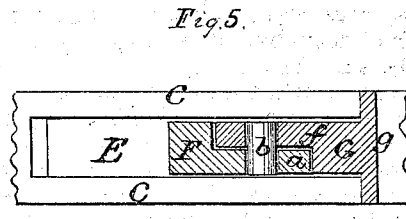
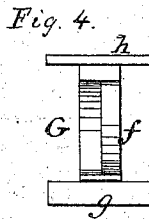
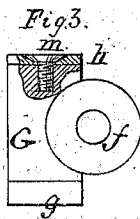
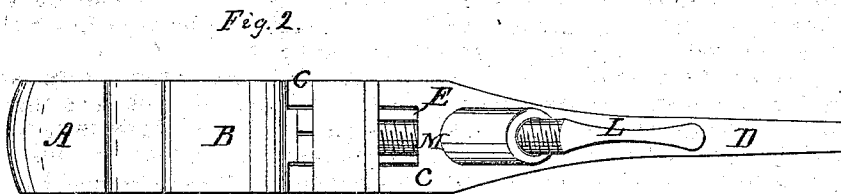
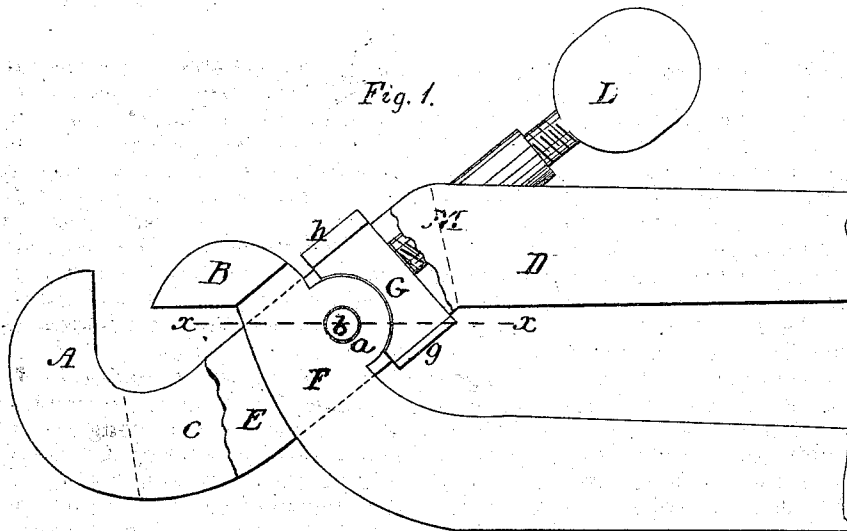


E. S. MOULTON.

Pipe-Wrenches.

No. 136,089.

Patented Feb. 18, 1873.



WITNESSES.

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UNITED STATES PATENT OFFICE.

ERI S. MOULTON, OF CHELSEA, MASSACHUSETTS.

IMPROVEMENT IN PIPE-WRENCHES.

Specification forming part of Letters Patent No. 136,089, dated February 18, 1873.

To all whom it may concern:

Be it known that I, ERI S. MOULTON, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Pipe-Tongs; and that the following is a full, clear, and exact description of the same, reference being had to the accompanying plate of drawing.

The invention relates more particularly to the pipe-tongs of such class as secure the adjustment of the movable jaw by a screw acting upon said jaw. Under this invention the movable jaw is hung to a block and arranged, with the block to which it is hung, within a slot of the other and stationary jaw for the adjusting screw-rod of the tongs to act either directly upon the movable jaw or upon it through the block to which it is hung, and thereby, through the turning of the screw-rod in one direction, to force the movable jaw toward the stationary jaw, or, through the turning of the screw-rod in the other direction, draw or allow the movable jaw to be brought away from the stationary jaw, according as the size of the pipe on which the pipe-tongs are used is larger or smaller.

In the accompanying plate of drawing my improvements in pipe-tongs are illustrated, Figure 1 being a side view; Fig. 2, a plan view; Figs. 3 and 4, detail views of the block to which movable jaw is hung; Fig. 5, section in plane of line *x x*, Fig. 1.

A and B in the drawing represent, respectively, the stationary and movable jaws of a pipe-tongs. The stationary jaw A, along the portion C of its handle-arm D, is provided with a slot, E, which is across the width of the handle in a plane parallel to the two sides or faces limiting the width of the jaw A. The movable jaw B, by a semicircular ear-piece, *a*, projecting from one side or edge of its handle-arm F, is hung to and upon a pivot or center, *b*, of a semicircular ear-piece, *f*, to a block, G. The thicknesses of the block G correspond, or nearly so, to the width of the slot E in stationary jaw, and this block G, together with the jaw hung to it, is placed in the slot E, and then the block there confined, so far as escaping from the sides of the slot, by its projecting flanges *g* and *h*. One, *g*, of these flanges *g h* is upon one side and the other, *h*, upon the other side of the jaw A, and the one flange, *g*, is part and parcel of the

block, and the other, *h*, formed by a plate secured to the block by means of a screw, *m*, screwing into the block. These flanges *g* and *h* hold the block G within the slot E of stationary jaw C and prevent its escape, and as the movable jaw is hung to the block, as described, it is also held secure from escape. L, a thumb-screw. This thumb-screw is arranged to screw into and out of the handle D to stationary jaw A at the end M of the slot E therein, traveling in a line corresponding to the length of the slot.

By turning the thumb-screw L in the one direction, the block G, to which the movable jaw is hung, is forced along the slot in a direction toward the fixed or stationary jaw A, and turning the screw L in the opposite direction it is relieved from the movable jaw, allowing the same to be moved back or away from the stationary jaw. The thumb-screw acts upon and through the block G to which movable jaw is hung.

Under the arrangement of the movable jaw herein described, it is obvious that when the pipe-tongs are in use there is no strain on the thumb-screw to wrench or twist it, as this wrenching or twisting action is all taken up by the slide-block G, the importance and advantage of which are obvious.

In lieu of arranging the block G for the screw L to act through it upon the movable jaw, the screw may act directly on the movable jaw, the hinge and block in such a case occupying the reverse of the position particularly shown and described; but it is preferable for the screw to act through the block upon the jaw B.

I am aware that pipe-tongs have been made heretofore for one jaw to be adjusted as regards the other by the combination of a slot and thumb-screw, and therefore I do not claim, broadly, any such combination of parts; but

What I do claim is—

The jaw B pivoted to the block G, and each arranged and moving together in the slot E of the stationary jaw and adjusted by the screw L, substantially as set forth.

The above specification of my invention signed by me this 21st day of June, A. D. 1872.

Witnesses: E. S. MOULTON.

EDWIN W. BROWN,
J. P. McELROY.