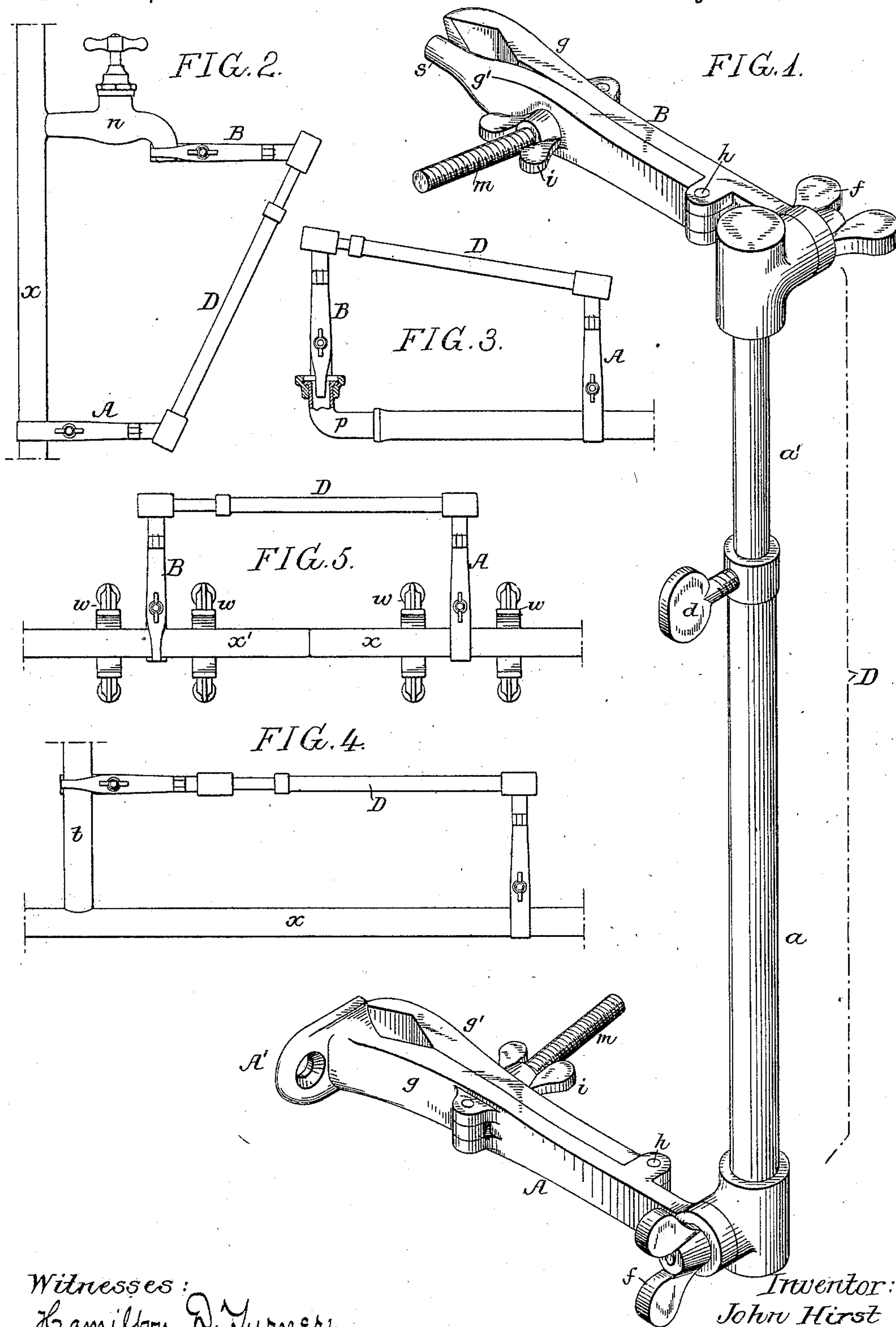


(No Model.)

J. HIRST.  
PLUMBER'S VISE

No. 432,829.

Patented July 22, 1890.



Witnesses:  
Hamilton D. Turner.  
Alex. Barkoff

Inventor:  
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# UNITED STATES PATENT OFFICE.

JOHN HIRST, OF PHILADELPHIA, PENNSYLVANIA.

## PLUMBER'S VISE.

SPECIFICATION forming part of Letters Patent No. 432,829, dated July 22, 1890.

