

H. E. LONG.

Wood Vise for a Joiner's Bench.

No. 68,519.

Patented Sept. 3, 1867.

Fig. 1.

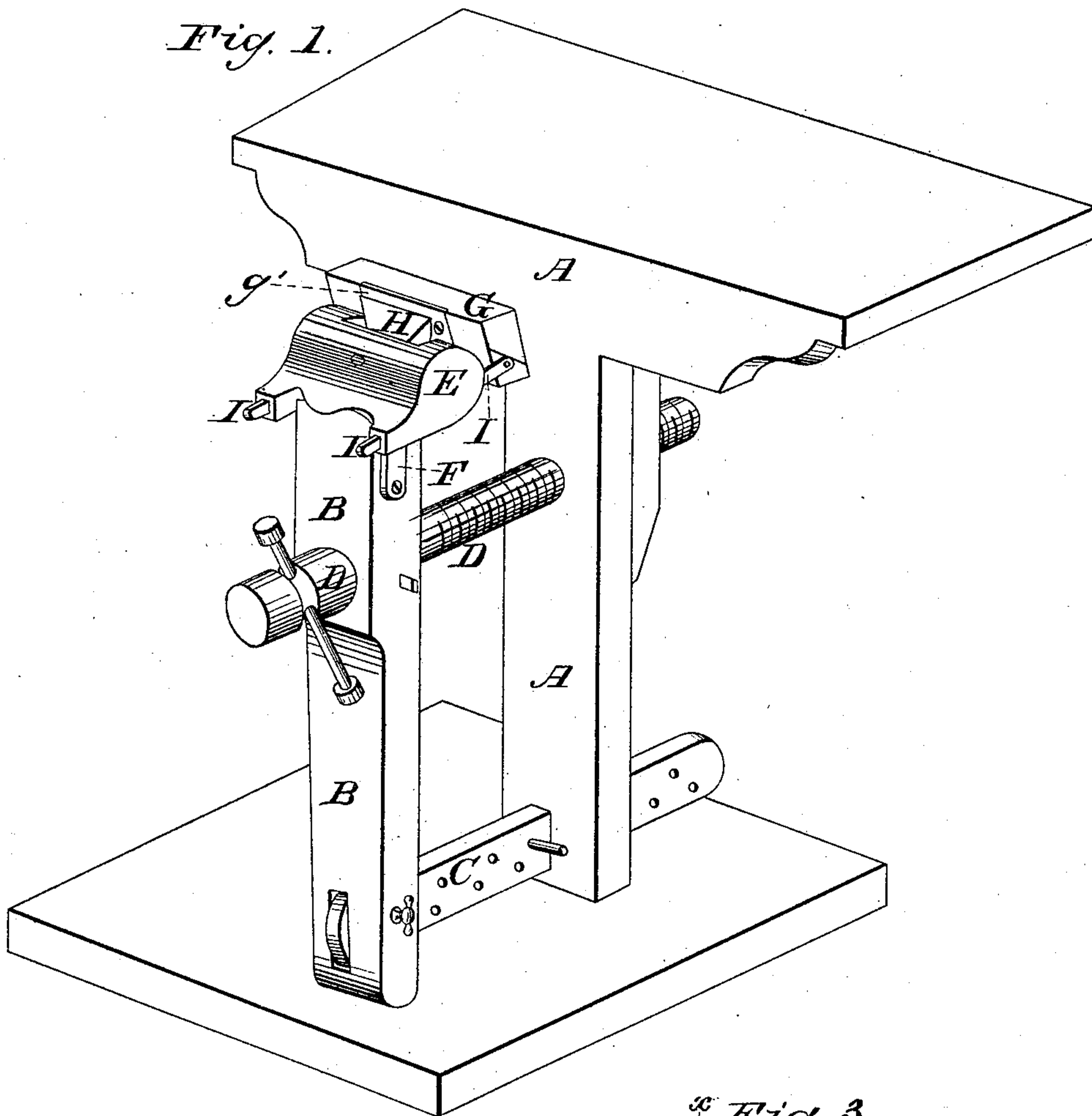
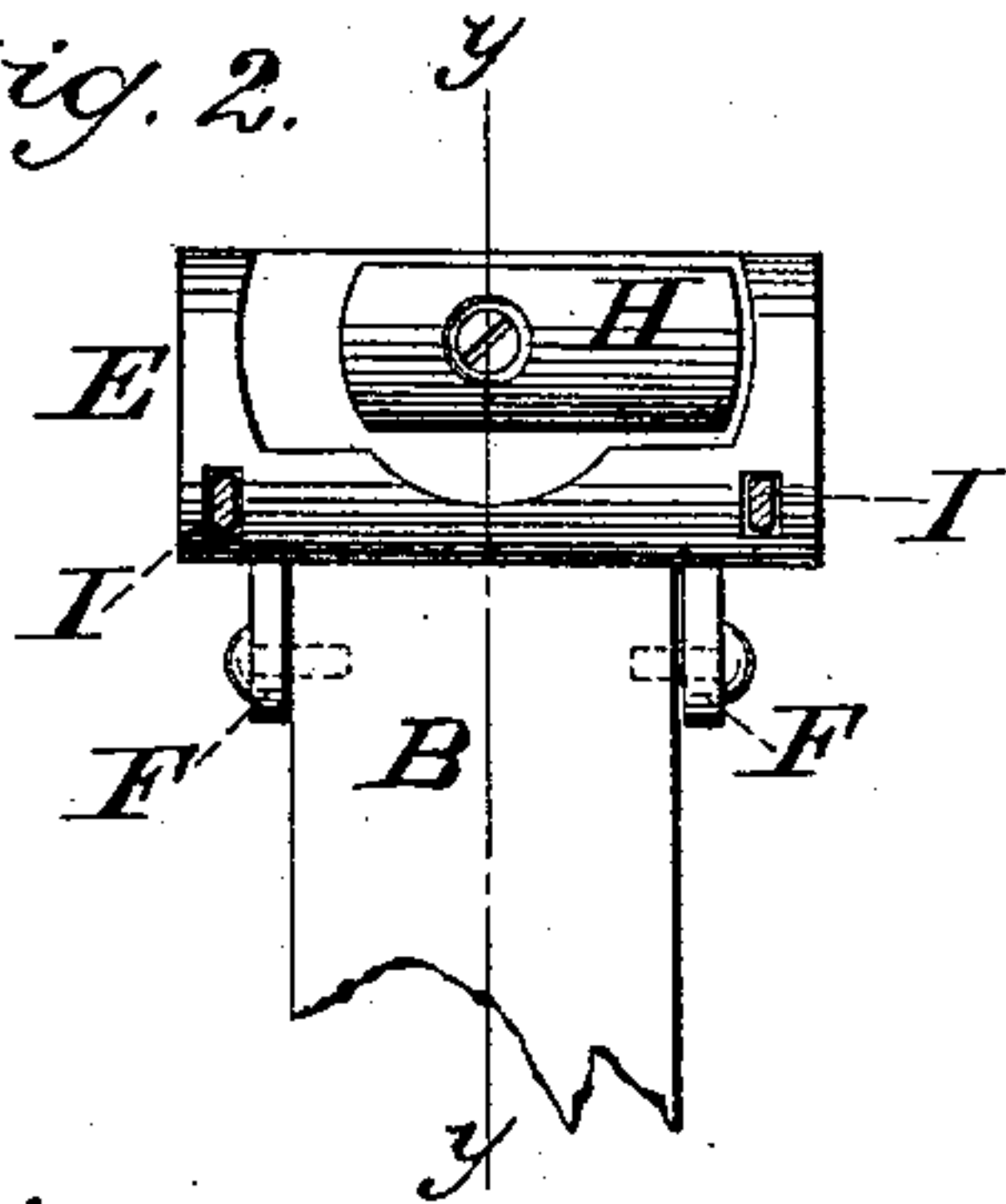
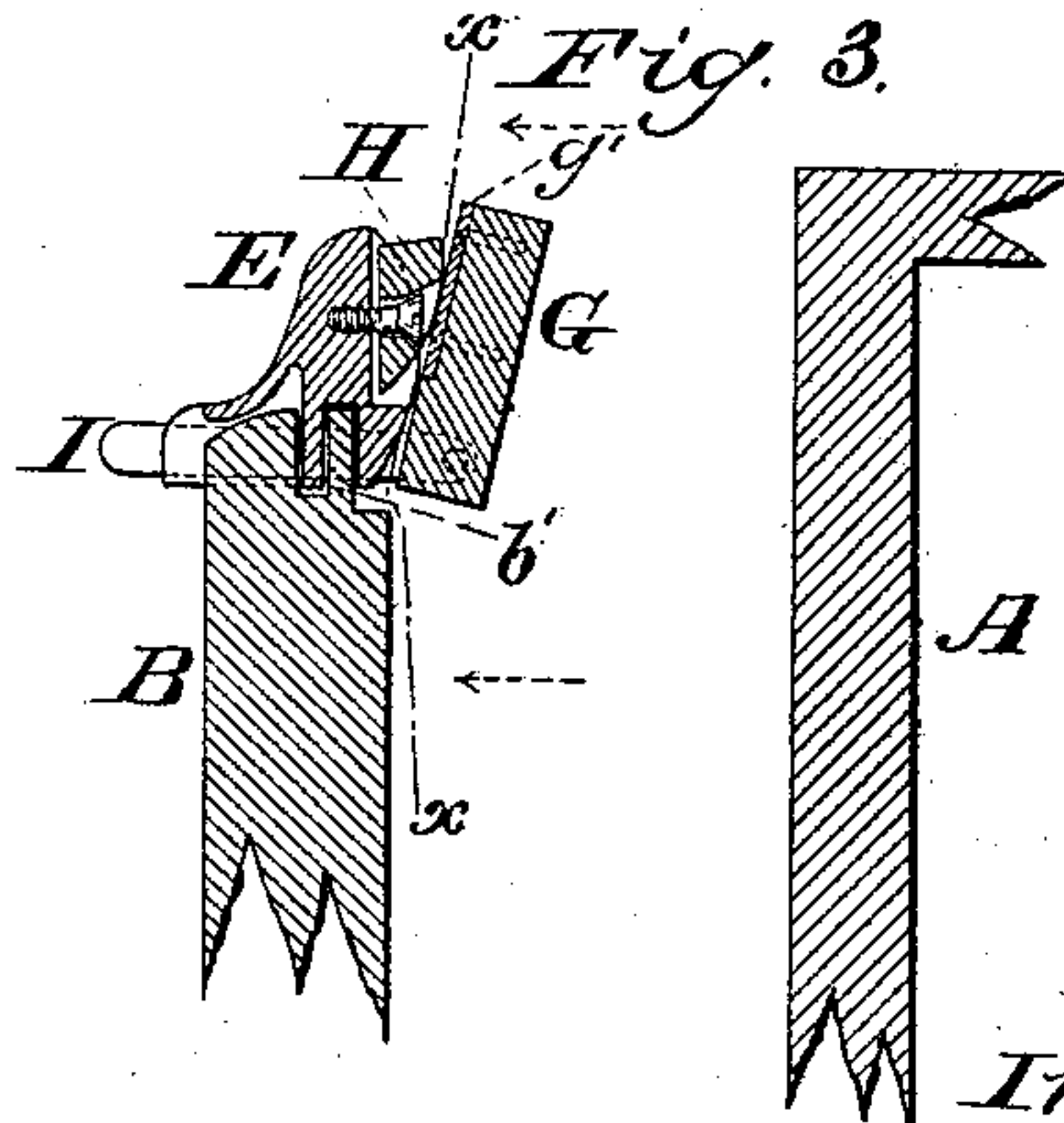


