W. H. LAWRENCE.

DOOR HOLDER.

APPLICATION FILED DEC. 24, 1920.

1,388,272. Patented Aug. 23, 1921.

Fig. 1.

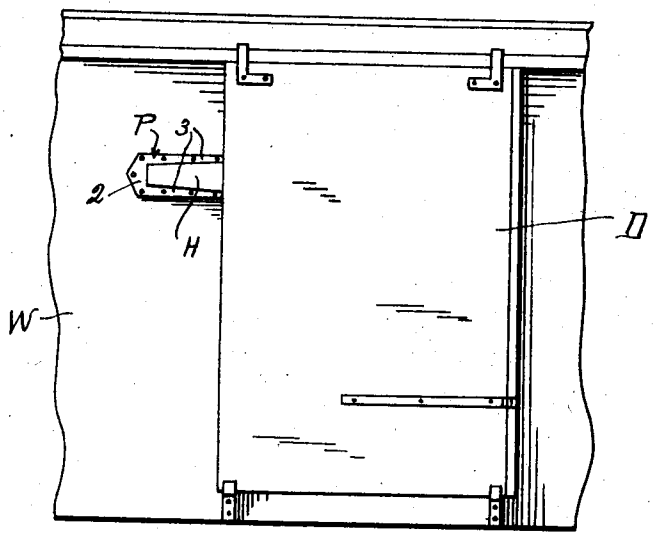


Fig. 2.

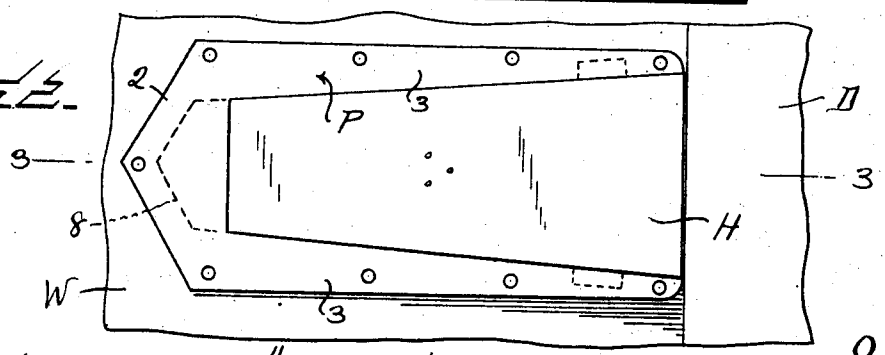


Fig. 3.

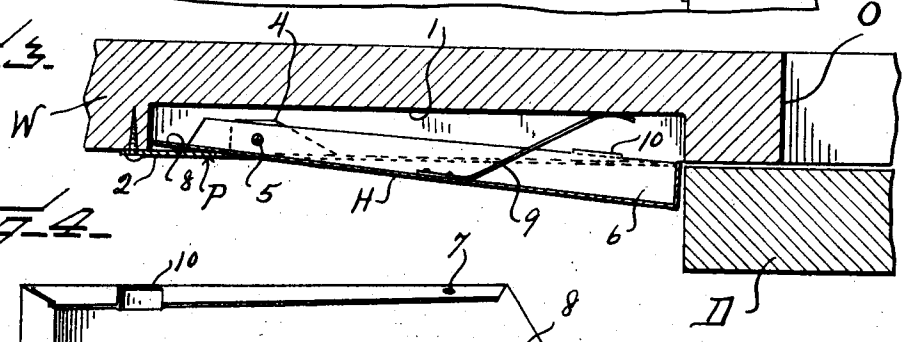
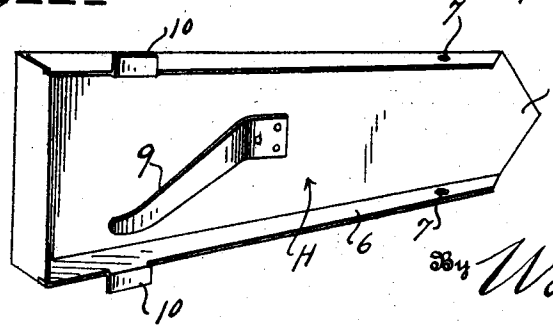


Fig. 4.



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DOOR-HOLDER.

1,388,272. Specification of Letters Patent. Patented Aug. 23, 1921.

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To all whom it may concern:

Be it known that I, WILLIAM H. LAWRENCE, a citizen of the United States, residing at Akron, in the county of Summit and State of Ohio, have invented certain new and useful Improvements in Door-Holders, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain improvements in door holders and has relation more particularly to a device of this general character especially designed and adapted for use in connection with the sliding doors of freight cars or the like, and it is an object of the invention to provide a novel and improved device of this general character which coacts with the door in a manner to reduce to a minimum the vibration of the door when the car is in transit.

Another object of the invention is to provide a novel and improved device of this general character which is adapted to provide means for holding effectively a sliding door against movement on its supports and particularly in connection with the sliding door of a freight car so that the breaking of hasps and seals is substantialy eliminated and whereby the use of cleats is unnecessary for holding the door in closed position.

