

(No Model.)

G. F. NILSSON.  
PLUMBER'S VISE.

No. 534,345.

Patented Feb. 19, 1895.

Fig. 1.

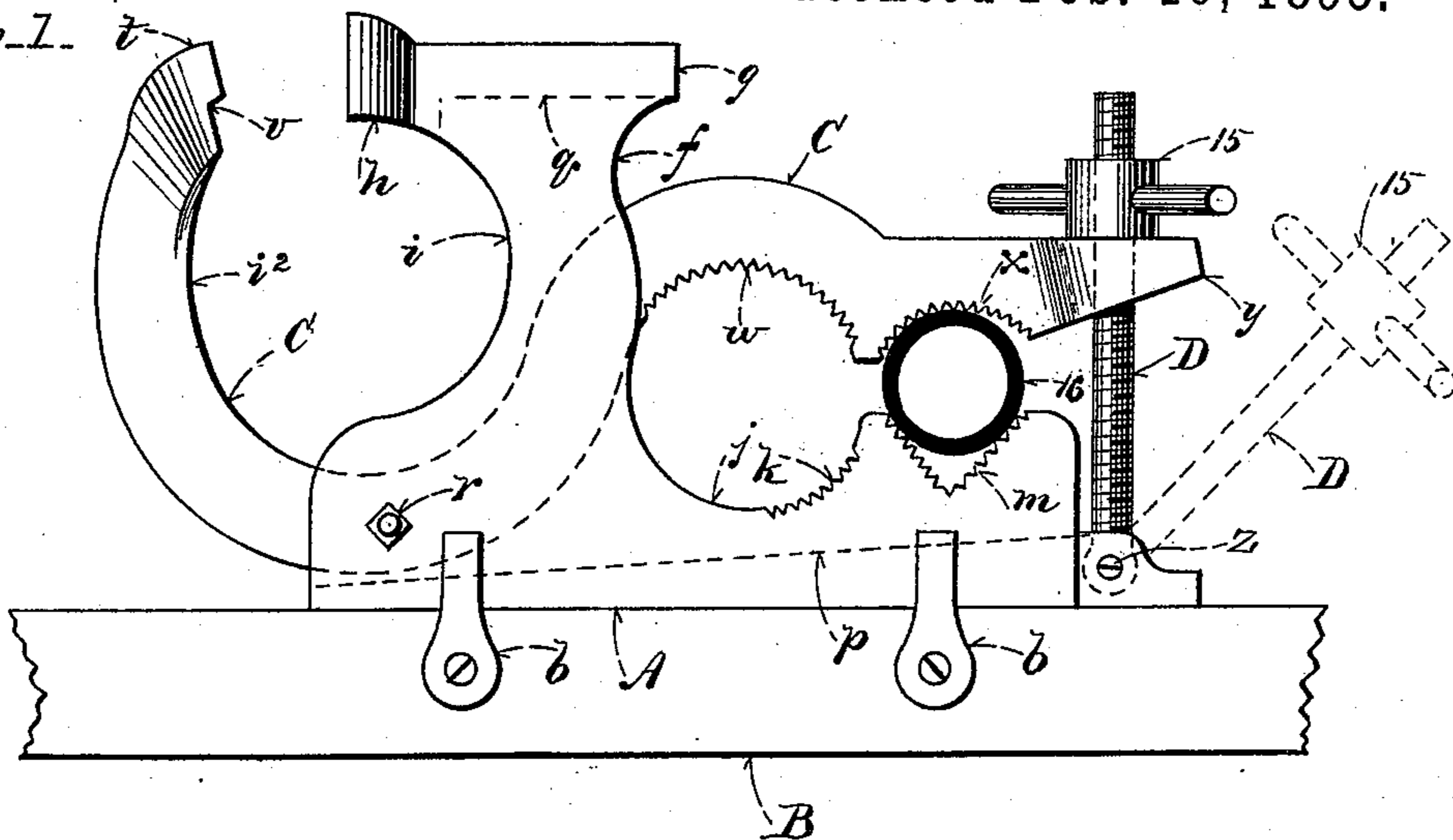


Fig. 2.

