

(No Model.)

2 Sheets—Sheet 1.

J. PARKINSON.

WISE.

No. 394,292.

Patented Dec. 11, 1888.

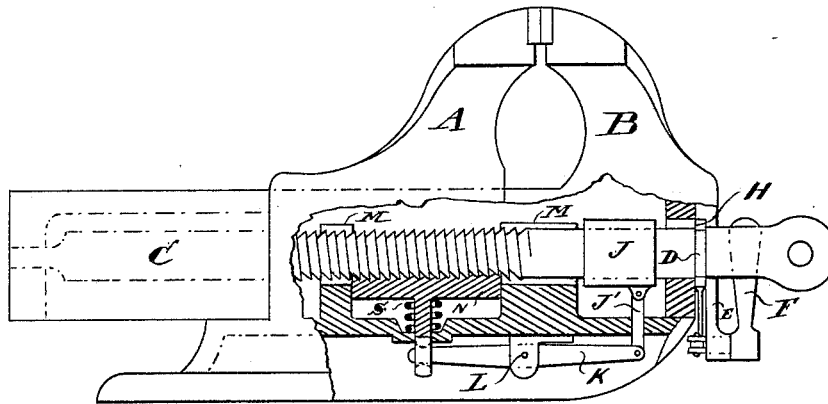


FIG. 1.

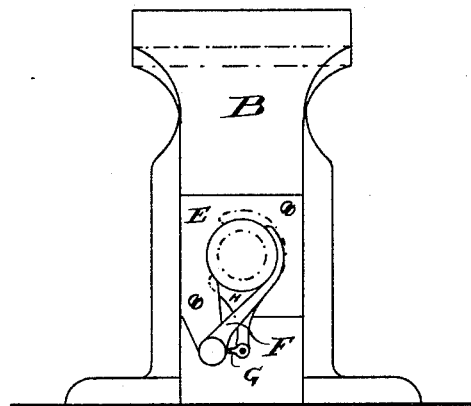


FIG. 2.

Witnesses:

E. J. Griswold.
Geo. A. Crane.

Inventor:

Joseph Parkinson.
By his Attorneys
Horton and Horton.

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FIG. 3. Patented Dec. 11, 1888.

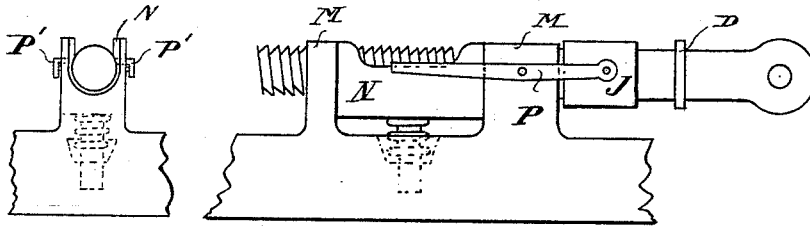


FIG. 4.

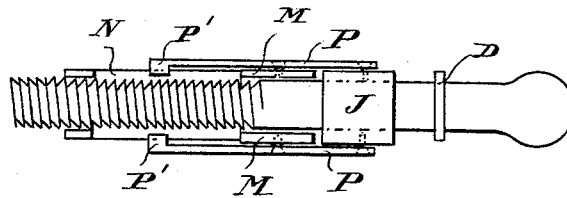


FIG. 5.

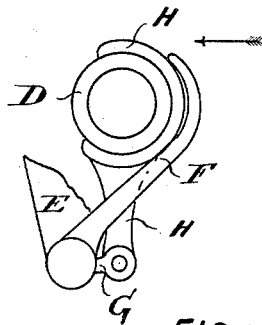


FIG. 6.

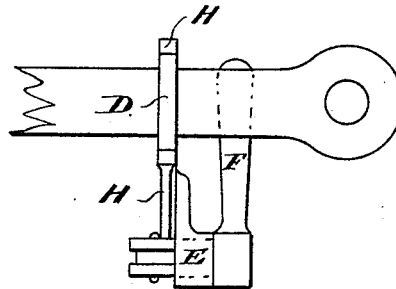


FIG. 7.

