

W. CRUMBIE.
PIPE-WRENCH.

No. 171,999.

Patented Jan. 11, 1876.

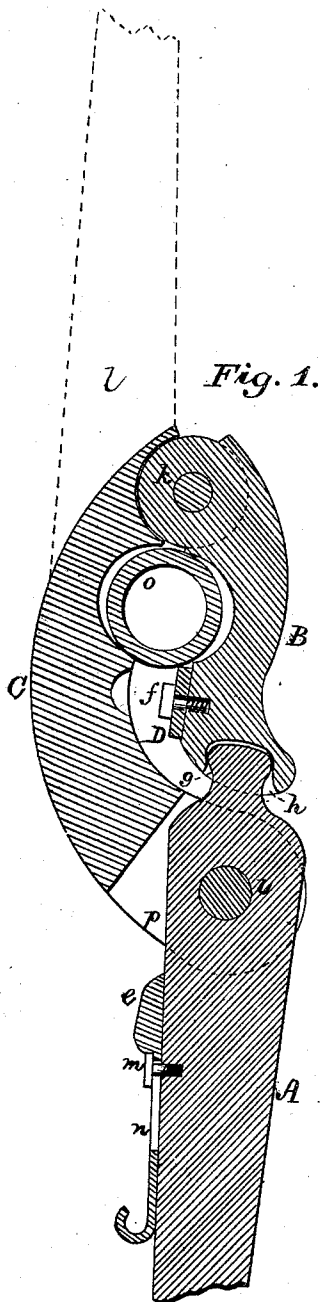


Fig. 1.

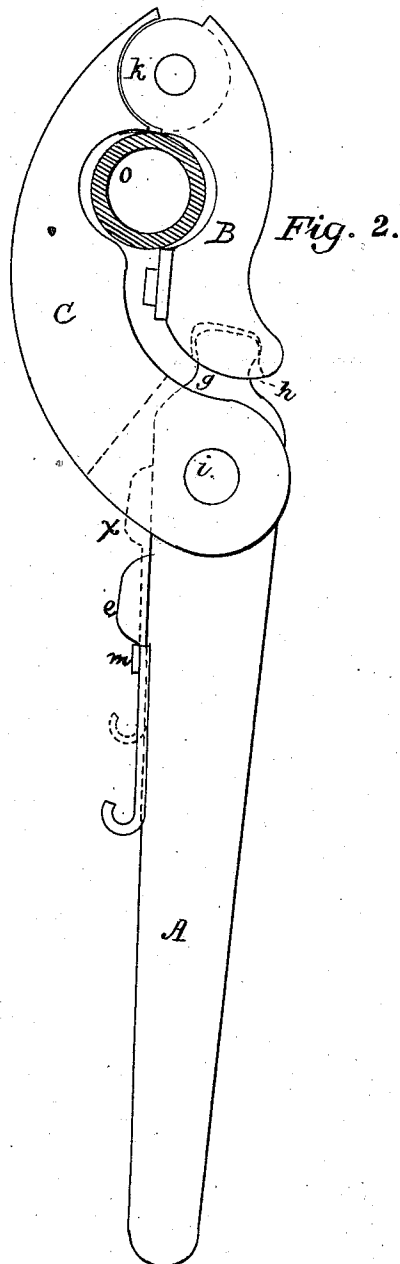


Fig. 2.

WITNESSES
Philip W. Hale
A. L. Van Ness.

By

INVENTOR
William Crumbie
Parker H. Sweet, Jr.
Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM CRUMBIE, OF ROUSEVILLE, PENNSYLVANIA.

IMPROVEMENT IN PIPE-WRENCHES.

Specification forming part of Letters Patent No. 171,999, dated January 11, 1876; application filed June 17, 1874.

To all whom it may concern:

Be it known that I, WILLIAM CRUMBIE, of Rouseville, in the county of Venango and State of Pennsylvania, have invented a certain new and useful Improvement in Pipe Wrench or Tongs, the same being an improvement on the pipe-wrench granted to William C. Abbe, August 20, 1867, and numbered 67,937; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings and to the letters of reference marked thereon.

My invention relates to an improvement in pipe tongs or wrench; and consists in the combination of the operating-lever, locking device, and grasping-jaws.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

In the accompanying drawings, which form part of my specification, Figure 1 is a longitudinal section of my improved pipe-tongs. Fig. 2 is a side view of the same.

A represents the operating-lever, to which is pivoted, at *i*, the jaw C, to which is hinged, at *k*, the jaw B, in the inner end of which is a recess, *h*, into which is fitted the inner projecting end of the lever A. The jaw B is furnished with a changeable tooth, D, which is held in position through the medium of a set-screw, *f*. The tooth is constructed of steel, and can be so changed in its position on the jaw B that its eight edges can be utilized for catching against the pipe *o*, grasped between the jaws B and C, as shown in the accompanying drawings. On the upper side of the operating-lever A is a locking-latch, *e*, which is held in position on the lever through the medium of a set-screw, *m*, placed in a slot, *n*, of the latch *e*. The head of the set-screw projects beyond the side walls of the slot *n*, and thereby holds the latch *e* in position on the lever A. The jaw C may be furnished with a lever, as indi-

cated by the dotted lines *l* in Fig. 1, for the purpose of obtaining a double leverage; but such additional lever will only be useful in large tongs.

The jaws B and C have the recesses therein formed so that when clasped around a pipe said recesses will constitute a circular clasp entirely around the same. These jaws may be constructed of malleable cast-iron or cast-steel, and the lever of wrought-iron; but I do not confine myself to the use of these articles.

The operator places the jaws B and C over the pipe *o*, with the projection *g* of the lever A in the recess *h* of the jaw B. He then moves the locking-latch *e* forward, so that it enters the space *p*, as indicated by the dotted lines *x* in Fig. 2. This will prevent the projection *g* of the lever A from leaving the recess *h* of the jaw B. The operator then gives to the lever A the reciprocating motion common to the operating of pipe-tongs.

When it is desired to unship the tongs from the pipe the latch is drawn back into the position represented in the accompanying drawings.

Power of the grasp of the jaws, certainty and facility in the action of the tongs on the pipe, are the advantages of my improvement.

Having thus described my improvement, what I claim as of my invention is—

The jaws B C, provided with semicircular recesses, whereby a pipe may be uniformly and entirely clasped, and a tooth, D, for catching against said pipe, in combination with the lever A, provided with a locking-catch, *e*, to keep said lever and the jaw B in position together, all constructed and arranged substantially as and for the purposes set forth.

WM. CRUMBIE.

Witnesses:

A. C. JOHNSTON,
JAMES J. JOHNSTON.