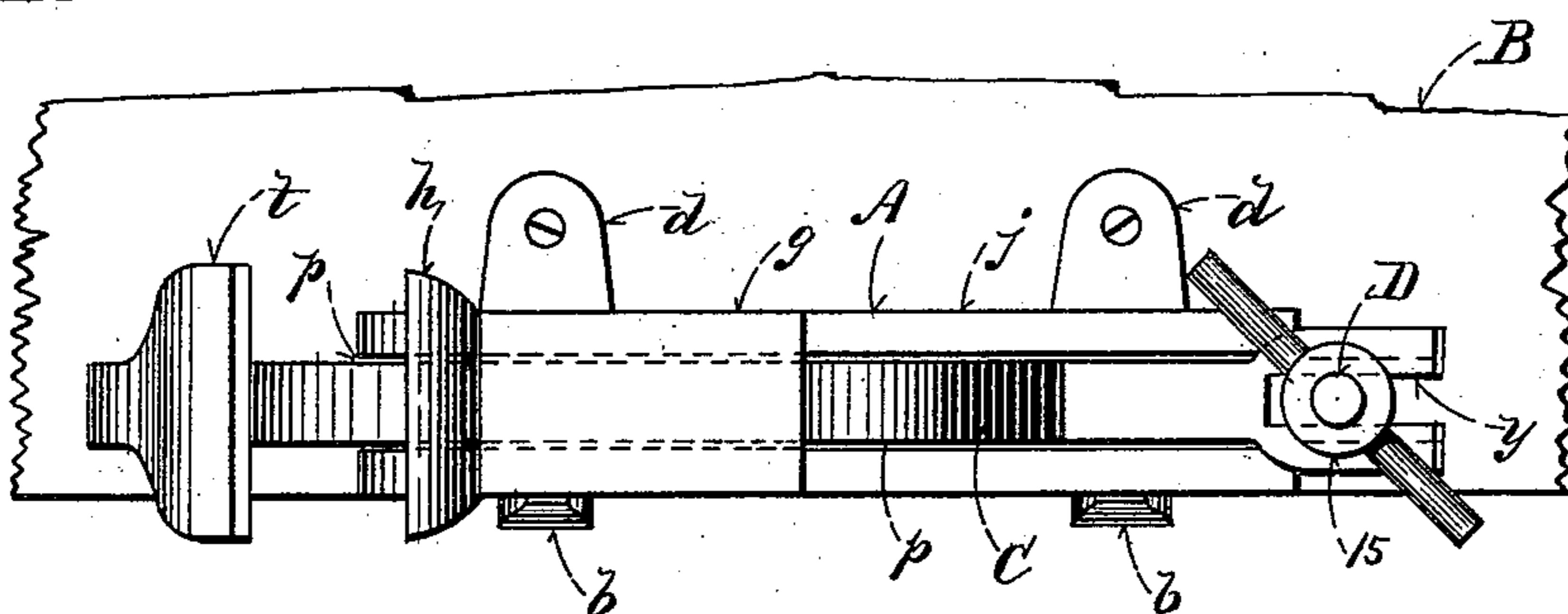
