

(No Model.)

W. HELLEM.

PIPE WRENCH.

No. 334,227.

Patented Jan. 12, 1886.

Fig. 1.

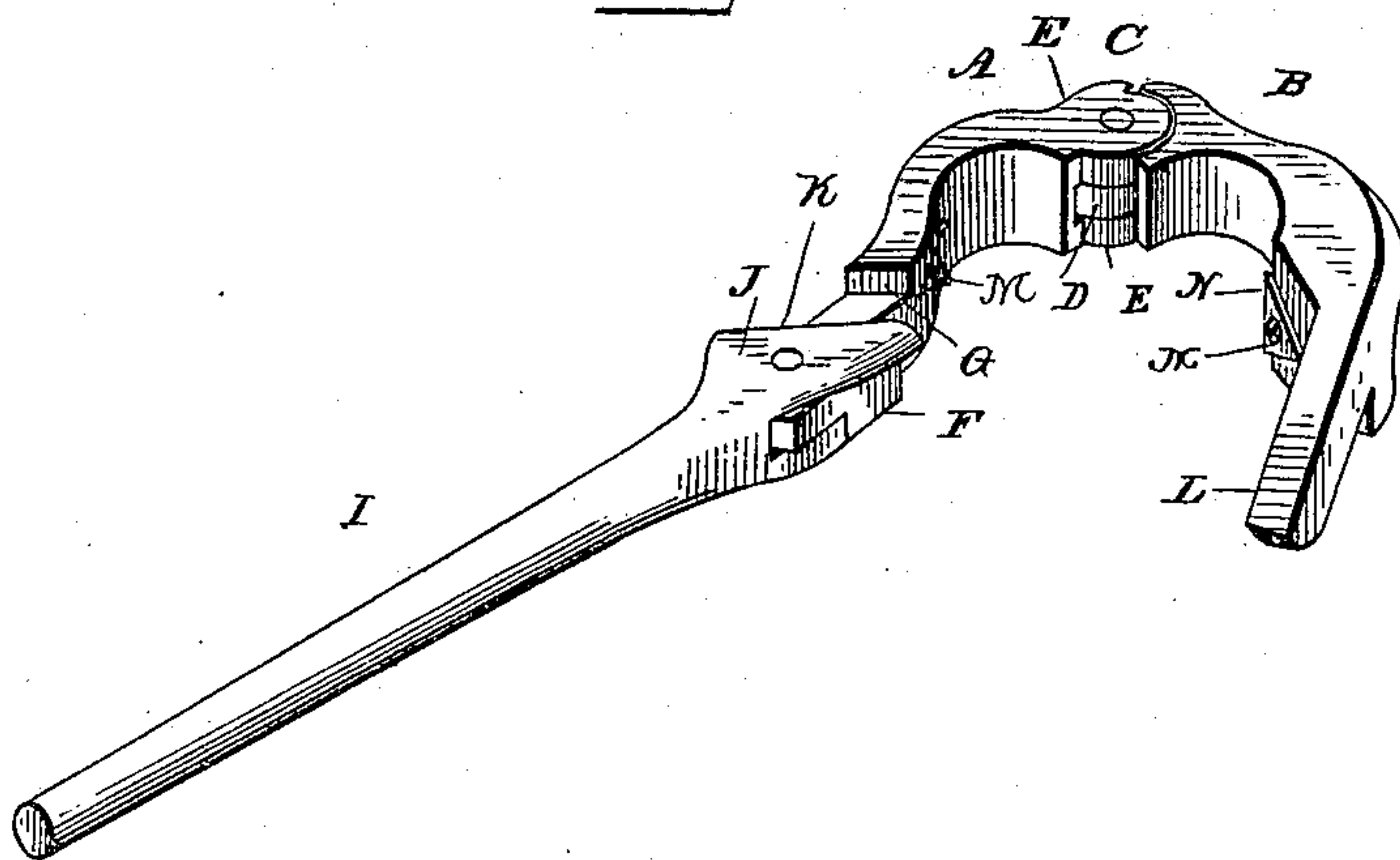


Fig. 2.

