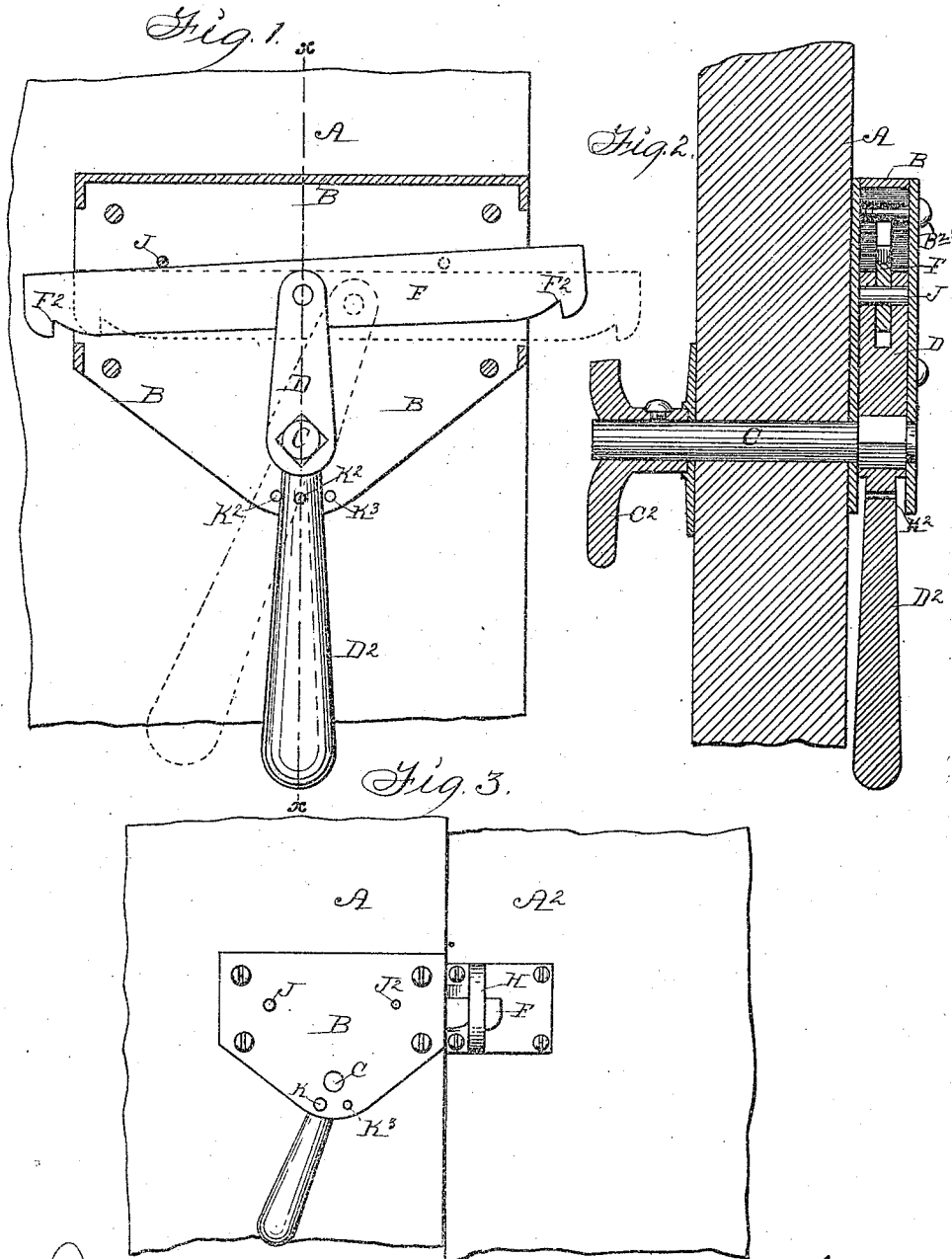


(No Model.)

W. E. JOHNSON.
SLIDING DOOR LOCK.

No. 527,609.

Patented Oct. 16, 1894.



Witnesses:
R. H. Orwig
C. F. Wilson.

Inventor: William E. Johnson,
By Thomas G. Orwig,
and J. Ralph Orwig, Attorneys.

UNITED STATES PATENT OFFICE.

WILLIAM E. JOHNSON, OF COON RAPIDS, IOWA.

SLIDING-DOOR LOCK.

SPECIFICATION forming part of Letters Patent No. 527,809, dated October 16, 1894.

Application filed March 16, 1894. Serial No. 503,959. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM E. JOHNSON, a citizen of the United States of America, residing at Coon Rapids, in the county of Carroll, and State of Iowa, have invented a new and useful Reversible Door-Latch for Sliding Doors, of which the following is a specification.

