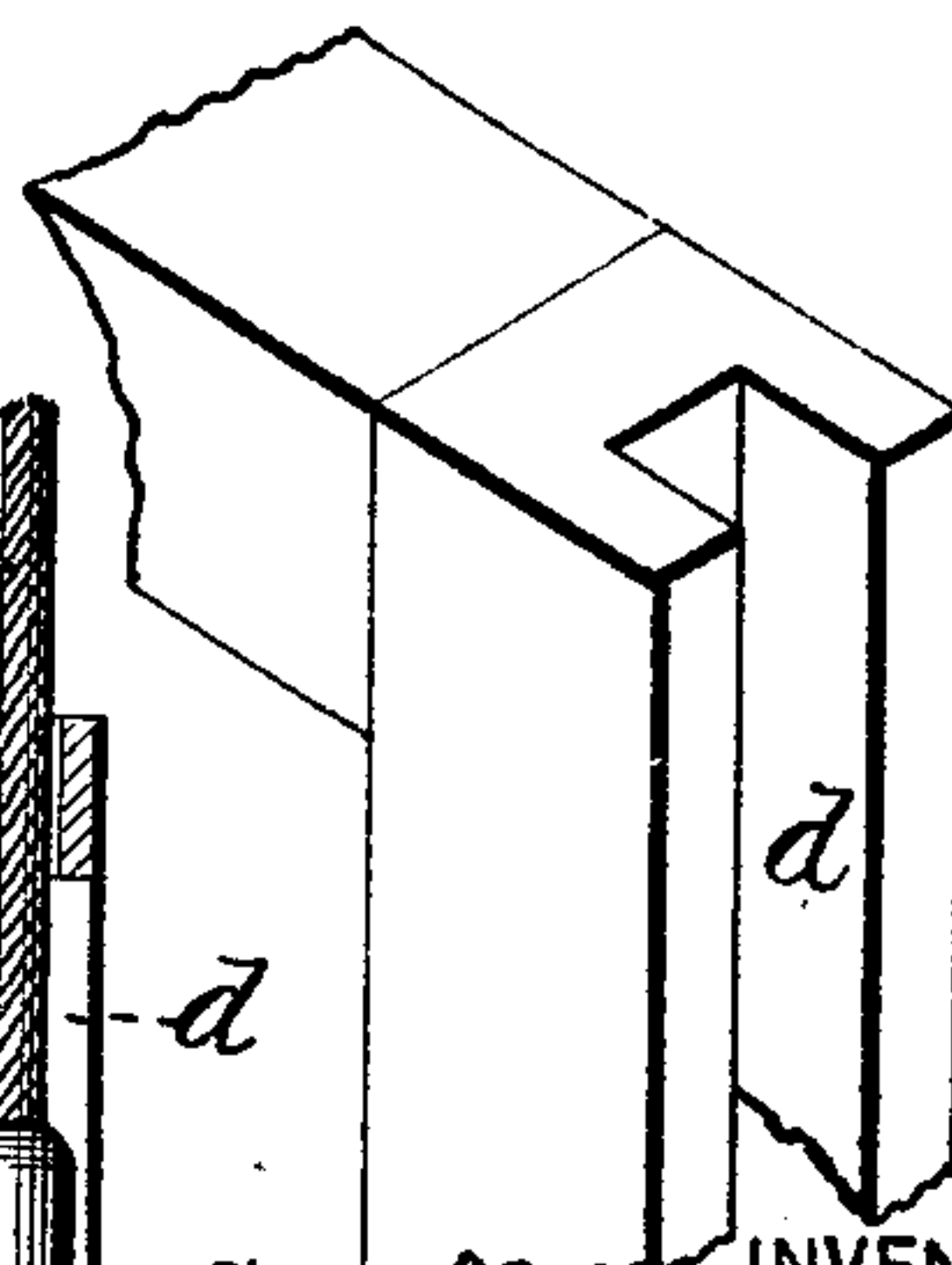