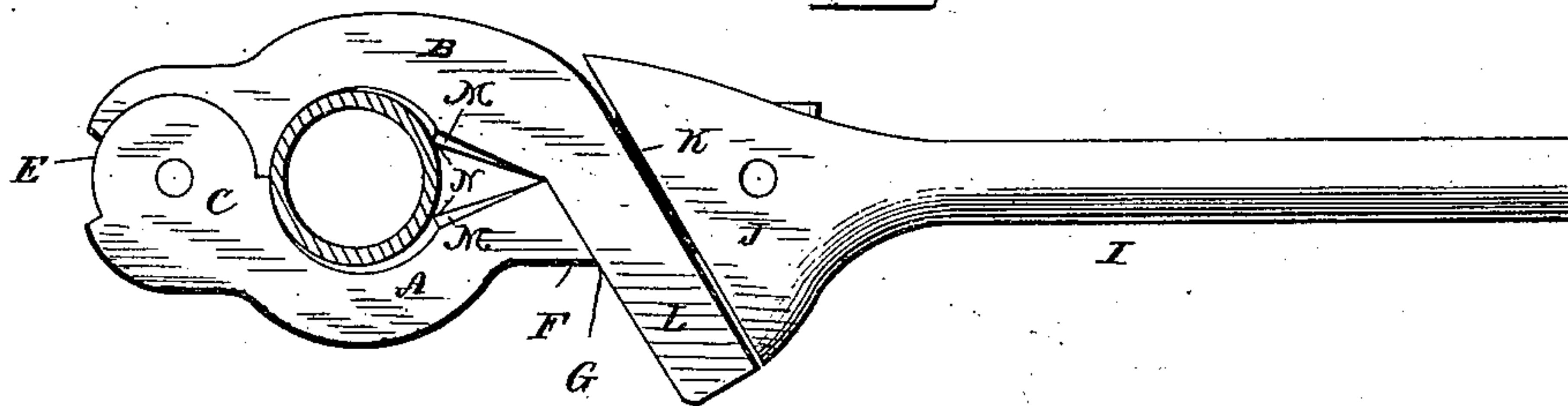


Fig. 3.

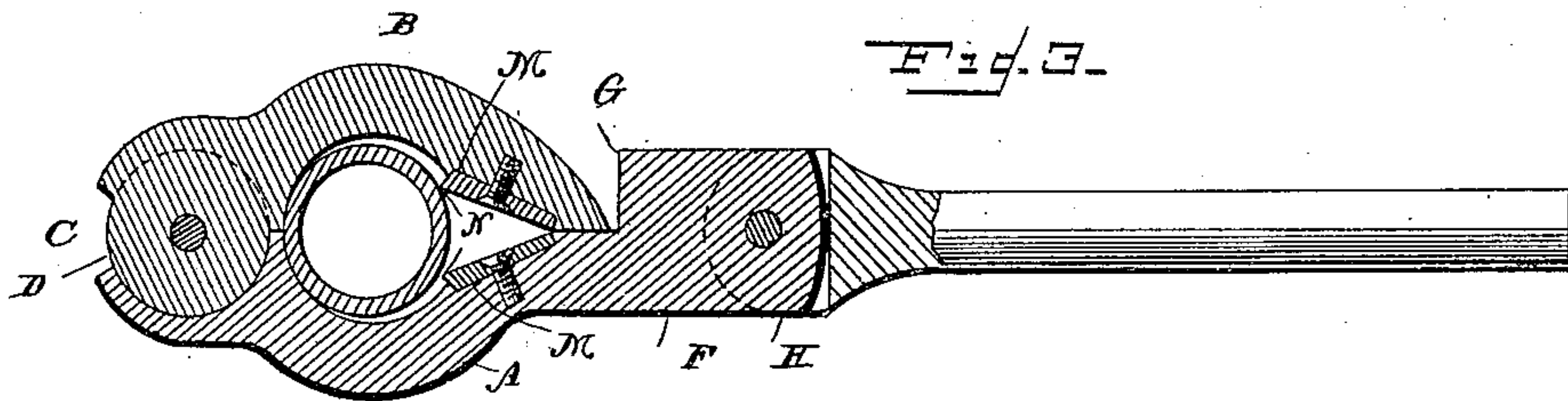
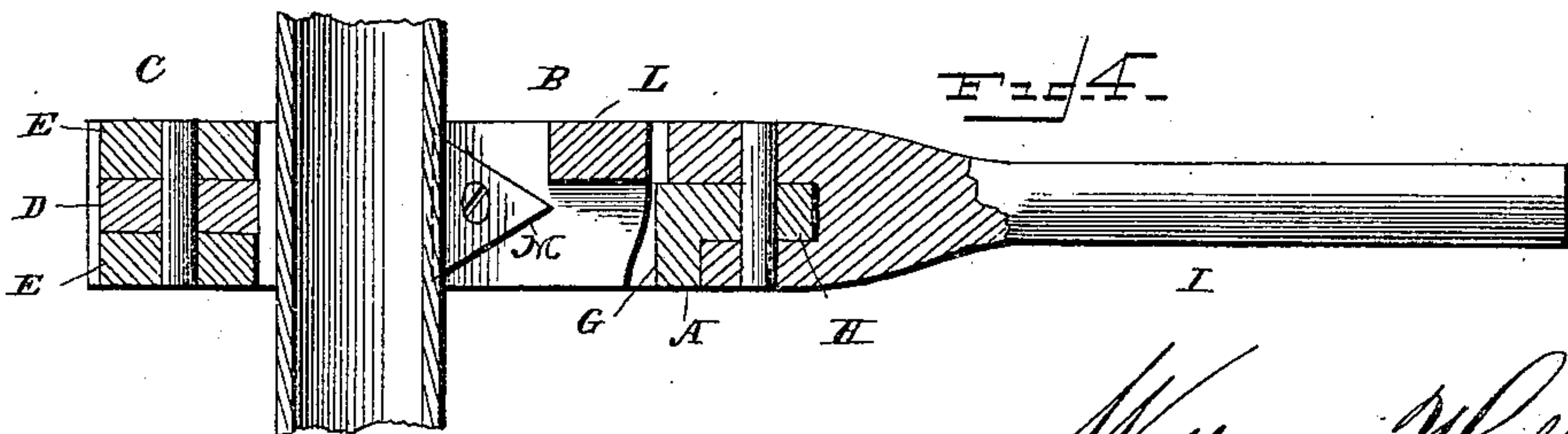