The objects of my invention are to produce
10 a simple, cheap and durable device adapted to be attached to sliding doors and capable of being latched or unlatched from either side of the door and adapted to be locked from the inside, and my object is further to provide a
15 latch and lock that may be applied to either side of a door.

With these objects in view my invention consists in certain details in the construction, arrangement and combination of the various
20 parts of the device as hereinafter set forth, pointed out in my claims and illustrated in the accompanying drawings, in which—

Figure 1 is a view of the latch with part of the casing removed to show the operative
25 parts. Fig. 2 is a vertical transverse sectional view through the line $x-x$ of Fig. 1. Fig. 3 is a side view of the device applied to a sliding door.

Referring to the accompanying drawings
30 the reference letter A is used to designate a sliding door and A² a like door adapted to meet the inner edge of the first.

B designates the lock frame preferably composed of metal plates and provided with
35 bores at its corners adapted to admit screws B² whereby it may be secured to a door.

C is a shaft extended transversely through said frame and of a length adapting it to be
40 passed through an opening in the door A and having a knob or handle C² secured thereto whereby it may be turned.

D designates a lever fixed to the shaft C within the frame having its upper end bifurcated and a handle D² formed on its lower end
45 to project below the frame of the latch to provide means whereby the latch may be operated.

The latch proper designated by the reference letter F is extended transversely through
50 the frame and is provided with a hook F² on each end so that when the latch is reversed either end may be used.

H designates a device adapted to be secured to a stationary support or to a door in proximity to the edge of the door to which the
55 latch is attached and is adapted to admit the sliding latch and hold it therein until it is elevated and drawn backwardly.

J designates a guide consisting of a straight rod extended transversely through the frame
60 of the device and above the latch F near its rear end. This guide is positioned so as to hold the rear end of the latch downward when its central portion is elevated by turning the knob and thereby elevate the forward
55 end so as to raise it above the device that the hook engages and allow it to be lowered to engage said device when in an extended position. An opening J² is provided at the
70 other side of the center of the latch frame to admit said guide J when the latch is reversed.

When it is desirable to lock the device a bolt K is extended through a bore K² that
extends through the frame of the latch and also through the lever D so as to prevent a
75 movement of the latch. A similar bore K² is provided at the opposite side of the latch frame to be used when the device is employed in a reversed position.

Having thus described my invention, what
80 I claim as new therein, and desire to secure by Letters Patent of the United States therefor, is—

1. An improved latch for sliding doors, comprising a suitable frame adapted to be secured
85 to a sliding door, a shaft extended through said frame and door, a knob on its outer end, a lever fixed to said rock shaft with its inner end projecting below the latch frame, a latch having a hook formed on its
90 forward end extended horizontally through the device and pivotally attached to the upper end of said lever some distance above its pivotal point, a rod extended transversely through the frame of the device above the
95 rear end of the latch for the purposes stated and a device secured to a stationary upright and adapted to be engaged by said latch substantially as and for the purposes stated.

2. An improved latch and lock for sliding
100 doors comprising a suitable frame adapted to be secured to a sliding door, a shaft extended through said frame and door, a knob on the outer end, a lever fixed to said rock shaft

with its inner end projecting below the latch
 frame, a latch having a hook formed on its
 forward end extended horizontally through
 the device and pivotally attached to the up-
 5 per end of said lever some distance above its
 pivotal point, a rod extended transversely
 through the frame of the device above the
 rear end of the latch for the purposes stated,
 and a device secured to a stationary upright
 10 adapted to be engaged by said latch and a
 bolt or rod adapted to be passed through the
 frame and the handle of said lever when the
 latch is in engagement with the said device
 secured to the stationary upright, to lock the
 15 doors, substantially as set forth.

3. An improved latch and lock for sliding
 doors, comprising a suitable frame adapted
 to be secured to a sliding door, a shaft ex-
 tended through said frame and door a knob

on its outer end, a lever fixed to said rock 20
 shaft with its inner end projecting below the
 frame, a latch having a hook formed on both
 of its ends extended horizontally through the
 device and pivotally attached to the upper
 end of said lever some distance above the 25
 pivotal point, a guide adapted to be extended
 through the frame directly above either end
 of the latch for the purposes stated and a
 bolt adapted to be passed through the frame
 and said lever when locked with either end 30
 of the latch projection and a device adapted
 to be engaged by said latch, substantially as
 and for the purposes stated.

WILLIAM E. JOHNSON.

Witnesses:

W. H. HENDRICKS,
 ED MORGAN.