

(No Model.)

G. A. MANCHESTER.
DOOR FASTENER.

No. 560,809.

Patented May 26, 1896.

Fig. 1

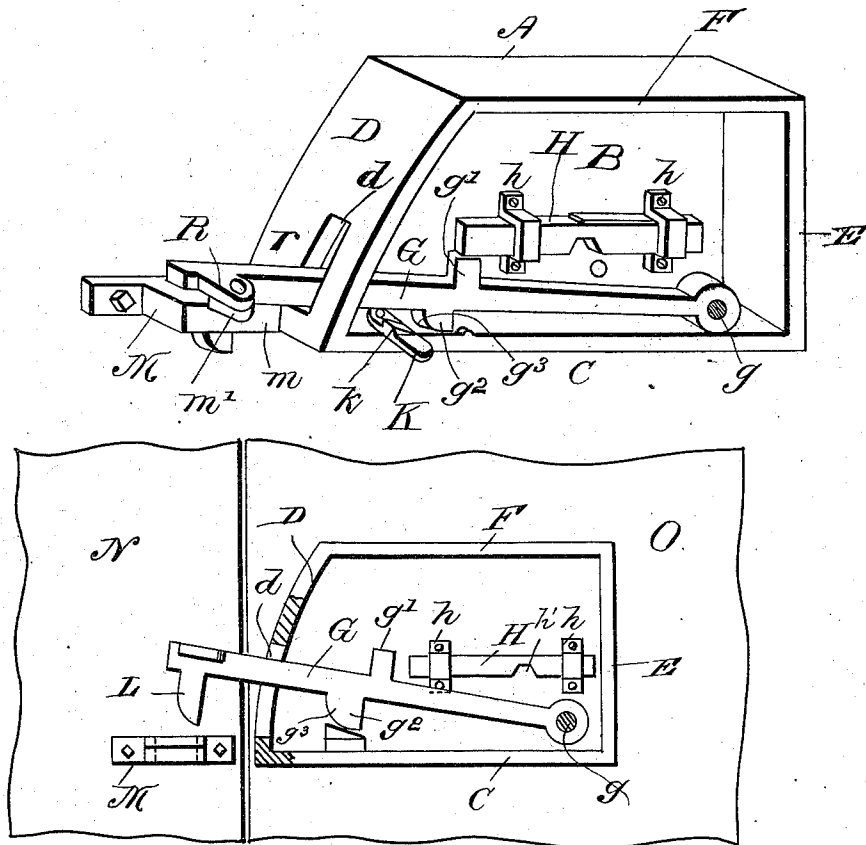


Fig. 2

WITNESSES:

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GEORGE ALBERT MANCHESTER, OF PROVIDENCE, RHODE ISLAND.

DOOR-FASTENER.

SPECIFICATION forming part of Letters Patent No. 560,809, dated May 26, 1896.

Application filed September 5, 1895. Serial No. 561,524. (No model.)

To all whom it may concern:

Be it known that I, GEORGE ALBERT MANCHESTER, a citizen of the United States, and a resident of Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Door-Fasteners, of which the following is a specification, reference being had to the accompanying drawings, forming a part thereof, in which similar letters of reference indicate corresponding parts.

This invention relates to door-locks, and particularly to that class thereof which are used in connection with sliding doors; and the object of the invention is to provide an effective device of this kind, which may be employed in connection with sliding doors wherever used, and which is particularly applicable to car-doors; and with this and other objects in view the invention consists in the construction, combination, and arrangement of parts hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a perspective view of my improved lock with the front casing thereof removed; and Fig. 2, a side elevation showing the lock attached to a door, the front casing of the lock being removed.

In the practice of my invention I employ a casing A of any preferred form, having a back B, a bottom C, ends D and E, and a top plate F, said casing being in use also provided with a front side or casing, which is not shown in the drawings. Within the casing A is pivoted an arm G, said arm being pivotally connected with the casing near the rear end thereof, as shown at *g*, and arranged above said arm and mounted in bearings secured to the back of the casing is a sliding bolt H, the bearings in which said bolt is mounted being shown at *h*. Formed on the upper side of the arm G, near the middle portion thereof, is a shoulder *g'*, and formed on the lower side of said arm is a shoulder *g''*, the outer surface of which is beveled or inclined, as shown at *g'''*. Connected with the bottom of the casing A is a bar K, which extends through the front side thereof, and formed thereon is an inclined shoulder *k*, adapted to operate in connection with the shoulder *g''* on the arm G,

as hereinafter described. The arm G projects through a slot *d*, formed in the end D of the casing, and the outer end thereof is provided with a downwardly-directed hook or projection L, which is adapted to pass through an opening formed in a plate M, which is secured to the frame of the door or the body of a car, said frame being shown at N in Fig. 2, and the door or a section thereof being shown at O. The plate M is provided with a projection or shoulder *m*, in which the opening is formed which is adapted to receive the hook or projection L of the arm G, and the operation will be readily understood from the foregoing description when taken in connection with the accompanying drawings. The pivoted bar K extends through the front of the casing, and in the normal position of the parts the arm G is raised thereby into the position shown in Fig. 2 by simply moving said bar backward under the shoulder *g''*, formed on the arm G. Whenever it is desired to lock the door, the bar K is moved forward and the arm G dropped into the position shown in Fig. 1, in which the hook or projection L formed thereon passes through the opening formed in the plate M, and the bar G is locked in this position by inserting a properly-constructed key and sliding the bolt H forward until it rests on the shoulder *g'*, formed on the upper side of the arm, as shown in Fig. 1. The bolt H is provided on its under side with a notch or recess *h'*, in which the key operates, and whenever it is desired to unlock the door the bolt H must be moved backward by the key, and the arm G may be raised by operating the bar K, as will be readily understood. The bar G is also provided at its outer end with an outwardly-directed extension R, in which is formed an aperture *r*, and the plate M is provided with a corresponding projection *m'*, in which is formed a similar aperture or opening, (not shown,) and by means of this construction the arm G may be sealed to the plate N in the usual or any desired manner.

My invention is not limited to the exact form, construction, and arrangement of the various parts shown and described, and I therefore reserve the right to make all such alterations and changes therein as fairly come within the scope of the invention.

Although I have described the casing of my improved lock as secured to or connected with a door and the plate M as connected with the frame thereof, it is evident that this arrangement may be reversed, and the casing secured to the frame of the door and the plate M to the door, the construction and operation being substantially the same in either case.

10 Having fully described my invention, I claim and desire to secure by Letters Patent—

15 The combination with a sliding door of the casing secured thereto, an arm pivoted within a vertical slot formed therein, said arm being provided upon the upper side thereof with an intermediate upwardly-extending shoulder, and a downwardly-directed shoulder upon
20 the opposite side of said arm, a pivoted trans-

verse bar below said arm, and operating in connection with the casing to raise or lower the same, a sliding bolt secured in said casing and adapted to impinge upon the upwardly-directed shoulder upon the arm, to retain the same in a depressed position, a downwardly-directed hook upon the outer end of said arm, adapted to engage a recess in a plate secured upon the door-frame, and means for actuating said bolt to lock or release the arm, substantially as described. 25 30

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 31st day of August, 1895.

GEORGE ALBERT MANCHESTER.

Witnesses:

EDWARD P. HUGHES,
WILLIAM F. GRANT.