Fig. 2.



Witnesses:
Thos. Tinsche
J. A. Service

Fig. 3.



Inventor:
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United States Patent Office.

H. E. LONG, OF PLYMOUTH, INDIANA.

Letters Patent No. 68,519, dated September 3, 1867.

IMPROVEMENT IN WOOD VISES FOR A JOINER'S BENCH.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, H. E. LONG, of Plymouth, in the county of Marshall, and State of Indiana, have invented a new and useful Improvement in Vise; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification, in which—

Figure 1 is a perspective view of my improved vise.

Figure 2 is a detail sectional view of the same, taken through the line *x x*, fig. 3.

Figure 3 is a detail sectional view of the same, taken through the line *y y*, fig. 2.

Similar letters of reference indicate like parts.

My invention has for its object to furnish an improved vise, the head of the movable jaw of which shall be so constructed that it will adjust itself to the various forms and thicknesses of the objects held without its being necessary to adjust the position of the lower end of the movable jaw every time a different article is placed in the vise; and it consists in the construction of the various parts of the head of the movable jaw, and in their combination with each other.

A represents the stationary jaw of the vise, which may be the edge of the bench if desired. B is the movable jaw of the vise, the position of the lower end of which is adjusted by the arm C, one end of which is pivoted to the said lower end of the said jaw, and which passes through a slot in the lower part of the stationary jaw A or in the frame of the bench. The arm C has numerous holes formed through it, and it is held in place by passing a pin through one or the other of these holes. D is the screw, by means of which the article to be held is clamped between the jaws of the vise. The jaw B is made with a semicircular recess in its upper end, in the centre of which projects a pin, *b'*, upon which the iron head E is pivoted, as shown in fig. 3, so as to have a horizontal movement. This movement may be limited or prevented, when desired, by the buttons F, pivoted to the edges of the jaw B in such positions that they may be turned up into recesses in the head E, as shown in figs. 1 and 2. The face of the head E is made curved, as shown in fig. 3, so as to furnish a firm bearing for the face-plate G, whatever position the form of the object held may compel that plate to take. In the face of the head E is formed a recess in which is pivoted a button, H, which is so formed that when turned in one direction its face may correspond with the face of the head E, but when turned half around into the position shown in the drawings, its upper edge may project to support the upper edge of the face-plate G when the object held is of such a form that the jaws of the vise can take only a shallow hold upon it. I are arms or bars passing through and working in slots in the head E near its ends. Upon the inner sides of the inner ends of the bars I are formed pins which enter holes or sockets in the lower parts of the end edges of the face-plate G and pivot the said plate so that it may adjust itself to the form of the object being held. These pivoting pins enter the face-plate G near its forward edge so that its weight may hold it back against the face of the head E. *g'* is a metallic plate attached to the rear side of the face-plate G to prevent it from being worn by the edge of the button H. By this construction and arrangement of the head E and its various attachments the jaws of the vise can adjust themselves or can be readily adjusted to hold objects of various forms and thicknesses without its being necessary to adjust the lower end of the movable jaw every time a different object is placed in the vise.

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the pivoted head E having the pivoted button H, and provided with holes for the passage of the arms I pivoted to the face-plate G, said face-plate having the plate *g'*, constructed as herein set forth for the purpose specified.

Witnesses:

D. E. SIMONS,
AMASA JOHNSON.

H. E. LONG.