(Model.)

G. H. BURROWS.

DOOR HANGER.

No. 305,996. Patented Sept. 30, 1884.

Fig: 1.

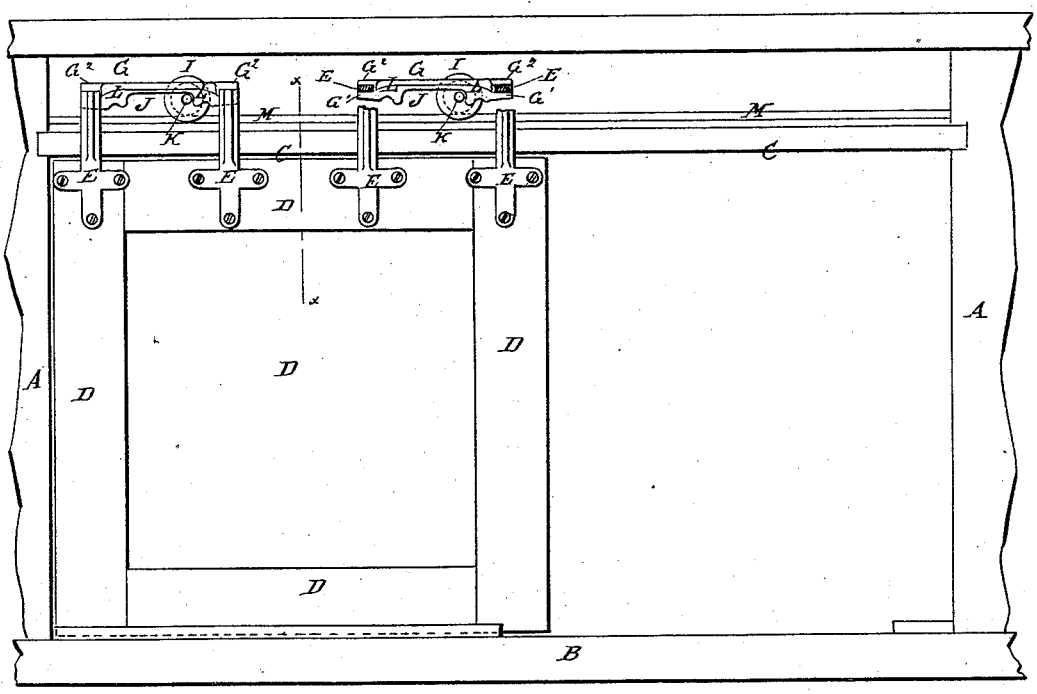


Fig: 3.

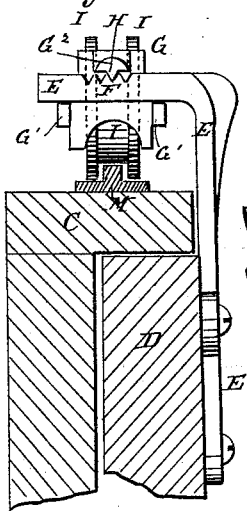
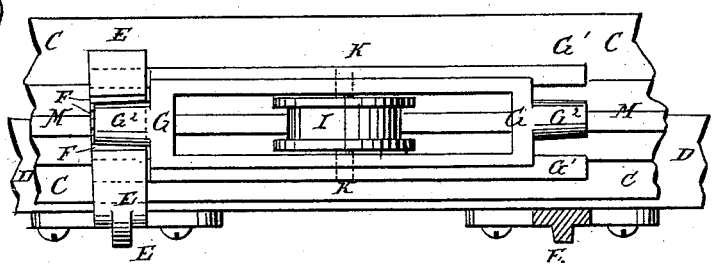


Fig: 2.



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GEORGE HENRY BURROWS, OF SOMERVILLE, ASSIGNOR TO HIMSELF, AND CHARLES H. DUNHAM, OF BOSTON, MASSACHUSETTS.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 305,996, dated September 30, 1884.

