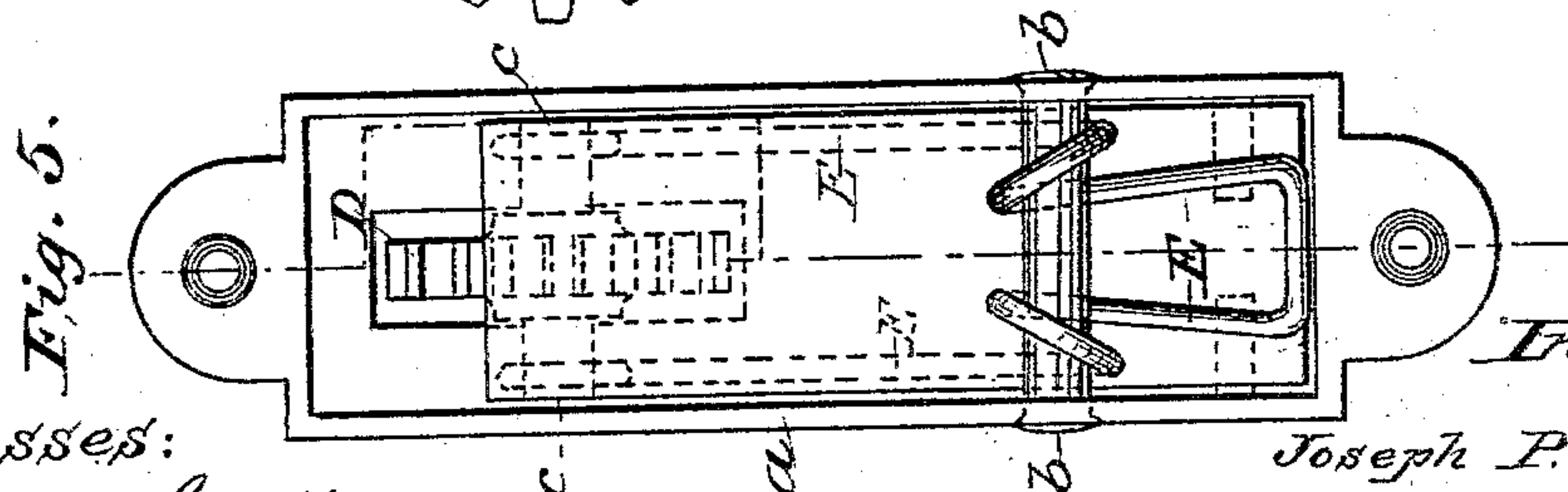
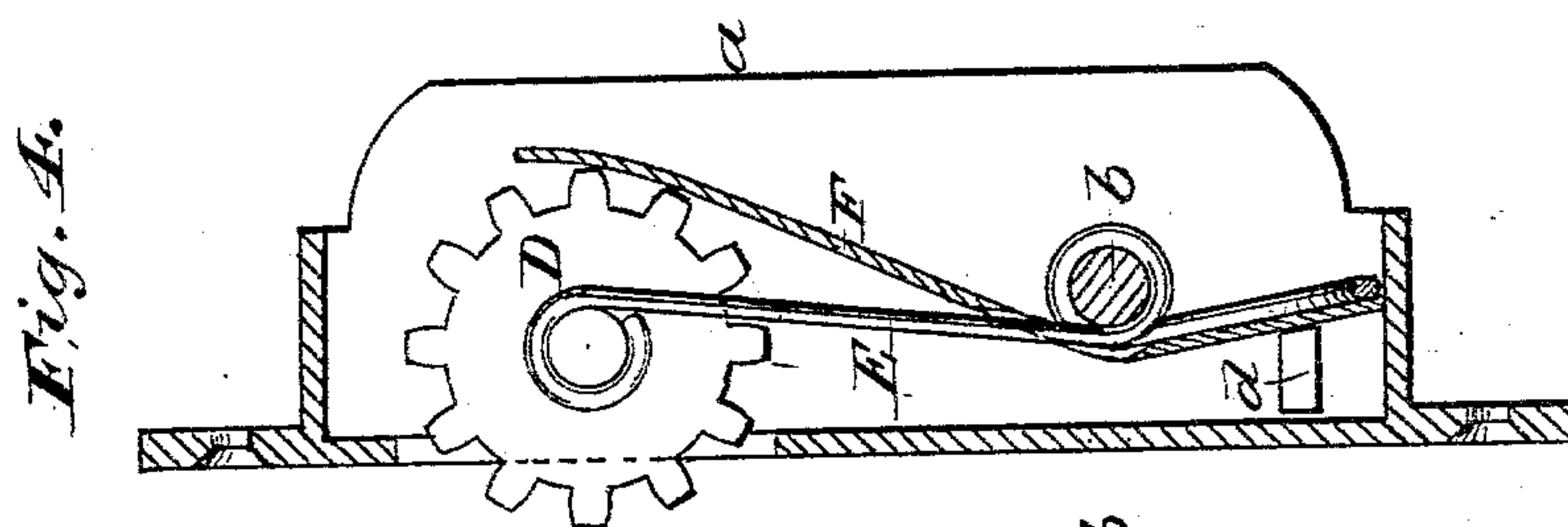