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM HELLEM, OF ALLENTOWN, NEW YORK, ASSIGNOR OF ONE-HALF
TO PORTER BARNES AND DENNIS BARNES, BOTH OF SAME PLACE.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 334,227, dated January 12, 1886.

Application filed November 13, 1885. Serial No. 182,728. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM HELLEM, a citizen of the United States, and a resident of Allentown, in the county of Allegany and State of New York, have invented certain new and useful Improvements in Tube-Wrenches; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a perspective view of my improved tubing and pipe tongs, showing the same open for adjustment upon the tubing. Fig. 2 is a top view showing the device closed and in position for operation upon a tube, which is shown in section. Fig. 3 is a longitudinal horizontal sectional view of the device as shown in Fig. 2, and Fig. 4 is a longitudinal vertical sectional view of the same.

This invention relates to an improved tube-wrench adapted particularly for the manipulation of tubes when they are being set in position in oil-wells, salt-wells, and other deep wells; and it has for its object to provide a device of this class which shall possess superior advantages in point of simplicity, durability, and general efficiency.

With these ends in view the invention consists in the improved construction of the said wrench, which will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings hereto annexed, A and B designate the two semicircular jaws of my improved wrench, the rear ends of which are connected by means of a hinge, C, the central leaf of which, D, is fitted loosely between the two outer leaves, E E, as will be seen in Fig. 1 of the drawings, so as to enable the jaws to vibrate slightly with relation to each other, for the purpose which will be hereinafter set forth.

The jaw A is provided at its rear end with a rearwardly-extending shank, F, having a shoulder, G, and terminating in a plate, H, to which is pivoted a handle, I, the front

end of which terminates in a triangular plate, J, having an inclined or diagonal front side, K, facing the shoulder G. The rear end of the jaw B has a diagonally-extending arm, L, adapted to fit loosely between the shoulder G and the plate J, as will be seen in Fig. 2 of the drawings.

The inner concave sides of the jaws A and B are provided with triangular die-plates M M, partly embedded therein, but having projecting sharp rear edges, N N, adapted to engage the tubing which is to be operated upon by the wrench.

The operation of this invention will be readily understood from the foregoing description, taken in connection with the drawings hereto annexed.

In order to adjust the wrench upon the tubing, it is opened, as shown in Fig. 1, when it may be readily slipped into position and closed, thus placing the arm L in the position shown in Fig. 2.

By working the lever or handle I in either direction the plate J will be caused to bear against the said arm L, thus forcing the jaws together and causing one of the dies M to engage the tube, which may thus be turned in the direction in which the lever I is moved. The lever may be moved and the device be operated in either direction.

The arm L is slightly beveled on its under side, at its end, to enable it to pass over the plate J, and the loose hinge, to which reference has been made, also serves to facilitate the opening or closing of the jaws.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a pipe-wrench, the combination of the jaw A, having a shank provided with a shoulder, and having a pivoted handle or lever provided with a triangular plate, with the jaw B, hinged to the jaw A and having the arm L, substantially as and for the purpose set forth.

2. In a pipe-wrench, the combination of the jaws A and B, connected by a hinge which admits of a vibrating motion of the said jaws with relation to each other, the shank F, ex-

tending from the jaw A and having shoulder G and plate H, the pivoted handle I, having plate J, the arm L, extending from the jaw B and the dies M M, partly embedded in the inner sides of the jaws, and having projecting sharp rear edges, N, substantially as and for the purpose herein set forth.

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

WILLIAM HELLEM. [L. S.]

Witnesses:

J. W. ANDERSON,

F. J. FOX.