C. M. ANDERSON.

DOOR LOCK.

APPLICATION FILED SEPT. 7, 1916.

1,216,765.

Patented Feb. 20, 1917.

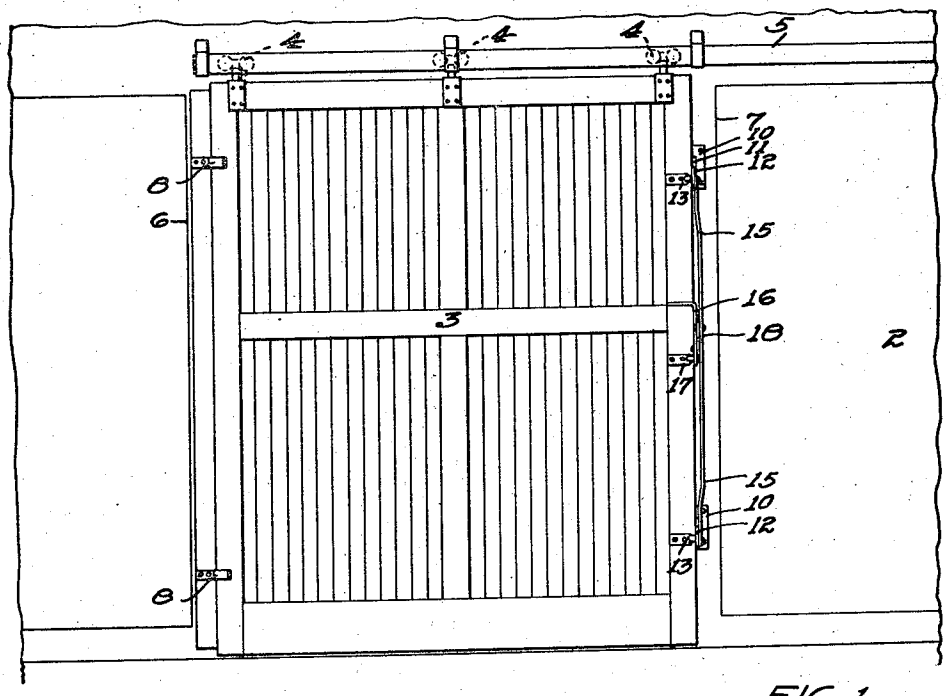


FIG. 1.

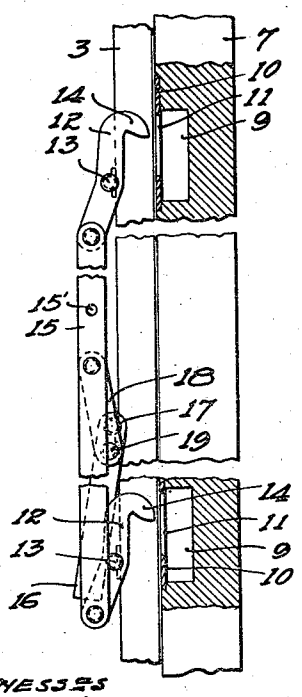


FIG. 2.

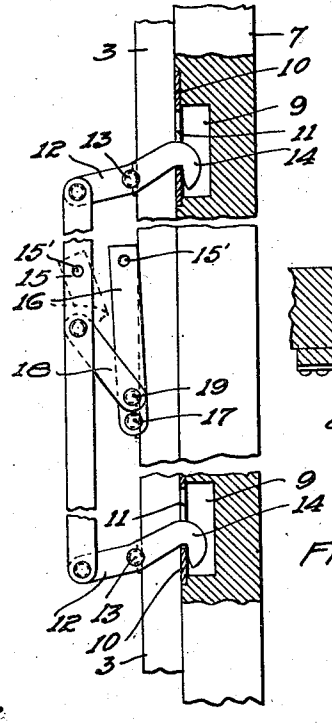


FIG. 3.

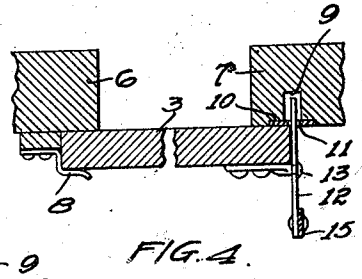


FIG. 4.

WITNESSES

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UNITED STATES PATENT OFFICE.

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DOOR-LOCK.

1,216,765. Specification of Letters Patent. Patented Feb. 20, 1917.

Application filed September 7, 1916. Serial No. 118,827.