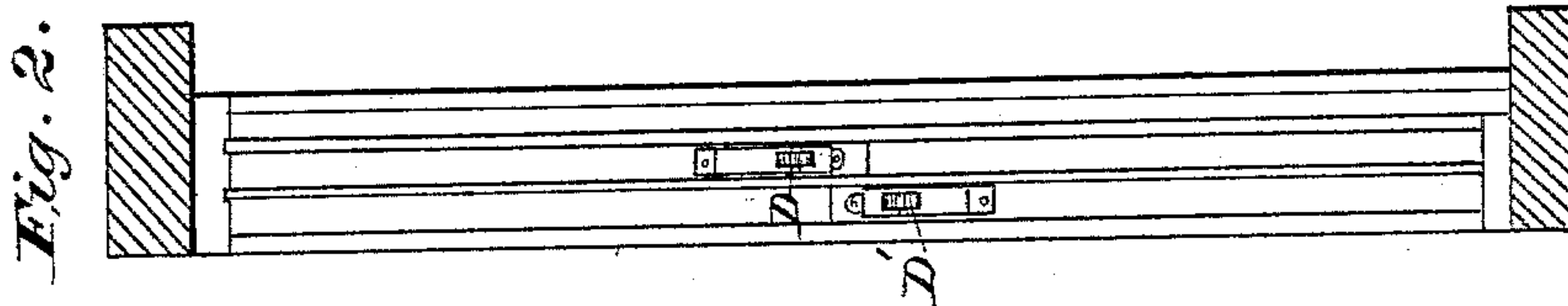
