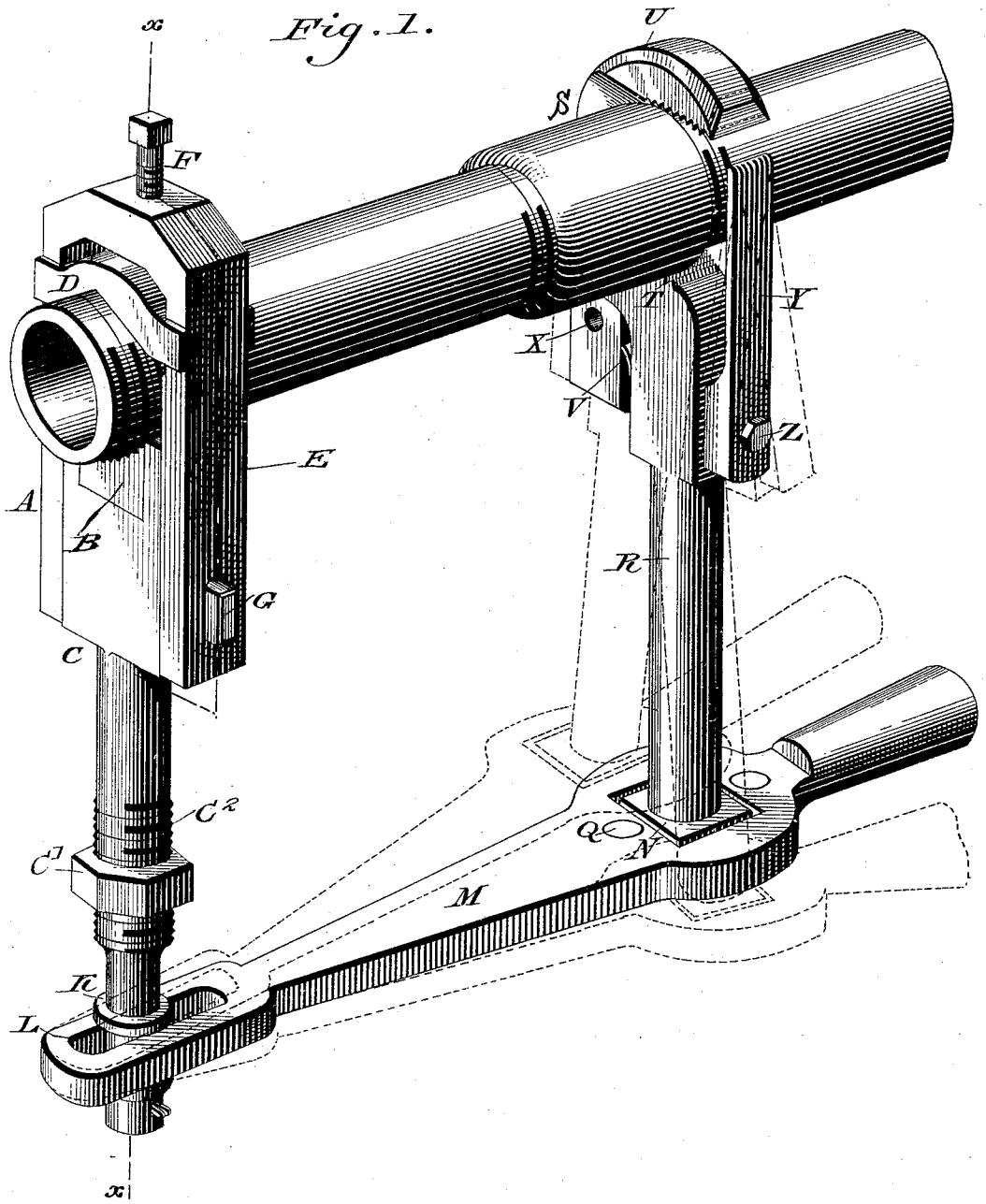
(No Model.) 2 Sheets—Sheet 1.

P. J. BODE.

PIPE TONGS.

No. 443,312. Patented Dec. 23, 1890.

Fig. 1.



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(No Model.) 2 Sheets—Sheet 2.

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PIPE TONGS.

No. 443,312. Patented Dec. 23, 1890.

Fig. 2.

