

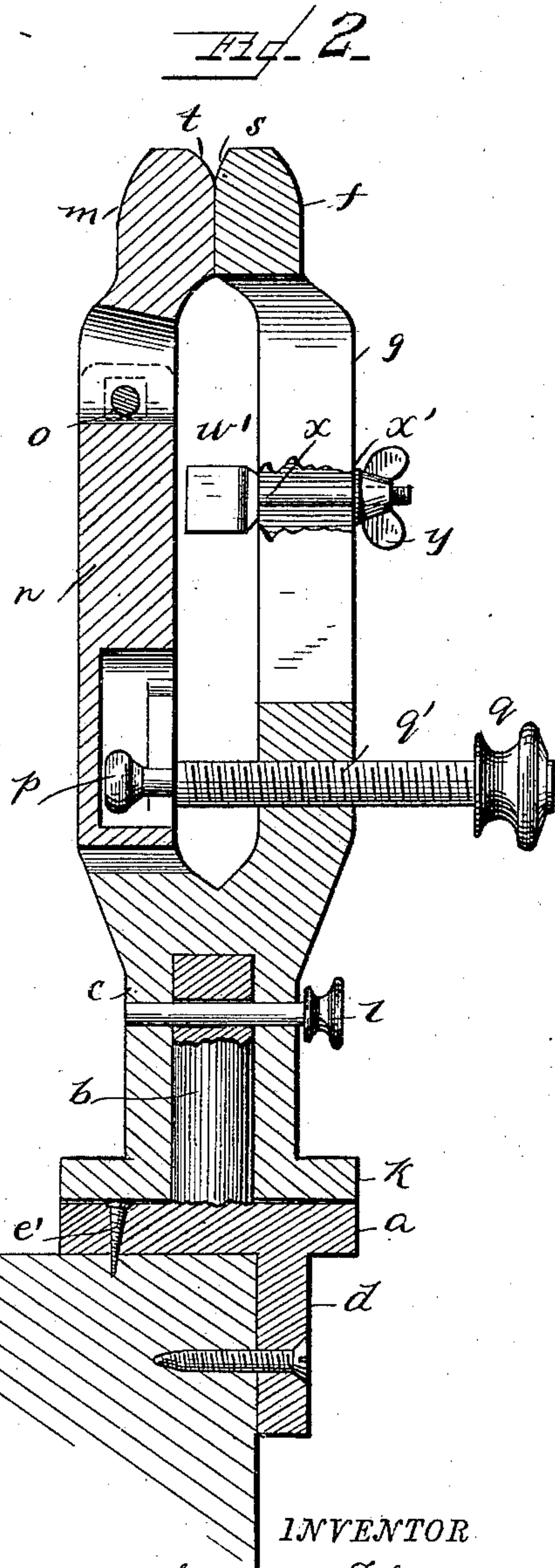
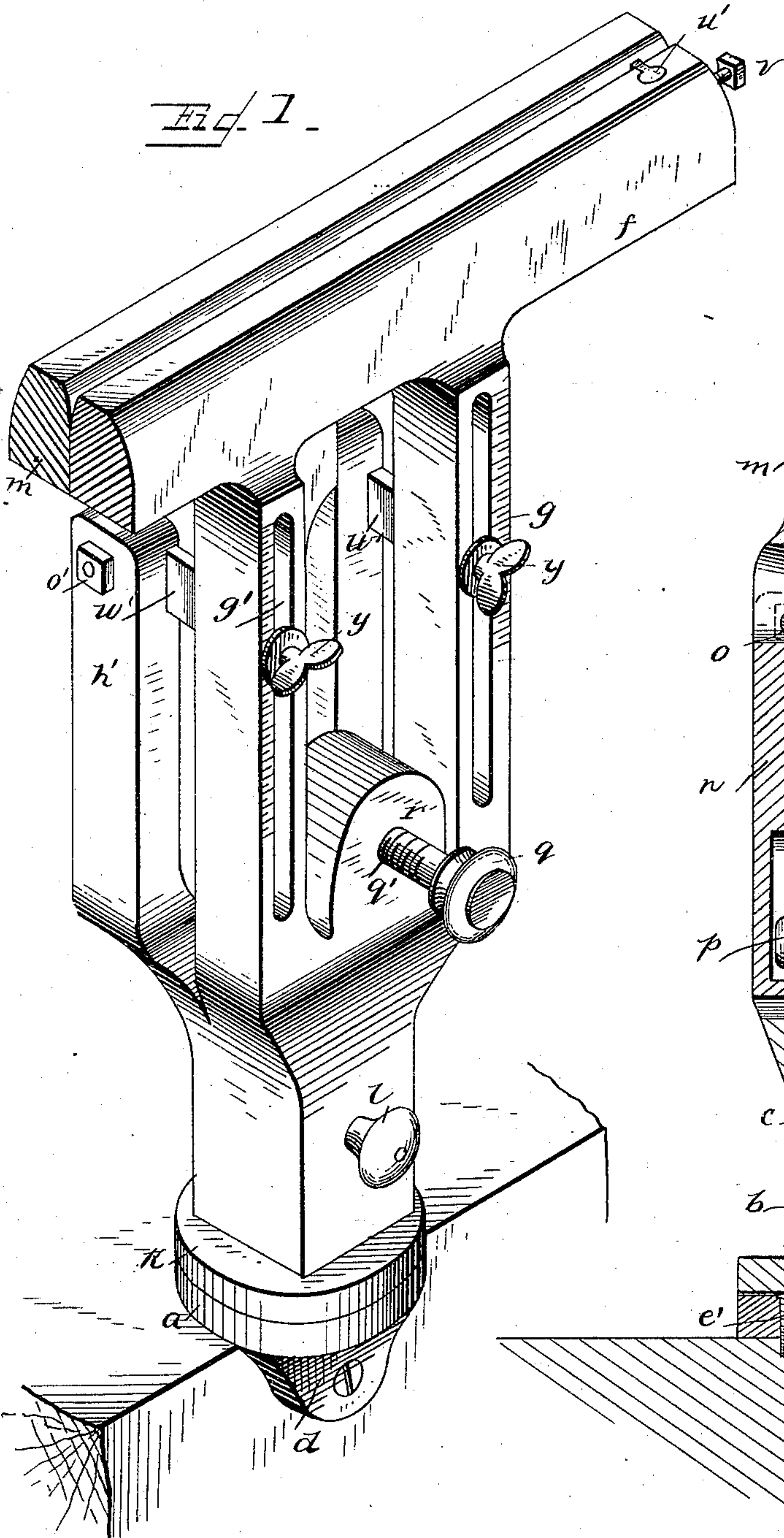
(No Model.)

