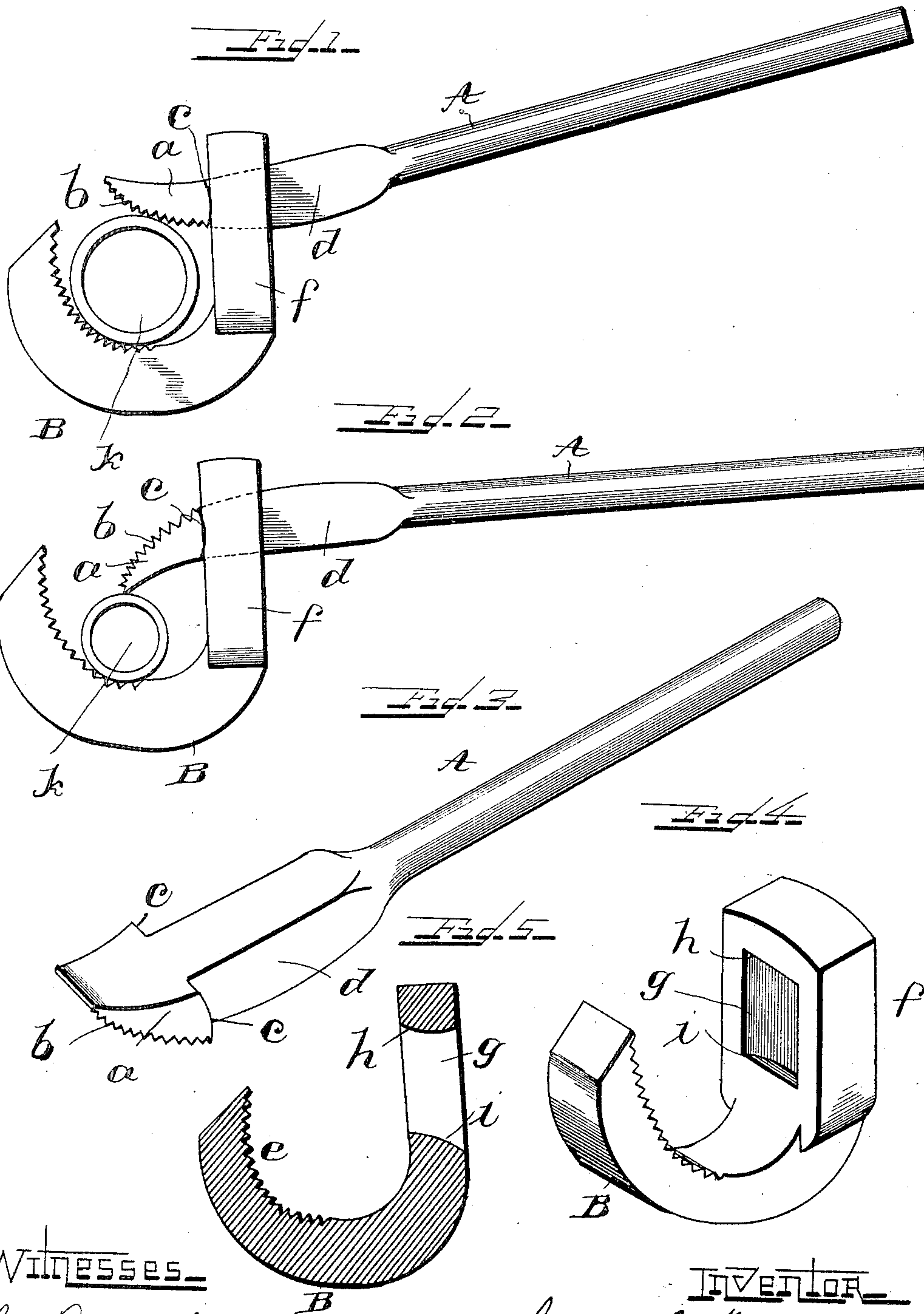


(No Model.)

J. P. KENNEDY.  
PIPE WRENCH.

No. 581,737.

Patented May 4, 1897.



Witnesses

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# UNITED STATES PATENT OFFICE.

JAMES P. KENNEDY, OF LEBANON, PENNSYLVANIA.

## PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 581,737, dated May 4, 1897.

Application filed March 11, 1897. Serial No. 627,021. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES P. KENNEDY, a citizen of the United States, residing at Lebanon, in the county of Lebanon and State of Pennsylvania, 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.

My invention relates to pipe-wrenches, and has for its object a simple and cheap implement; and it consists in certain improvements in construction, which will be fully disclosed in the following specification and claims.

In the accompanying drawings, which form part of this specification, Figure 1 represents a side elevation of my improved wrench; Fig. 2, a like view with the lever in reverse position to that in which it is shown in Fig. 1; Fig. 3, a perspective of the wrench-lever detached; Fig. 4, a like view of the sliding jaw of the wrench, and Fig. 5 a vertical section of the wrench-jaw.

Reference being had to the drawings and the letters thereon, A indicates the lever of the wrench, which is provided at its front end with a jaw *a*, having a convex face or surface *b*, and shoulders *c c* on each side of the jaw, which shoulders are preferably convex and form a fulcrum for the lever A, as will hereinafter more fully appear. The shoulders also prevent the lever slipping back in the sliding jaw out of operative position or the sliding jaw of the wrench falling off the end of the lever. In the rear of and adjacent to the jaw *a* and the shoulders *c c* is a smooth elongated neck *d*, which is preferably square in cross-section and is of a width and thickness equal to the width of the slot in the shank of the sliding jaw.

B indicates the sliding jaw, which is curved inward and upward and is preferably serrated at *e*, though the serrations may be omitted, and is provided with an upward-extending

shank *f*, in which is an elongated slot *g*, having convex end walls *h* and *i*, with which the neck *d* of the lever A engages in applying the wrench to a pipe or rod *k*.

The lever A may be applied with the serrated face *b* of the jaw *a* engaging a pipe or rod, as shown in Fig. 1, or the lever may be reversed and the extreme end of the jaw *a* made to engage or bite the pipe, as shown in Fig. 2. Other manipulations of the lever A may be made in using the wrench which will present themselves to persons skilled in the use of this class of implements.

In applying the wrench the pipe or rod is held between the gripping-faces *b* and *e*, and the shoulders *c c* on the sides of the jaw *a* bear against the inner surface of the shank and form a fulcrum for the lever A as pressure or force is applied thereto and prevent the lever slipping in the jaw and losing its bite upon the pipe being operated upon.

The lever and the sliding jaw may be made of cast-steel or they may be forged.

Having thus fully described my invention, what I claim is—

1. A wrench consisting of a lever having a jaw provided with a serrated face and shoulders on the sides of the jaw, in combination with a free sliding jaw having a gripping-face, and a shank provided with an elongated slot engaging said lever.

2. A wrench consisting of a lever having a jaw provided with a convex serrated face, shoulders on the sides of the jaw and a smooth elongated neck in rear of and adjacent to the jaw, in combination with a free sliding jaw having a concave and serrated gripping-face, and a shank provided with an elongated slot.

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

JAMES P. KENNEDY.

Witnesses:

PATRICK F. MURRAY,  
LYMAN W. W. HESS, Sr.