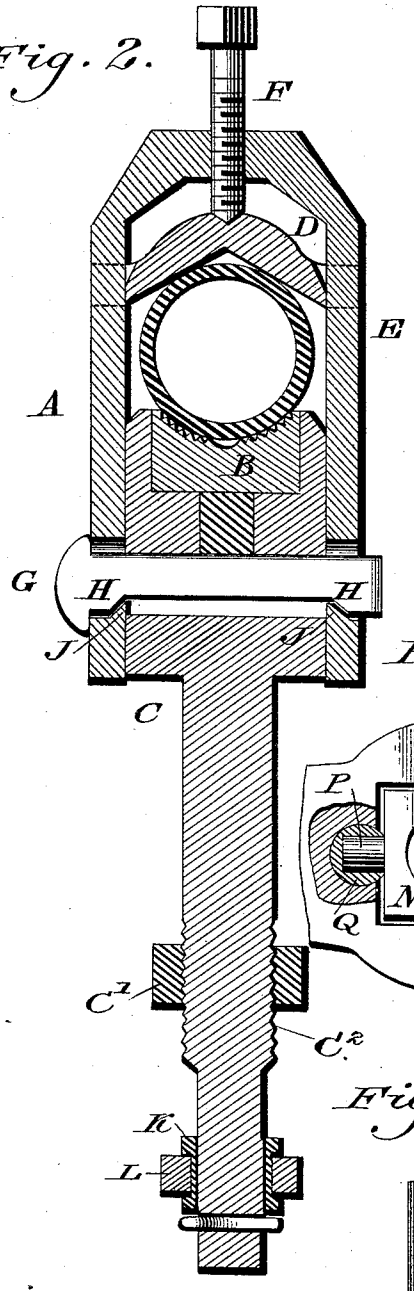


Fig. 3.

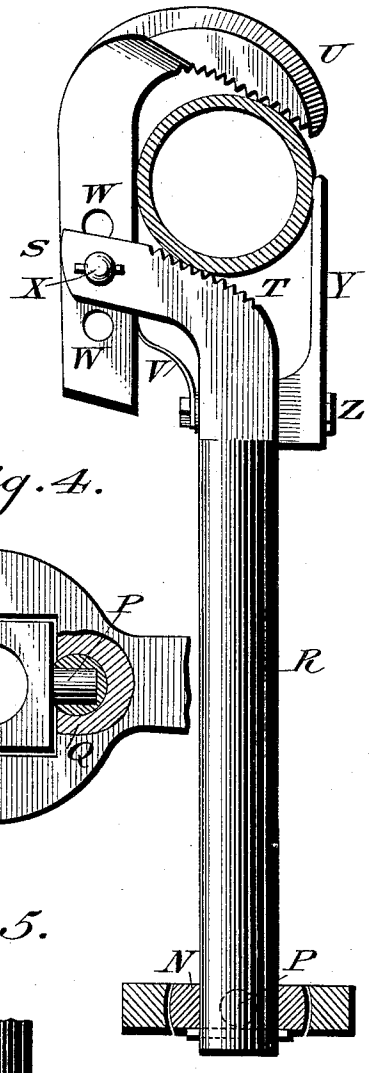
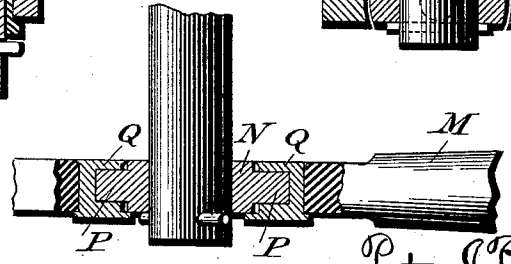


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE.

PETER J. BODE, OF BELLEVILLE, ILLINOIS.

PIPE-TONGS.

SPECIFICATION forming part of Letters Patent No. 443,312, dated December 23, 1890.

Application filed May 9, 1889. Serial No. 310,098. (No model.)

To all whom it may concern:

Be it known that I, PETER J. BODE, a citizen of the United States, residing at Belleville, in the county of St. Clair and State of Illinois, have invented a new and useful Improvement in Pipe-Tongs, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of improvements in pipe-tongs, embodying means of working pipe, rods, &c., in narrow and inconvenient places, and other features, as will be hereinafter fully set forth.