The invention consists in the details of construction and in the combination and arrangement of the several parts of my improved door holder whereby certain important advantages are attained and the device rendered simpler, less expensive and otherwise more convenient and advantageous for use, as will be hereinafter more fully set forth.

The novel features of my invention will hereinafter be definitely claimed.

In order that my invention may be better understood, I will now proceed to describe the same with reference to the accompanying drawings, wherein:

Figure 1 is a fragmentary view in side elevation of a car illustrating a door holder constructed in accordance with an embodiment of my invention and in applied position.

Fig. 2 is an enlarged fragmentary view in elevation of my improved device as herein disclosed, with the tail portion of the holding plate indicated by dotted lines.

Fig. 3 is a sectional view taken substantially on the line 3—3 of Fig. 2, and

Fig. 4 is a view in perspective looking at the under face of the holding plate.

As disclosed in the accompanying drawings, W denotes a wall of a freight car or the like and D a sliding door of any ordinary or preferred construction. Immediately adjacent the door opening O in the wall W, the outer face of said wall W is provided with a pocket 1.

Secured to the outer face of the wall W and defining the side and inner end walls of the pocket 1 is a plate P. The plate P comprises the central portion 2 which partially overlies the inner or closed end portion of the pocket 1 and the arms 3 which extend along the side walls of the pocket 1. The inner margins of the side arms 3 at a point immediately adjacent the central portion 2 are provided with the flanges 4 extending within the pocket 1 and which provide a mounting for a pintle 5.

H denotes a plate which substantially snugly fits between the arms 3 of the plate P and which has its side and outer end marginal portions defined by the inwardly directed flanges 6. The inner end portions of the flanges 6 have the openings 7 through which the pintle 5 is directed and whereby the plate H is supported for swinging movement. The pivoted end portion of the plate H is provided with a tail part 8 which underlaps the central portion 2 of the plate P, said tail part 8 contacting with the central portion 2 of the plate to limit the intimate movement of the plate H.

Secured to the central portion of the plate H is an end portion of a spring 9, the opposite end portion of which spring contacts with the base of the pocket 1. The spring 9 serves to constantly urge the plate H outwardly and which outward movement of the plate is limited by the outwardly disposed wings 10 carried by the forward end portions of the side flanges 6 and which have contact with the outer end portions of the arms 3 of the plate P.

When it is desired to move the door D into open position, it is only necessary to depress the plate H sufficiently to permit an unobstructed movement of the door. When the door D is returned to closed position with respect to the opening O, the plate H, as the

door passes entirely thereover, will automatically move outwardly for contact with the adjacent side edge of the door, whereby said door is maintained against movement in a direction toward such plate. This is of decided advantage as the breaking of the hasps and seals employed in connection with the sliding doors of freight cars is substantially eliminated and the doors are also prevented from opening. In view of these material advantages, pilfering is prevented.

When the sliding door is of a single type, it is only necessary that one of my improved holders be employed but when a pair of sliding doors coact with a single opening, one of my holders is positioned for coaction with each of the doors.

From the foregoing description it is thought to be obvious that a door holder constructed in accordance with my invention is particularly well adapted for use by reason of the convenience and facility with which it may be assembled and operated, and it will also be obvious that my invention is susceptible of some changes and modification without departing from the principles and spirit thereof and for this reason I do not wish to be understood as limiting myself to the precise arrangement and formation of the several parts herein shown in carrying out my invention in practice except as hereinafter claimed.

I claim:

1. In combination with a wall provided with an opening and with a pocket adjacent said opening and a sliding door coacting with the opening, a plate substantially defining the side walls and inner end wall of the pocket and provided with flanges extending within the pocket, a plate fitting between the portions of the first named plate defining the side walls of the pocket, the side margins and the forward end margin of said second named plate being defined by inwardly directed flanges, a pintle supported by the flanges of the first named plate and with which the side flanges of the second named plate are pivotally engaged, and means for constantly urging an end portion of the second named plate outwardly of the pocket and in the path of travel of the door, the pivoted end portion of the second named plate being provided with a tail underlying the portion of the first named plate at the inner end of the pocket.

2. In combination with a wall provided with an opening and with a pocket adjacent said opening and a sliding door coacting with the opening, a plate substantially defining the side walls and inner end wall of the pocket and provided with flanges extending within the pocket, a plate fitting between the portions of the first named plate defining the side walls of the pocket, the side margin and the forward end margin of said second named plate being defined by inwardly directed flanges, a pintle supported by the flanges of the first named plate and with which the side flanges of the second named plate are pivotally engaged, and means for constantly urging an end portion of the second named plate outwardly of the pocket and in the path of travel of the door, the pivoted end portion of the second named plate being provided with a tail underlying the portion of the first named plate at the inner end of the pocket, the side flanges of the second named plate adjacent the outer ends thereof being provided with outstanding wings for contact with the portions of the first named plate defining the side walls of the pocket to limit the outward movement of the second named plate.

In testimony whereof I hereunto affix my signature.

WM. H. LAWRENCE.