

K. OSEL.
CAR DOOR HANGER.
APPLICATION FILED MAY 6, 1912.

1,044,908.

Patented Nov. 19, 1912.

Fig. 1

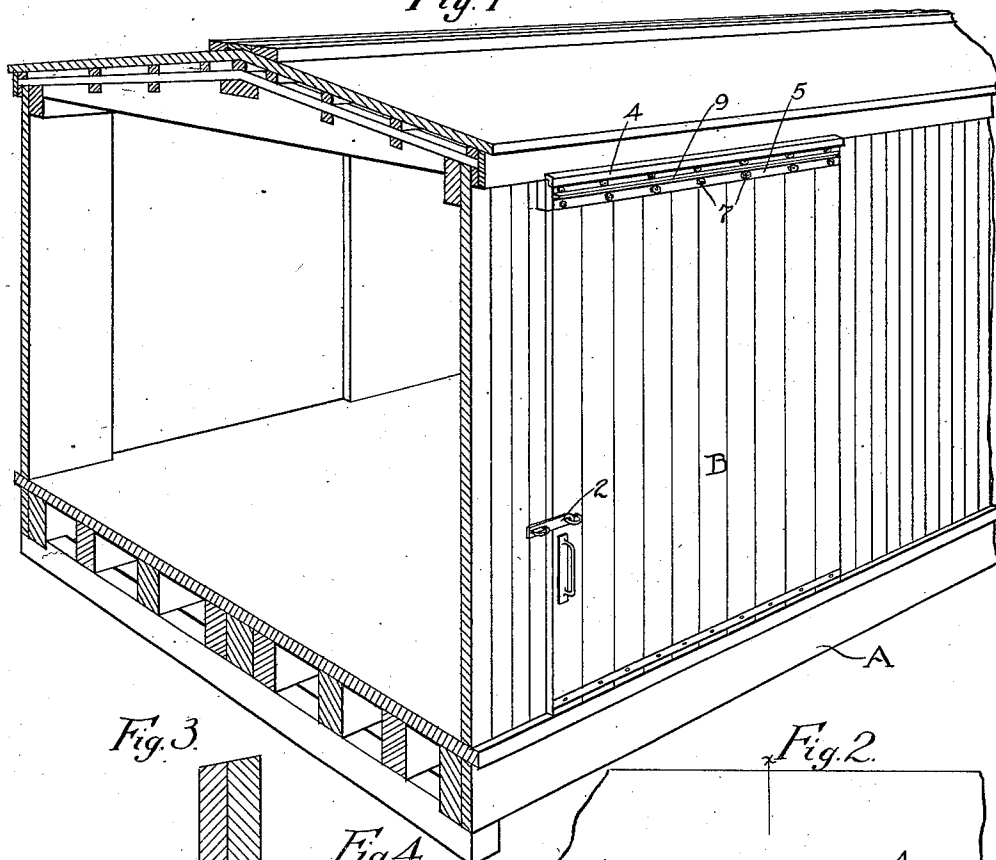


Fig. 3

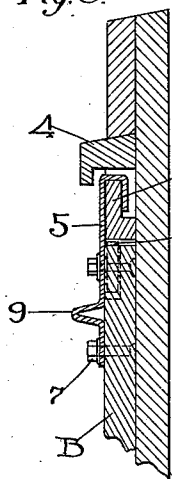


Fig. 4

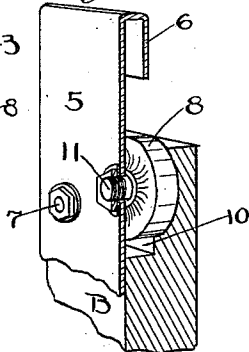
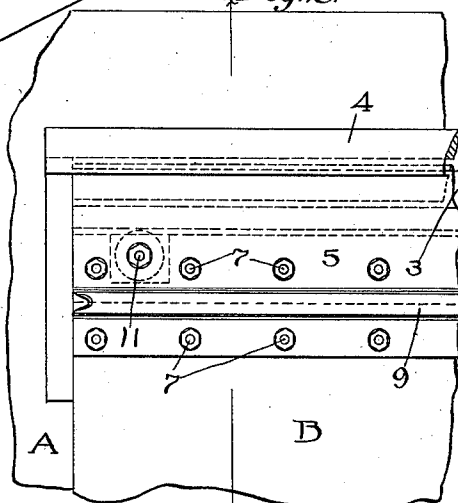


Fig. 2



WITNESSES

Walter D. Hurd
H. Smith

INVENTOR

Kistel Osel
By *Lathrop & Johnson*
his Attorneys.

