W. A. DAVIS.

DOOR HANGER.

APPLICATION FILED OCT. 26, 1915.

1,223,856. Patented Apr. 24, 1917.

Fig. 1.

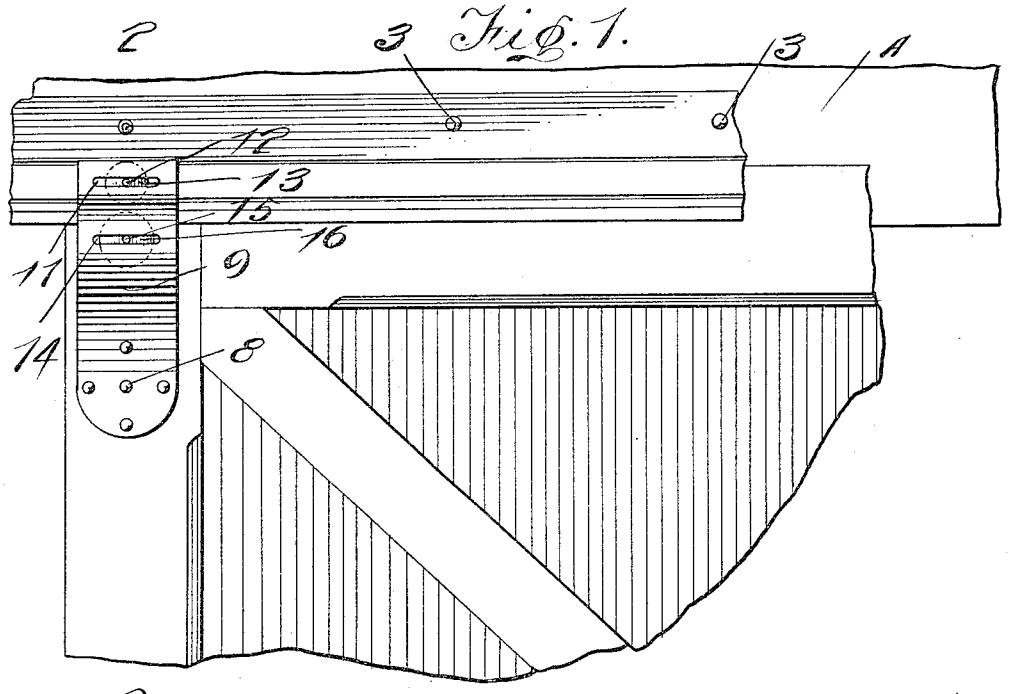
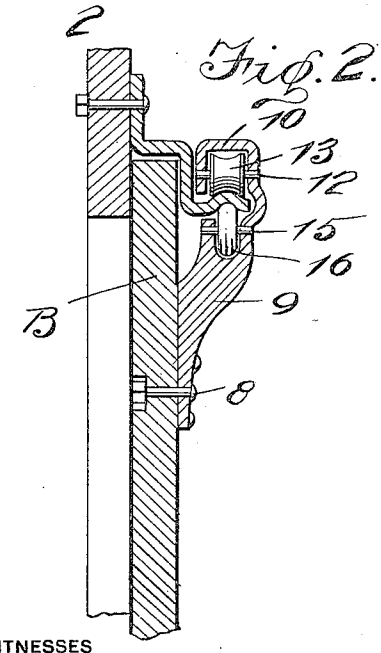



Fig. 2.



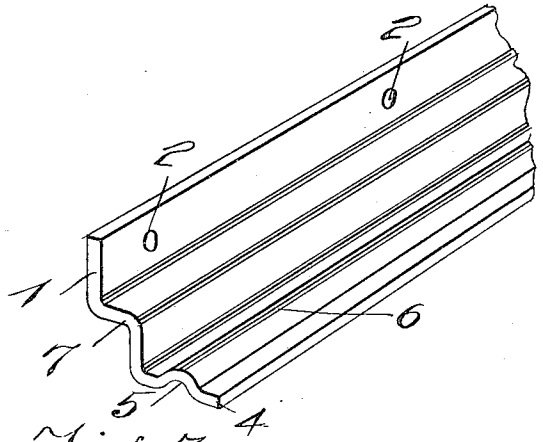




Fig. 3.

