No. 854,262. PATENTED MAY 21, 1907.

J. M. YOUNG.

DEVICE TO OPEN DOORS.

APPLICATION FILED SEPT. 7, 1906.

Fig. 1.

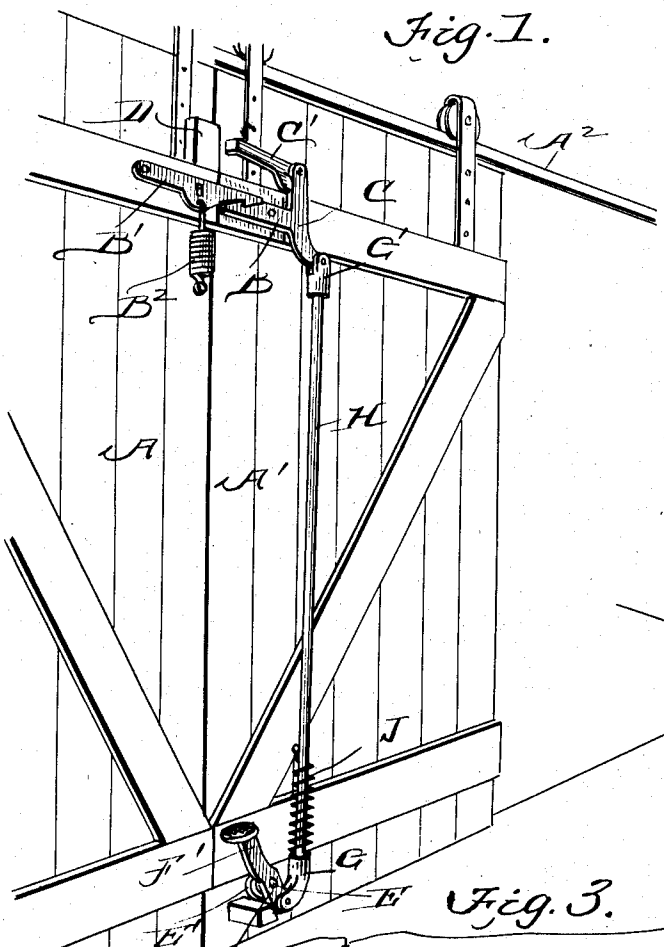


Fig. 2.

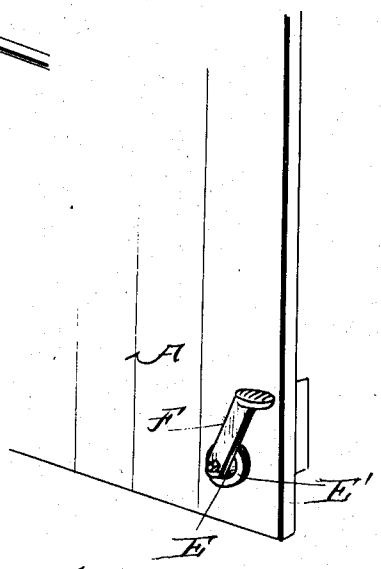


Fig. 4.

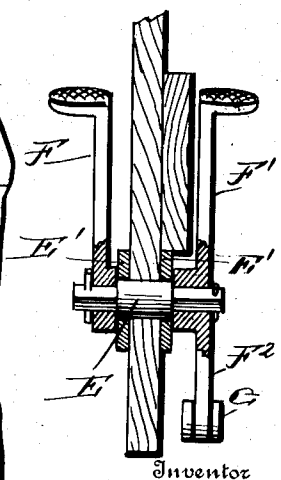
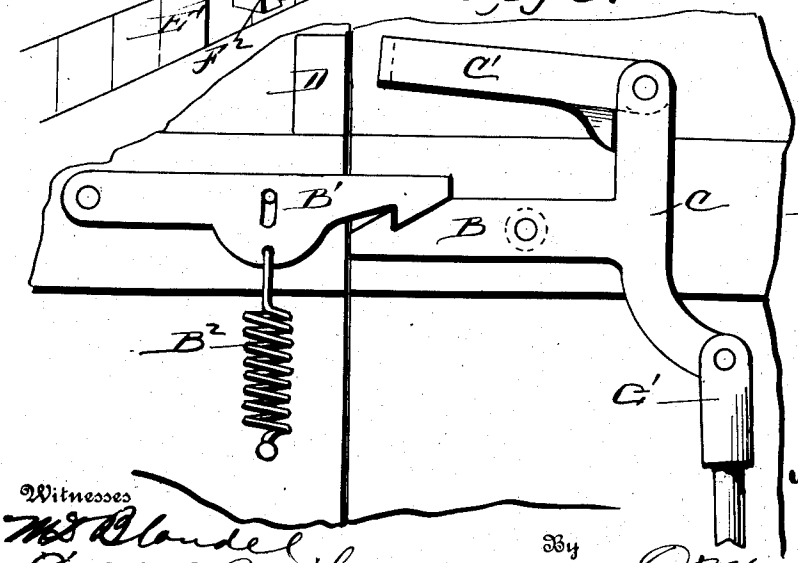


