(No Model.)

L. COBURN.

CAR DOOR LOCK.

No. 458,414. Patented Aug. 25, 1891.

Fig. 3.

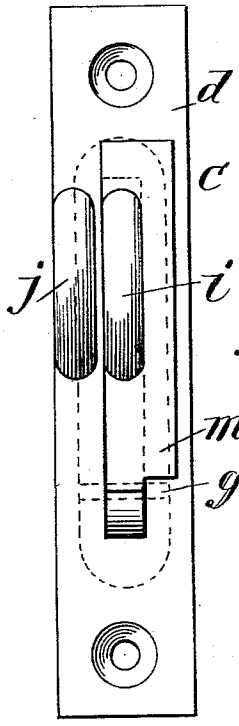


Fig. 1.

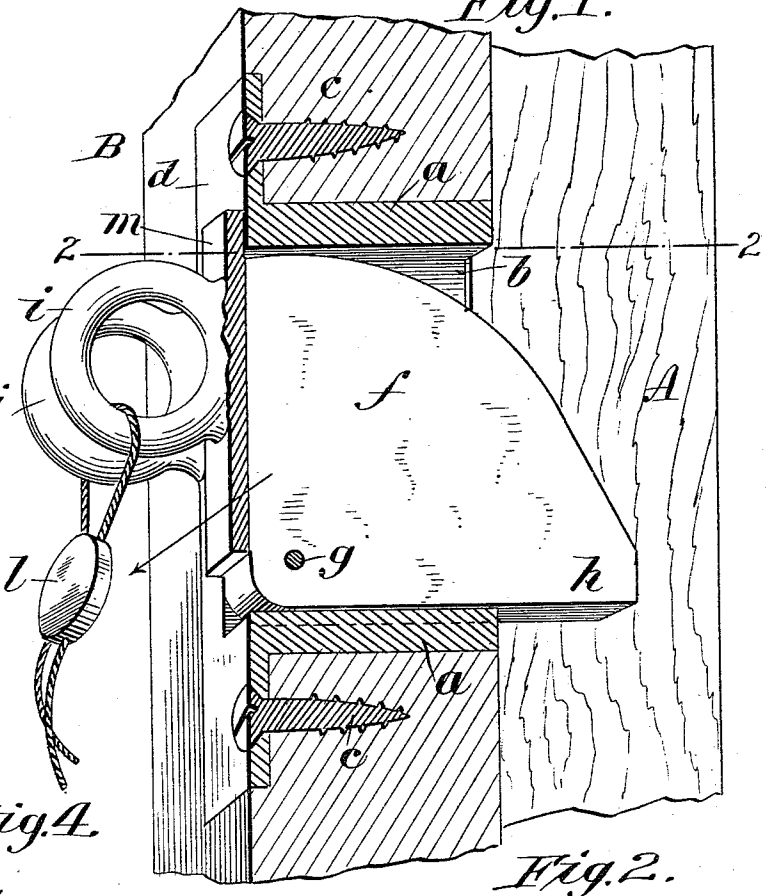


Fig. 4.

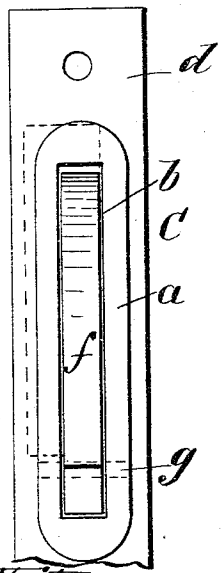
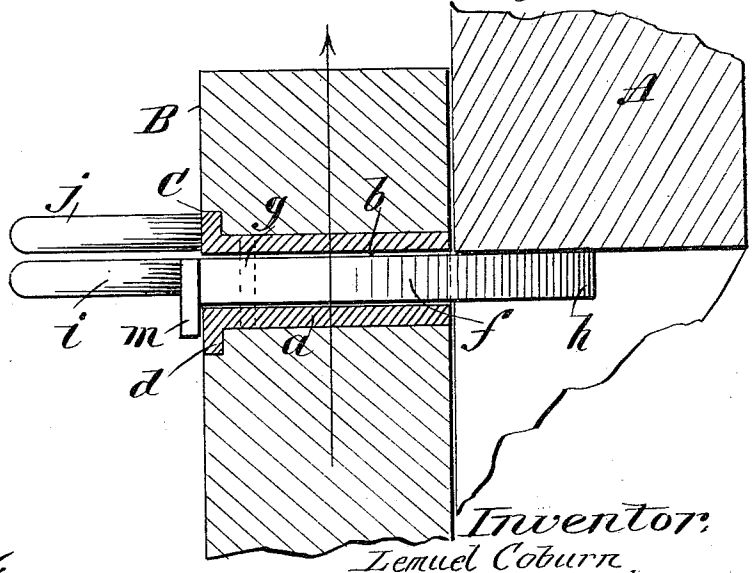


Fig. 2.