INVENTOR

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WITNESSES.

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

# UNITED STATES PATENT OFFICE.

WILLIAM A. DAVIS, OF HAMMOND, INDIANA, ASSIGNOR OF ONE-HALF TO DOLL L. NEWMAN, OF HAMMOND, INDIANA.

## DOOR-HANGER.

1,223,856. Specification of Letters Patent. Patented Apr. 24, 1917.

Application filed October 26, 1915. Serial No. 58,036.

*To all whom it may concern:*

Be it known that I, WILLIAM A. DAVIS, a citizen of United States, residing at Hammond, in the county of Lake and State of Indiana, have invented certain new and useful Improvements in Door-Hangers, of which the following is a specification.

My invention relates to a door hanger including a track and bearing for use on freight cars and the like.

One object thereof is to provide a sliding door so constructed that, during a sliding movement, the door will be positively guided by reason of the engagement of the roller bearing means carried by the door with the upper and lower face of a laterally projecting track.

A further object is to provide means for protecting one edge of the door against the weather, and,

A still further object resides in the particular manner of swinging the door from the track so that the same will not bind during a sliding movement.

With the above and other objects in view, I will now proceed to describe a specific embodiment of my invention as illustrated in the accompanying drawings, and in which:

Figure 1 is a side elevation of a door constructed according to my invention.

Fig. 2 is a sectional view taken on line 2—2 of Fig. 1, and

Fig. 3 is a view in perspective of one portion of the track.

In detail, the track comprises the flange 1 which is provided with holes 2 through which bolts 3 project for securing the track to the side of the car or the upper sill A of the door and the track is provided with a laterally projecting track surface 4 which is longitudinally grooved from underneath at 5, which produces a rib 6 on the top of the portion 4. The shape of the track at 7 is such that it will shield the upper edge of the door B from the weather. Secured to the door B by means of bolts 8 is a bracket 9 which carries suitable roller bearing members to be hereinafter set forth. This bracket 9 projects upwardly and is turned over as at 10 and is slotted as at 11 to receive the pivot pin 12 of a concaved roller 13 which fits on the rib 6, and directly beneath this roller 13 and held in a similar slot 14 is a pivot pin 15 carrying the convexed roller 16 which engages the groove 5, and thus the rollers 13 and 15 bear on opposite sides of the laterally projecting track 4 and the door is thereby positively guided during sliding movement. Furthermore by reason of the shape of the track 4, that is to say, considering the groove 5 and rib 6, and the shape of the rollers 13 and 15, the door B, in its sliding movement is positively guided and therefore cannot move laterally so as to bind. Therefore at all times, an easy sliding movement of the door is insured.

From the foregoing, it will be apparent that I have provided a sliding door construction which positively guides the doors, at all times, and prevents binding of the same. However, it is to be definitely understood that, while I have herein shown and described a specific embodiment of the invention, practical modifications may be resorted to without departing from the spirit of the invention as defined in the appended claim.

I claim:

In combination, a plate formed of metal and being supported at one edge, the said plate being bent adjacent the supporting portion outwardly and at right angles and then downwardly to provide a pocket, the outer edge of said plate being bent outwardly and at right angles to the downwardly extending portion, the metal adjacent the said outer edge being bent to provide an upwardly extending rib on its upper face and a groove on its under face coextensive with said plate and parallel with the free edge thereof, a door having its upper edge inclosed by said pocket, a bracket on said door inclosing the free edge of said plate, rollers rotatably mounted on said bracket above and below the free edge of said plate, the upper roller having a grooved periphery for engagement with said rib, and the under roller being engaged in the groove on the under side of said plate.

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

WILLIAM A. DAVIS.

Witnesses:

JULIUS TAUSSIG,

E. P. LISK.

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