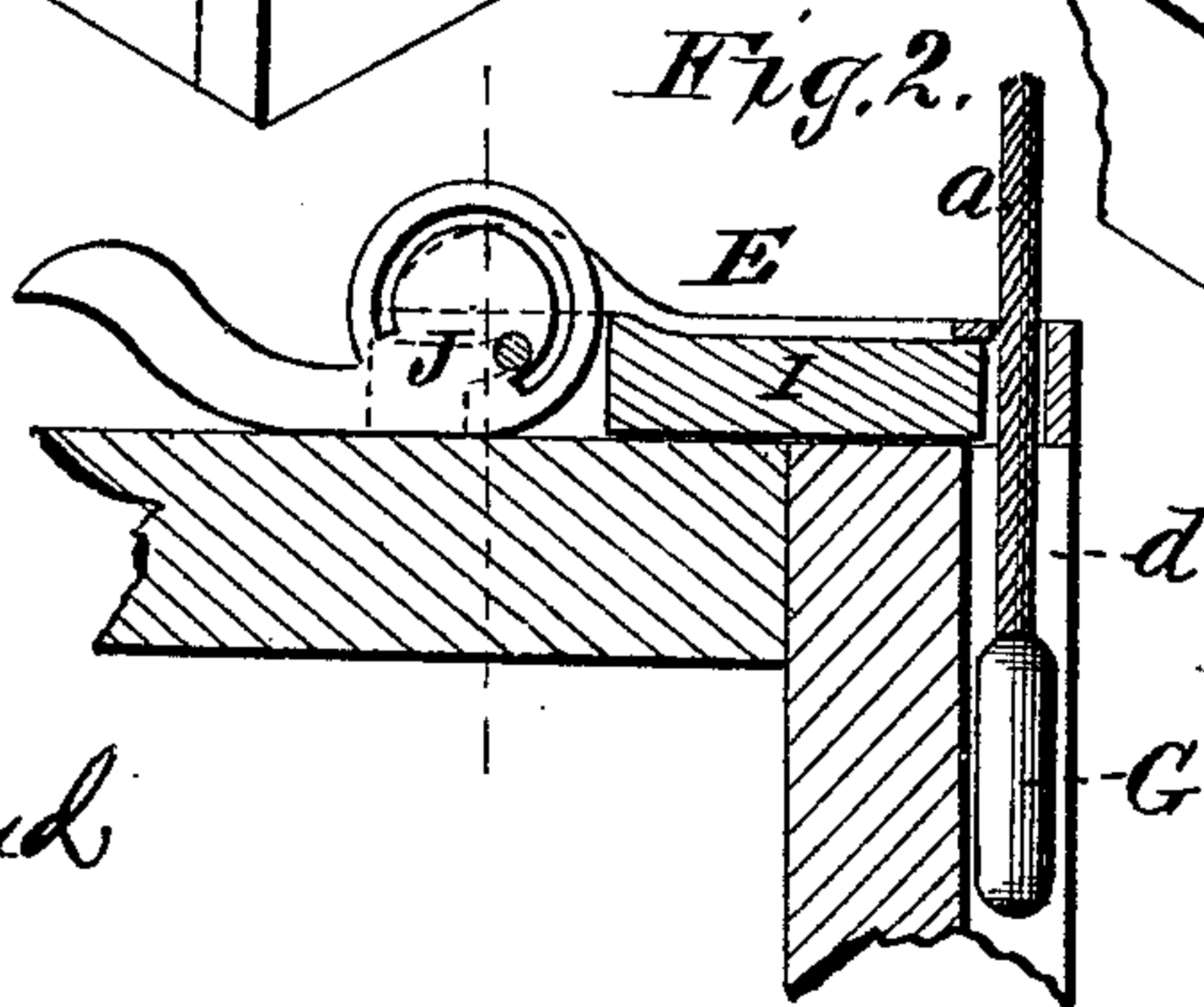
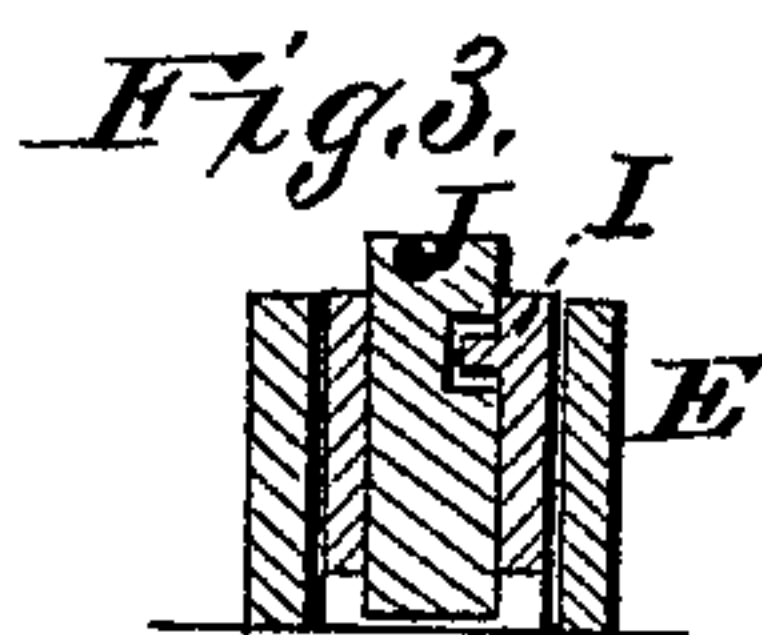
