

No. 749,094.

PATENTED JAN. 5, 1904.

B. J. QUICK & W. H. SMITH, JR.  
DOOR LATCH.

APPLICATION FILED JAN. 17, 1903.

NO MODEL.

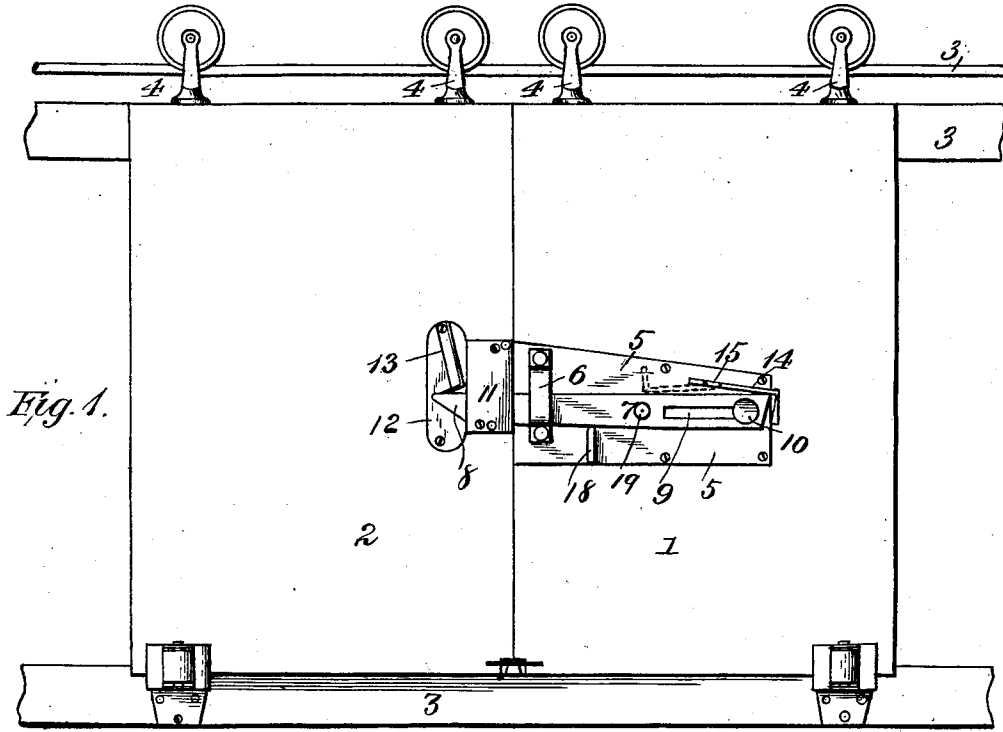


Fig. 1.

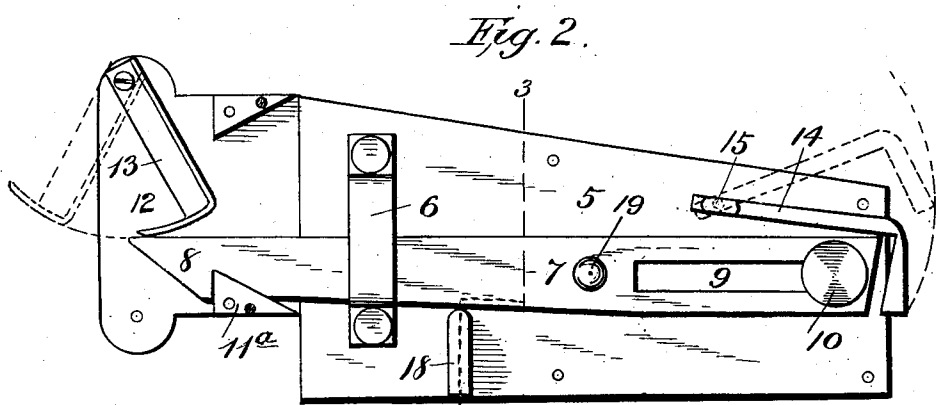


Fig. 2.

