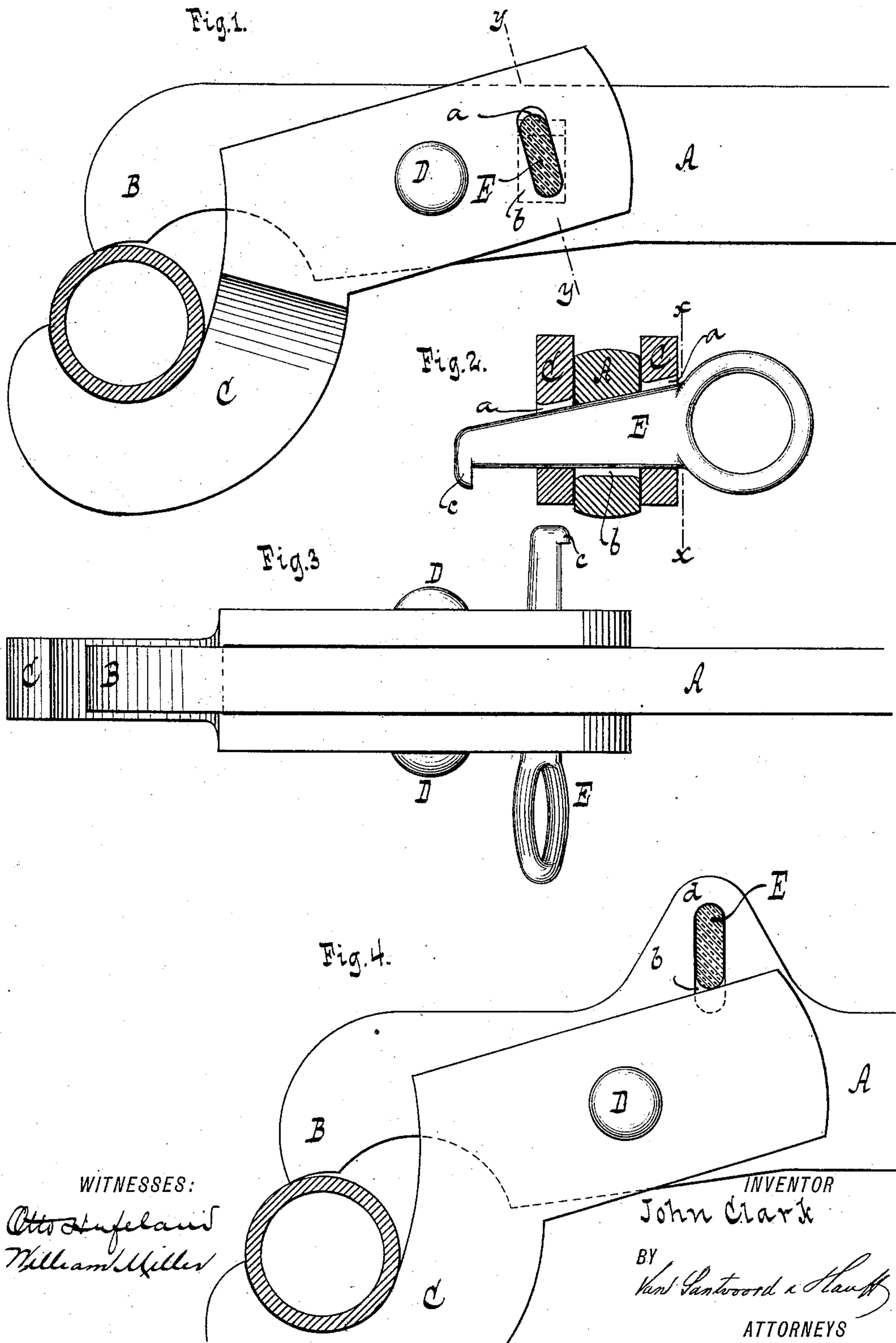


(No Model.)

J. CLARK.  
PIPE WRENCH.

No. 356,986.

