

G. H. CROSBY.
PIPE-WRENCH.

No. 179,276.

Patented June 27, 1876.

Fig. 1.

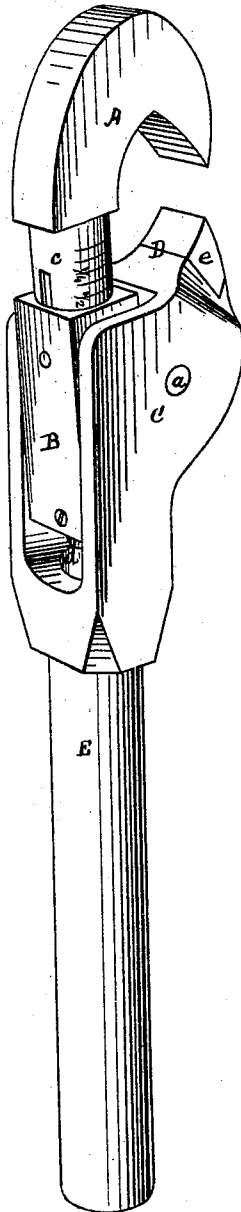
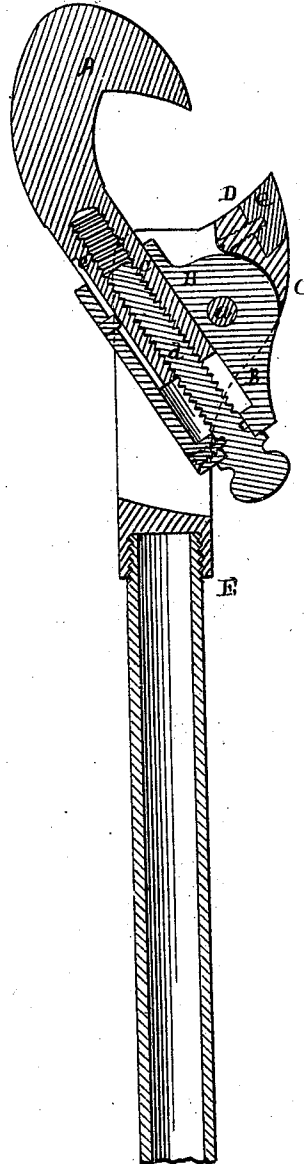


Fig. 2.



Witnesses:

Ernest A. Sick,
Joseph M. L. M. L.

Inventor:

Geo. H. Crosby
by atty. R. L. B. B.

UNITED STATES PATENT OFFICE.

GEORGE H. CROSBY, OF EAST SOMERVILLE, MASSACHUSETTS.

IMPROVEMENT IN PIPE-WRENCHES.

Specification forming part of Letters Patent No. **179,276**, dated June 27, 1876; application filed March 25, 1876.

To all whom it may concern:

Be it known that I, GEORGE H. CROSBY, of East Somerville, Massachusetts, have invented certain new and useful Improvements in Pipe Dogs or Wrenches, of which the following is a specification:

My improvements relate to the construction and arrangement of the hook-jaw of pipe dogs or wrenches, to means for adjusting it, and to the manner of combining it with the dog-jaw and lever or handle.

The nature of my invention, and the manner in which the same is or may be carried into effect, can best be explained and understood by reference to the accompanying drawing, in which—

Figure 1 is a perspective view of a pipe dog or wrench embodying my improvements. Fig. 2 is a longitudinal central section of the same.

A is the hook-jaw, carried by and adjustable in a center block, B, which is pivoted in the slotted extension or strap C, formed or provided with a dog-jaw, D. To the strap or dog-jaw extension is secured the lever or handle E. The front or breast of the center block is convex, the curvature being upon the arc of a circle, of which the pivot *a* is the center. This portion of the block bears against a corresponding concave face of the strap or extension C. The adjustment of the hook-jaw is provided for in this instance by fitting its shank *c* into a correspondingly-shaped socket in the center block, and by combining with the block an adjusting-screw, *d*, which rotates in the block, and extends into and engages the hollow interiorly screw-threaded shank *c*. When the screw, by means of its exterior head, is rotated, the hook-jaw will be raised or lowered, according to the direction of rotation of the screw. On the shank of the hook-jaw I form graduation-marks or a scale, as shown in Fig. 1, to facilitate the adjustment of the jaw for different sizes of pipes, &c.

I prefer to make the hook-jaw of steel. The center block may be either wrought, cast, or malleable iron. The strap or extension should be of malleable cast-iron or cast-steel; and the nose-piece *e* of the dog-jaw, suitably fitted and

fastened to the extension, should be tempered steel. The handle can be either solid, cast, or wrought iron, or wrought-iron pipe screwed on or welded. In the drawing I have represented wrought-iron pipe screwed on.

The manner of using my improved pipe dog or wrench will be understood without explanation.

The advantages due to my invention are many. Not so many different sizes of dogs, tongs, or wrenches for pipe are required as heretofore. The wrench does not weigh so much as the usual adjustable tongs or wrenches, and is much more easily and perfectly adjusted to different sizes of pipe. By the use of the center block the adjusting-screw is entirely covered up and protected from all injury; and by the described arrangement of parts the strain on the screw is such as to remove liability of its buckling or bending.

What I claim, and desire to secure by Letters Patent, is as follows:

1. The hook-jaw carried by and adjustable in the pivoted center block, substantially as set forth.
2. The combination of the pivoted center block, that carries the adjustable hook-jaw, with the strap or slotted dog-jaw extension, substantially as set forth.
3. In combination, the pivoted center block, the hook-jaw, with hollow shank fitting a socket in said block, and the adjusting-screw carried by said block, and engaging said shank, substantially as shown and set forth.
4. The dog-jaw, slotted dog-jaw extension, and handle, in combination with the pivoted center block, adjustable hook-jaw, and adjusting-screw, these parts being arranged together for joint operation, substantially as specified.

In testimony whereof I have hereunto signed my name this 23d day of March, A. D. 1876.

GEORGE H. CROSBY.

Witnesses:

J. H. MILLETT,
JOHN S. HOLMES.