G. M. MONSON.

SLIDING DOOR FASTENER.

APPLICATION FILED APR. 17, 1912.

1,078,941.

Patented Nov. 18, 1913.

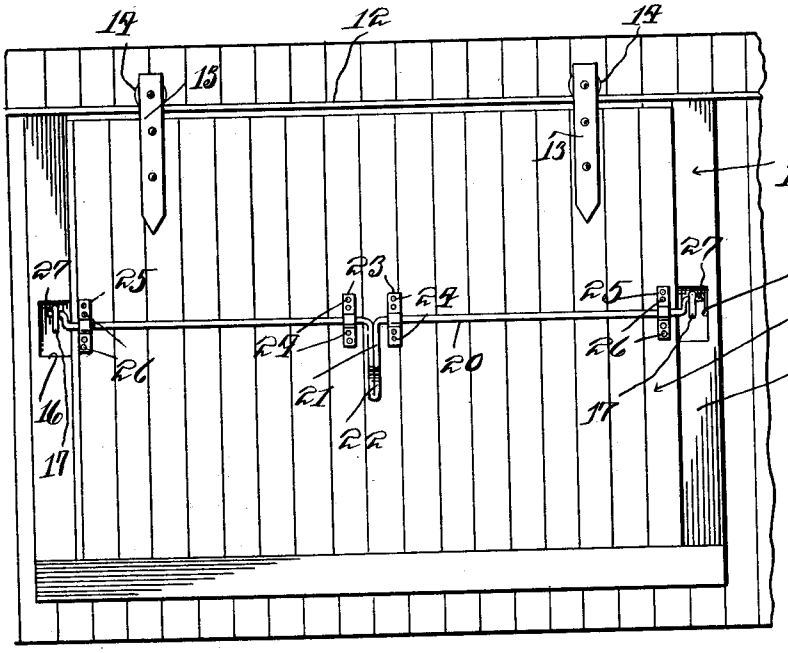


FIG. 1.

FIG. 3.

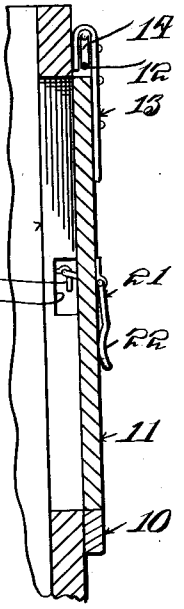


FIG. 2.

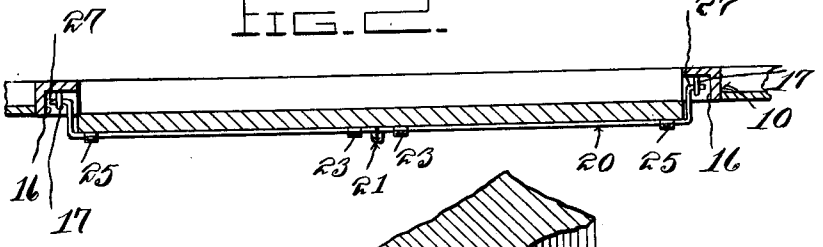
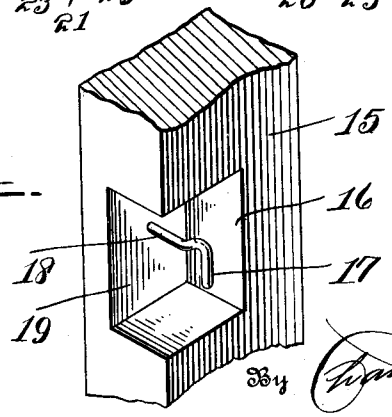


FIG. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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SLIDING-DOOR FASTENER.

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To all whom it may concern:

Be it known that I, GEORGE M. MONSON, a citizen of the United States, residing at Ambrose, in the county of Divide, State of North Dakota, have invented certain new and useful Improvements in Sliding-Door Fasteners; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improved sliding door lock, the primary object of the invention being to provide an improved, novel and simple form of locking device adapted for use in connection with sliding doors such as car doors or the like whereby the door may be secured in an open or closed position and conveniently moved longitudinally with relation to said opening.