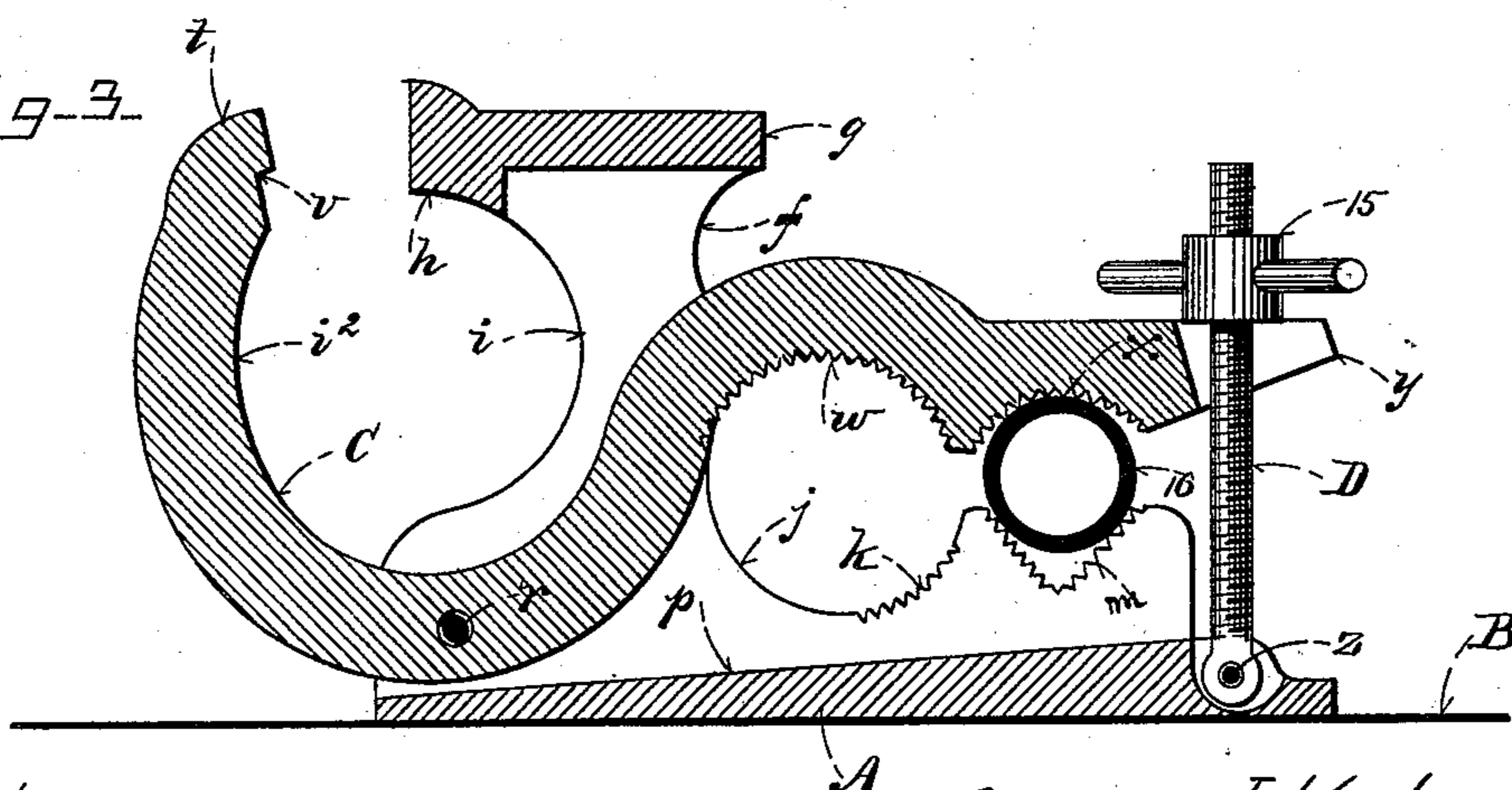


