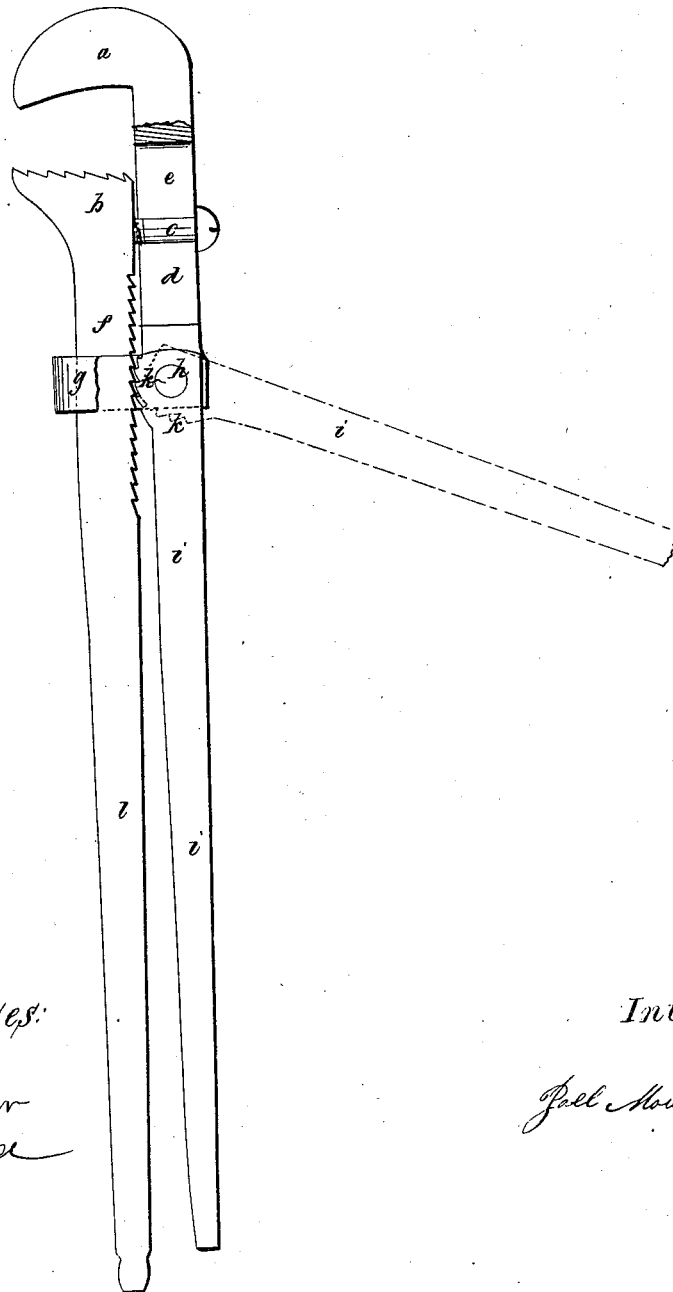


J. Moulton,

Wrench.

N^o 52,065.

Patented Jan. 16, 1866.



Witnesses:

*S. B. Hadden
R. Gould*

Inventor

J. Moulton

UNITED STATES PATENT OFFICE.

JOEL MOULTON, OF BOSTON, MASSACHUSETTS.

IMPROVED PIPE-TONGS.

Specification forming part of Letters Patent No. 52,965, dated January 16, 1866.

To all whom it may concern:

Be it known that I, JOEL MOULTON, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improved Pipe-Tongs or Wrench; and I do hereby declare that the following, taken in connection with the drawing which accompanies and forms part of this specification, is a description of my invention sufficient to enable those skilled in the art to practice it.

The invention relates to the construction of tongs and wrenches for grasping and turning metal pipe or other articles.

The shank of the movable jaw is made to slide loosely with respect to the stationary jaw, and is held in place to grasp the pipe or other article to be seized by a lever or handle extending from the shank of the fixed jaw and turning on a fulcrum-pin, one face of this lever opposite the fulcrum being made eccentric to the pin, and in such manner that when the handle is turned outward from the handle of the movable jaw said movable jaw may slide freely, while, when it is brought up to the handle of the movable jaw, the eccentric face bites upon and holds the shank of the movable jaw in fixed position with respect to the stationary one. It is in this construction that the invention consists.

A tongs or wrench embodying the invention is shown in the drawing, the parts being broken to clearly show the construction.

a denotes the fixed jaw; *b*, the sliding jaw, having a pin, *c*, which slides in a slot, *d*, in the shank *e* of the fixed jaw, and a shank, *f*, which slides in a yoke, *g*, projecting from the shank *e*, the yoke and pin keeping the movable jaw laterally in position with respect to the jaw *a*. At the lower end of the shank *e* is a fulcrum-pin, *h*, upon which is hung the lever-handle *i*, this handle turning freely upon the pin, and having a gripping-face, *k*, formed eccentrically to its fulcrum, and in such manner that when the handle *i* is turned out from the handle *l* of the movable jaw, as seen by the red lines, the shank *f* and the movable jaw may slide freely, while by carry-

ing the lever up to, or nearly to, the handle *l* the gripping-face of the lever is carried tightly into contact with the inner face of the shank *f* and holds the movable jaw from sliding, the grasp of the hand upon the two handles *i l* holding the parts securely in position.

The shank *f* may be held merely by the impingement of the surface of the lever, or the two surfaces may have interlocking teeth.

In operating with the tongs the lever is carried outward and the movable jaw slid toward the pipe or other article to be held until both jaws rest against it. The lever is then carried toward the handle *l*, when the article will be grasped or held, as will be readily understood. While, however, this hold will be sufficient to turn a nut, the grasp would not always be tight enough to hold a pipe firmly enough to turn the same. The shank *f* may therefore be provided with a series of teeth, into which teeth upon the lever shall mesh as they are brought into contact, in such manner as to carry the movable jaw toward the stationary jaw by bringing together the handles, so that when the jaws are brought against the opposite surfaces of the article by sliding they shall not only be held against such surfaces by bringing the handles together, but shall be made to pinch or bite upon the article with increasing force by tightening the grasp upon the handles. By loosening the grasp a little the jaws may then be allowed to slip round upon the pipe to take a fresh hold, to turn the same, as will be readily understood.

I claim—

The construction of the tongs or wrench with the fixed jaw and shank *e*, sliding shank *f*, and lever *i*, having a gripping-face, and operating substantially as set forth.

In witness whereof I have hereunto set my hand this 21st day of November, A. D. 1865.

JOEL MOULTON.

Witnesses:

S. B. KIDDER,
F. GOULD.