Witnesses:

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UNITED STATES PATENT OFFICE.

JOSEPH PARKINSON, OF BRADFORD, COUNTY OF YORK, ENGLAND.

WISE.

SPECIFICATION forming part of Letters Patent No. 394,292, dated December 11, 1888.

Application filed May 1, 1888. Serial No. 272,423. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH PARKINSON, a subject of the Queen of Great Britain and Ireland, residing at Bradford, in the county of York, England, have invented certain Improvements in Vises, of which the following is a specification.

This invention relates to certain improvements in parallel vises, and has for its object the provision of means whereby the nut and vise-screw may be moved out of mesh for allowing the sliding vise-jaw to be moved back and forth without turning the vise-screw; and it consists in raising the said screw by levers arranged in a novel manner and combining with the screw mechanism for automatically operating the vise-nut in an opposite direction to that in which the screw is moved.

In the accompanying drawings, Figure 1 represents a side elevation of a parallel vise having some of the parts cut away; Fig. 2, an end view. Figs. 3, 4, and 5 are views of a modification; and Figs. 6 and 7 are views, drawn to an enlarged scale, of the devices for raising the front end of the vise-screw.

The fast jaw of the vise is denoted by the letter A and the loose or sliding jaw by B, the latter having an oblong hole at C, through which the vise-screw passes, and is carried at the opposite end in the usual manner. The vise-screw collar D works against the end face of the sliding jaw, and is inclosed by a cap, E, which also acts as a carrying-plate for supporting levers arranged in the following manner: A journal is formed in the lower portion of the said plate E, in which is mounted a short shaft having a lever, F, secured thereto on one side of the said cap-plate, and a lever, G, secured at an angle to the lever F on the other side, and to the lever G is attached a yoke, H, partly embracing the screw-collar D, inclosed within the space covered by cap-plate E.

In the recess within the loose or sliding jaw B, I place on the screw a sleeve, J, connecting thereto by link J' a lever, K, fulcrumed at L, and extending through a slot-hole cut in the shank of half-nut N, a spiral spring, S, being on the said shank compressed between the under side of the half-nut and vise-plate base, the half-nut being kept in position for receiving the strain by the lugs M M.

On pressing the lever F in the direction of the arrow toward the vise-screw the short lever G raises the yoke H and thereby the vise-screw, the latter causing the lever K to be operated on its fulcrum and the half-nut N be moved toward the base-plate, thus further compressing the spiral spring S, thereby moving the vise-screw and half-nut in opposite directions to such an extent that the threads are clear or unmeshed, enabling the operator to move the loose or sliding jaw as required without turning the screw.

The connection between the sleeve J and half-nut N may be accomplished, as shown by details 3, 4, and 5, representing a side view, end view, and plan of an arrangement in which a lever, P, is mounted on each side of the sleeve J, the fulcrum pins or screws being supported by a lug, M, and the opposite ends of each lever P, instead of one passing through a slot-hole in the shank, as before described, are made with a projection, P', extending some distance over the side of the half-nut N, so that on raising the vise-screw, as described, the half-nut N is depressed, thereby unmeshing the threads and liberating the sliding jaw B, to be moved as desired.

What I claim is—

1. The combination of the fixed and movable jaws of a vise and operating screw with a sleeve on the front end of the latter, a half-nut engaging with the threaded portion of the screw, and a connecting-lever between the nut and sleeve, whereby on the raising of the front end of the screw the nut will be disengaged, all substantially as set forth.

2. The combination of the fixed and movable jaws of a vise and operating screw with a yoke and levers to raise the front end of the screw, a sleeve on the latter, a half-nut to engage with the threaded portion of the screw, and a lever connecting the sleeve and half-nut, as and for the purpose set forth.

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

JOSEPH PARKINSON.

Witnesses:

WILLIAM PREST,
ISAAC CAUTHERY.