Patented Feb. 1, 1887.





# UNITED STATES PATENT OFFICE.

JOHN CLARK, OF GREEN POINT, NEW YORK, ASSIGNOR OF ONE-HALF TO  
MICHAEL GILMARTIN, OF SAME PLACE.

## PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 356,986, dated February 1, 1887.

Application filed November 4, 1886. Serial No. 218,000. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN CLARK, a citizen of the United States, residing at Green Point, in the county of Kings and State of New York, have invented new and useful Improvements in Pipe-Wrenches, of which the following is a specification.

This invention relates to certain means for adjusting a pipe-wrench to pipes of different sizes.

The peculiar and novel construction which constitutes my invention is pointed out in the following specification and claims, and illustrated in the accompanying drawings, in which—

Figure 1 represents a sectional side elevation, the plane of section being indicated by the line *xx*, Fig. 2. Fig. 2 is a transverse section in the plane *yy*, Fig. 1. Fig. 3 is a top view. Fig. 4 is a sectional side view of a modification.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates the stock, the front end of which forms the stationary jaw B. C is the movable jaw, which is bifurcated, Figs. 2 and 3, so as to straddle the stock A. Said movable jaw swings on a pivot, D, which has its bearings in the stock A, and the movable jaw is extended back of the pivot to form a swinging tail-piece.

In the tail-piece of the movable jaw C is an opening, *a*, which may be tapering, as seen in Fig. 2, and which can be brought in line with an opening, *b*, in the stock, so that the key E can be passed transversely through the openings *a b*. This key is tapering, so that when it is pushed into the openings *a b*, as shown in Fig. 2, it acts on the tail-piece of the movable jaw and swings the latter on its pivot toward the stationary jaw, and as the key is gradually drawn out the movable jaw falls back from the stationary jaw, so that the wrench can be adjusted for pipes of different sizes. At the tip or small end of the key E is a stop, *c*, which prevents said key from dropping out accidentally. In order to permit a free adjustment of the jaw, it is desirable that the opening *b* in the stock A shall be made somewhat wider than the thickness of the key E requires, as indicated in dotted lines in Fig. 1, so that said key can assume an oblique position, as shown, which position it will assume when the wrench is adjusted for the smallest-

sized pipe for which it can be used, or that it can be brought in an upright position, or in a position parallel to the sides of the opening *b*, which position it will occupy when the wrench is adjusted to the largest-sized pipe for which it can be used.

Instead of passing the tapering key E through openings *a b* in the tail-piece of the movable jaw C and in the stock A, the stock may be provided with a projection, *d*, Fig. 4, in which is formed an opening, *b'*, for the reception of the key E. This opening is so placed that when the key is inserted therein its lower edge bears upon the top edges of the bifurcated shank of the movable jaw C, and by moving the key in or out the wrench can be adjusted to pipes of different sizes. It is obvious that the same effect will be produced if the bifurcated shank of the movable jaw is provided with projections rising above the top edge of the stock A, so that a tapering key passed through openings in said projections will bear upon the top edge of the stock, and by moving said key in or out the wrench can be adjusted to pipes of different sizes.

What I claim as new, and desire to secure by Letters Patent, is—

1. The stock A, having the transverse opening *b* and jaw B, in combination with the swinging jaw C, pivoted to the stock and having a tail-piece extending back of its pivot, and a key, E, passing transversely through the opening in the stock, and acting on the tail-piece of the swinging jaw to swing the latter on its pivot toward the jaw on the stock, substantially as described.

2. The stock A, having the jaw B and transverse opening *b*, in combination with the swinging jaw C, pivoted to the stock and having a tail-piece back of its pivot, provided with a transverse opening, *a*, and the key E, passing transversely through said openings, and acting on the tail-piece of the swinging jaw to swing the latter toward the jaw on the stock, substantially as described.

In testimony whereof I have hereunto set my hand and seal in the presence of two subscribing witnesses.

JOHN CLARK. [L. S.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.