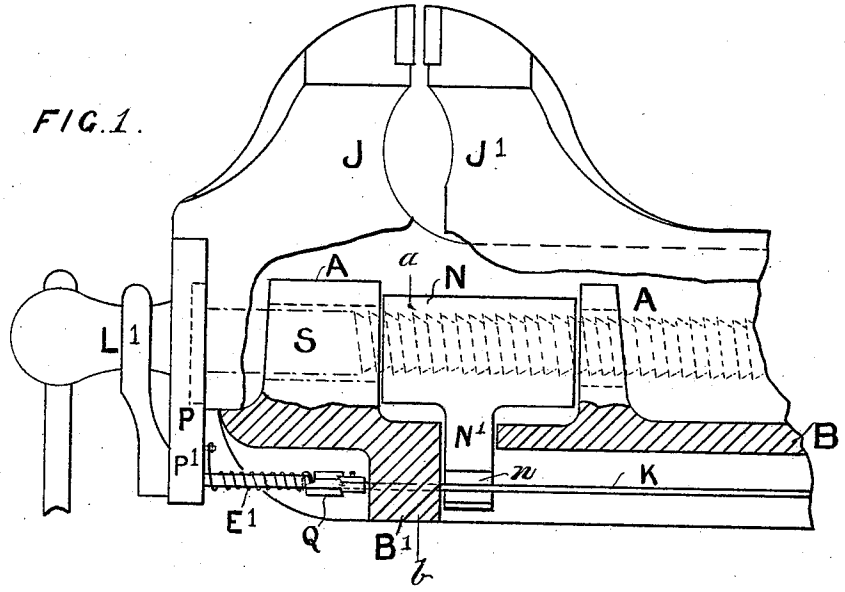
(No Model.)

J. PARKINSON.

VISE.

No. 361,445. Patented Apr. 19, 1887.

FIG. 1.



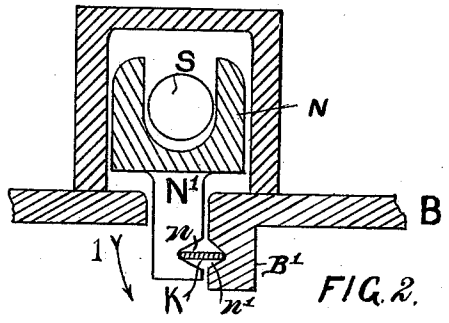


FIG. 2.

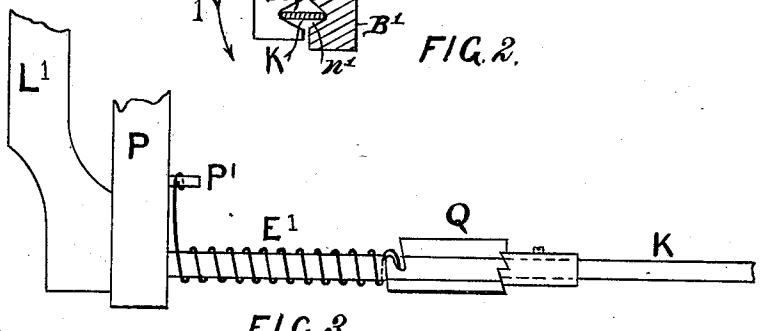


FIG. 3.

Witnesses.

Dennis Sumby.

Robert Everett.

Inventor.

Joseph Parkinson.

By James L. Norris.

Atty.

UNITED STATES PATENT OFFICE.

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

VISE.

SPECIFICATION forming part of Letters Patent No. 361,445, dated April 19, 1887.

Application filed March 25, 1886. Serial No. 196,569. (No model.) Patented in England April 24, 1885, No. 5,114; in Germany June 18, 1885, No. 34,190; in Belgium July 28, 1885, No. 69,746, and in France September 10, 1885, No. 171,120.

To all whom it may concern:

Be it known that I, JOSEPH PARKINSON, a subject of the Queen of Great Britain and Ireland, and residing at Bradford, in the county of York, England, have invented certain Improvements in Parallel Vises, (for which I have obtained Letters Patent in Great Britain, No. 5,114, dated April 24, 1885; in Belgium, No. 69,746, dated July 28, 1885; in France, No. 171,120, dated September 10, 1885; in Germany, No. 34,190, dated June 18, 1885,) of which the following is a specification.

The object of my invention is to provide simple and novel means for disconnecting the screw-actuating movable jaw of a vise from its threaded nut, in order to permit the jaw to be drawn back and forth without operating the screw, and to combine therewith devices for automatically restoring the nut to mesh.

The invention consists in the several novel features of construction and combinations of parts hereinafter set forth, and definitely specified in the claims following this specification.

In the accompanying drawings, Figure 1 is a side elevation, parts being broken away. Fig. 2 is a transverse section of the lower portion of Fig. 1. Fig. 3 is a detail view showing, on a larger scale, the construction of the lever and bar.

In the said drawings, the letters J J′ denote the jaws of the vise, the former being the movable jaw. A A represent lugs formed upon base B of the stationary jaw, and S designates the screw passing loosely through said lugs.

Between the lugs A is arranged a half-nut, N, meshing with the under part or surface of the screw S, and having a shank, N′, which passes downward below the base-plate B and in rear of a lug, B′, depending from the base of the stationary jaw J. In the vertical face of the shank N′ is cut a V-shaped notch, *n*, which registers with a similar notch, *n′*, in the adjacent face in the lug B′.

Upon the outer jaw, J, is mounted a plate, P, having a screw or pin, P′, and through the end of said plate passes a rod or bar, K, having a lever, L′, rigidly mounted on its projecting end and standing normally a little apart from the head of the screw. A spiral spring, E′, has one end fastened to pin P′ and the other to a catch-nut, Q, on the bar K. The latter is substantially flat in cross-section, as shown in Fig. 2, and its edges engage the notches *n* and *n′* in the lug B′ and shank N′.

By revolving the lever L′, the bar K may be rocked so as to depress the edge engaging with the notched shank N′, thereby withdrawing it from mesh with the screw S. The jaw J can then be moved in either direction. The lug B′ forms a guide for the bar K.

The catch-nut Q can be turned until the spring E′ is of proper tension, the end of said nut being indented, as shown in Fig. 3.

By swinging lever L′ toward the head of the screw, the nut is thrown downward, and when it is released the tension of the spring E′ will restore it and lift the nut.

The vise shown is of that class generally used by joiners; but the invention may be readily adapted to other kinds of vises.

What I claim is—

1. In a parallel vise, the combination, with the nut N, having notched shank N′, of the bar or plate K and spring E′, substantially as described.

2. The combination, with the jaws J and J′, the latter having lugs A A and B′, of the screw S, the half-nut N, having shank N′, the rod K, having its edges engaged with notches *n* and *n′* in the shank N′ and lug B′, respectively, and the spring E′, substantially as described.

3. The combination, with the nut N, having notched shank N′, of the bar K, the spring E′, plate P, having pin P′, and the catch-nut Q, having its end indented, substantially as described.

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

JOSEPH PARKINSON.

Witnesses:

JNO. GILL,

ARTHUR JOS. TAYLOR.