

D. GILBERT.
Pipe-Wrenches.

No. 160,179.

Patented Feb. 23, 1875.

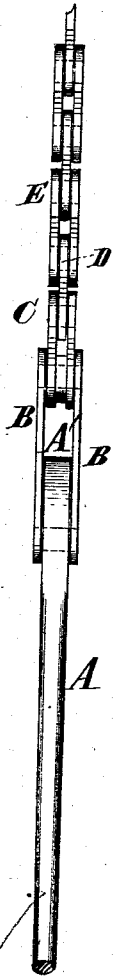


Fig. 2.

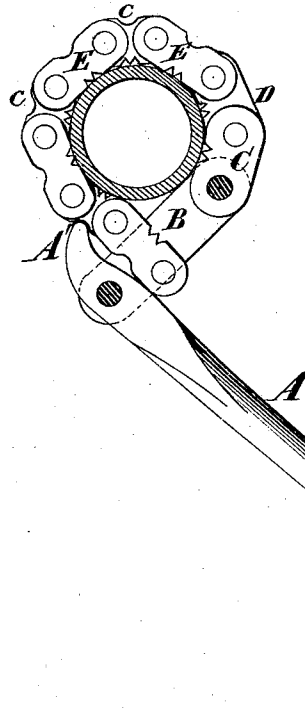


Fig. 1.

Witnesses.
A. Ruppert.
W. Chaffee

Daniel Gilbert
Inventor.
D. P. Holloway & Co.
Attys.

UNITED STATES PATENT OFFICE

DANIEL GILBERT, OF WAYNESBOROUGH, PENNSYLVANIA.

IMPROVEMENT IN PIPE-WRENCHES.

Specification forming part of Letters Patent No. **160,179**, dated February 23, 1875; application filed January 8, 1875.

To all whom it may concern :

Be it known that I, DANIEL GILBERT, of Waynesborough, in the county of Franklin and State of Pennsylvania, have invented a new and useful Improvement in Wrenches, of which the following is a specification:

In the annexed drawings making a part of this specification, Figure 1 is an elevation, showing the wrench attached to a pipe; and Fig. 2 is an elevation, showing the edge of the links.

The same letters are employed in both figures to indicate identical parts.

A is a lever, having its point A' formed substantially as shown, to form a dog to catch the edges of the links, which are correspondingly indented. Two flat links, B, are attached near the point by a pivot, and are of length sufficient to permit the free end of the chain to pass between the lever and the link C, the end of which is attached by a pivot to the outer end of the links B. The end of link C, where it is attached to link B, is strengthened by being slightly lengthened, and by an interposed piece, of the thickness of the link D, which is a single piece or plate. The chain is thus composed of alternate double and single plate-links connected by pivots, so that the chain may be bent in the direction of its

edges. The inner edges are formed with serrations to give it adhesion to the pipe, and the outer edges with indentations to receive the rounded and bent end of the lever.

When the wrench is attached to a pipe it is bent around it, as shown in Fig. 1. The free end is drawn between the plates of the link B until the chain fits closely against the pipe, when, by moving the lever, the point or dog bears against the chain, and confines it, while the force applied to the long arm of the lever turns it.

What I claim as my invention, and desire to secure by Letters Patent, is—

In combination with the lever A, bent at the point, the chain formed of a series of links, B C D E, &c., constructed to receive the point of the lever on their outer edges to compress the chain against the pipe, the link B being open so as to permit the free end of the chain to pass through it, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

DANIEL GILBERT.

Witnesses:

JAMES S. GORDON,

DANIEL O. HARSHMAN.