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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

LEMUEL COBURN, OF HOLYOKE, MASSACHUSETTS.

CAR-DOOR LOCK.

SPECIFICATION forming part of Letters Patent No. 458,414, dated August 25, 1891.

Application filed December 29, 1890. Serial No. 376,007. (No model.)

To all whom it may concern:

Be it known that I, LEMUEL COBURN, a citizen of the United States, residing at Holyoke, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Locks for Car-Doors, of which the following is a specification.

This invention relates to locks for car-doors, the object of the invention being to provide a lock which is of the most simple construction and of the utmost efficiency for all the purposes required; and the invention consists in the construction and combination or arrangement of parts, all substantially as will hereinafter more fully appear, and be set forth in the claims.

Reference is to be had to the accompanying drawings, in which the construction and application of the improved car-door lock is illustrated, Figure 1 being a sectional and perspective view vertically of a portion of the sliding car-door comprising the door-lock, the latter being shown as in its locking or engaging position with the jamb of the doorway. Fig. 2 is a view in horizontal section of the above-named parts. Fig. 3 is a front view of the lock, and Fig. 4 is an inner or rear view of the same.

In the drawings, A represents a portion of the side of the car at the jamb of the doorway, and B indicates the portion of the door which, when the same is closed, lies over and opposite the jamb of the doorway.

C represents the car-door lock as a whole, and which will now be described as to its composition and details of construction.

a represents a casting forming a bushing, the same forming the boundary for the slot *b*, which is open from the front to the rear of the said casting, and the latter is provided with the flange *d* around its outer border. The said casting is to be inserted with its slot vertically within a narrow mortise through the door, and the screws *c*, passing through the holes therefor in the said flange *d*, secure the casting within the door, all as clearly shown.

f represents the locking-dog of the device, the same being of a form more or less nearly that of a quadrant, and is pivoted at its heel, as at *g*, within the said bushing-casting, so that the toe portion *h* will, when the dog is in its engaging position, as shown in Figs. 1 and 2, lie and project within the inner face of the door and close alongside the edge of the jamb of the doorway, when the door is closed, and constituting an impediment to the sliding movement of the door. The toe portion *h* exerts a preponderating action, so that when the dog is swung into the engaging position, as shown, the same will normally so remain, for the weight of the toe portion *h* a little more than counterbalances the portions of the dog which are at the other side of the pivot. The dog is provided with a ring-eye *i*, which is preferably cast therewith and projects forwardly from the forward edge of the dog, and there is alongside of the said ring-eye *i* and formed on or attached to the front of the bushing-casting another ring-eye *j* opposite but centrally coinciding with the said ring-eye *i*. Said ring-eyes constitute simple and convenient members for the engagement therewith of the loop or wire which receives the lock-seal *l*. The engaging-dog *f* is provided at it front edge portion with the flange *m*, which forms a stop for the inward swing of the dog, and also substantially closes and conceals slot *b* in the bushing-casting when the dog is in its closing position.

When the ring-eyes *i* and *j* are not tied by the seal cord or loop or otherwise restrained, the car-door is most readily unlocked by simply grasping the ring-eye *i* and swinging the dog so that the toe portion *h* thereof is entirely forward of the inner face of the car-door, the forward portion of the dog, of course, then being seen as a projection outwardly from the front of the door.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A lock for a car-door, consisting, in combination, of a bushing-casting to be set into the door and having a slot from the front to the rear thereof, and the dog *f*, of substantially a quadrant form, pivoted at its heel at the front and lower portion of the said bushing-casting and formed with the preponderating toe *h*, substantially as and for the purpose described.

2. A lock for a car-door, consisting, in com-

bination, of a bushing-casting having the slot *b*, flange *d*, and the ring-eye *j*, substantially as described, and the engaging-dog *f*, pivoted at *g* within said slotted casting and provided with the preponderating toe *h*, and having therefrom an upwardly and forwardly curving contour and provided with the forwardly-extending ring-eye *i*, substantially as described and shown.

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