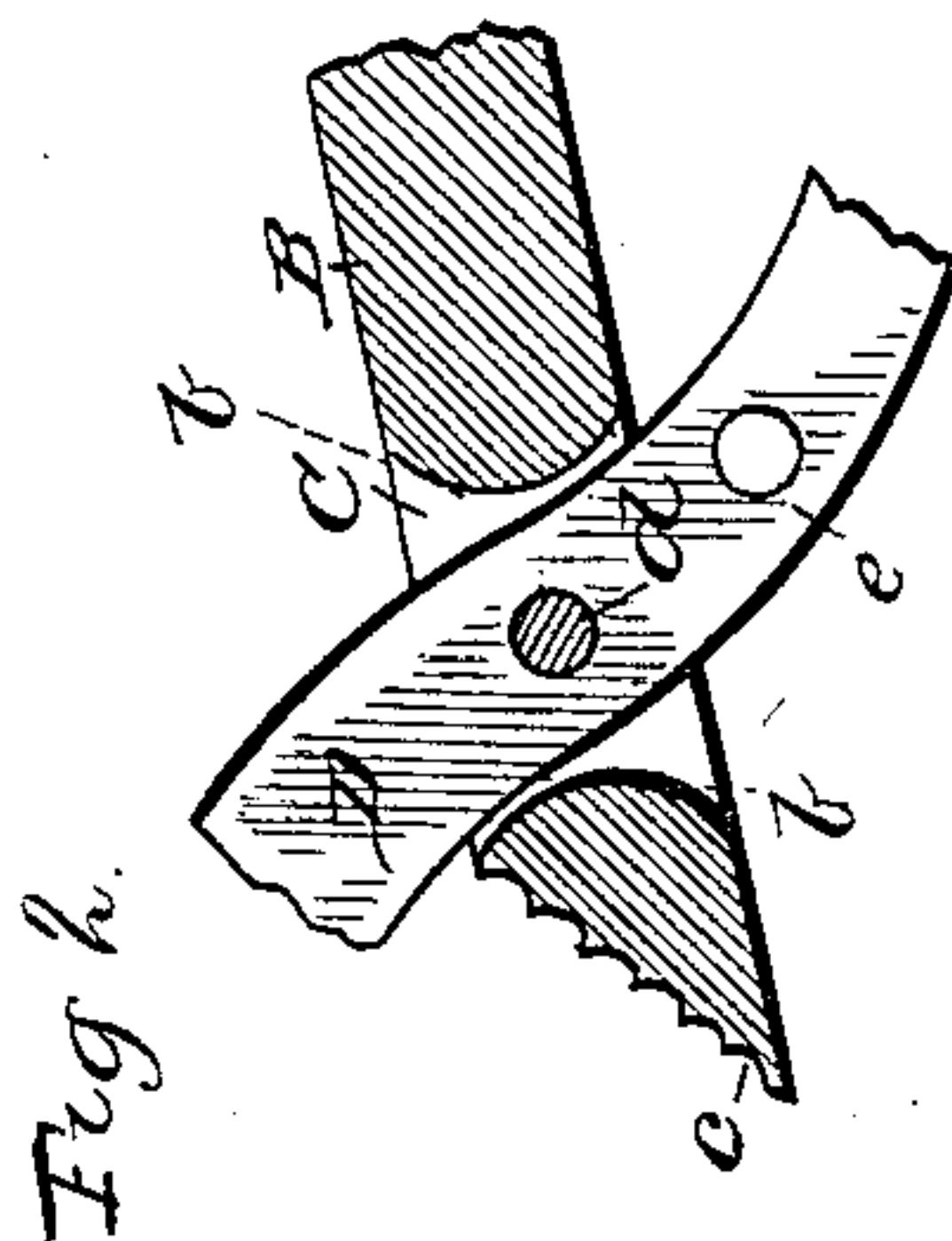
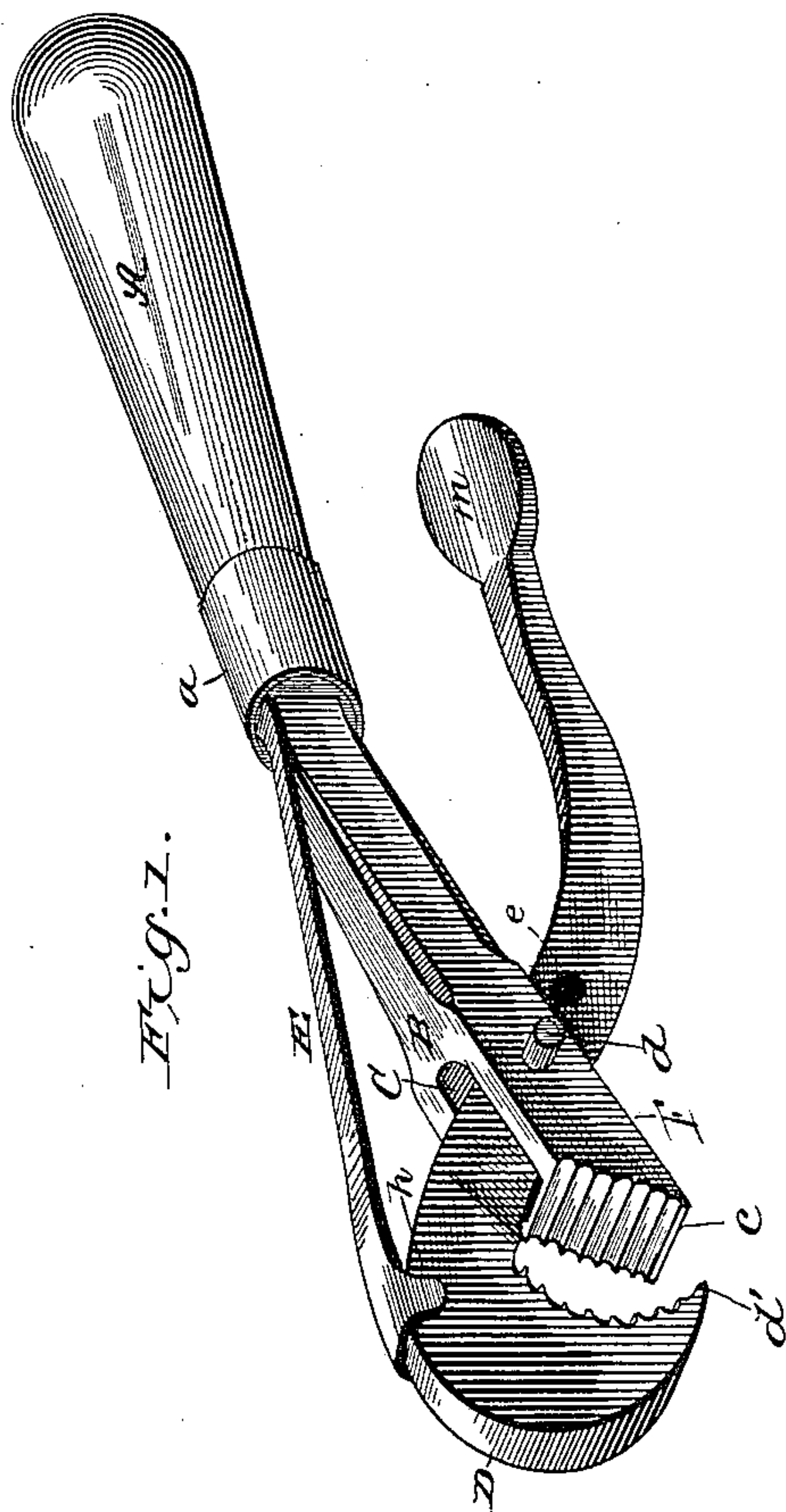
(No Model.)

