

R. P. HILL.
LATCH FOR SLIDING DOORS.
APPLICATION FILED SEPT. 27, 1910.

1,033,891.

Patented July 30, 1912.

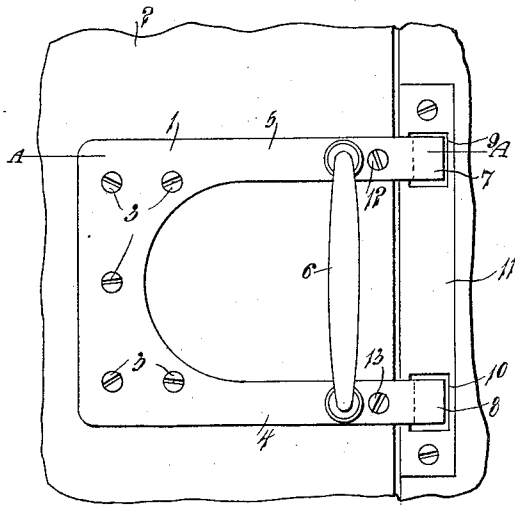


FIG. 1.

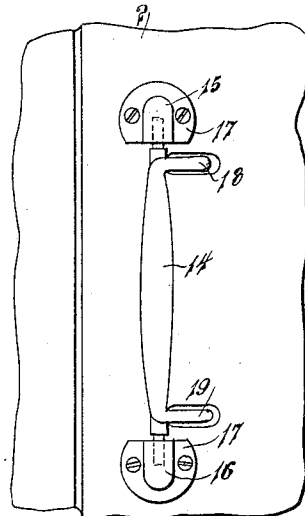


FIG. 2.

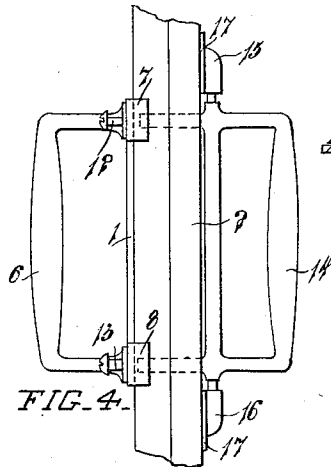


FIG. 3.

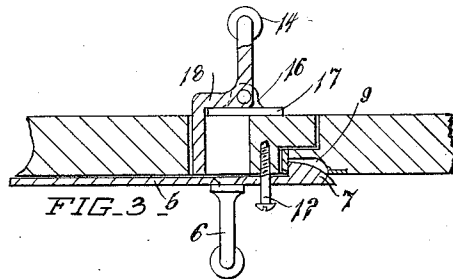


FIG. 4.

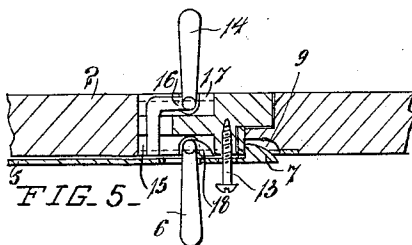


FIG. 5.

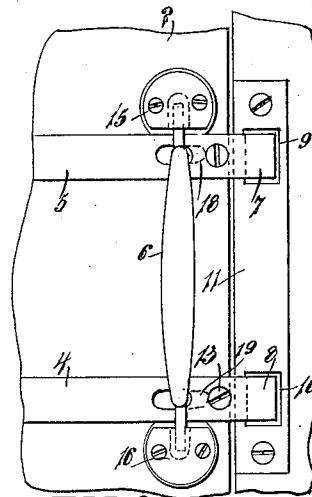


FIG. 6.

Witnesses:
W. C. Bender
C. S. Brown

Inventor:
Richard P. Hill
by Foster, Freeman, Watson & Co.

UNITED STATES PATENT OFFICE.

RICHARD PARKER HILL, OF AUCKLAND, NEW ZEALAND.

LATCH FOR SLIDING DOORS.

1,033,891.

Specification of Letters Patent.

Patented July 30, 1912.

Application filed September 27, 1910. Serial No. 584,100.

