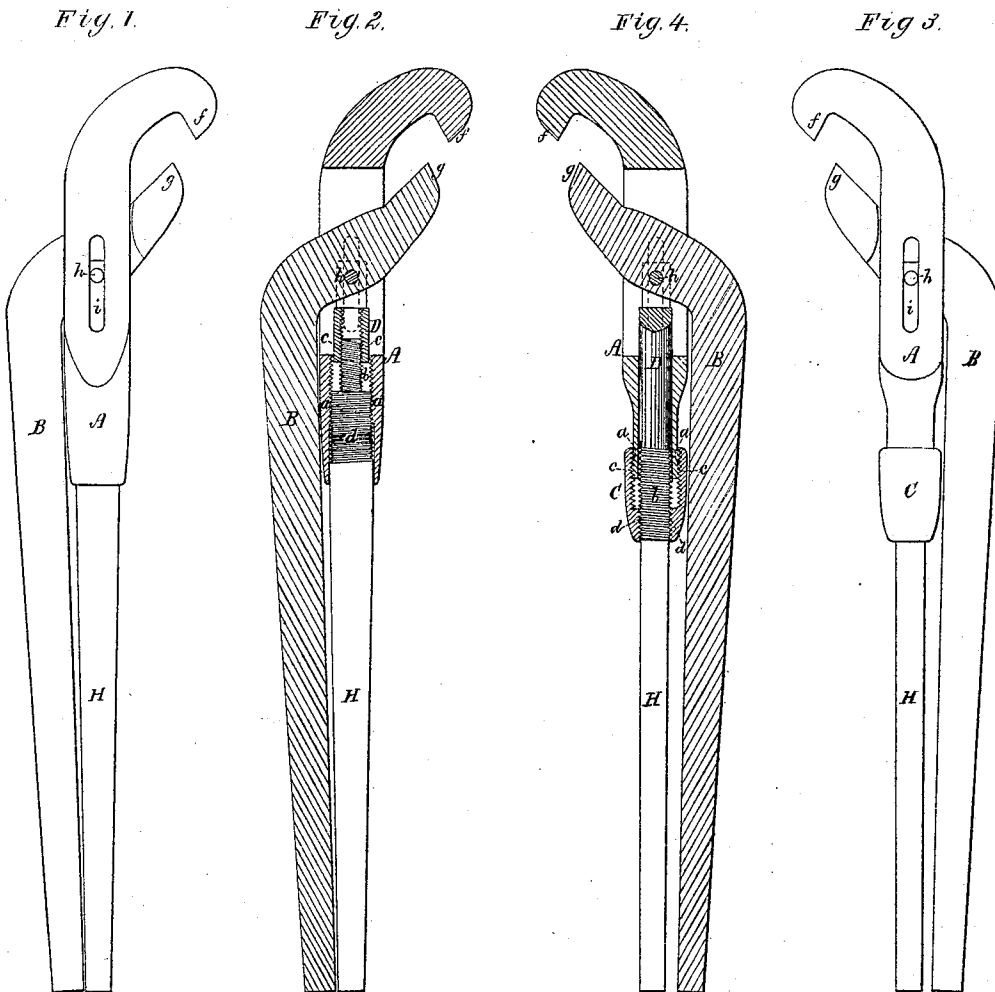


**J. R. BROWN.**  
**Pipe-Tongs.**

No. 150,131.

Patented April 28, 1874.



Witnesses.

*S. W. Ripper.*  
*L. W. Collier.*

James R. Brown.

*by his attorney.*  
*R. H. Eddy*

# UNITED STATES PATENT OFFICE.

JAMES R. BROWN, OF CAMBRIDGEPORT, MASSACHUSETTS.

## IMPROVEMENT IN PIPE-TONGS.

Specification forming part of Letters Patent No. **150,131**, dated April 28, 1874; application filed January 19, 1874.