J. COURTLEYOW.

PIPE WRENCH.

No. 362,819.

Patented May 10, 1887.



WITNESSES
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JACOB COURTLEYOW, OF CHARITON, IOWA, ASSIGNOR OF ONE HALF TO
DAVID WORMLY, OF SAME PLACE.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 362,819, dated May 10, 1887.

Application filed December 9, 1886. Serial No. 221,056. (No model.)

To all whom it may concern:

Be it known that I, JACOB COURTLEYOW, a citizen of the United States, residing at Chariton, in the county of Lucas and State of Iowa, have invented certain new and useful Improvements in Pipe-Wrenches; 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.

This invention relates to pipe-wrenches of that class in which one of the jaws is stationary, and which, owing to the shape of its grasping-faces, can be applied to articles of almost any shape that require a wrench to turn; and it has for its object to provide a very simple, durable, inexpensive tool which can be easily operated by one hand; and it consists of the parts and combination of parts hereinafter described and claimed.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of the tool, and Fig. 2 a detail section of the head of the stationary jaw.

A represents a wooden handle, in one end of which a metallic bar, B, is inserted and securely held therein by a metal ring or ferrule, *a*, which is shrunk on or otherwise rigidly secured to the end of said handle. The bar B is inclined or projects from the handle at its point of junction therewith at an angle of about thirty (30) degrees, and has a series of teeth, *c*, cut in the inclined face of its head F. A slot, C, is formed in the head F, extending entirely through the same, to receive the curved lever or bar D. The ends *b* of the slot C are slightly rounded, as clearly shown in Fig. 2, to permit movement of the lever D therein—that is, to afford room for or permit the grasping-faces of the bar B and lever D to be widely separated or closely brought together. The lever D is pivotally secured to the bar B within the slot C by a pin, *d*, two or more openings or perforations, *e*, being formed in said lever, so that it may be adjusted at its pivotal point to accommodate different sizes of articles by simply withdrawing pin *d* and moving the lever up or down and inserting the pin in a different opening. The head G of the curved lever D is rounded on its inner

side, forming the grasping-face, which is provided with suitable serrations or teeth, *d'*.

E is a stiff metallic flat spring having one end inserted in the handle A immediately next to the bar B, and wedged or otherwise rigidly secured therein. The outer end of this spring embraces the upper edge of the lever D by two depending flanges, *h*, to prevent the spring slipping off of said lever when the latter is moved. The purpose of the spring is to exert sufficient pressure on the lever D to hold it securely against the article between the jaws. The lever D extends back to about or near the center of the handle, and terminates in a thumb-plate, *m*.

By this construction it will be seen that the power or force exerted on the jaws is conveyed direct to the article grasped, for the reason that the stationary jaw is inclined from the handle to its grasping-face and the center of resistance located directly in a line, or nearly so, with the center of the handle, and therefore, when the handle is grasped by the hand, it exerts the force directly on the resistance, requiring less exertion and getting a better result.

It will also be noticed that the tool can be easily operated by one hand, the operator using his thumb or one of his fingers to open the jaws by pressing on the thumb-plate *m*.

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

A wrench consisting of the handle A, the bar B, secured in said handle and projecting therefrom at an angle, and having the slotted and perforated head F, said head having the inclined serrated face, the curved lever D, having the rounded serrated face and thumb-plate *m*, said lever being pivotally and adjustably secured in the slotted head F, and the spring E, having one end rigidly secured to the handle and the other resting on the lever D, substantially as described.

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

JACOB COURTLEYOW.

Witnesses:

NICHOLAS LEINEN,
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