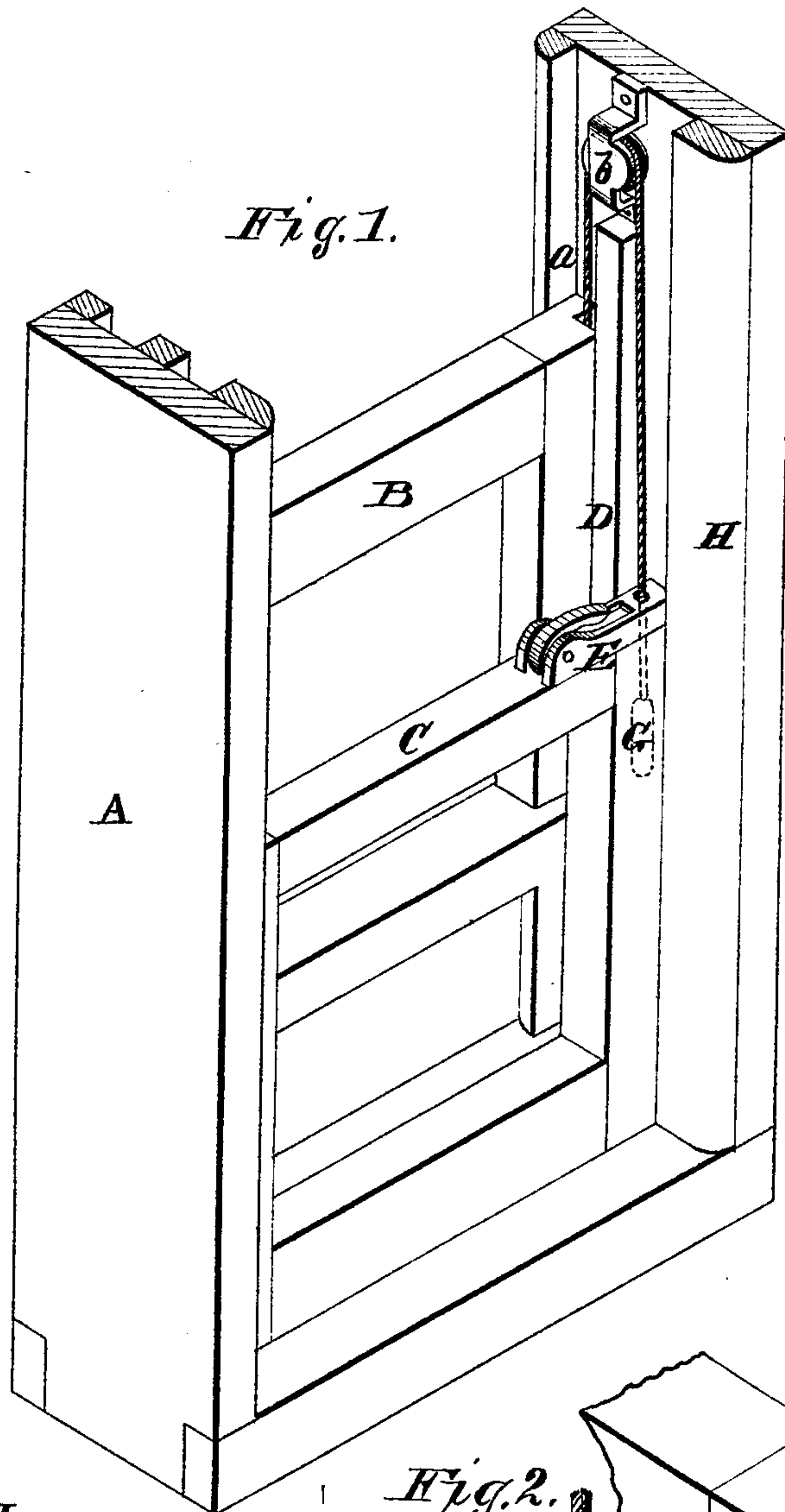