Fig. 3.



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# UNITED STATES PATENT OFFICE.

GEORGE F. NILSSON, OF WHITINSVILLE, MASSACHUSETTS.

## PLUMBER'S VISE.

SPECIFICATION forming part of Letters Patent No. 534,345, dated February 19, 1895.

Application filed May 2, 1892. Serial No. 431,464. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE F. NILSSON, of Whitinsville, in the county of Worcester, State of Massachusetts, have invented certain new and useful Improvements in Plumbers' Vises, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my improved vise represented in position for use; Fig. 2, a top plan view of the same; and Fig. 3, a vertical longitudinal section.

Like letters and numerals of reference indicate corresponding parts in the different figures of the drawings.

My invention relates especially to a vise which is particularly adapted for use by plumbers and others in similar occupations for holding piping of various sizes; and it consists in certain novel features hereinafter fully set forth and claimed, the object being to produce a simpler, cheaper and more effective device of this character than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation.

In the drawings, A represents the body of the vise and B the bench or table. Said body is secured to the bench by downwardly projecting lugs, *b*, which overlap the bench edge and by lateral lugs, *d*, which engage the top of the bench. Said body is provided at one end with a standard, *f*, the top of which is enlarged horizontally forming an anvil, *g*. At one end of said top a clamping jaw, *h*, is formed and under said jaw the standard is grooved or curved at, *i*.

Centrally of the body adjacent to the foot of the standard a curved jaw, *j*, is formed serrated at, *k*, and adjacent said curved jaw a V-shaped serrated jaw, *m*, is constructed. The body is slotted longitudinally through all of said jaws at, *p*, said slot extending to a point indicated by dotted lines, *q*, in Fig. 1, under the head or top, *g*.

A lever, C, is pivoted at, *r*, between the sections of the standard, one end thereof being curved vertically, forming a jaw, *t*, which may register with the anvil-jaw, *h*. Said jaw, *t*, is provided with a lateral indentation, *v*. The lever, C, forms the movable or clamping jaw for the jaws, *h*, *j*, *m*. Said lever passes through the slot, *p*, in the standard and is again bent vertically at, *w*, and serrated, said portion registering with the serrated jaw, *j*. Beyond said portion the lever is again curved and serrated at, *x*, registering with the V-shaped jaw, *m*. The outer end of the lever, C, is forked at, *y*.

A screw, D, is pivoted at, *z*, in the body, A, to swing vertically and is adapted to be inserted in the fork, *y*, of the lever. A hand-nut, 15, is mounted on said screw and adapted to engage the lever end.

The short vertically curved arm of the lever forms with the curved portion of the standard jaws for grasping soil-pipes or similar pipes of large diameter. By swinging the long arm of the lever C upward its short arm, *i*<sup>2</sup>, will be thrown outward opening said jaws to receive the pipe. The indentation or depression, *v*, of the jaw, *t*, of said arm forms a bearing surface to take on any circular or curved surface which it may be desired to clamp between said jaw, *t*, and the anvil jaw, *h*.

The jaws, *j*, *w*, are adapted to receive pipes of smaller diameter than the jaws, *i*, *i*<sup>2</sup>, and the jaws, *x*, *m*, are fitted to receive other pipe-rods of very small diameter.

The screw-lever, D, being thrown outward as indicated by dotted lines in Fig. 1, the article to be clamped in the vise can be passed laterally into any of the jaws described. The lever, C, being then depressed the screw-lever is thrown upward into the fork, *y*, and the nut, 15, turned against said fork jamming said lever to the pipe, 16, which may be thus held in a manner which will be readily understood by all conversant with such matters.

Any of the jaws described may be smooth or serrated as desired and the anvil-head to the standard may be omitted if preferred.

It will be seen that the screws afford direct pressure on the object clamped and that the peculiar construction of the lever, C, permits a very compact arrangement of parts for use on work varying greatly in size.

Instead of slotting the body of the vise as in manner described, said body may be solid and the lever, C, pivoted to an outer face thereof any suitable form of guides being employed to prevent lateral movement of said lever and straining its pivot. I prefer, however, to construct the device in the form shown.

Having thus explained my invention, what I claim is—

1. In a pipe-vise the stationary body provided with the standard, *f*, having the jaws, *i*, *h*, in combination with the lever, C, pivoted in said standard and provided with the jaws, *i*<sup>2</sup>, *t*, and screw and nut for clamping the op-

posite arm of said lever to said body, substantially as described.

2. In a pipe-vise the slotted stationary body provided with the jaws, *i*, *j*, *m*, in combination with the lever C, pivoted in said slot and provided with the jaws, *w*, *x*, the short arm of said lever being curved to form a jaw, *i*<sup>2</sup>, registering with the body jaw, *i*, and mechanism for clamping the long arm of said lever to said body, substantially as specified.

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Witnesses:

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