To all whom it may concern:

Be it known that I, CARL M. ANDERSON, a citizen of the United States, resident of Havana, county of Sargent, State of North Dakota, have invented certain new and useful Improvements in Door-Locks, of which the following is a specification.

My invention relates to a locking device for doors and particularly those of the sliding type, and hence is adapted especially for securing the doors of a garage or similar structure to prevent any unauthorized person opening the door from the outside and removing the car.

A further object is to provide a locking device which will not only lock the door but will seat it firmly against the posts and thereby exclude cold air and rain or snow from the building.

Other objects of the invention will appear from the following detailed description.

The invention consists generally in various constructions and combinations, all as hereinafter described and particularly pointed out in the claims.

In the accompanying drawings forming part of this specification,

Figure 1 is a view of the exit of a building, showing a sliding door with my improved locking device thereon,

Fig. 2 is a detail sectional view, showing the locking device in its open position,

Fig. 3 is a similar view, showing the locking device in its closed or locking position,

Fig. 4 is a detail horizontal sectional view, through the door and the locking device.

In the drawing, 2 represents the wall of a building, having a door opening and a sliding door 3 supported by wheels 4 on a track 5. 6 and 7 represent the door posts on opposite sides of the opening. Brackets 8 are mounted on the post 7 in the path of the door to form stops therefor and also to hold the edge of the door against the post 6. The post 7 is provided with recesses 9 therein having plates 10 secured to the post over the recesses and provided with slots 11. Latches 12 are mounted at 13 on the door and have hooked ends 14 which enter the slots 11 and lock the doors securely against opening. These latches are connected with one another by a bar 15 and an operating lever 16 is pivoted at 17 on the door and has a link connection 18 with the bar 15. This lever forms substantially a toggle connection. When the pivotal connection 19 of the link 18 with the lever 16 is above the pivot 17, the latches 12 will be in their locking position and when the pivotal point 19 is below the point 17, as shown in Fig. 2, the locking latches will be withdrawn from the recesses in the door post and out of the path of the door, allowing it to be moved to an open position. These latches 12, it will be noted, are mounted on the door and consequently when their hooked ends engage the plates over the recesses 9, the outer face of the door will be snugly seated against the posts and will not only be locked but the joint will be closed between it and the door post to exclude cold air, rain or snow. The structure will, of course, be provided with a small door through which the person locking the sliding door may pass out when the door is closed.

With this device the large or sliding door of the garage or other structure can be easily and quickly secured for the night or for any other period without the necessity of having a padlock or other locking means on the outside of the door where it would be accessible to any one wishing to break in.

The bar 15 and the lever 16 may have holes 15′ therein to receive the shackle of a padlock for locking the device securely to prevent the levers 12 from being disengaged from the door. While I have shown the device mounted on the inside of the door, it may be placed on the outside, if preferred.

The device may be made in various sizes, according to the size of the door, and in various ways the details of construction may be modified and still be within the scope of my invention.

I claim as my invention:

1. The combination, with a door post, of a door, latches mounted on said door and having hooked ends for engaging with said post for locking the door in its closed position, said hooked ends also operating to draw said door against said post to clamp them together, a bar pivotally connected with the corresponding ends of said latches, an operating lever mounted on said door and a link connecting said operating lever with said bar, the movement of said lever reciprocating said bar to release or lock said latches.

2. The combination, with a door post, of a sliding door, latches pivoted at points intermediate to their ends on said door near one edge thereof and having means for drawing

said door against said post and locking them together, a bar connecting the ends of said latches, and operating lever mounted on said door and a link connecting said operating lever near its pivot with said bar, the oscillation of said operating lever in one direction shifting the pivot of said link on said lever to one side of the pivot of said operating lever for moving said locking latches to their locking position, and the movement of said operating lever in the opposite direction retracting said locking latches from their locking position.

3. The combination, with a door post having recesses therein and slotted plates fitting over said recesses, of a door mounted to slide past said post, latches pivoted at points intermediate to their ends on said door near one edge thereof and upon a level substantially with said recesses, said latches having hooked ends for entering the slots in said plates and drawing said door against the face of said plate, a bar having its ends connected with the outer portions of said latches, an operating lever pivoted on said door and a link connecting said operating lever near its pivot with said bar at a point adjacent the middle portion thereof, said latches operating in a substantially vertical plane and the rocking of said lever in one direction withdrawing the hooked ends of said latches from engagement with said plates and the movement of said lever in the opposite direction rocking said latches to thrust the hooked ends thereof through said slotted plates.

In witness whereof, I have hereunto set my hand this 1st day of September, 1916.

CARL M. ANDERSON.

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