

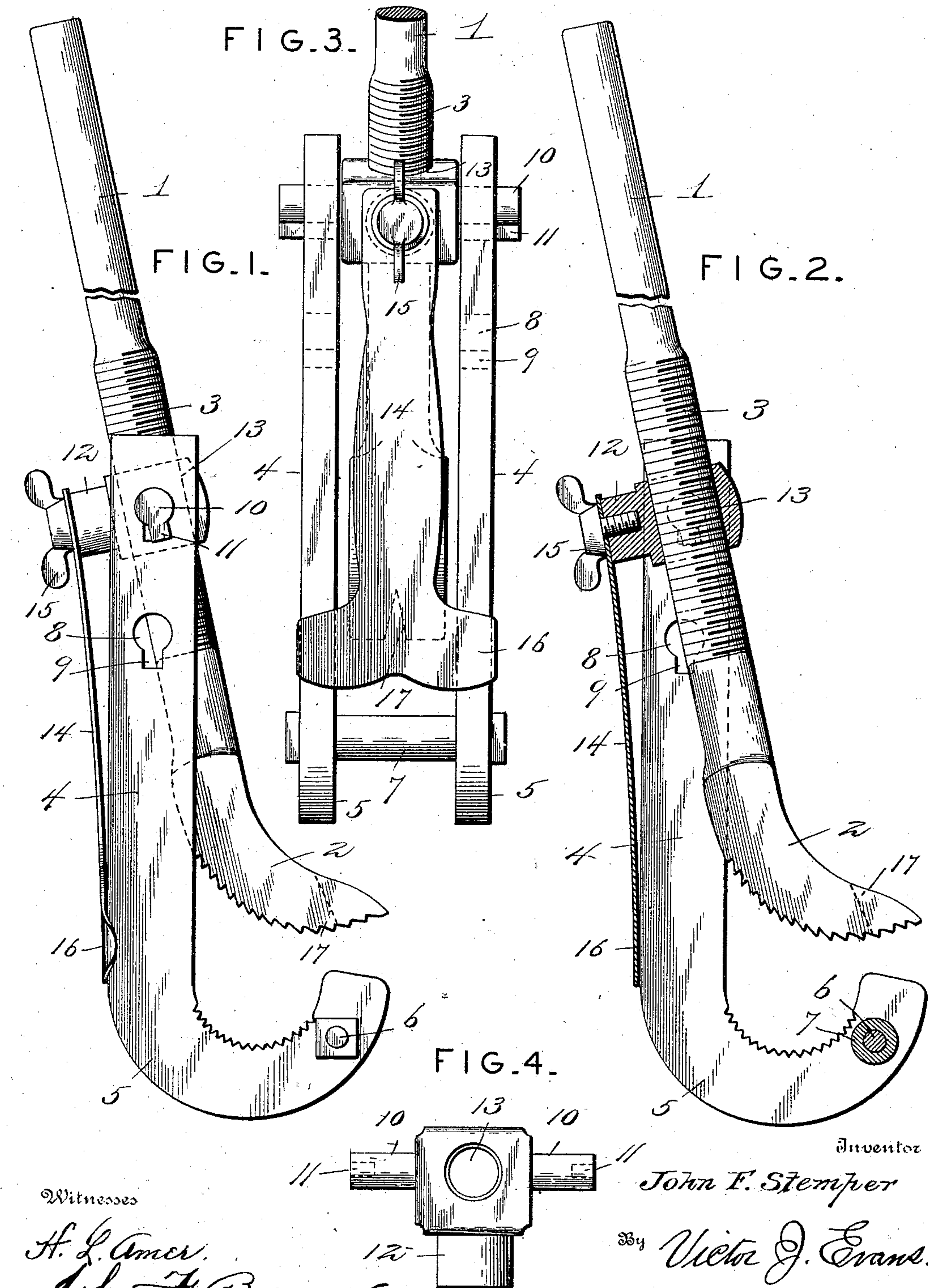
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Patented June 10, 1902.

J. F. STEMPER.
PIPE WRENCH.

(Application filed Nov. 18, 1901.)

(No Model.)



Witnesses
H. L. Amer.
John F. Byrnes.

Inventor
John F. Stemper
By Victor J. Evans.
Attorney

UNITED STATES PATENT OFFICE.

JOHN F. STEMPER, OF MICHIGAN CITY, INDIANA, ASSIGNOR OF ONE-HALF
TO PETER MICHAELY, OF MICHIGAN CITY, INDIANA.

PIPE-WRENCH.

SPECIFICATION forming part of Letters Patent No. 702,253, dated June 10, 1902.