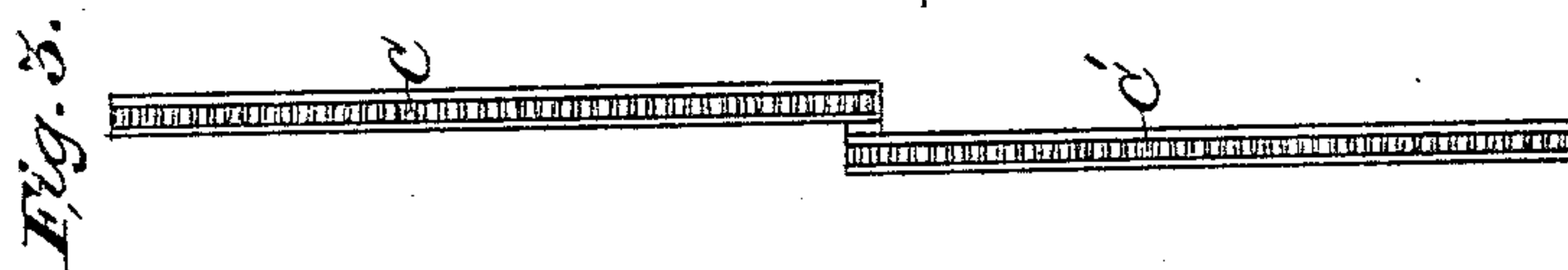
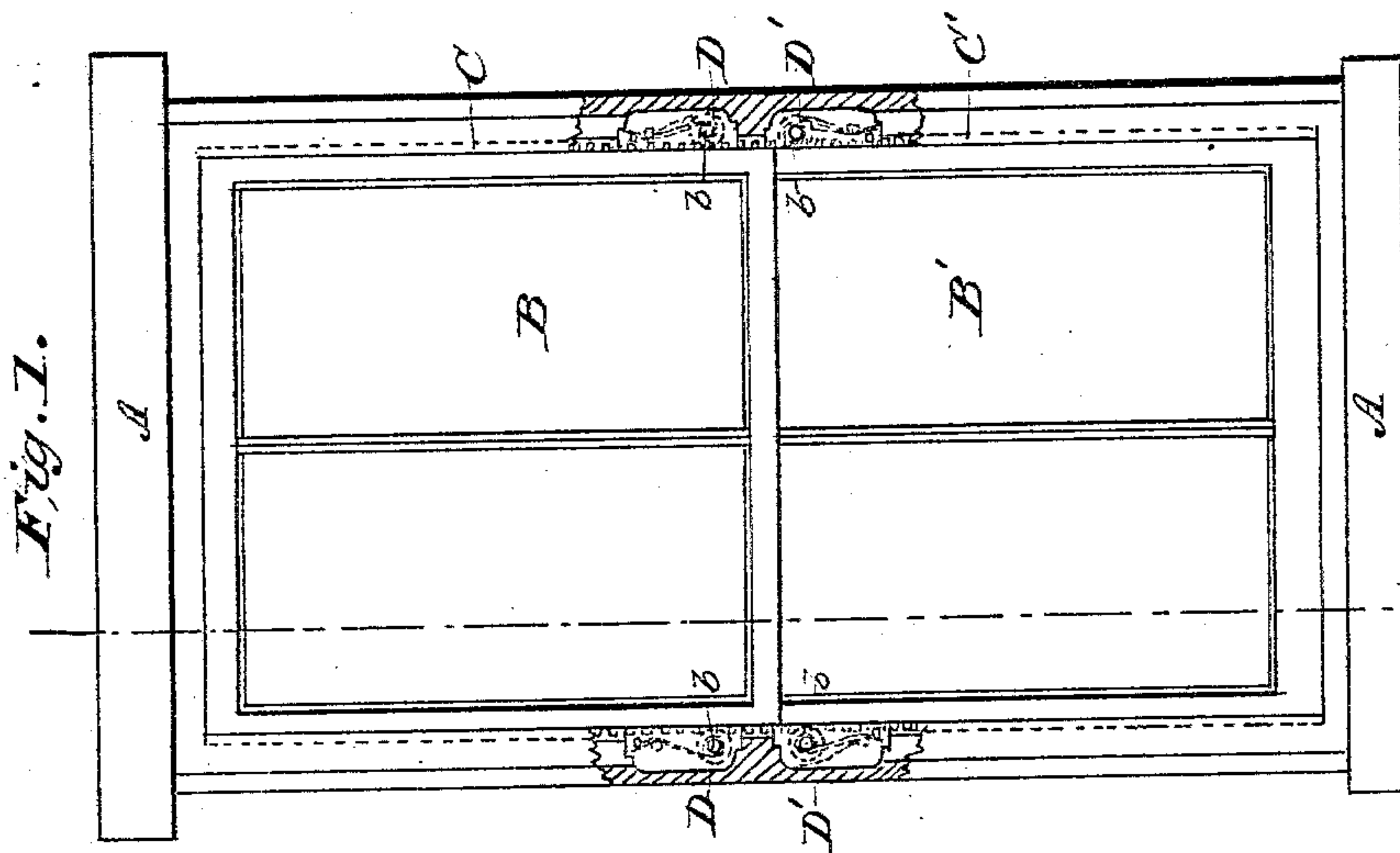