To all whom it may concern:

Be it known that I, RICHARD PARKER HILL, a citizen of the Dominion of New Zealand, residing at 63 Queen street, Auckland, in the Provincial District of Auckland, New Zealand, have invented certain new and useful Improvements in Latches for Sliding Doors, of which the following is a specification.

The invention provides an improved latch for sliding doors, such as are used on tramway vehicles, wardrobes, and the like.

According hereto a spring catch plate parallel with the door and in most cases secured to the face thereof, has a projection at its end which engages in a cavity in a plate fixed upon the other door, or upon the door frame. A handle is secured to the spring catch plate, and when such handle is employed to slide the door to an open position the projection is drawn out of engagement with the recess. Upon the other side of the door is a pivoted handle having a projection which when the handle is pulled laterally to slide open the door pushes against the spring catch plate and thereby withdraws the projection from its recess. There may be more than one of the spring catch plates, and a latch having two of such members is illustrated in the drawing wherein:—

Figure 1 is a front elevation of a latch for sliding doors constructed in accordance with the invention, Fig. 2 is a rear elevation of the latch, Fig. 3 is a horizontal sectional view on the line A—A of Fig. 1, Fig. 4 is an end elevation, Fig. 5 is a sectional plan view and Fig. 6 an end elevation of a slightly modified form of the invention.

The metal plate 1 is fixed to the door 2 by screws 3 and has the projecting spring catch plate members 4 and 5 which normally spring toward the face of the door and are connected by a cross D handle 6.

Each of the members 4 and 5 has a projecting catch 7 and 8 respectively, upon its end and these catches when the door is closed engage in recesses 9 and 10 in a plate 11 secured to the opposing door or when a single door is employed to the door frame. The outward movement of the spring members 4 and 5 is limited by the heads of the screws 12 and 13, which screws pass through slots in the members.

When the handle 6 is pulled laterally for

the purpose of opening the door, the catches 7 and 8 are drawn out of their recesses.

Upon the opposite side of the door is a D handle 14 pivoted in sockets 15 and 16 upon a plate 17 screwed to the door and having projections 18 and 19 which pass through holes in the door and which severally engage the members 4 and 5 so that when the handle 14 is pulled for the purpose of sliding the door the said members are pushed outwardly from the door and the catches upon them are withdrawn from the recesses.

It will be apparent without illustration, that the outward tendency of the catch plate members may be reinforced by a spring or springs interposed between them and the door, and if desired, the catch plate may be carried in a mortised recess in the door instead of being secured to the face thereof.

In the modification shown in Figs. 5 and 6, the handle 14 upon the back of the door is pivoted and operates as described in connection with the preceding figures. The handle 6 upon the front of the door is also pivoted in brackets 15 and 16 countersunk in the door and the handle has the projections 18 and 19 one at either end, which, when the handle is pulled to open the door, engage with the spring plate members 4 and 5 and raise the catches 7 and 8 at their respective ends, clear of the recesses 9 and 10.

What I do claim and desire to secure by Letters Patent of the United States is:—

1. The combination with a sliding door, of a latch comprising a flexible plate attached to the door to move toward and from a face thereof and a relatively stationary member adapted to be engaged by said plate when the door is in closed position, two handles pivotally supported on opposite faces of the door and each having projections engaging the same surface of the latch plate and adapted to move the plate to disengage the members of the latch as the handle is actuated to slide open the door.

2. The combination with a sliding door, of a latch comprising a flexible plate attached to the door to move toward and from a face thereof and a relatively stationary member adapted to be engaged by said plate when the door is in closed position, two handles situated on opposite faces of the door and each adapted to directly move the plate to release the latch when actuated to slide open the door, and a supplemental stop on

the door for limiting movement of said
plate to disengage the members of the latch
comprising a two-headed pin or stud pro-
jecting from said face of the door and ex-
5 tending through an aperture in the flexible
plate.

In testimony whereof I have signed my

name to this specification in the presence of
two witnesses.

RICHARD PARKER HILL.

Witnesses:

ARTHUR HEWITT FERNAHOUGH,
EDWIN JOHN CHILTON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