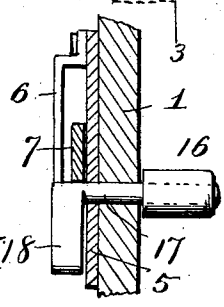


Fig. 3.

Witnesses:  
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# UNITED STATES PATENT OFFICE.

BYRON J. QUICK AND WILLIAM H. SMITH, JR., OF ITHACA, MICHIGAN;  
SAID QUICK ASSIGNOR TO SAID SMITH, JR.

## DOOR-LATCH.

SPECIFICATION forming part of Letters Patent No. 749,094, dated January 5, 1904.

Application filed January 17, 1903. Serial No. 139,482. (No model.)

*To all whom it may concern:*

Be it known that we, BYRON J. QUICK and WILLIAM H. SMITH, Jr., citizens of the United States, residing at Ithaca, in the county of Gratiot and State of Michigan, have invented new and useful Improvements in Door-Latches, of which the following is a specification.

Our invention relates to latches for doors; and the object of the same is to construct a device of this character which can be operated either as a gravity latch or bolt and be provided with efficient means for securely locking it against movement when used either

way. The simple and novel construction employed by us in carrying out our invention is fully described in this specification and claimed, and illustrated in the accompanying drawings, forming a part thereof, in which—

Figure 1 is a front elevation of a pair of sliding doors equipped with our device. Fig. 2 is a detail of the latch-bar in elevation. Fig. 3 is a detail section on line 3 3, Fig. 2.

Our device is attached to a pair of sliding doors 1 and 2, mounted between guides 3 and suspended by hangers 4. A base-plate 5 is attached to the door 1 and supports a strap 6. A latch-bar 7, having a spear-head 8 on one end and a slot 9 in the other, is secured by a stud 10, which engages the slot. The bar 7 extends through the strap 6 in position to engage a lug 11<sup>a</sup> in a keeper 11, mounted on a base-plate 12, attached to the door 2. A catch 13 is pivoted to the base-plate 12 and is designed to engage the head 8 of the latch-bar 7 to prevent its being raised out of engagement with the lug 11<sup>a</sup>. A hook 14 is pivoted on a pin 15, seated in the base-plate 5, and is located in position to engage the rear end of the latch-bar to prevent its rearward movement when not used as a bolt. In order to operate the latch-bar 7 to raise it from the outside, a knob 16 is provided and secured on a spindle 17, which extends through the door 1 and bears a wing 18, positioned to

engage the under side of the latch-bar 7 to raise it out of engagement with the lug 11<sup>a</sup>. A knob 19 is seated in the bar 7 for use in operating it as a bolt.

When our device is operated as a latch, the catch 13 is turned up into the position shown in dotted lines and the hook 14 is set to engage the rear end of the latch. The latch can now be raised from the outside by the use of the knob 16.

If it is desired to use the latch 7 as a bolt, the hook 14 is disengaged and turned back into the dotted position shown in Fig. 1. The latch can now be operated by means of the knob 19. To lock it against all movement, it is only necessary to turn down the catch 13 to engage the head 8.

We do not wish to be limited as to details of construction, as these may be modified in many particulars without departing from the spirit of our invention.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In a latch device, the combination of a latch-bar having a spear-head on one end and a straight slot in the other end, a stud engaging said slot, a keeper located to be engaged by said spear-head and to permit a lateral movement of said bar and a hook pivotally mounted above said latch in position to be dropped to engage the slotted end of said latch-bar to hold it against longitudinal movement and to be thrown up to release said bar, and means mounted on said bar for use in operating it as a bolt or pivoted latch, substantially as described.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

BYRON J. QUICK.  
WILLIAM H. SMITH, JR.

Witnesses:  
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