

B. L. BITTING.
DOOR RELEASING APPARATUS.
APPLICATION FILED APR. 7, 1910.

961,578.

Patented June 14, 1910.

2 SHEETS—SHEET 1.

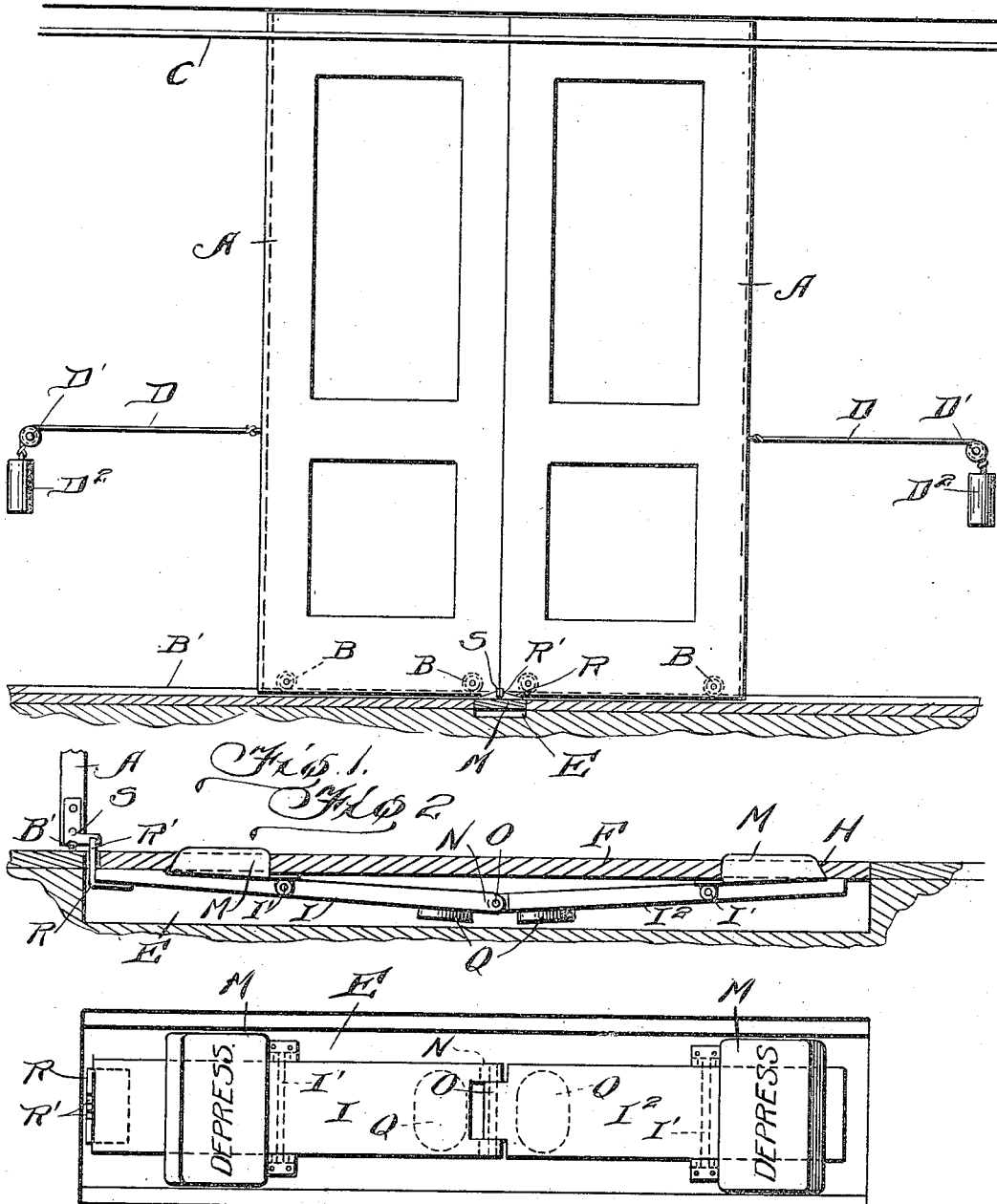


Fig. 3.