H. FLATER.

SAW VISE.

No. 311,241.

Patented Jan. 27, 1885.



WITNESSES

F. L. Ourand
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INVENTOR

Henry Flater,
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UNITED STATES PATENT OFFICE.

HENRY FLATER, OF FINDLAY, OHIO, ASSIGNOR OF ONE-HALF TO WILLIAM L. CARLIN, OF SAME PLACE.

SAW-VISE.

SPECIFICATION forming part of Letters Patent No. 311,241, dated January 27, 1885.

Application filed December 7, 1883. (No model.)

To all whom it may concern:

Be it known that I, HENRY FLATER, a citizen of the United States, residing at Findlay, in the county of Hancock and State of Ohio, have invented certain new and useful Improvements in Vises, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is a view in perspective of a device embodying my improvements. Fig. 2 is a vertical longitudinal sectional view.

This invention has relation to vises; and it consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and particularly pointed out in the claims appended.

Referring by letter to the accompanying drawings, *a* designates a bed-plate having a central vertical cylindrical standard, *b*, rising therefrom and perforated laterally near its upper end at *c*. This bed-plate *a* has a vertically-depending lug, *d*, perforated so that the base or bed plate may be secured to a stump, bench, board, or to a vise on the work-bench, as circumstances may require. Vertical perforations *e' e'* are also made in the bed-plate in order that additional fastening-screws may be employed, if necessary.

The fixed jaw *f* of the vise is cast upon the upper end of the vertically-slotted gage-arms *g g'*, which, together with the shorter standards *h h'*, are cast with the vertically-bored stand *i*, rising from the circular base *k*. The stand *i*, and standard *b* are perforated laterally to receive a locking-pin, *l*, to hold the vise stationary, when desired. The movable jaw *m* of the vise is cast on the upper end of a pivoted arm, *n*, which has its bearings on a rod, *o*, passing through perforations *o'* in the shorter standards *h h'*, near their upper ends, as shown. The lower end of this pivoted or swinging arm *n* is recessed in its inner face for the reception of the ball end *p* of an adjusting-screw, *q*, seated in a threaded perforation, *q'*, in a bearing, *r*, between the slotted standards *g g'*. The fixed or stationary jaw is made slightly longer than the movable jaw, so that it projects beyond the latter at both ends. The inner upper edge of the fixed jaw is provided with a short bevel, *s*, while the

inner upper edge of the movable jaw is provided with a longer bevel, *t*, as shown. The fixed jaw is provided near each end with a vertical recess in which gage-slides *u u'* work, and are held in place by set-screws *v*, projecting inwardly from the ends of this jaw.

The slotted standards or arms *g g'* are gaged, and saw-rests *w w'* have their threaded shanks *x* passed through said slots, and washers *x'* are interposed between the scales on said standards and the thumb-nuts *y*, in order that the rests may be quickly adjusted to saws of different widths.

For tapering saws the rests are not employed, but are dropped to the bottom of the slots, and the vertical gages are employed and each raised to the level of the other and secured, and the teeth of the tapering saw aligned with these gages both for filing and setting.

The vise can be turned on its pivotal standard, so that the saw can be filed from either side throughout the entire length of the saw without removing it from the vise.

In setting the saw the punch is rested on the longer bevel of the movable jaw and the tooth driven against the shorter bevel of the fixed jaw. Both beveled faces are of steel, the bodies of the jaws being cast.

The saw-rests may be used with tapering saws, if desired; but where they are light the clamps are sufficient of themselves to hold. I prefer, however, to use the rests at all times.

When it is necessary to use the vise in the woods, it can be easily removed from its pedestal when not in actual use and stored in any dry place, so that it is not liable to get out of order.

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

1. The combination, with the fixed jaw provided with the vertical gages near its ends, and set-screws for holding them to their adjustments, and the steel face upper inner edge of the movable jaw hinged to the vertically-bored stand, the ball-head screw, and the bed-plate having the vertical standard and locking-pin, substantially as specified.

2. The combination, with the bed-plate hav-

ing the vertical stand thereon, and the vertically-bored standard having the fixed jaw at the ends, of the vertically-slotted gage-arms, the movable jaw and operating-screw, and the 5 vertically-adjustable saw-rests provided with thumb-nuts and working in the slotted gage-arms, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY FLATER.

Witnesses:

ALFRED GRABER,
V. T. SPITLER.