*To all whom it may concern:*

Be it known that I, JAMES R. BROWN, of Cambridgeport, of the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Pipe-Tongs; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a side elevation, and Fig. 2 a longitudinal section, of "pipe-tongs" provided with my improvement. Fig. 3 is a side elevation, and Fig. 4 a longitudinal section, of another form or construction of such tongs.

A distinctive feature of difference between my present pipe-tongs and those heretofore patented by me consists in the hook-jaw carrier and its handle being made in separate parts or pieces, and the movable tooth-jaw lever fulcrum-supporter arranged to slide lengthwise within, and covered on all sides by the hook-jaw carrier, adjusting-screws being applied to such parts concentrically with the handle and fulcrum supporter to effect the adjustment of the said supporter, all being substantially as hereinafter described.

In the drawings, A denotes the hook-jaw carrier, provided with the jaw *f*, B being the tooth-jaw lever, having the jaw *g*. The fulcrum of the lever B is shown at *h* as extended through the said lever and the fulcrum-supporter D, which is notched or furcated at its upper end to receive the lever. The fulcrum or pin *h* is also extended laterally into a slot, *i*, made in or going transversely through the jaw-carrier A, and extended longitudinally therein, as shown. The handle H of the jaw-carrier A is separate therefrom, or, in other words, the jaw-carrier and its handle, instead of being in one piece, are in two separate pieces. In Fig. 2 the handle H is shown as provided with two male screws, *b d*, arranged as represented, one being a "right" and the other a "left" thread screw. The threads of one screw are pitched in directions opposite to those of the other. To operate with these screws, corresponding female screws, *a c*, are formed in the jaw-carrier A and in the ful-

crum-supporter D, which, as shown, in Fig. 2, is separate from the handle H. On revolving the said handle H transversely, the male and female screws will effect a compound longitudinal movement of the fulcrum-supporter, so as to move the tooth-jaw lever in a manner to adjust its jaw *g* either nearer to or farther from the hook-jaw *f*, as occasion may require.

I would observe that the handle or part to be revolved to effect longitudinal movement of the part D, instead of being screwed into the jaw-carrier A, may be pivoted thereto, so as to be capable of being revolved without having any endwise movement relatively to it, in which case but one male and one female screw will be necessary.

In the construction of the pipe-tongs shown in Figs. 3 and 4, the handle H and the fulcrum-supporter D are in one piece of metal, a nut, C, being screwed upon the handle, and also upon the carrier, the two sets of reversed male and female screws being shown at *a b* and *c d* in Fig. 4, the male screw of one set being right-threaded, and the male screw of the other set a left-threaded screw. By revolving the nut, the fulcrum-supporter will be moved lengthwise within the carrier A.

By making the hook-jaw carrier A and its handle in separate parts or pieces, and extending the tooth-jaw lever transversely through the hook-jaw carrier, I am enabled to arrange the fulcrum-supporter wholly within and to protect it on all sides by the said carrier, the two being disposed with their two axes in one straight line, the jaw-carrier A being made with a bore to receive and entirely encompass the fulcrum-supporter; also, to arrange the operative or adjusting screws concentrically with the handle, and to so cover them as to protect them from injury and dust.

I make no claim to pipe-tongs provided with an adjustable fulcrum-supporter and screws, and having each jaw-handle in one piece with its jaw and jaw-carrier. Nor do I claim a coach-wrench made as represented in F. B. Morse's application for a patent filed September 6, 1871, as in addition to the parts therein

contained I have a lever and its fulcrum combined with the lower jaw, and the means for supporting such and adjusting it with reference to the upper or hook-jaw.

I claim—

The improved pipe-tongs, as specified, consisting of the two jaws *f g*, the slitted jaw-carrier A, the lever B, the fulcrum-supporter

D, the handle H, and the four adjusting-screws *a b c d*, all arranged and combined in manner and to operate as shown and described.

JAMES R. BROWN.

Witnesses:

R. H. EDDY,  
J. R. SNOW.