

Rufus Porter's
Excentric-pawl Vice.

No. 121,895.

Patented Dec. 12, 1871.

Fig. 1.

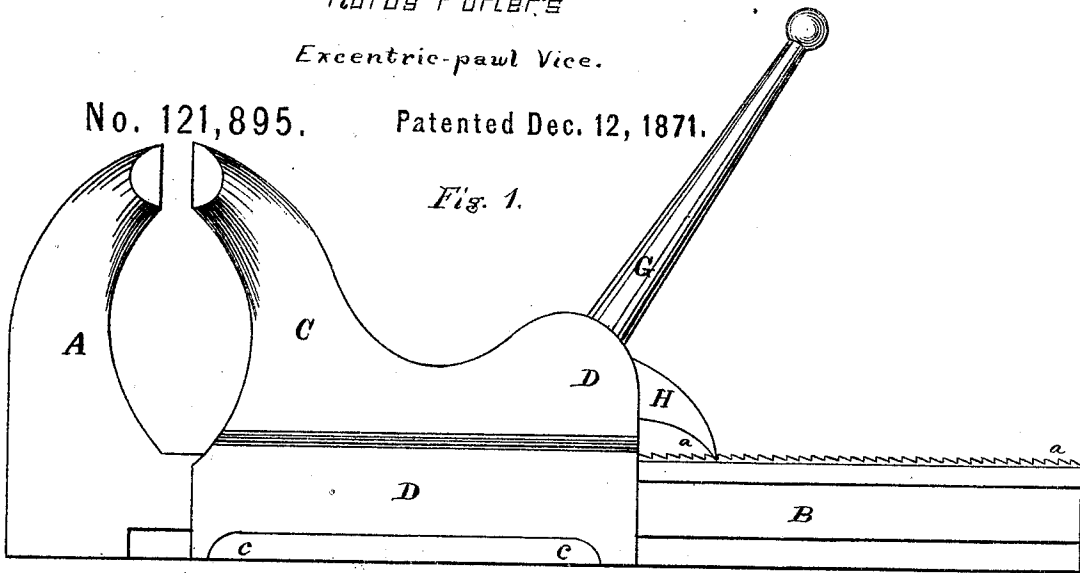


Fig. 2.

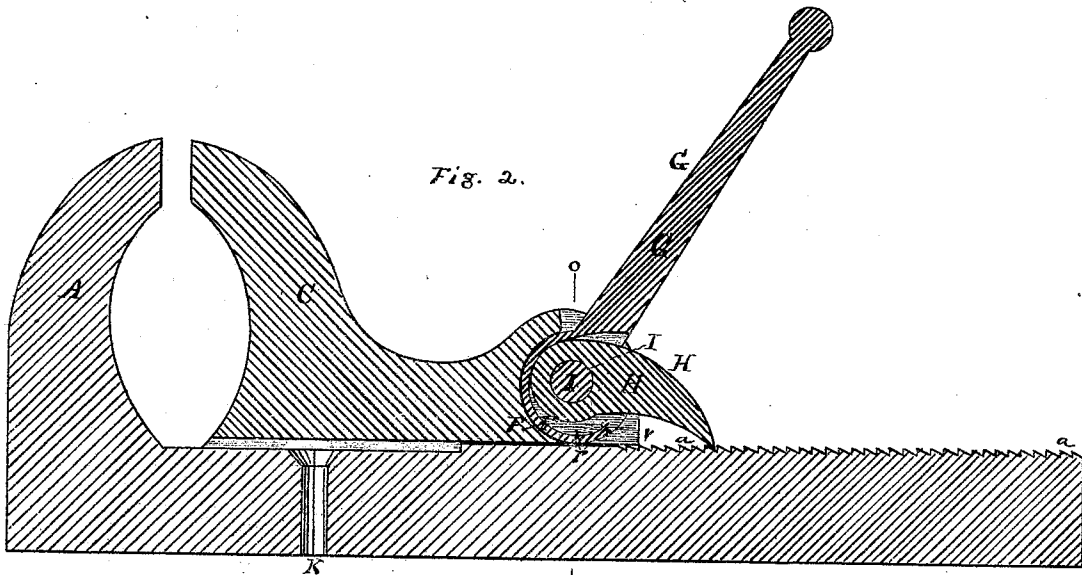
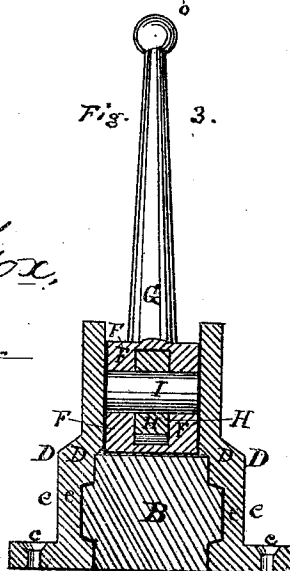


