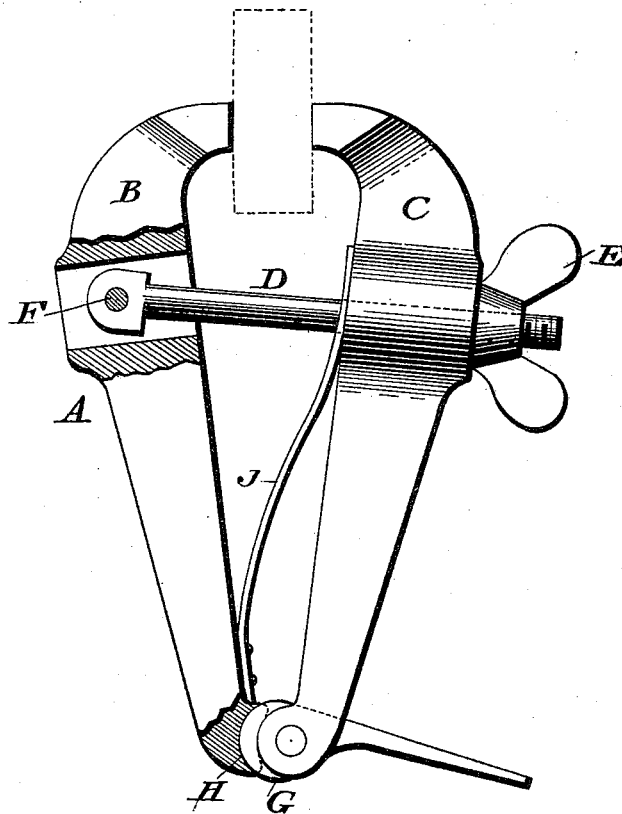


(No Model.)

W. LOREY.  
VISE.

No. 457,997.

Patented Aug. 18, 1891.



WITNESSES:

*P. H. Hoagland*  
*L. Douville*

INVENTOR:

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# UNITED STATES PATENT OFFICE.

WILLIAM LOREY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO LOREY  
& CO., OF SAME PLACE.

## WISE.

SPECIFICATION forming part of Letters Patent No. 457,997, dated August 18, 1891.

Application filed December 23, 1890. Serial No. 375,575. (No model.)

### *To all whom it may concern:*

Be it known that I, WILLIAM LOREY, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Vises, which improvement is fully set forth in the following specification and accompanying drawing.

My invention consists of a vise formed of 10 jaws, one of which has pivoted to it a screw-rod which passes freely through the other jaw and is provided with a nut whereby the jaws may be primarily adjusted on the object to be gripped or clamped. The lower portion of 15 one jaw carries an eccentric which bears against the corresponding portion of the other jaw, so that by the rotation of the eccentric the jaws are most firmly tightened on the article, and the latter is thus clamped and held 20 in a powerful manner.

The figure represents a side elevation, partly broken away, of a vise embodying my invention.

Referring to the drawing, A designates a 25 vise, and B C designate the jaws thereof. Pivoted to the jaw B is a rod D, which is passed freely through the other jaw and has its end threaded for the engagement of a nut E, which bears against the outer side of said jaw, 30 it being seen that the jaws are connected by said rod D, whereby they may be opened and closed, the pivot F of the rod constituting an axis on which the jaws turn. On the lower end of the jaw C is mounted an eccentric lever G, whose head is adapted to bear against 35 the lower end of the jaw B, said head entering a groove or recess H in the opposite portion of the jaw B as a seat.

J designates a spring which is secured to 40 the lower portion of the jaw B and bears against the upper portion of the jaw C for separating the jaws when the nut E is unscrewed, said spring extending above the axis of the jaws, the rod passing freely through 45 said spring.

It will be seen that when an article is to be gripped it is placed between the jaws and the nut rotated until the jaws take hold of said article. The lever G is now rotated, whereby its head bears against the jaw B, thus separating the jaws at their lower ends, and consequently forcing them toward each other at their upper ends, thus tightly closing on the article and holding the same in a powerful manner. 55

When the article is to be removed, the lever G is rotated in a reverse direction, thus in a measure releasing the jaws, after which the nut E is unscrewed, the spring J then separating the jaws, the effect of which is evident. 60

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

1. A vise consisting of jaws pivotally connected by a rod which is attached to one jaw, 65 passes through the other jaw, and provided with a nut which bears against the adjacent jaw, substantially as described.

2. The jaws pivotally connected by a rod which is provided with a tightening-nut and adapted to be further tightened by an eccentric which is pivoted to one jaw below the 70 axis of the jaws and bearing against the adjacent portion of the other jaw, substantially as described.

3. A vise having jaws pivoted together, and a spring which is secured to one jaw and bears against the other jaw above the axis thereof, substantially as described. 75

4. A vise having its jaws adjustably connected near the grip portions thereof by a 80 pivotal rod and are additionally adjusted at the heel ends of the same by an eccentric or equivalent, substantially as described.

WILLIAM LOREY.

Witnesses:

JOHN A. WIEDERSHEIM,  
L. JENNINGS.