No. 665,412. Patented Jan. 8, 1901.

E. S. DILL.

CAR DOOR HANGER.

(Application filed Apr. 17, 1900.)

(No Model.)

Fig. 1.

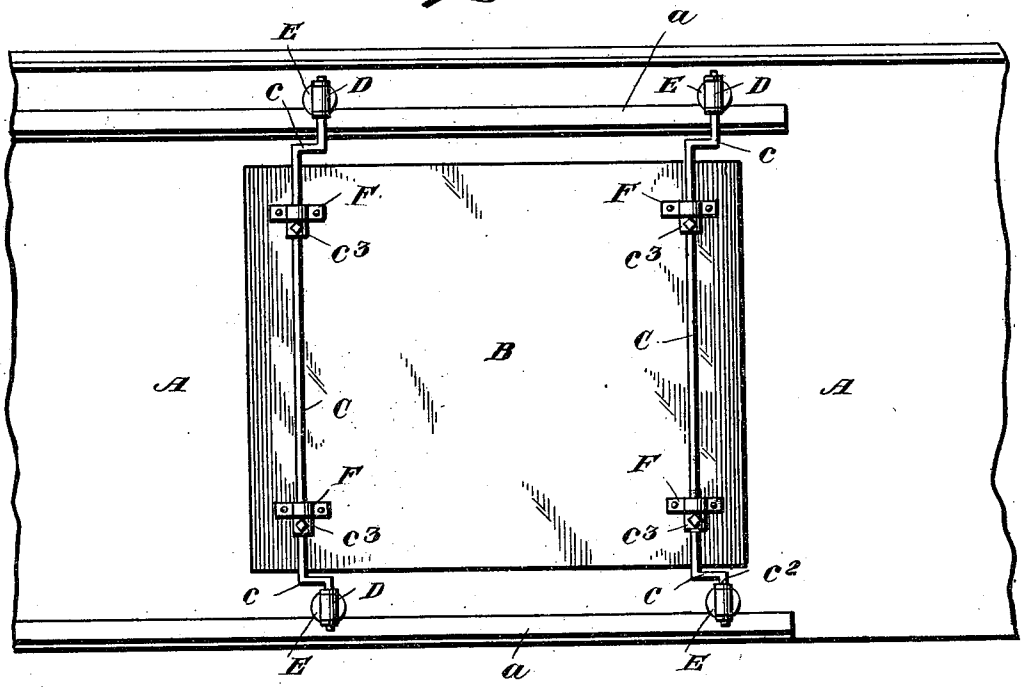


Fig. 2.

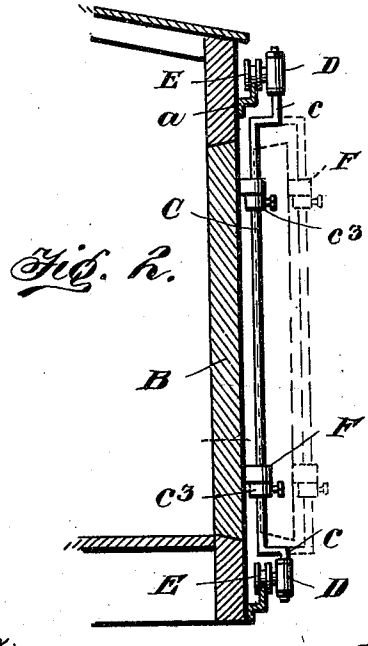
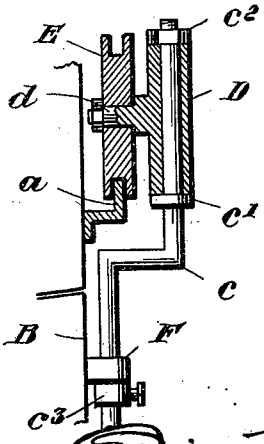


Fig. 3.



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CAR-DOOR HANGER.

SPECIFICATION forming part of Letters Patent No. 665,412, dated January 8, 1901.

Application filed April 17, 1900. Serial No. 13,180. (No model.)

To all whom it may concern:

Be it known that I, EDWIN S. DILL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Car-Door Hangers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to an improvement in car-door hangers; and it consists in the construction and arrangement of parts hereinafter described, and definitely pointed out in the claim.

The invention is adapted more particularly to that class of car-doors which are designed to be moved into or out from the door-frame or toward and from the side of the car for clearance, so that they can be readily moved along the track or ways.

The invention in its general structural features comprises two hangers, each conveniently composed of trucks which are mounted on cranks pivotally secured to the door, there being a truck or wheel adjacent each corner of the door at top and bottom and top and bottom tracks on which the trucks work.

In the drawings a simple form of the invention is shown; but minor changes can be made without departing from the nature and principle of the invention.

Figure 1 is an elevation of a portion of the side of a car with the improvement. Fig. 2 is a transverse section, and Fig. 3 is an enlarged detail section of one of the hangers.

A designates the side of the car, and B the door. Above and below the door are the tracks *a*, of any desired construction.

C and C designate the hangers, located at opposite edges of the door. The hangers are constructed conveniently of a rod which extends vertically across the door and a short distance beyond, at which point right-angle bands *c* are formed, from the outer ends of which extend vertical continuations, forming, in conjunction with the part *c*, a crank. On the vertical continuations of the rod is secured a shoulder or flange *c'*, while the extreme end is threaded to receive a nut c^2.

E designates a grooved truck or wheel, which is mounted on an axle *d*, extending laterally from an elongated tubular box D, sleeved on the vertical portion of this crank, resting on the flange *c'* and held in place loosely by the nut c^2.

F designates clips or yokes fixed to the side of the door and through which the hanger-rods loosely pass, and c^3 designates collars sleeved on the rods below and on which the clips rest. They are held in adjusted positions by any suitable means conveniently, such as set-screws, as shown.

By having the crank-hangers at opposite ends at top and bottom and extending in the same direction it will be observed that by simply drawing outward the door will swing out clear of the door-frame and side of the car, as shown in dotted lines, Fig. 2. The door is at all times held securely against swinging and its weight is equally distributed between the tracks. It will also be noticed that by the use of the adjustable collars c^3 the position of the door relative to the frame can be properly secured.

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

In combination with a car provided with the usual door-opening, of a door, tracks above and below the door, supporting-rods for the door capable of a sliding and swinging movement, rollers at the respective ends of the said rods adapted to engage the tracks, means for slidably mounting the door on the rods, and clamping devices on the rods beneath said first means designed to hold the door at adjusted vertical positions on the rods, as and for the purpose described.

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

EDWIN S. DILL.

Witnesses:
W. J. ROBINSON,
GEORGE E. TEW.