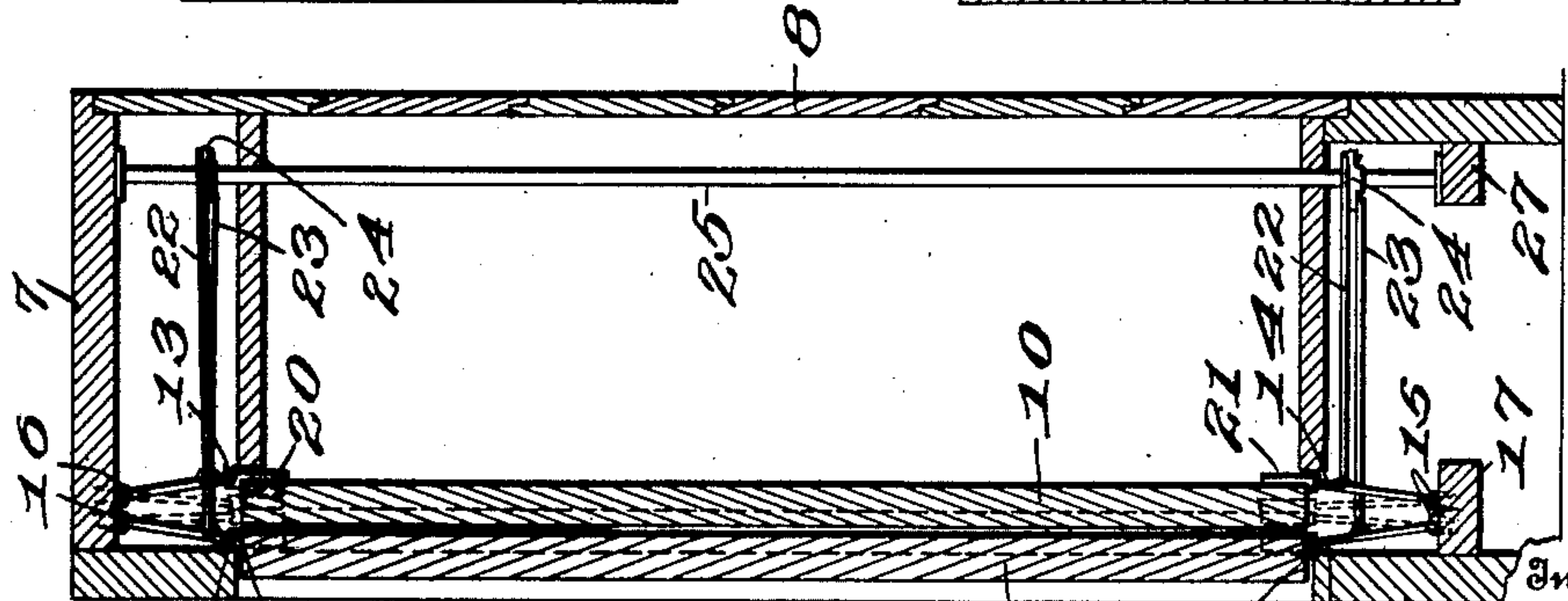
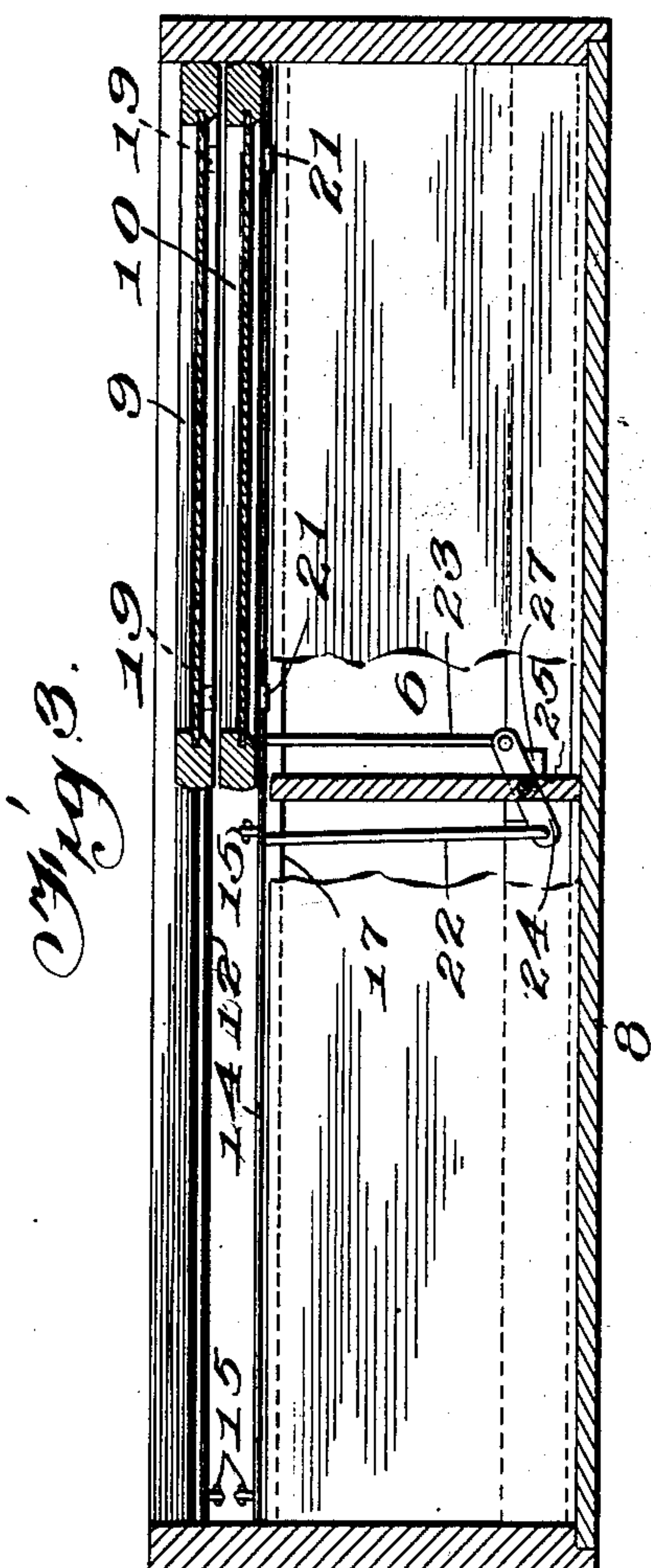