Fig. 3.



Witnesses,

Thomas L. Fox,

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UNITED STATES PATENT OFFICE.

RUFUS PORTER, OF BRISTOL, CONNECTICUT, ASSIGNOR TO HIMSELF AND G. W. AND H. S. BARTHOLEMEW, OF SAME PLACE.

IMPROVEMENT IN VISES.

Specification forming part of Letters Patent No. 121,895, dated December 12, 1871; antedated December 2, 1871.

To all whom it may concern:

Be it known that I, RUFUS PORTER, of Bristol, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Vises; and I hereby declare that the following is a full and exact description thereof, reference being had to the annexed drawing making part of this specification, in which—

Figure 1 is a side view. Fig. 2 is a central vertical longitudinal section, and Fig. 3 is a vertical transverse section on the line *o o* of Fig. 2.

The nature of this invention consists in so forming and arranging the two jaws and main sections of a vise that either jaw may be firmly secured and made stationary while the other is free, and may be moved promptly and made to gripe any article firmly without the time and labor required to turn a common vise-screw.

The front jaw A is united to a horizontal sliding bar B, the top of which has ratch-teeth *a a*. The rear jaw C is united to a saddle, D, the sides of which extend downward on both sides of the bar B and terminate in lateral flanges *c c*, whereby this section is attached to the top of a bench by screws. The bar B slides freely through this section, being guided by internal grooves *e e*. (See Fig. 3.) In the rear end of the saddle D is a curved concave, *n n*, into which is fitted a circular slotted hub, F, from which a lever, G, extends upward; and within the slot of the hub F is mounted a pawl, H, the point of which ordinarily rests upon the ratch *a a*; and the pawl, being mounted upon a pivot, I, which is slightly eccentric, takes to the teeth of the ratch when the lever G is pressed rearward, and the jaw A is thereby slightly moved. A pin, *r*, extends through the hub F in such a position that, when the lever G

is brought to an upright position, the pin comes in contact with the pawl and lifts it from the ratch, so that the bar A may move freely in either direction. Another pin, *v*, extends through the rear of the saddle for the purpose of keeping the hub F in its place.

When an article is to be held fast by this vise it is placed between the jaws and the front jaw is pressed rearward until it comes in contact with the article, and then, by forcing back the lever G, the article is griped as forcibly as by a screw-vise, and the labor and time required for turning a screw are obviated. Through the center of the bar B is a vertical screw-hole, K, whereby this bar may be firmly attached to the bench, and, with the front jaw, become fixed, while the rear jaw is free and movable; for, the bottoms of both sections being even, it is only requisite to place a piece of card-board under the section that is to be stationary that it may be held fast while the other is free.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The particular construction and combination, herein described, of the slotted hub F, bar G, pawl H eccentrically pivoted in said hub, extension B of jaw A, and the jaws A C, as set forth.

2. The particular construction and the arrangement relatively to one another of the bar B and the open-bottomed saddle D, in virtue of which either jaw may be made stationary or immovable, as herein described.

RUFUS PORTER.

Witnesses:

THOMAS L. FOX,
HENRY A. MITCHELL.

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