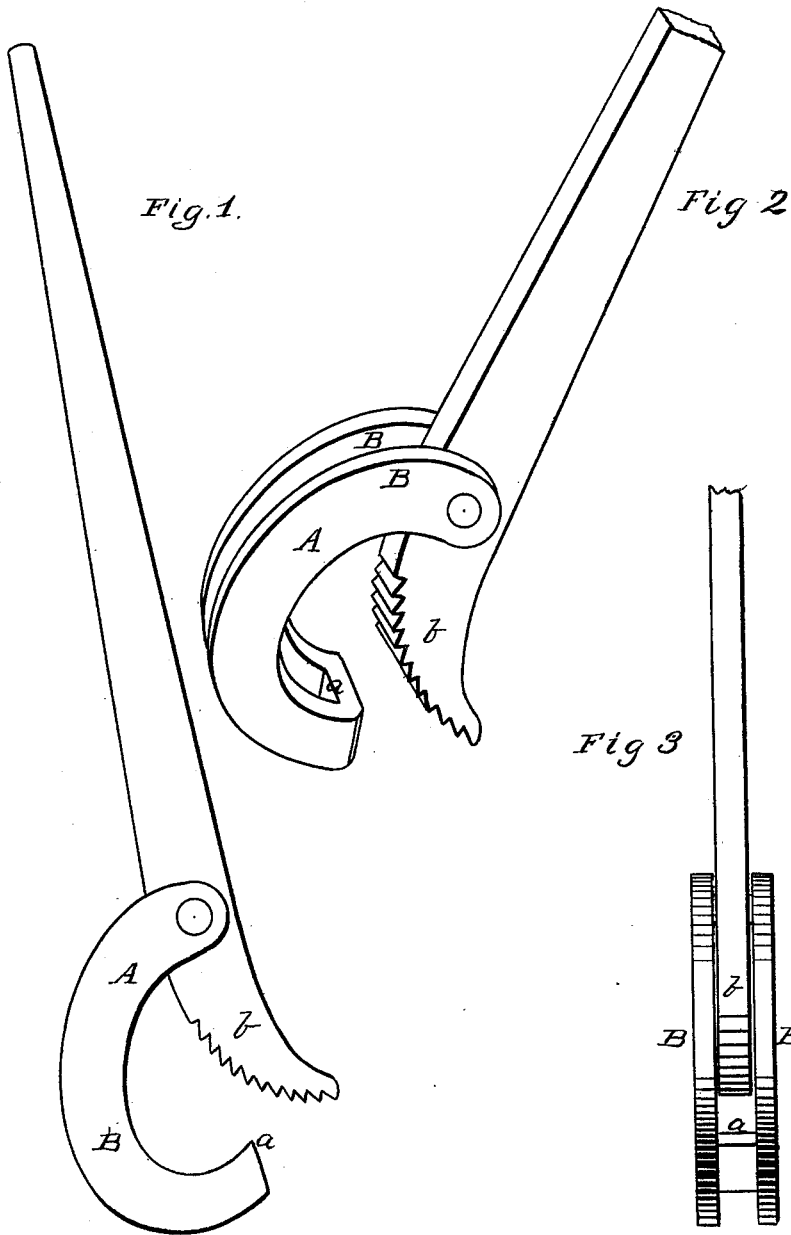


W. A. ST. JOHN, W. M. ROBINSON & J. SHEPARD.

PIPE-TONGS.

No. 187,928.

Patented Feb. 27, 1877.



WITNESSES
E. H. Bates
George B. Upshaw

INVENTORS
Wm. A. St. John
Wm. M. Robinson
John Shepard
Chipman & Son
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM A. ST. JOHN, WILLIAM M. ROBINSON, AND JOHN SHEPARD, OF
CARMi, ILLINOIS.

IMPROVEMENT IN PIPE-TONGS.

Specification forming part of Letters Patent No. **187,928**, dated February 27, 1877; application filed
February 12, 1877.

To all whom it may concern:

Be it known that we, WILLIAM A. ST. JOHN, WILLIAM M. ROBINSON, and JOHN SHEPARD, all of Carmi, in the county of White and State of Illinois, have invented a new and valuable Improvement in Pipe-Tongs; and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of our pipe-tongs. Fig. 2 is a perspective view of the same, and Fig. 3 is a front view of the same.

This invention has relation to self-adjusting pipe-wrenches; and it consists in the peculiar construction of the curved loop-dog, as will be hereinafter shown and described.

In the accompanying drawings, A represents the loop-dog of our pipe-wrench, extending transversely at its central portion to form the bit *a*, and bent at right angles at the ends of said bit, in the form of curved branches B, which extend alongside and are pivoted to opposite sides of the serrated lever end *b*.

The advantage of this wrench is, that the loop-dog A is forged of one piece, thereby enabling it to be more easily repaired than if it were composed of two or more pieces riveted together.

On account of the broad transverse bit *a*,

the wrench will hold the pipe firmly without injury to its surface, and the bite will be in the direction of the pipe. Furthermore, the amount of metal employed in constructing the dog is disposed in the direction of the strain, being between the pivot and the bit ends.

We are aware that a bifurcated jaw or dog formed of two pieces, riveted together, is shown in Letters Patent granted to Wm. Kenyon, Jr., dated February 18, 1868, No. 74,697; and we are also aware that jaws have been formed of one piece of metal, bifurcated at its lower end by cutting out a portion thereof, as shown in the patent granted to Richard Cox, dated May 15, 1866. We claim neither of these inventions, broadly.

What we claim as new, and desire to secure by Letters Patent, is—

The hook A, constructed of a single bar of metal, bent at its middle to form the connecting-bar *a*, and having the curved arms B B, pivoted to the handle *b*, substantially as described.

In testimony that we claim the above we have hereunto subscribed our names in the presence of two witnesses.

WILLIAM A. ST. JOHN.
WILLIAM M. ROBINSON.
JOHN SHEPARD.

Witnesses:

ALLEN BLEAKLEY,
CHARLES PARKHURST.