Inventor

Witnesses

Geo. L. Thompson
A. L. Hough

B. L. Bitting
by *Franklin H. Hough*

Attorney

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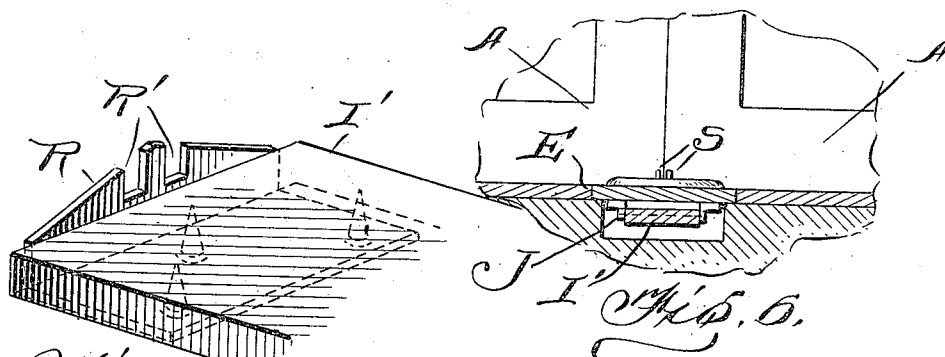
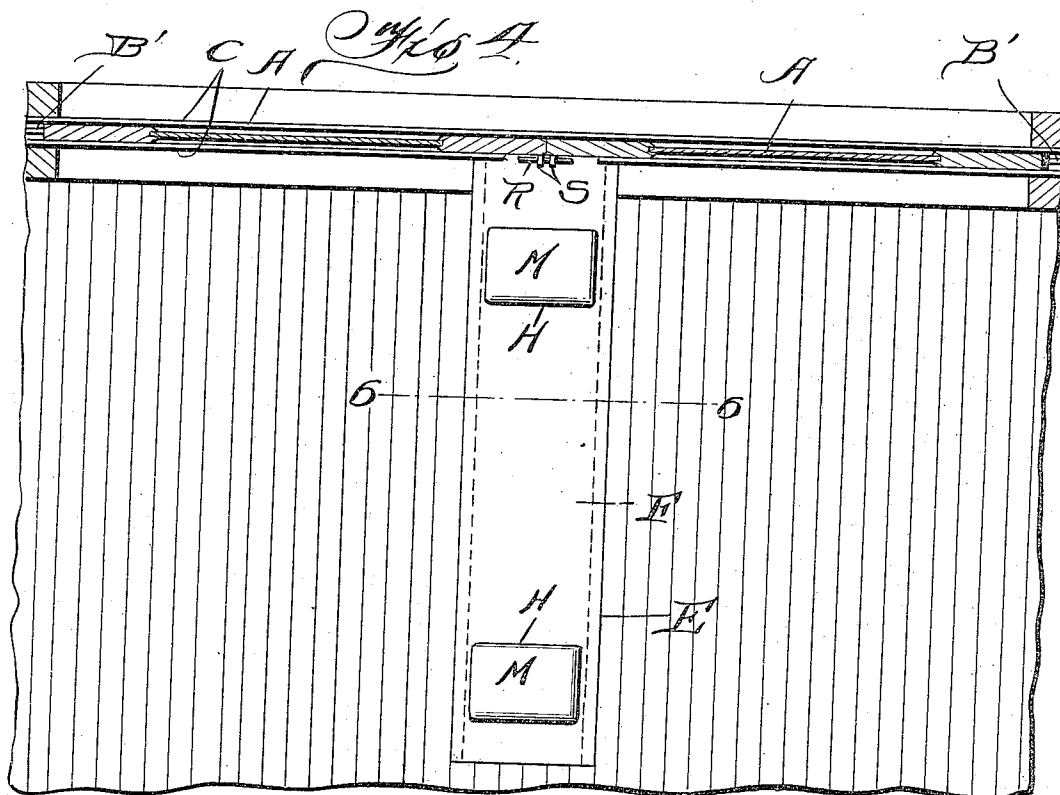


Fig. 5.

Fig. 6.

