

J. D. DAVIS.
Pipe-Tongs.

No. 157,441.

Patented Dec. 8, 1874.

Fig. 1.

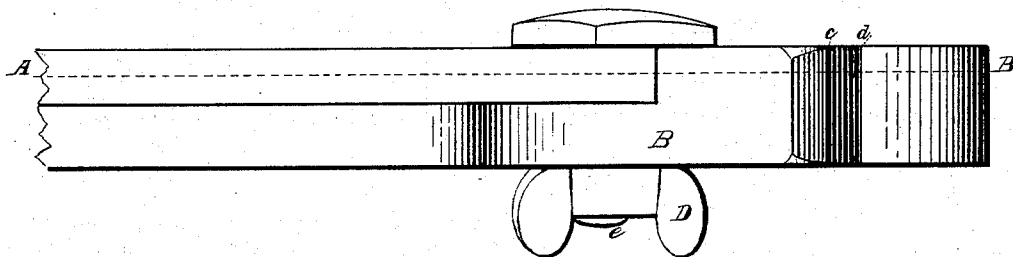


Fig. 2.

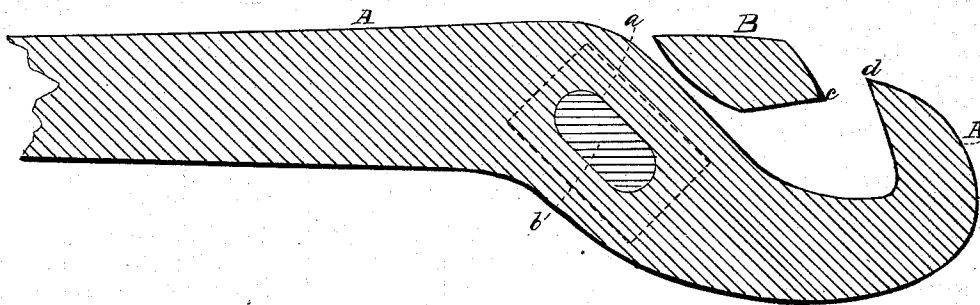


Fig. 3.

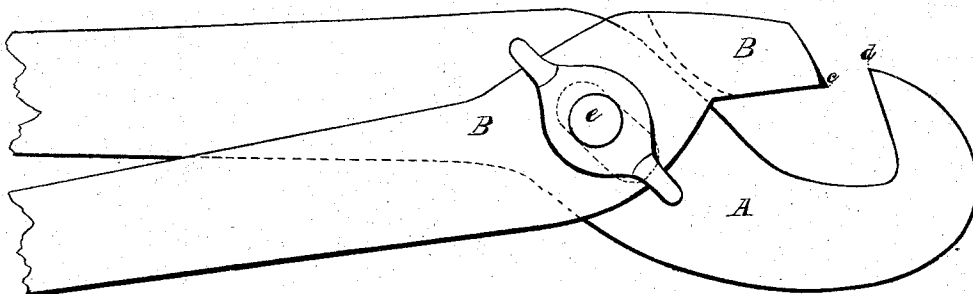


Fig. 4.

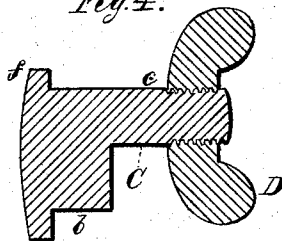


Fig. 5.

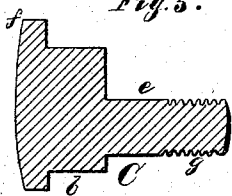
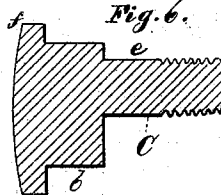


Fig. 6.



Witnesses:
Thos. H. Dodge
E. M. Dickinson

Inventor:
Jonathan D. Davis.

UNITED STATES PATENT OFFICE.

JONATHAN D. DAVIS, OF FITCHBURG, MASSACHUSETTS.

IMPROVEMENT IN PIPE-TONGS.

Specification forming part of Letters Patent No. **157,441**, dated December 8, 1874; application filed September 15, 1874.

To all whom it may concern:

Be it known that I, JONATHAN D. DAVIS, of Fitchburg, in the county of Worcester and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Pipe-Tongs; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings forming a part of this specification, and in which—

Figure 1 represents a top view of a pair of pipe-tongs having my invention applied thereto, the lever ends being shown broken off. Fig. 2 represents a longitudinal vertical central section on line A B, Fig. 1. Fig. 3 represents a side view of Fig. 1; and Figs. 4, 5, and 6 represent longitudinal central sections, of detached parts, as will be hereafter more fully described.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it more in detail.

The nature of my invention consists in the combination, with the pipe-jaws, of a reversible bolt, whereby the tongs can be easily and conveniently adjusted to fit different-sized pipes with unerring precision, and that, too, by an inexperienced workman.

I make an oblong slot or opening, *a*, in the stationary jaw A, as indicated in full lines, Fig. 2, and dotted lines, Fig. 3, to receive the base *b* of the fulcrum-bolts, upon which the movable jaw B turns. By reference to Fig. 2, it will be seen that the base of the fulcrum-bolt C is made to fit accurately the oblong slot *a* in the stationary jaw, and that it stands in such position as to secure the proper bite of the points *c* and *d* of the jaws of the tongs upon the pipe when either of the bolts shown in Figs. 4 and 5 are used, either to hold the largest or smallest sized pipes for which they are adapted. For instance, assuming that the bolt shown applied in Fig. 3, a section of which is shown in Fig. 6, holds jaw B in the proper position, as respects the stationary jaw A, to turn a three-eighth-inch pipe, then, by removing the fulcrum-bolt C and reversing the base part *b'* in the slot *a* of the stationary jaw A, the jaws of the tongs would be adjusted to the proper

position for turning or holding one-fourth-inch pipe. Still further to illustrate the operation of my invention, let it be supposed that the fulcrum-bolt C (shown in Fig. 4) is used, and the fulcrum part *e*, which receives and supports the movable jaw B, is arranged to project from the upper part of slot *a*; then the jaws would be in the proper relative position to operate upon one-half-inch pipe, while, by reversing the position of the base *b* in the slot *a*, the fulcrum part *e* of the bolt will project from the lower end of the slot *a*, and the jaws of the tongs will be adjusted to operate upon a pipe one-eighth inch in diameter. As the fulcrum-bolts C have strong heads, *f*, and are provided with screw-threads *g*, to receive the thumb-nut D, which also possesses the necessary strength to adapt it to the use for which it is employed, the tongs are not liable to break by use, while the adjustment can be quickly made, either by the reversing of the base of the bolt in the slot *a* or the substitution of another bolt having a greater or less range of adjustment. Any desired number of adjusting-bolts may be employed.

Those skilled in the art to which my invention belongs will readily perceive the great practical value and utility of my said improvement, and will observe that my improved pipe-tongs combine the advantages due to what are called the "solid" tongs, as well as those due to "adjustable" tongs. It will also be seen that the adjustment, when once made, is just as secure and permanent as if the bolt were stationary, as used in what are called "solid" tongs.

Having described my improvements in pipe-tongs, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

The combination, with the stationary jaw, provided with an oblong slot, *a*, of the reversible fulcrum-bolt C, provided with an oblong base, *b*, to fit slot *a*, and an eccentric fulcrum part, *e*, upon which the movable jaw turns, as shown and set forth.

JONATHAN D. DAVIS.

Witnesses:

THOS. H. DODGE,
E. M. DICKINSON.