Figure 1 represents a perspective view of pipe-tongs embodying my invention. Fig. 2 represents a longitudinal section on line *x x*, Fig. 1. Fig. 3 represents a side elevation of a portion thereof. Fig. 4 represents a top view of a detached portion. Fig. 5 represents a partial side elevation and partial vertical section of a part at the lower right-hand corner of Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

Referring to the drawings, A designates a clamp or vise consisting of a stationary jaw B, the stock C, the movable jaw D, the stirrup E, screw F, and gib G. The yoke embraces the sides of the stock around the jaw B, and the movable jaw D is fitted to said yoke, it being seen that the jaws embrace the piece of pipe or rod to be held, while another section or length of pipe or a coupling is to be connected therewith. The screw F is fitted to the crown of the stirrup and bears against the jaw D. The gib passes through enlarged openings in the limbs of the stirrup and the part of the stock below or adjacent to the jaw B and has its under side beveled, as at H, to engage the opening in the limbs of the stirrup, it being seen that when the screw is properly rotated the contiguous bevels ride on each other, whereby the gib is prevented from lateral displacement and the jaws are tightly clamped against the pipe or rod, so as to hold the same with a firm grip, the stirrups being also prevented from spreading. When the screw is loosened, the jaws and gib are relieved. The gib may then be withdrawn through the openings in the stirrup and stock and said stirrup and the jaw D removed from the stock and other jaw B, so that the clamp is disconnected from the pipe or rod. The lower end or stem of the stock carries a roller K, which enters a slot L in a hand-lever M, said stem thus forming the fulcrum of the lever.

On the stem of the stock, above the roller K, is a screw-threaded portion C^2 to receive a nut C'.

The device for holding the roller K on the end of the stem which forms the bearings thereof may be removed, the roller detached, and the end of the stem then constitutes a stud which may be fitted in an opening in a bench or other support. The aforesaid fastening device for the roller is again applied to the stem and the nut C' screwed down upon the said bench or support, this being a provision for the use of the device as a common pipe-vise. In this form the use of the remaining portions of the device are dispensed with.

In the lever, near the handle thereof, is a rocking block N, whose sides are provided with journals P, the latter extending in the direction of the length of the lever and entering bushings Q, which are connected with the lever.

Connected with the block N is the stock or shank R of the pipe tongs or wrench S, the latter having a stationary jaw T, a pivotal jaw U, and a spring V, which is secured to the stock and bears against the back of the jaw U, said back having a series of openings W, either of which receives the pivotal pin X, whereby the jaws may be adjusted to pipes or rods of different diameters.

Connected with the stock below the stationary jaw is a latch Y, which is secured in position by the screw or bolt Z, and rises in such manner as to close the space in front of the two jaws, but is readily movable to the side, so as to uncover said space, it being seen that when the tongs are adjusted upon the piece of pipe or rod to be screwed or coupled to the one held by the clamp or vise A the latch Y prevents the tongs from being disconnected and lost, a feature of great importance when the tool is in service upon upright pipes, rods, &c., or used upon bridges and places where the tool is liable to disconnect and drop.

When the lever M is properly operated, it

turns upon the stem or stock C of the clamp, whereby the tongs S are worked, and the pipe or rod engaged by the same is rotated and thus screwed or coupled, as required.

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

1. The clamp or vise A, having the jaw B on the stock, the stirrup E, connected with said stock by the gib G, which passes through the stirrup and stock, the jaw D, attached to said stirrup, and the screw F, fitted to the stirrup and engaging with the jaw D, said gib and stirrup having their contact-faces beveled or inclined, substantially as described.

2. A pipe-tongs consisting of a vise having a stock with a stationary and movable jaw, a slotted hand-lever rotatable on the lower end of said stock and provided with a rocking block having journal-bearings in said lever, and a wrench secured to said rocking block and provided with stationary and movable jaws, said parts being combined substantially as described.

3. In pipe-tongs, a vise having a stock with a slotted hand-lever movable on the lower end thereof, a rocking block having journals extending in the direction of the length of the lever and provided with bearings therein, and a wrench having its stock rigidly secured to said block, said parts being combined substantially as described.

4. In pipe-tongs, a wrench with a stationary jaw, a movable jaw pivoted to said stationary jaw, a spring secured to the stock and bearing against the pivoted jaw, and a latch secured to the stock by a screw or bolt, so as to be rotatable thereon, said parts being combined substantially as described.

PETER J. BODE.

Witnesses:
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GEO. W. DAAB.