Application filed December 20, 1883. (Model.)

To all whom it may concern:

Be it known that I, GEORGE H. BURROWS, of Somerville, in the county of Middlesex and State of Massachusetts, have invented a new and useful Improvement in Door-Hangers, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a side elevation of my improvement, part being broken away. Fig. 2 is a plan view of a part of the same, part being broken away. Fig. 3 is a sectional elevation of a part of the same, taken through the line *x x*, Fig. 1.

The object of this invention is to facilitate the adjustment of door-hangers.

The invention consists in a door-hanger constructed with a traveling bar made with a longitudinal slot to receive the wheel, and long rabbets in its lower side to receive and travel upon the journals of the said wheel. The hanger-supports are made with horizontal inwardly-projecting upper arms having cross-grooves, and the traveling bar is made with prongs upon its ends to receive the upper arms of the supports, and with ribs upon the lower sides of the upper prongs to engage with the grooves of the supports and adapt the said traveling bar to be adjusted laterally. To the top bar of the doorway is attached a T-rail, upon the flanges of which rest and roll the flanges of the grooved wheels that carry the traveling bars, as will be hereinafter fully described.

I will describe my improvement as applied to car-doors, but do not limit myself to that application, as it can be used with advantage upon barn-doors, yard-doors, gates, and in other places.

A represents the door-posts; B, the door-sill, and C the top bar of a doorway.

D is the door, to the other side of the top bar of which are secured the bases of one or more pairs of hanger-supports, E, as the size and weight of the door D may require. The bases of the supports E are made wide, or are branched, to give them a wide bearing against the door.

The supports E project upward above the top of the door D to a suitable height, and are then bent inward at right angles, as shown in Fig. 3. The upper arms of the supports E are made thin, are flat and smooth upon both upper and lower sides, and have a number of cross-grooves, F, formed in their upper sides, as shown in Fig. 3.

Each pair of supports E is provided with a traveling bar, G, each end of which is made with three prongs, arranged in such positions that the side prongs, G′, will pass beneath and the center prong, G^2, above the upper arm of the support E.

Upon the lower sides of the center prongs of the traveling bar G are formed ribs H, corresponding with the grooves F of the supports E, so that the said traveling bar G can be adjusted laterally upon the said supports, to adapt the hangers to be applied to thinner and thicker doors, and to allow the doors to be set out from their seats to form openings between the said doors and seats for the passage of air to ventilate the car.

The traveling bars G are slotted longitudinally to receive the upper parts of the wheels or rollers I, and in the lower sides of the said bars are formed long rabbets or recesses J, to receive the journals K of the said wheels I, the shoulders L at the ends of the rabbets J serving as stops to limit the movement or travel of the said bars upon the said journals.

The faces of the wheels I are grooved to receive the rib of the T-rail M, attached to the upper side of the bar or plate C, the said groove being made of such a depth that the flanges of the wheels I will roll upon the flanges of the said rail.

The ratio between the circumferences of the wheel I and the journals K is designed to be such that the movement of the wheel I in opening or closing the door will cause the bar G to travel upon the journals K the length of the rabbets J, so that there will be no sliding friction.

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

1. In a door-hanger, the combination, with suitable supports, of a wheel supporting and connecting bar laterally adjustable on said supports, substantially as herein shown and described.

2. In a door-hanger, the combination, with

the horizontal inwardly-projecting upper arms of the supports E, having grooves F, of the traveling bar G, having prongs upon its ends to receive the upper arms of the said supports, and provided with ribs upon the lower side of the upper prongs to engage with the grooves of the said supports, substantially as herein shown and described, whereby the said traveling bar can be adjusted laterally upon the said supports, as set forth.

3. In a door-hanger, the combination, with the supports E, of the traveling-bar G, laterally adjustable on said supports, and provided with a longitudinal slot to receive the wheels, and long recesses J in its lower side to receive and travel upon the journals of the said wheels, substantially as herein shown and described.

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