UNITED STATES PATENT OFFICE.

KISTEL OSEL, OF ST. PAUL, MINNESOTA.

CAR-DOOR HANGER.

1,044,908.

Specification of Letters Patent.

Patented Nov. 19, 1912.

Application filed May 6, 1912. Serial No. 695,448.

To all whom it may concern:

Be it known that I, KISTEL OSEL, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Car-Door Hangers, of which the following is a specification.

My invention relates to improvements in a car door hanger, its object being particularly to provide a construction of hanger and associated bearing rollers in which the bearing rollers are most effectively employed, and in which there is not the strain upon the pivots of the bearing rollers which exists in those constructions where bearing rollers run upon a rail and support the door, and which will further cover the opening above the car door to prevent the interior of the car from inlet of rain, etc.

To this end the invention consists in the features of construction, combination, and arrangement of parts hereinafter described and claimed.

In the accompanying drawings forming part of this specification, Figure 1 is a perspective view of a car body showing the car door fitted with my improvements and showing a vertical section through the end of the car body; Fig. 2 is a detail view, broken away, of the car door and my improvements; Fig. 3 is a section on line *x-x* of Fig. 2; and Fig. 4 is a detail view through the hanger, illustrating the manner of supporting the rollers.

Referring to the drawings A represents an ordinary car body and B the door provided with the usual fastening means 2. Supported longitudinally upon the car body above the door way is a guide rail 3 over which is positioned an ordinary hood 4.

Secured across the outer face of the upper edge of the door is my improved combination hanger and hood consisting of a plate 5 having an inwardly and downwardly bent upper end 6 to fit over the top of the rail. The plate is secured to the door as by means of bolts 7 and is formed preferably below the pivots of the rollers 8 with an outwardly projecting horizontally extending rib 9. The rollers 8 are inserted in a groove

10 in the upper edge of the door, the axle 11 of each roller being journaled at one end in the plate 5 and at the other end in the door.

The rollers 8 of my construction, instead of traveling upon the top of the rail as in the ordinary construction, bear against the underside of the rail, the pressure upon the axles of the rollers being borne by the body of the door and by the plate 5. The rib 9 assists in strengthening and bracing the plate 5 to resist the strain imposed upon the plate by the pressure upon the rollers.

I have found by experience in manipulating car doors of the ordinary constructions that in the opening and closing of the door the door presses upwardly against the rail resulting in friction and in raising the ordinary top rollers from the rail, making them ineffective and making the door hard to open and close. I have also found that the heavy strain caused by the weight of the door upon the rollers and their axles necessitate the use of a very large number of supporting rollers for the door and results in injury to the rollers and necessity of constant repairs. It will be apparent that in my construction the door exerts no weight upon the rollers, the door being entirely supported by the upper end 6 of the plate 5 of the hanger, and that consequently the only strain upon the rollers is in the opening and closing of the door. I am thus enabled to use a very small number of rollers, having found two in connection with each door to be thoroughly effective, and I secure a door that is exceptionally easy to open and close, and in which the hanger and bearing parts are extremely simple and strong.

I claim as my invention:

1. In combination with a car body provided with a doorway and door, a longitudinally extending rail supported above the doorway, a hanger plate extending across the upper edge of the door and bent at its upper end inwardly and downwardly to fit over said rail, and rollers supported between the upper edge of said door and said plate in position to bear against the underside of said rail.

2. The combination with a car body provided with a door way and door and a longitudinally extending rail above said door way, of a hanger plate secured across the
5 upper edge of said door and formed with an inwardly and downwardly bent upper edge fitted over said rail, and rollers inset in the upper edge of the door below said rail,

said rollers having journal support in said hanger plate and door.

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

KISTEL OSEL.

Witnesses:

H. S. JOHNSON,
H. SMITH.

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