W. C. BARNES.  
SASH-BALANCES.

No. 183,885.

Patented Oct. 31, 1876.



WITNESSES  
*Frank L. Outland*  
*Henry A. Miller*

INVENTOR  
*Wm C. Barnes*  
*Alexander & Mason*  
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# UNITED STATES PATENT OFFICE.

WILLIAM C. BARNES, OF MEXICO, MISSOURI.

## IMPROVEMENT IN SASH-BALANCES.

Specification forming part of Letters Patent No. **183,885**, dated October 31, 1876; application filed September 9, 1876.

*To all whom it may concern:*

Be it known that I, WILLIAM C. BARNES, of Mexico, in the county of Audrain, and in the State of Missouri, have invented certain new and useful Improvements in Window-Sash Balances; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention relates to the construction and arrangement of a sash-balance; and it consists in the novel construction and arrangement of a box inclosing a slide, operated by a pivoted cam, in combination with the two sashes and cord, as hereinafter more fully described and definitely claimed.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of my invention, and Figs. 2 and 3 are detailed views of parts thereof.

A represents the window-frame, with the upper sash B and lower sash C. D is the parting-strip between the two sashes. To each side of the upper sash B, near the upper end, is fastened a cord, *a*, which passes over a pulley, *b*, at the top of the parting-strip D, and down in front thereof. This end of the cord

passes through a hole in the end of a box, E which is fastened on top of the top rail of the lower sash C, and the cord extends down into a vertical groove, *d*, made in the side rail of the sash, and the cord has a weight, G, attached to it within said groove. Within the box E is a slide, I, operated by means of a cam-lever, J, pivoted at the inner end of the box.

By throwing the lever over outward on the slide, as shown in Fig. 1, the slide is pushed outward, and binds on the cord *a*, so as to lock the same in place, and thereby balancing the two sashes. By throwing the cam-lever J back from the slide, this is drawn away from the cord and the cord released, so that either sash can be raised or lowered without interfering with the other.

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

The box E, slide I, and pivoted cam-lever J, in combination with the sashes B and C and cord *a*, substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 8th day of August, 1876.

WILLIAM C. BARNES.

Witnesses:

J. C. BASSFORD,  
L. C. SWERER.