Another and important object of the invention is to provide a novel form of locking rod or bar having cranks formed at its ends for engagement with hooks seated in the door frame or jamb in a novel manner.

With the above and other objects in view the invention consists of certain other combinations and arrangements of parts as will be hereinafter more fully described, claimed and illustrated in the accompanying drawings, in which:

Figure 1 is a front elevation of the door frame having a door slidably mounted in the door opening and secured in a closed position by my improved locking device. Fig. 2 is a horizontal section thereof. Fig. 3 is a vertical sectional view thereof on the line 3—3 of Fig. 1. Fig. 4 is a detail perspective view of a portion of the door jamb carrying the hooked keeper.

As illustrated, in the embodiment of my invention, I have shown a door frame 10 in which a door 11 is slidably mounted on a track 12, the said door being provided with spaced hanger members 13 having their upper ends rotatably supporting rollers 14 riding upon the track 12 for sliding the door to cover or uncover the door opening in the frame.

The ends of the door frame or door jambs 15 are provided with rectangular recesses 16 communicating with their inner and outer faces approximately centrally of the height of each jamb and keepers in the form of hooks 17 having downwardly extending bill portions, are provided with horizontally disposed shank portions 18 which are secured through the end walls 19 of the recesses 16 in the jambs so that the hook members will lie wholly within the recesses as clearly shown in Fig. 3 of the drawings.

Adapted to coact with the hook members or keepers 17 in order to hold the door 11 in a closed position or to permit the same to be moved longitudinally relative to the door opening and upon the track 12, is a locking bar or rod 20 which is formed of a single section of bar metal and has a central rebent portion forming an operating member 21 having its extremity arcuately curved as shown at 22 to form a gripping member when the operating member or lever 21 is in a raised position and to space the lever proper from the door when moved to a lowered position.

The locking bar or rod 20 extends longitudinally of the door 11 approximately centrally of its height between the recesses 16 and is rotatably or pivotally mounted in a pair of spaced central bearing straps 23 which are secured vertically to the door as shown at 24 by screws or other fastening means and said rod or bar is supported near its ends by similar bearing straps 25 secured by fastening means 26 to the door. The end portions of the bar or rod 20 outwardly of the bearing straps 25 are formed with angular cranks 27 which when the lever 21 is in a raised position, are disposed in a plane outwardly of the door frame or recesses 16, whereby when said lever is grasped through the medium of the portion 22, and moved to a lowered position, said cranks will be moved inwardly and upwardly against the bill portions of the hooks 17 so as to bind therewith and force the door 11 against the frame 10 to form a very desirable joint therebetween and securely hold the door in a closed position. It will also be understood that by shifting the lever 21 to a raised position, that the cranks 27 will be swung inwardly and downwardly and thus outwardly of the recesses 16 and the faces of the door jamb so as to permit longitudinal sliding of the door.

From the foregoing description in connection with the accompanying drawings, it will be apparent that a very simple and improved form of locking device is provided, wherein the locking bar can be constructed of a single section of metal bent in a novel manner and capable of convenient manipu-

lation, while the door will be securely held in a closed position by reason of the binding engagement of the cranks with the hooks which are eccentrically located relative to the pivot of the cranks.

I claim:

The combination with a door frame and the jambs thereof, said jambs being provided with recesses opening through their mutually adjacent faces and through their outer faces, of hooks engaged in the rear walls of the recesses and having downwardly turned ends, a door mounted for sliding movement into and out of position to lie over the space between the jambs, a transverse series of alining brackets secured against the outer face of the door, and a bar pivotally mounted in the brackets and having its central portion bent to form a crank, lying between certain of the brackets, the end portions of the bar being bent to extend over the side edges of the door and having their extremities turned outwardly, said crank being movable to bring the end portion of the bar into the recesses or out of the recesses, said ends of the door being adapted to engage the hooks and force the bar against the jambs.

In testimony whereof, I affix my signature, in presence of two witnesses.

GEORGE M. MONSON.

Witnesses:

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