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UNITED STATES PATENT OFFICE.

BENJAMIN LEWIS BITTING, OF RURAL HALL, NORTH CAROLINA.

DOOR-RELEASING APPARATUS.

961,578.

Specification of Letters Patent. Patented June 14, 1910.

Application filed April 7, 1910. Serial No. 553,932.

To all whom it may concern:

Be it known that I, BENJAMIN L. BITTING, a citizen of the United States, residing at Rural Hall, in the county of Forsyth and State of North Carolina, have invented certain new and useful Improvements in Door-Releasing Apparatus; 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in apparatus for automatically releasing and opening doors, windows, blinds, etc., and the object in view is to produce a simple and efficient means of this nature so arranged that in cases of emergency the door or window may be opened by a person approaching it from one side or the other.

The invention comprises various details of construction and combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a front elevation showing two doors held together by my improved holding and releasing device. Fig. 2 is a sectional view through the tilting members which actuate the release. Fig. 3 is a top plan view of the arrangement shown in Fig. 2. Fig. 4 is a vertical sectional view of the device as applied to a door. Fig. 5 is a detail perspective view of the latch, and Fig. 6 is a sectional view on line 6—6 of Fig. 4.

Reference now being had to the details of the drawings by letter, A, A designate two sliding doors mounted upon anti-friction wheels B movable upon the track B', and C is a guide rail which guides the upper portions of the doors as is common with sliding doors. Fastened to the outer edge of each door at any suitable location is a rope D, each of which passes over a pulley D' and has a weight D² connected thereto, the purpose of which weights is to cause the doors to open after they have been unlocked or released.

Referring to Fig. 4 of the drawings, I

have shown an opening E formed in the floor of a building adjacent to the doors and there may be a similar opening formed upon opposite side of the doors for the purpose of causing the latter to be opened from either side. Said opening has a platform F seated therein with open spaces H adjacent to each end. Tilting levers I and I² are mounted upon the pivotal pins I' carried by the lugs J which project from the under side of the platform. Said lever I has an elongated slot N formed adjacent to its inner end and O designates a pin carried by the lever I² and adapted to engage said slot and have a sliding movement therein. The inner portion of each lever is weighted, as at Q, for the purpose of normally holding the outer ends of the lever at their highest limits and a block M is mounted upon the upper surface of each lever and said blocks are adapted to fill the openings or spaces H at the ends of the platform, the upper surfaces of said blocks being substantially flush with the upper surface of the platform and floor upon which the latter is seated. Fastened to the free end of the lever M is an angled latch plate R having notches R' formed in the upper edge thereof and secured to each door is an angled plate or catch S adapted each to engage one of said notches when the doors are closed, thereby forming means for holding the adjacent edges of the two doors together or in closed relation.

The operation of my apparatus will be readily understood and is as follows:—Assuming the parts to be in their normal positions, as shown in Fig. 1 of the drawings, the blocks M are flush with the upper surface of the floor. When it is desired to open the doors, a person by stepping upon one block or the other may cause the two levers to tilt, the latter being pivotally connected at their adjacent ends and, as the outer ends of the levers are depressed, the latch plate R will be withdrawn from the angled plates S and the weights D² will cause the two doors to open and remain open until they are closed in any suitable manner. After the doors are opened and the pressure is relieved from the blocks M, the latch plate will be returned to its normal position so that, when the doors are brought together, they will be automatically locked together.

What I claim to be new is:—

1. In combination with sliding doors, a latch plate fastened to the lower end of

each door, a platform, levers pivotally connected thereto and having their inner ends pivoted together, a projection upon one of said levers positioned in the path of said latch plates and adapted to engage and hold the latter when the doors are closed.

2. In combination with sliding doors, a latch plate fastened to the lower end of each door, a platform, levers pivotally connected thereto and having their inner ends pivoted together, and weighted, depressible blocks

mounted upon each lever, a notched plate fastened to one end of one of said levers and projecting above the platform and adapted to be engaged by the latches of the door. 15

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

BENJAMIN LEWIS BITTING.

Witnesses:

SQUIRE L. VEST,
ELLIS E. SHORE.