(Model.)

J. P. CENTNER.
SASH HOLDER.

No. 300,307.

Patented June 10, 1884.



Witnesses:

James Scott
J. B. Richard

Inventor:

Joseph P. Centner,
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Attorney.

UNITED STATES PATENT OFFICE.

JOSEPH PETER CENTNER, OF PITTSBURG, PENNSYLVANIA.

SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 300,307, dated June 10, 1884.

Application filed September 24, 1883. (Model.)

To all whom it may concern:

Be it known that I, JOSEPH P. CENTNER, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Sash-Holders; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in sash-holders; and the object is to produce a sash-holder that is reliable at all times, holding the sash in any position desired, which is not liable to get out of order, and can be readily applied to new as well as old windows, and at a very moderate expense.

The invention consists in securing to the sides of the sash a rack or toothed plate, into the teeth of which a pinion meshes. Said pinion is journaled in a spring, bent at its outer end around the axle of the pinion on both of its sides, and turned over a pin attached to the sides of a metal box or case, and bearing with its rear end on a projection or rib on said box. A flat auxiliary spring attached to the pin assists in forcing the pinion into contact with the rack.

It also consists in certain details of construction, as will be more fully described hereinafter, and more specifically pointed out in the claims, reference being had to the accompanying drawings.

Like letters of reference indicate like parts in the different figures of the drawings, in which—

Figure 1 represents a side elevation of a window-frame and sashes, partly in section. Fig. 2 is a vertical cross-section on line *x x* of Fig. 1. Fig. 3 is an edge view of the sashes, showing the racks or toothed plates. Fig. 4 is an enlarged sectional view of the box with the pinion and springs. Fig. 5 is a plan view of the same.

In the drawings, A represents a window-frame, and B B' are the sashes, made of any required size. To the sides of the sashes are secured the racks C C' in any suitable manner. The sashes are recessed for the reception of said racks, so as to present a flush or even side. In the frame are fitted the boxes

or receptacles *a*, made of any suitable material, and in them the pinions D D' are journaled by means of a pin, *b*, and wire spring E. This spring is forked or recessed, and the forked ends embrace the axle *c* of the pinion on each side. It is then turned around the pin *b* near its rear end, and bears with the projecting part on a cross-bar, *d*, secured or cast to the box *a*. Between the forked ends of the spring E is arranged a lighter flat auxiliary spring, F, which passes under the pin *b*. This spring assists the main spring in forcing the pinion into contact with the rack, so as to mesh with it. The springs may be made of steel, brass, or other metal. The racks and pinions may be made of any suitable material and size, according to the requirements of the case.

The advantages of my improved sash-holder will be readily appreciated, and among some of them may be mentioned that it is perfectly noiseless, it will hold a sash in any position desired, it is automatic in its operation, it is out of sight entirely, it is not liable to get out of order, it can be produced at a very reasonable cost, and can be readily applied to new as well as old sashes and windows.

It will be readily understood that the racks and pinions may be reversed—i. e., the racks may be secured to the frame of the window and the pinions attached, with their casing, to the sashes—without departing from the spirit of my invention, although I prefer the arrangement shown and described above.

If desired, only one rack and pinion may be employed on one side of each sash, instead of using one on each side, although not so good.

The operation is as follows: The pinions are forced into contact with the teeth of the racks or toothed plates, with which they mesh, by means of the main spring E, as well as the auxiliary spring F. The sash will remain stationary at any desired height until forced up or down by the person operating it. It will be readily understood that the pinions, being in elastic or yielding bearings, will be forced back when the sash is raised or lowered, and at any point it is stopped the pinions will of course be forced into contact with the racks, and by the pressure of the springs on the pinions will securely hold the sash wherever desired.

I am aware that ratchets and pawls operating window-sashes are old; also, that ratchet-teeth plates and pawls, as well as cams or eccentrics with teeth or roughened surfaces to form a friction or gripping device, are old, and I therefore disclaim all such; but,

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

10 1. A sash-holder consisting of a box or casing containing a pinion journaled in a spring secured to a cross-pin, and bearing against a cross-bar, *d*, substantially as shown, and for the purpose set forth.

2. The combination of racks C, secured to a window sash or frame, with pinions D, journaled in a forked spring, E, secured to a pin, *b*, attached to a receptacle, *a*, and an auxiliary spring, F, all constructed and arranged substantially as and for the purpose herein set forth.

In testimony whereof I hereby affix my signature in presence of two witnesses.

JOSEPH PETER CENTNER.

Witnesses:

JAMES SCOTT,
J. B. RICHARDS.