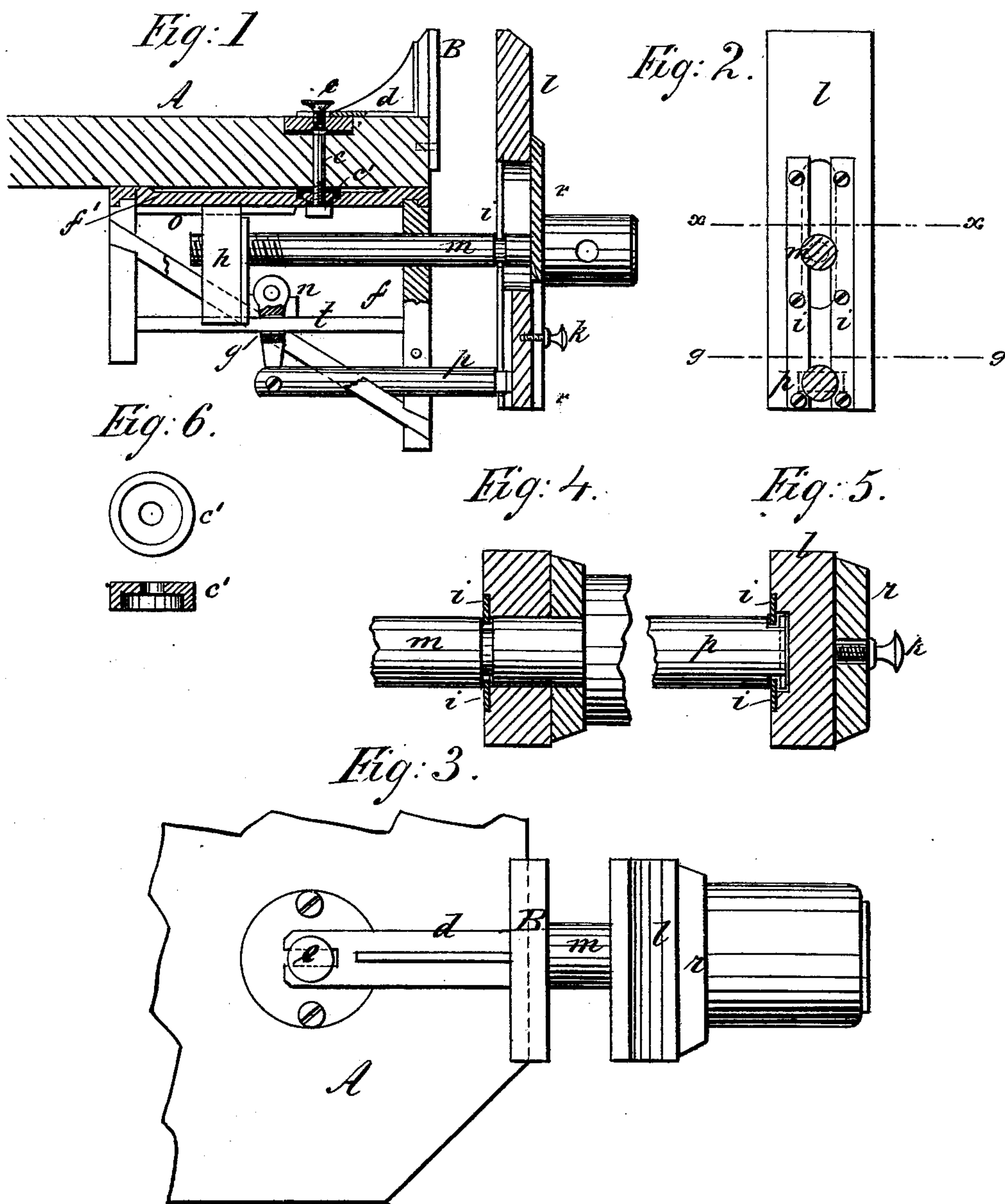


N. E. LOVEJOY.  
Vise.

No. 229,432

Patented June 29, 1880.