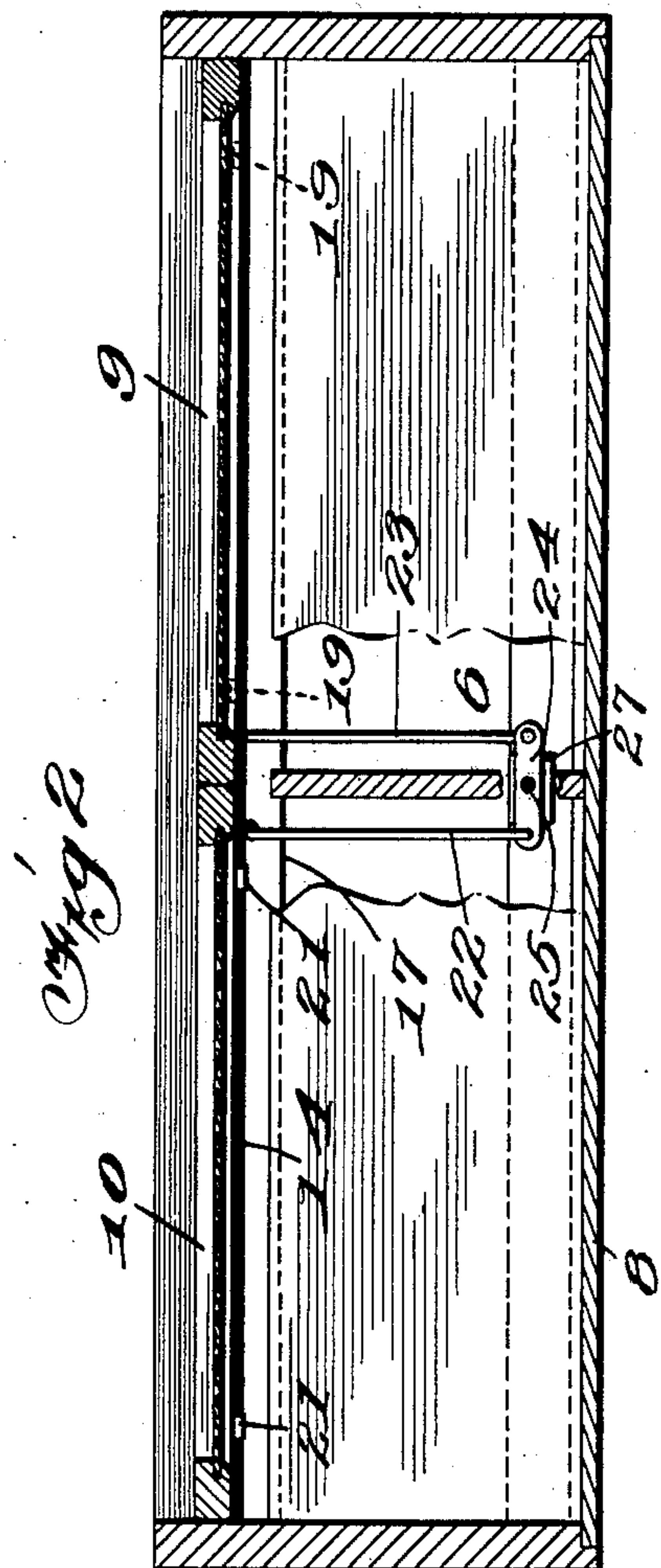