Application filed November 18, 1901. Serial No. 82,744. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. STEMPER, a citizen of the United States, residing at Michigan City, in the county of Laporte and State
5 of Indiana, have invented certain new and useful Improvements in Pipe-Wrenches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to
10 which it appertains to make and use the same.

This invention relates to pipe-wrenches, and has for its object the production of a device of this character wherein the pivoted
15 the wrench to span pipes or other objects of different diameters, and the fixed jaw carried by the handle or lever is also capable of being adjusted to clamp the pipe or other object.

A further object of the invention is to provide tension means for holding the pivoted
20 jaw in its normal position and which will when the jaws are forced open to span an object immediately close said jaws upon the object when they are released.

25 Still further objects of the invention will appear as the nature of the same is fully understood from the following description.

The invention consists of the novel construction, combination, and arrangement of
30 parts hereinafter fully described and claimed and illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a wrench constructed in accordance with my invention.
35 Fig. 2 is a similar view with the pivoted jaw partly in section. Fig. 3 is a rear elevation of the same with the handle broken away. Fig. 4 is a detail view of the supporting-shaft.

The reference-numeral 1 designates the
40 handle or lever of the wrench, having one of its ends curved on the arc of a circle and serrated upon its inner curved surface, providing a toe or fixed jaw 2 and intermediate its
45 ends screw-threaded for a portion of its length, as at 3.

4 designates the pivoted jaw, comprising parallel side bars 5, each of which has one of its ends curved on the arc of a circle and serrated on its inner curved side, providing a
50 surface to grip a pipe or other object. The bars 5 are secured together at their lower

ends by means of a headed bolt 6, having a sleeve 7 spacing them apart, and their upper ends are provided with a series of alining perforations 8, having communicating rec- 55
tangular openings 9.

10 designates a supporting-shaft journaled in one of the series of perforations 8 and secured therein against casual displacement by rectangular lugs 11 on the ends thereof, 60
which when turned to register with the rectangular openings 9 permit said shaft to be removed. The central portion of the shaft 10 is enlarged and provided with a rearwardly-extending screw-threaded sleeve 12 and a 65
screw-threaded central opening 13 to receive the screw-threaded portion 3 of the handle or lever 1, thus pivotally and adjustably securing the jaw 4 to the said handle or lever, and in order to hold the said pivoted jaw in its nor- 70
mal position with relation to the toe or fixed jaw, so that when they are forced apart to span a pipe or other object they will when released immediately close on the pipe or other object, I secure to the sleeve 12 a leaf- 75
spring 14, the free end of which rests upon the back of the pivoted jaw.

The spring 14 is provided at one end with a perforation, through which passes a wing thumb-screw 15 into the sleeve 12, thus se- 80
curing said spring to the supporting-shaft, and the opposite end thereof is enlarged, providing arms 16, the ends of which are bent inwardly, embracing the sides of the pivoted jaw, thus preventing said spring from mov- 85
ing laterally.

The fixed jaw 2 is recessed, providing claws 17, adapting the handle or lever to be used in extracting nails or spikes.

It is apparent from the construction herein 90
shown that the lever carrying the fixed jaw is capable of longitudinal adjustment with relation to the curved portion of the pivoted jaw and that the fixed jaw is also capable of adjustment upon the lever or handle by trans- 95
ferring the supporting-shaft from one series of perforations to the other.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a handle or lever carrying a fixed jaw; of a pivoted jaw pro- 100

vided at its upper end with a series of alining perforations having communicating rectangular openings, a supporting-shaft journaled in one series of said perforations and
5 having a central opening in which is adjustably secured said handle or lever, and rectangular lugs upon the ends of said shaft.

2. A wrench comprising a handle or lever carrying a fixed jaw and screw-threaded for
10 a portion of its length, a pivoted jaw having at its upper end a series of alining perforations, a supporting-shaft having an enlarged central portion with a screw-threaded opening and a sleeve, and a spring secured to said
15 sleeve having its free end resting upon the back of the pivoted jaw.

3. A wrench comprising a handle or lever screw-threaded for a portion of its length and having one of its ends curved and serrated to
20 provide a fixed jaw, a pivoted jaw composed

of parallel side bars having their lower ends curved and serrated, and their upper ends having a series of perforations and communicating rectangular openings, a supporting-shaft adapted to fit in one series of said per- 25 forations and having an enlarged central portion having a screw-threaded opening to receive said handle or lever, and a rearwardly-extending screw-threaded sleeve, a spring having one end provided with a perforation 30 and the opposite end enlarged, forming arms having their ends bent, and means for securing said spring to the supporting-shaft.

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

JOHN F. STEMPER.

Witnesses:

JOHN D. WEST,
JACOB SILL.