WITNESSES:

A. Sehehl.  
C. Dickinson

INVENTOR:

N. E. Lovejoy  
BY *Munn Ho*  
ATTORNEYS.

# UNITED STATES PATENT OFFICE.

NATHAN E. LOVEJOY, OF COLUMBUS, OHIO.

## WISE.

SPECIFICATION forming part of Letters Patent No. 229,432, dated June 29, 1880.

Application filed February 25, 1880.

To all whom it may concern:

Be it known that I, NATHAN E. LOVEJOY, of Columbus, in the county of Franklin and State of Ohio, have invented a new and useful Improvement in Vises, of which the following is a specification.

The invention consists in combining a bench hook or screw fitted in the table with a swinging frame and clamping-jaw, as hereinafter described.

In the drawings, Figure 1 is a vertical section of the vise and table. Fig. 2 is a face view of the outer jaw of the vise. Fig. 3 is a plan view. Fig. 4 is a horizontal section on line *xx* of Fig. 2. Fig. 5 is a horizontal section on line *yy* of Fig. 2.

Similar letters of reference indicate corresponding parts.

A is the work-table, having its corner cut off, as shown in Fig. 3, to give a bearing for the vise upon the corner as well as on the side and end of the table.

*f* is the frame of the vise, *h* the nut, *m* the screw, and *l* the outer or moving jaw of the vise. The nut *h* slides upon the lower bar, *t*, of the frame, and is guided by a strip, *o*, that is attached to the under side of the top piece, *f'*, of frame *f*, whereby the nut is prevented from turning or twisting.

Upon the forward side of the nut *h* is a projection, *n*, from which hangs a clutch, *g*, that is apertured for the bar *t* to pass through, and from the lower end of clutch *g* a rod, *p*, passes to the jaw *l*. The rod *p* moves back and forth with the nut and outer jaw, and serves to make the clutch *g* bite upon the rod *p* when the jaw *l* is moved by turning screw *m*, and thus locks the jaw in position.

The frame *f* is pivoted directly to the table A by a pin, *c*, that passes through the table and through the top piece, *f'*, of frame *f*, there being a nut on the lower end of screw *c* to hold the frame upon the pin.

Around the pin *c*, between the table and piece *f'*, is a washer, *c'*, (shown separately in Fig. 6,) which forms a bearing on which the frame *f* turns.

By this construction the jaw *l*, with the screw and nut and coupling-rod *p*, may be moved in and out of the frame *f*, and also turned with the frame to the side, end, or corner of the table.

The jaw *l* is slotted for the screw *m* to pass through, and is fitted on its inner side with slide plates or ways *i*, which project beyond the edges of the slot and enter an annular groove of the screw *m*, so that the jaw *l* is held in place on the screw and may be moved vertically. To the outer end of screw *m* is attached a plate, *r*, through a slot in which a set-screw, *k*, passes in the jaw *l*, so that the jaw may be clamped in position as adjusted.

B is the extra jaw, for use with the jaw *l* when the latter is raised. This jaw B is formed with a slotted horizontal extension, *d*, to rest on the table A, while the lower end of the vertical portion of the jaw bears upon the edge of the table, and is fitted with pins entering holes in the table edge to prevent displacement. The slotted end of the portion *d* passes beneath the screw bench-hook *e*, which serves as a set-screw to clamp the portion *d* and hold the jaw B firmly. This construction and arrangement of the jaw B permit the frame and movable clamp-jaw to be turned while the jaw remains attached to the table.

The coupling-rod *p* is attached to the jaw *l*, as shown in Fig. 5, by the slideways *i*, which enter a groove in rod *p* in the same manner as the screw *m* is held. This construction saves weakening of the jaw by mortising, and furnishes a cheap and strong connection.

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

The combination of the bench hook or screw *e*, fitted in the table, with the swinging frame *f* and clamping-jaw *l*, substantially as and for the purpose specified.

NATHAN E. LOVEJOY.

Witnesses:

GEO. D. WALKER,  
C. SEDGWICK.