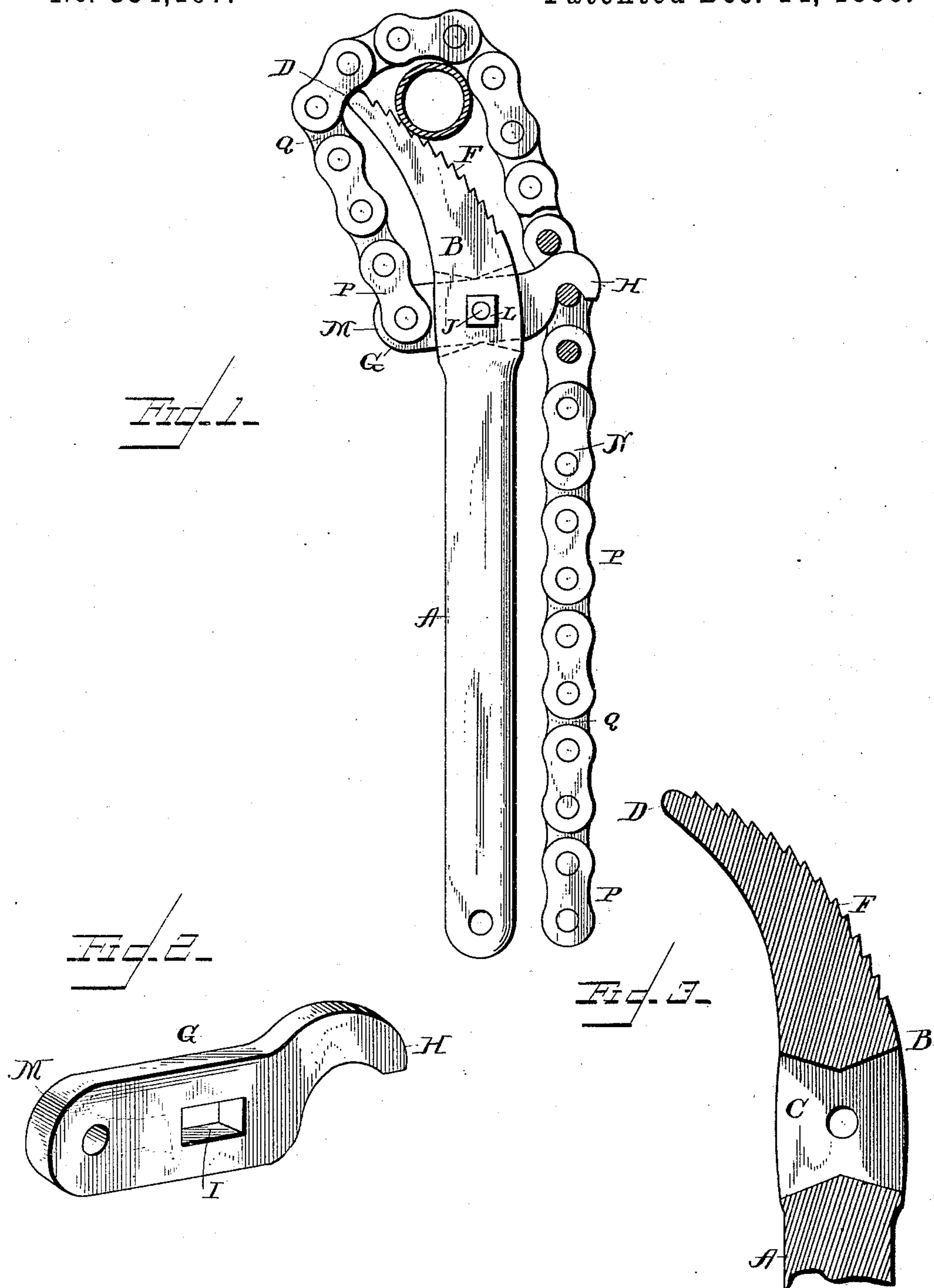


(No Model.)

J. LEIB.
PIPE WRENCH.

No. 354,197.

Patented Dec. 14, 1886.



WITNESSES

D. Fugitt.
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INVENTOR

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UNITED STATES PATENT OFFICE.

JOHN LEIB, OF SANDY RUN, PENNSYLVANIA.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 354,197, dated December 14, 1886.

Application filed November 4, 1886. Serial No. 217,988. (No model.)

To all whom it may concern:

Be it known that I, JOHN LEIB, a citizen of the United States, and a resident of 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 ap-

pertains 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 side view of my improved pipe-wrench. Fig. 2 is a perspective view of the dog. Fig. 3 is a sectional view of the head 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.

The object of this application is to correct the defects shown in a previous patent granted to me September 7, 1886, No. 348,751, in which the pivoted slotted dog is inserted in the slotted head of the lever, with the beveled end directed upwardly, which arrangement would render the device inoperative. I now desire to show and describe the said dog in proper position with relation to the lever, as hereinafter specified.

Referring by letter to the accompanying drawings, A designates the lever of the pipe-wrench, which lever 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 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 be desired.

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:

EDWIN PUGH,
DANIEL J. KENNEDY.