

UNITED STATES PATENT OFFICE.

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SLIDING-DOOR HANGER.

SPECIFICATION forming part of Letters Patent No. 780,389, dated January 17, 1905.

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To all whom it may concern:

Be it known that we, GEORGE VOGT and JULIUS MILLER, citizens of the United States, residing at Covington, in the county of Kenton and State of Kentucky, have made certain new and useful Improvements in Sliding-Door Hangers, of which the following is a specification.

This invention is an improvement in sliding-door hangers or supports, and especially in the devices for holding the door of the car, the invention having for an object, among others, to provide a novel construction in the form of a support for the lower end of the door adapted to slide on the rail at the base of the doorway of the car; and the invention consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a perspective view of a portion of a car provided with our improvement. Fig. 2 is a detail perspective view of the door-shoe shown in Fig. 1, and Fig. 3 is a sectional view showing a somewhat different form of shoe.

In the accompanying drawings, the car A, door B, and rail C at the base of the door may be of the ordinary construction. To the lower end of the door B is secured the shoe D, having at its upper end the bracket D', lapped against the outer side of the door and provided on its inner side with the upward-facing shoulder D² at about the base of the bracket D' and which forms a rest for the lower edge of the door B, as shown in Fig. 1. In the construction shown in Fig. 3, which differs somewhat from that shown in Fig. 1, the shoe E is provided with the bracket E', corresponding to the bracket D', and with the shoulder E², corresponding to the shoulder D² of the construction shown in Fig. 1; but in Fig. 3 the body of the shoe is located laterally at the outer side of the line of the bracket E', while in Fig. 1 the body of the shoe is located at the inner side of the line of the bracket D', so that in Fig. 1 the body of the shoe lies immediately below the door B, while in Fig. 3 the body of the shoe lies outside the plane of the door, as shown in such Fig. 3 of the drawings. The body of the shoe (see Fig.

1) includes an outer plate D³, which extends down along the outer side of the rail C, the inwardly-projecting portion D⁴, below the rail C, and the upwardly-projecting flange D⁵, which extends up for a short distance above the lower edge of the rail C and forms with the outer plate D³ a groove at d to receive the lower edge of the rail C. In the construction shown in Fig. 3 the shoe E has the outer plate E³, the base portion E⁴, and the flange E⁵, corresponding to the parts D³, D⁴, and D⁵ of the construction shown in Figs. 1 and 2. At its upper end the body of the shoe is provided immediately above the flange D⁵ with a depending upper flange D⁶ in the same plane as the flange D⁵ and overlapping the inner side of the upper edge of the rail C, as shown in Fig. 1 of the drawings. It will thus be noticed we provide a shoe which embraces the lower rail C and operates to securely hold the door thereto, so the door may slide back and forth, as desired. It is preferred to employ rollers F in the shoe to run upon the lower rail. As shown, the rollers F are provided with trunnions f, which operate in slots d³ and d⁶ in the parts D³ and D⁶, the said slots extending to the lower edge of the depending flange D⁶ and also extending in the plate D³ to a point opposite the opening D⁷ between the upper and lower flanges D⁶ and D⁵, as best shown in Fig. 2 of the drawings. This construction facilitates the introduction of the rollers and the adjustment thereof to the position shown in Figs. 1 and 3.

In the construction shown in Figs. 1 and 3 it will be noticed we provide the shoe with a body portion to embrace the rail, with an upwardly-projecting bracket to lap against the outer face of the door, and with a shoulder to underlie the lower edge of the door, so the shoe can be securely held to the door by the bolts, as shown in both Figs. 1 and 3. In Fig. 3 the bolts H are shown passing through the bracket E' and securing the same firmly to the door, the latter resting on the upward-facing shoulder at the inner side of the bracket, as shown in both Figs. 1 and 3 of the drawings.

The casting may be made of wrought-iron or other suitable material and with or with-

out rollers without departing from some of the broad principles of our invention. It will be understood, however, that the rollers are preferred.

5 What we claim is—

1. The combination with the door, and the rail at the base thereof, of the shoe having a body portion embracing said rail, and an upwardly-projecting bracket lapping against
10 and secured to the outer face of the door, and an upwardly-facing shoulder underlying the lower edge of the door, substantially as set forth.

2. The combination of the door, the rail at
15 the base of the door, the shoe having a body portion provided with an outer plate, an inwardly-projecting portion at the lower edge of the outer plate, the flange projecting up-

wardly from said inwardly-projecting portion, the depending flange in alinement with
20 said first flange and provided in its lower edge with slots, slots being also formed in the outer plate in line with those in the flange, and the roller having its trunnions fitting in the slots in the outer plate and the depending
25 flange of the shoe, the body portion of the shoe having an upwardly-facing shoulder lapping beneath the lower edge of the door, and a bracket projecting upwardly above said shoulder and lapping against the face of the
30 door substantially as set forth.

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Witnesses:

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