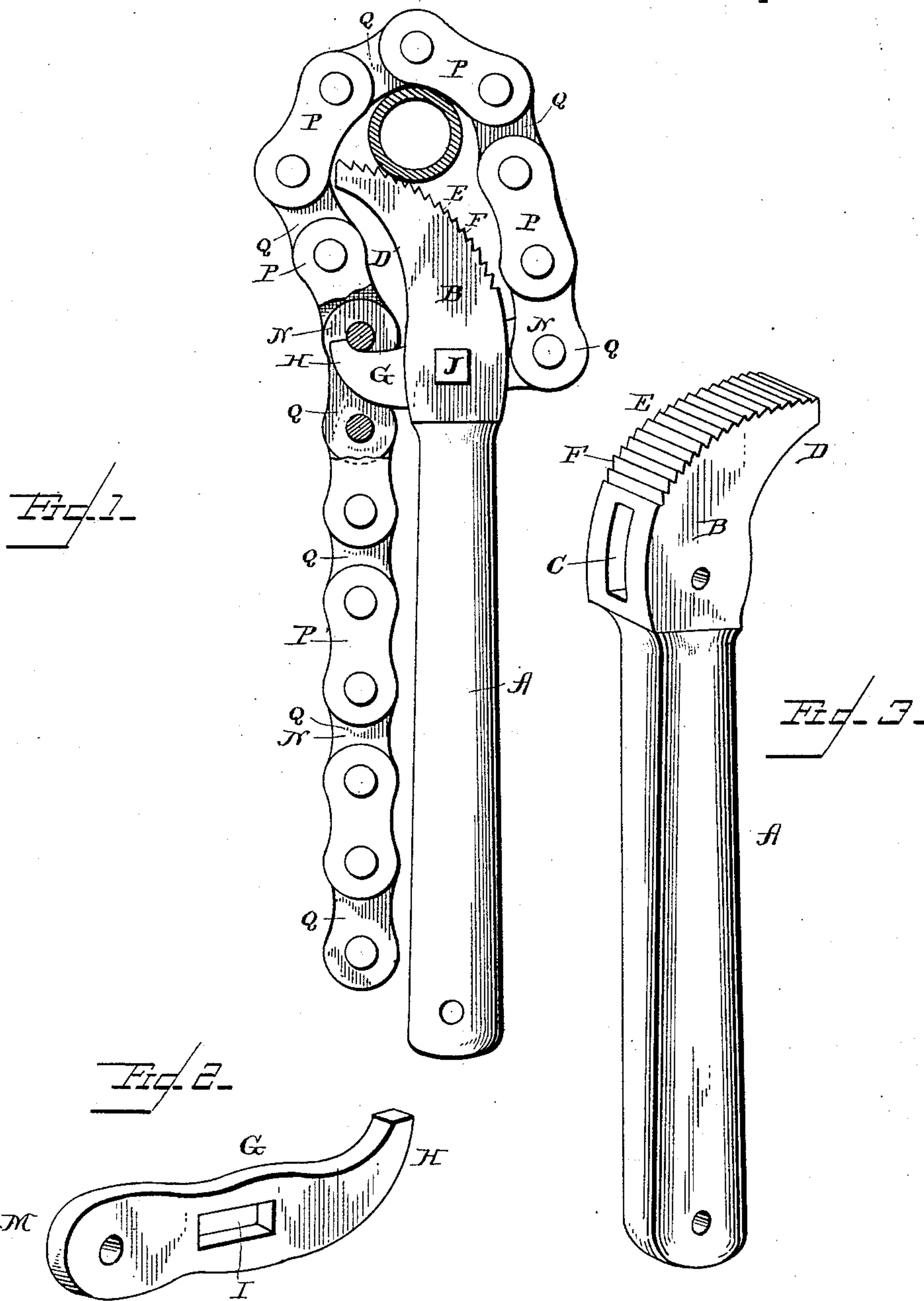


(No Model.)

J. LEIB.
PIPE WRENCH.

No. 348,751.

Patented Sept. 7, 1886.



WITNESSES

O. Fugitt.
Phil. Masi.

INVENTOR

John Leib
by Anderson & Smith
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UNITED STATES PATENT OFFICE.

JOHN LEIB, OF SANDY RUN, PENNSYLVANIA.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 348,751, dated September 7, 1886.

Application filed July 22, 1886. Serial No. 208,756. (No model.)

To all whom it may concern:

Be it known that I, JOHN LEIB, a citizen of the United States, residing at Sandy Run, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Pipe - Wrenches; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of my invention, and is a side view of the same in operation. Fig. 2 is an enlarged detail view of the dog. Fig. 3 is a detail view of the lever.

My invention relates to pipe-wrenches; and it consists in the construction and novel combination of parts, as hereinafter described, and pointed out in the claim.

Referring by letter to the accompanying drawings, A designates the lever of the pipe-wrench, which is provided with an integral slotted head, B, the slot C passing through the head B from edge to edge. The head B terminates in a curved tapering point, D, said point D being concave on one edge-face and convex on the other edge-face, the latter edge-face, E, being toothed transversely across the points of the teeth F, projecting tangentially in the direction away from the fulcrum-point of the dog G, said dog G being pointed and curved downwardly at its end H. The dog G is provided with an elongated slot, I, through which a bolt, J, seated in the head B, passes, said bolt J being provided with a head at one end and a nut,

L, at the other end for retaining it in place. To the larger or rounded end M of the pivoted slotted dog G is connected one end of a sprocket-chain, N, said chain N being composed of alternate larger links, P, connected by alternate smaller links, Q, said links all being rectangular links in plan view, the ends of the side bars of said links being rounded.

In operation, the sprocket-chain is passed over the pipe, and the proper link that will hold the teeth of the lever in contact with the pipe is engaged with the point of the dog. Then, by turning the lever of the wrench in the direction that will press the points of the teeth against the pipe, the chain will operate as a second jaw, and the pipe may be turned to screw it up or to unscrew it, as may desired.

The wrench may be made in all sizes, but in any size the wrench will not operate upon a pipe the diameter of which is smaller than one-half the length of one of the links of which the chain is composed, although it will operate on pipes the diameters of which are equal to the length of the chain, except by one link, which link must engage the dog.

Having described this invention, what I claim, and desire to secure by Letters Patent, is—

The combination, with the slotted lever having the convex serrated or toothed point, of the sprocket-chain provided with the slotted pointed dog at one end secured in the slotted lever by a bolt, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN LEIB.

Witnesses:

EDWARD SNYDER,
WILLIAM HAYES.