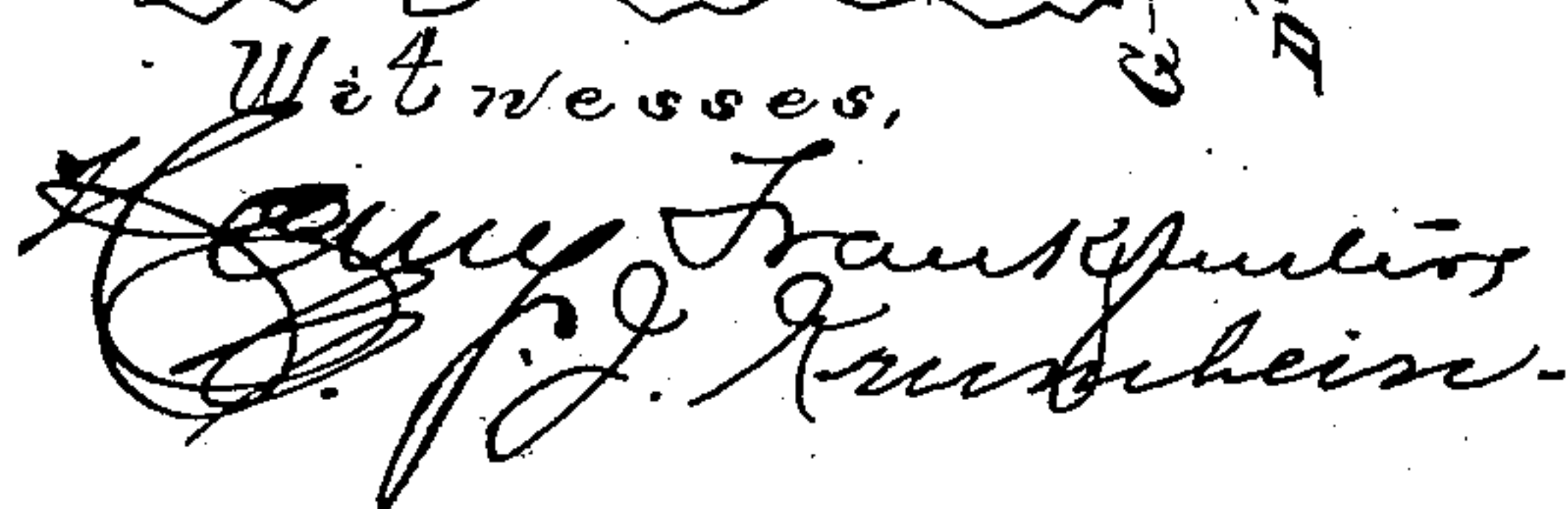


C. BRINTON.  
DOOR HANGER.

Patented Dec. 11, 1883.



Caleb Pimlott



# UNITED STATES PATENT OFFICE.

CALEB BRINTON, OF CHICAGO, ILLINOIS.

## DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 289,886, dated December 11, 1883.

Application filed February 17, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, CALEB BRINTON, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Door-Hangers, of which the following, in connection with the accompanying drawings, is a specification.

The invention consists in the devices herein-  
10 after described, and pointed out in the claims.

In the drawings, Figure 1 is a side view of a door-hanger embodying my invention. Fig. 2 is an end view of the same. Fig. 3 is a side representation, showing a modification in the  
15 means employed for connecting the door-suspending bolts to the truck-connecting bar. Fig. 4 is an end view of the same. Fig. 5 is a cross-section of the truck-connecting bar and truck-plates, showing the truck in place therein. Fig. 6 is a cross-section of the door and door-plate, showing a door suspended there-  
20 in; and Fig. 7 is a perspective of one of the axle-bearing plates.

Like letters of reference indicate like parts.

25 A A represent the studding, and B is the track. This track consists of boards *a a*, arranged against but not rigidly secured to the studding, and of the rails *a' a'*, rigidly fastened to the boards *a a*.

30 D D are brackets rigidly attached to the studding, and D' D' are arms projecting from said brackets and extending out laterally beyond the vertical edges of the studding, as shown.

35 E E are screws passing vertically upward through the brackets D D to and against the under side of the track B.

F is the lintel.

40 G G are plates rigidly attached to the backs of the boards *a a*. The upper ends of these plates lap the lintel, and their lower ends lap the arms D' D'. As the track is thus supported on the upper ends of the screws E E, it may be adjusted vertically by turning them  
45 for that purpose. The plates G G, in conjunction with the lintel and arms D' D', retain the track in a vertical position.

H H are the trucks, each consisting of two wheels, *b b*, and of an axle, *c*.

50 I is a truck-connecting bar.

J J are axle-bearing plates. These plates

each consist of a flat portion, *d*, and of a depending part, *d'*. I apply the plates J J to the under side of the bar I by means of screws or other suitable fastenings. Small points *e e* 55 may also project from the upper corners of the plates J J to aid in retaining them in place. In each depending part *d'* is a transverse opening, *f*, to receive the axle *c*. The central part of this opening fits the axle *c*, but is enlarged 60 vertically from the central part, as is clearly indicated in Fig. 5. This opening may with like effect extend downward entirely through the parts *d' d'*. By these means the axle, and consequently the truck, is allowed to tilt some- 65 what in rolling over an uneven track, but is prevented from rolling toward either rail, or from being turned out of the proper direction of movement. The trucks also, by being connected to the bar I in this manner, are always 70 retained in a position directly over or nearly over the corners of the doors, and the latter therefore are caused to move more evenly.

K K are the door-suspending bolts. These bolts depend from the bar I, and are flattened 75 near their lower ends or between the bar I and the top of the door, to adapt the said bolts to be turned by means of a wrench there inserted. The lower ends of the bolts K K are tapering or conical and smooth between these conical 80 parts and their screw-threaded portions, as shown.

K' K' are door-plates on the upper edge of the doors. These plates have openings to receive the lower ends of the bolts K; and are 85 ribbed on their under sides, as shown at *e' e'*, both to strengthen the door-plates and to prevent the nuts *e'' e''* from being turned while the bolts K K are being screwed into them. These nuts, being loose in the said plates, would 90 be liable to move slightly in a lateral direction while the bolts were being inserted, and so make it difficult to make the screw-threads on the bolts and in the nuts engage properly. To avoid this liability, I taper the lower ends of 95 the bolts K K, and make them smooth a little way above the tapering parts, so that the nuts may be easily entered by the bolts.

In Figs. 3 and 4, I have shown the door-suspending bolts as depending from clips L L, 100 through which the bar I passes, and to which it may be connected by means of screws. By

this means the bar I need not be weakened by holes made to permit the passage of the door-suspending bolts, and the clips may be adjusted or set at any place desired on the said bar.

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

1. The combination, in a door-hanger, of the vertically-adjustable track, a track-adjust-  
10 ing device, and the plates G G, fastened to the track and bearing movably against fixed parts, substantially as and for the purposes specified.

2. The combination, with the trucks and truck-connecting bar of a door-hanger, of the  
15 axle-bearing plates J J, secured to the said bar, and having therein the axle-receiving

opening *f*, widening vertically from its central part, substantially as and for the purposes specified.

3. The combination, in a door-hanger, of 20 the door-suspending bolts K K, made tapering or pointed at their lower ends and smooth between their screw-threaded parts and the said ends, the door-plates K' K', having openings therein to receive the lower ends of the said 25 bolts, and having thereon the ribs *e' e'* and the nuts *e'' e''*, substantially as and for the purposes specified.

CALEB BRINTON.

Witnesses:

F. F. WARNER,

HENRY FRANKFURTER.