Fig. 3.



Witnesses

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DEVICE TO OPEN DOORS.

No. 854,262. Specification of Letters Patent. Patented May 21, 1907.

Application filed September 7, 1906. Serial No. 333,637.

To all whom it may concern:

Be it known that I, JAMES M. YOUNG, a citizen of the United States, residing at Spring Creek, in the county of Warren and State of Pennsylvania, have invented a new and useful Improvement in a Device to Open Doors, of which the following is a specification.

This invention relates to a device for opening doors, and is especially adapted for barn doors, warehouse doors and other sliding doors hung upon an elevated track.

The object of the invention is to permit the door to be unlocked and opened by means of the foot, thus avoiding the necessity of the party entering or leaving and with both hands full having to put down the burden carried in order to unlatch and open the doors.

The invention consists also of the novel features of construction hereinafter set forth, pointed out in the claims and shown in the accompanying drawings, in which,

Figure 1 is a perspective view of the inner side of a door provided with my apparatus. Fig. 2 is a like view of a part of the outer side of the door. Fig. 3 is an enlarged elevation of the locking means. Fig. 4 is a vertical section through a portion of the door showing the foot lever employed.

In these drawings A represents a side of a building and A′ a door traveling upon a suitable track A^2. Upon the door is pivoted a latch B, which is adapted to engage a keeper B′ pivoted upon the inner side of the wall A and having a limited vertical movement, a spring B^2 holding the keeper normally in a horizontal position. The latch B as shown in the drawings engages the under face of the keeper. The latch B carries an arm C to the upper end of which is pivoted a lever C′ adapted to strike a suitable block D arranged upon the wall above the keeper.

The lower portion of the door carries a shaft E passing through and journaled in the door, and in suitable plates or washers E′ and upon the outer end of the shaft is fixed a foot lever F and upon the inner end portion of the shaft is fixed a foot lever F′ which is provided also with a depending portion F^2 to which is pivotally connected a slightly curved socket piece G. A socket G′ is also pivotally connected to the lower end of the arm C and a rod H either of wood or iron, as for example, a piece of gas pipe, has its ends secured in the said sockets. A coil spring fastened in the usual manner encircles the rod H and is adapted to draw the parts back to their normal position after one of the foot levers has been depressed.

The operation of the device is as follows:— To open the door either from the outside or from the inside it is only necessary to depress by the foot one of the levers F or F′ as the case may be, and this will elevate the rod H and cause the latch B to swing downwardly out of engagement with the keeper B′. This same movement will swing the lever C′ upon its pivot point and cause it to strike the block D, and the force of the blow will start the door and it will roll into open position.

It will be obvious that the door can be opened from either side by a pressure of the foot upon the proper lever.

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

1. The combination with a door, of a keeper, a latch carried by the door adapted to engage the keeper a lever carried by the latch, a foot lever carried by the door, means connecting the foot lever and the latch and a fixed object arranged adjacent the door in position to be struck by the lever carried by the latch.

2. The combination with a door, of a latch carried by the door, an arm carried by the latch, a lever pivoted to said arm, a keeper adapted to be engaged by the latch, a rod connected to said arm, and a foot lever pivotally connected to said rod, the first mentioned lever striking a fixed object adjacent the door when the foot lever is depressed and the latch disengaged from the keeper.

3. A device of the kind described comprising a shaft journaled in a door, foot levers arranged upon its ends of said shaft, a latch carried by the inner face of the door, a keeper adapted to be engaged by the latch, an arm carried by the latch, a lever pivoted to the upper end of said arm, a block secured adjacent the keeper adapted to be struck by said lever, and a rod pivotally connected at its upper end to the lower end of said arm and at its lower end to the inner foot lever.

JAMES M. YOUNG.

Witnesses:
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