Application filed November 4, 1889. Serial No. 329,107. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN HIRST, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain  
5 Improvements in Plumbers' Vises, of which the following is a specification.

My invention consists of certain improvements in that class of plumbers' vises which are intended for holding sections of pipe together for the formation of a solder-joint, or  
10 for holding cocks, couplings, branches, elbows, or other fittings in proper position on a pipe, so that they can be united thereto by a solder-joint, the object of my invention being to provide a simple and compact form of  
15 such vise which can be readily adjusted to suit the different classes of work for which it is intended. This object I attain in the manner hereinafter set forth, reference being  
20 had to the accompanying drawings, in which—

Figure 1 is a perspective view of a plumber's vise constructed in accordance with my invention, and Figs. 2, 3, 4, and 5 are diagrams illustrating different uses to which the  
25 device may be put.

The implement, in its preferred form, comprises a pair of vises A and B, hung to the opposite ends of a telescopic stem D, the latter comprising two portions *a* and *a'*, the portion *a* being tubular for the reception of the  
30 portion *a'*, so that the latter can both turn and slide longitudinally in said portion *a* of the stem, said portion *a'* being secured in position after adjustment by means of a set-  
35 screw *d*.

The pivot-pin, whereby each vise A B is hung to the end of the stem or shank, is provided with a thumb-nut *f*, or the pivot-pin may be in the form of a thumb-screw, so that  
40 each vise can be swung to any desired position around the pivot-pin, and can be secured in position after the desired adjustment has been effected.

Each vise comprises a fixed jaw *g* and a pivoted jaw *g'*, the latter being hung by a pin  
45 *h* to lugs on the fixed jaw, and being acted upon by a thumb-nut *i*, adapted to a screw *m*, pivoted to the fixed jaw, so that the vise can be readily applied to or removed from the  
50 pipes or the different fittings which are to

be held in position on a pipe. Ordinarily the vise A is applied to the pipe *x* and the vise B to the attachment or fitting which is to be joined to said pipe. Thus, as shown in Fig. 2, the vise B carries a cock or spigot *n*,  
55 projecting at right angles from the pipe *x*, while in Fig. 3 the vise B carries a bent coupling *p*, and for the purpose of conveniently clamping the latter one of the jaws of the vise—in this case the jaw *g'*—has a rounded  
60 end *s* for entering the tube of the coupling, the other jaw *g* bearing upon the outside of the same.

In Fig. 4 the vise B is illustrated as holding in position a branch pipe *t*, projecting at  
65 right angles from the pipe *x*, and in Fig. 5 both vises are shown as applied to the end portions of pipes *x x'*, which are to be united by a solder-joint, the pipes being shown as supported upon trestles *w*.  
70

It will be observed that owing to the facility which is afforded for universal adjustment of two vises in respect to each other the device is applicable to all the different  
75 classes of work for which such an implement is intended, and it will be observed on reference to the diagrams that the different attachments are so supported that the vise does not interfere in any way with ready access to the joint, so that the application of  
80 the solder thereto and the wiping of the joint are not obstructed.

The fixed jaw of the vise A is provided at its outer end with a perforated lug *A'*, so that said jaw may, if desired, be secured to  
85 a table or bench, and thus serve as a standard for the stem D of the vise when the latter is being used in a shop; or if the vise is intended wholly for shop use a standard or post may replace the vise A.  
90

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

1. The combination, in a plumber's vise, of the telescopic stem comprising two parts, one free to slide and turn in the other, a vise piv-  
95 oted so as to be free to swing on the end of said stem, and means for locking the sections of the stem and for locking the vise thereto, substantially as specified.

2. The combination, in a plumber's vise, of 100

the telescopic standard comprising the two parts, one of which is free to slide and to turn in the other part, with vises pivoted so as to be free to swing on the opposite ends of the  
5 said standard, and means for locking the parts of the standard together and for locking the vises thereto, substantially as specified.

3. The combination of the telescopic standard and vises hung to the opposite ends of  
10 the same, one of said vises having a jaw with

projecting lug serving as a base, whereby the vise can be secured to a bench or table, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of 15 two subscribing witnesses.

JOHN HIRST.

Witnesses:

WILLIAM D. CONNER,  
HARRY SMITH.