E. R. JACKSON.
SLIDING DOOR.

APPLICATION FILED JULY 2, 1908.

921,708.

Patented May 18, 1909.



Witnesses

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Fig 1

334

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EARLE R. JACKSON, OF MAYWOOD, ILLINOIS.

SLIDING DOOR.

No. 921,708.

Specification of Letters Patent.

Patented May 18, 1909.

Application filed July 2, 1908. Serial No. 441,683.

To all whom it may concern:

Be it known that I, EARLE R. JACKSON, citizen of the United States, residing at Maywood, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sliding Doors, of which the following is a specification.

This invention relates to sliding doors particularly adapted for use in connection with show-cases, file-cases, wardrobes and the like, but capable of use in any other structure where sliding doors are used.

The object of the invention is to provide improved means whereby a pair of sliding doors may be brought flush with each other when closed, and in which one will pass behind the other when opened.

The apparatus includes improved means for causing lateral movement of the respective doors to enable one to pass behind the other, or to cause them to close in alinement with each other.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section of a case having sliding doors provided with the invention, the doors being open; Fig. 2 is a horizontal section with the doors closed; and Fig. 3 is a horizontal section with the doors open.

Referring specifically to the drawings, 6 indicates the base of the case and 7 the top and 8 the back, and these parts may be substituted by any suitable casing, according to the conditions under which the sliding doors are used. One door is indicated at 9, and the other at 10, the former being in front when the doors are open and the latter behind. The former slides on top and bottom guides or rails 11 and 12 and the latter on similar rails 13 and 14. These guide rails consist of metal plates having a length equal to the width of the doorway, and the lower guides are pivoted at their lower edges to swing laterally, by staples 15, and the upper guides are hung to swing laterally by staples 16, the former being driven into a cross piece 17 in the base of the case and the latter being driven into the top piece of the case. The respective guides at top and bottom are located one behind the other, and will swing toward or from each other, after the manner of leaves. The front door is mounted on its guides by means of grooved supports 18 and 19 which are set in the back edge of the door, and the rear door is mounted upon its guides by

means of similar grooved supports 20 and 21 which are secured to the back of said door, whereby the supports of the front door are slightly offset or out of alinement with the supports of the rear door, when the doors are closed, as indicated in dotted lines in Fig. 1, the purpose being to bring the outer surfaces of the doors flush with each other when they are closed, as shown in dotted lines in Fig. 1 and in full lines in Fig. 2. The respective guides at the top and bottom are connected by rods 22 and 23 with opposite ends of levers 24 fast on a vertical rod 25 which, for the purpose of concealing the same, may be set in a partition at the middle of the case. Or, if no partition is used, the rod is left exposed. The lower end of the rod is set in a bearing in a block 27 in the base of the case and the upper end is set in a bearing in the top 7.

In consequence of the lateral movement or swing of the guides on which the doors slide, said doors may be swung to pass each other. Assuming that the case is closed, to open the same the door 10 is pressed in, which causes it to recede, its supports 13 and 14 swinging backwardly, and this movement swings the supports 11 and 12, and consequently the door 9, forwardly. The doors being thus brought out of alinement, either or both can be slid sidewise, as usual, to open the same. When they are again closed, the door 9 is pushed back or in, bringing the door 10 forward and flush therewith. The guides are so placed that the center of gravity of the doors falls beyond center when either open or closed, thereby causing the doors to set in the desired position. Obviously rollers or other anti-friction devices may be used instead of the grooved supports at the top and bottom of the doors. The levers and connecting rods are preferably concealed in the top and bottom compartments of the case, as shown in Fig. 1.

Various modifications may be made within the scope of the invention, especially with respect to the particular construction of the supporting guides, and no limitation is implied by reason of the exact structure shown and described.

I claim:

1. The combination of a pair of sliding doors shiftable respectively in and out to bring said doors in or out of alinement with each other, and means connecting the doors to cause opposite relative shift thereof.

2. The combination of a pair of sliding doors, guides upon which said doors are mounted, said guides being movable laterally with respect to the line of travel of the doors, to bring the doors in or out of alinement with each other, and connections between the guides, constructed to cause opposite movement thereof.

3. The combination of a pair of sliding doors, guides upon which said doors are mounted, said guides being pivotally mounted to swing laterally with respect to the line of travel of the doors, to bring them in or out of alinement with each other, and connections between the guides, constructed to cause opposite swing thereof respectively.

4. The combination of a pair of sliding doors, guides at top and bottom thereof, between which the doors are mounted, the guides being movable laterally with respect to the line of travel of the doors to bring the same in or out of alinement with each

other, and connections between the guides at top and bottom, constructed to cause similar movement thereof.

5. The combination of a pair of sliding doors, guides for each door at top and bottom thereof, on which the doors are supported and slidable, said guides being pivotally mounted to swing laterally with respect to the line of travel of the doors, to bring the doors in or out of alinement with each other, and connections between the guides to cause uniform movement thereof, comprising an upright shaft behind the doors, provided with levers, and rods connecting the guides and the opposite ends of the levers.

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

EARLE R. JACKSON.

Witnesses:

WM. J. ROBINSON,
NELLIE FELTSKOG.