

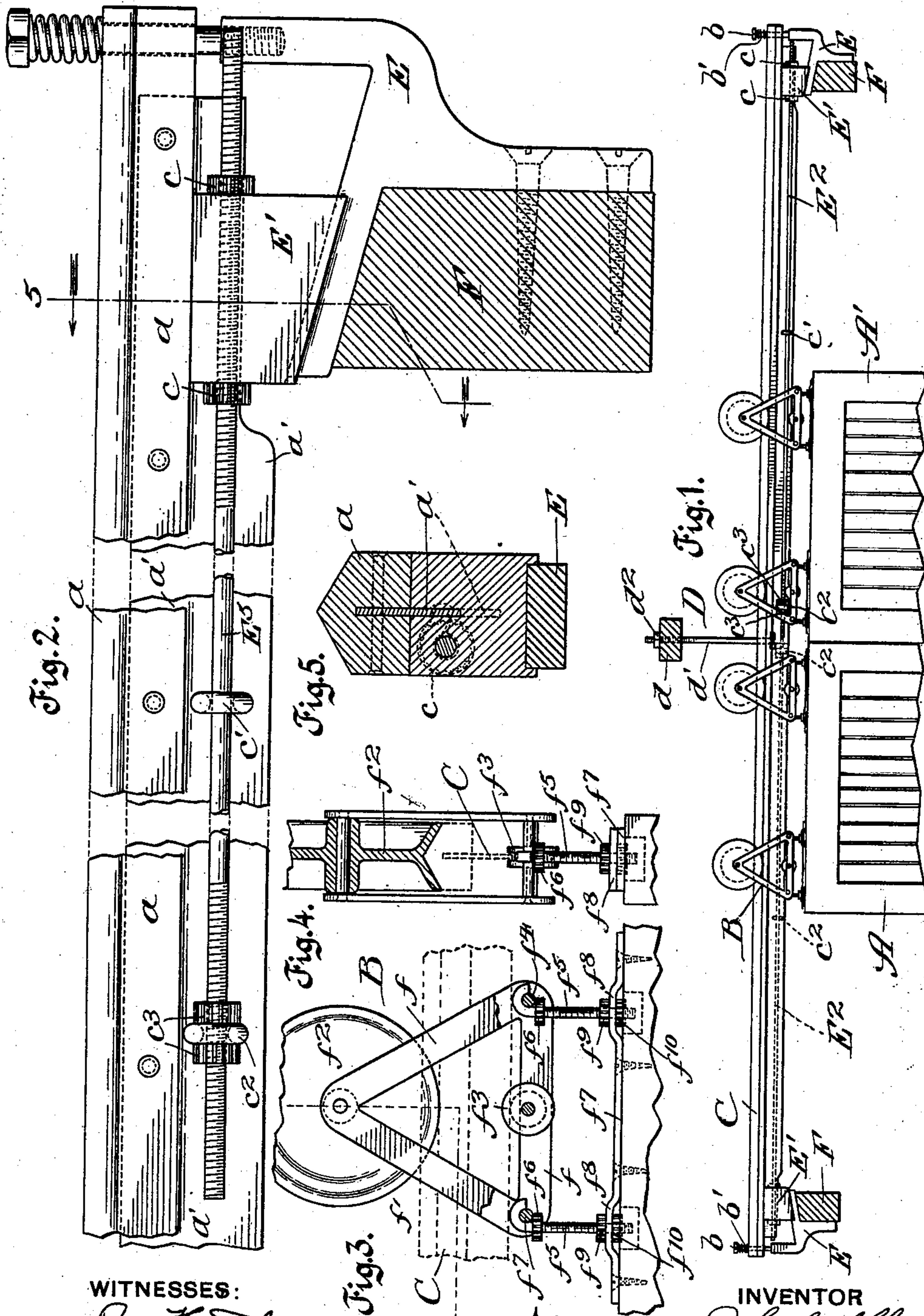
No. 689,569.

Patented Dec. 24, 1901.

J. E. AHLVIN.
DOOR HANGER.

(Application filed Aug. 17, 1901.)

(No Model.)



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN E. AHLVIN, OF JOLIET, ILLINOIS.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 689,569, dated December 24, 1901.

Application filed August 17, 1901. Serial No. 72,404. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. AHLVIN, a citizen of the United States, residing at Joliet, in the county of Will and State of Illinois, have invented a new and useful Improvement in Door-Hangers, of which the following is a specification.

My invention relates particularly to sliding-door hangers; and my primary objects are to provide a hanger which cannot be derailed and a track which can be readily adjusted in case of sagging and regardless of the fact that it may be inclosed between walls.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 represents a track and two doors suspended therefrom, the upper portion only of the doors being shown; Fig. 2, a broken view, inside elevation, of one-half of the track; Fig. 3, a fragmentary view of one of the hangers and a door to which it is attached; Fig. 4, a broken sectional view taken as illustrated at line 4 of Fig. 3, and Fig. 5 a broken sectional view taken as illustrated at line 5 of Fig. 2.

A A' represent the doors; B, hangers connected with the upper portions of the doors; C, a track; D, a central support for the track; E, brackets for the ends of the track; E', blocks mounted on inclined ways of the track, and E adjusting-rods for the blocks E'.

The track preferably comprises a slotted member *a* of the cross-section shown in Fig. 5, said member being provided with upwardly-converging surfaces, which form a ridge for the upper wheels of the door-hangers, and the flange *a'*, which appends from the under surface of the member *a*, said flange being received at its upper portion by the slot in the member *a* and secured therein by rivets, as shown. Where the track is received between two walls, or rather within a wall which is recessed to receive the doors and track, the brackets E are supported upon cross-pieces F. Through the ends of the track loosely pass vertically-disposed bolts *b*, which screw into the brackets E. The bolts *b* are equipped with springs *b'*, which serve to depress the ends of the track and hold the blocks E' in close contact with their guides. The adjusting-rods E² pass through the blocks E' and are secured thereto, as by nuts *c*. Said rods ex-

tend from said blocks to near the center of the track and are located one in front of the web *a'* and the other in the rear thereof. Near the center of their length said rods pass through eyes or staples *c'*, connected with the web *a'*, and near their inner ends said rods pass through eyes *c*², connected with said web. The rods are threaded at their inner ends to receive nuts *c*³, located on opposite sides of eyes *c*². The support at D is here shown comprising a cross-piece *d* and a bolt *d'*, which passes through the member *a* of the track and through a perforation in the cross-piece *d*, said bolt being equipped at its upper end with a nut *d*².

Each hanger B comprises, preferably, triangular side frames *f f'*, which receive the track between them, an upper grooved wheel *f*², supported by the track member *a*, a lower grooved wheel *f*³, which bears on the lower edge of the web *a'*, cross-bolts *f*⁴, connecting the lower corners of the side frames, hook-bolts *f*⁵, depending from the cross-bolt *f*⁴ and secured against removal therefrom by nuts *f*⁶, and a door-iron *f*⁷, having recessed perforate portions *f*⁸, which receive the bolts *f*⁵, being firmly connected thereto by nuts *f*⁹ *f*¹⁰.

It readily will be understood from the foregoing description that when the ends of the track are inaccessible they nevertheless can be adjusted in height by means of the adjusting-rods, for which purpose it is only necessary to untighten one of the nuts *c*³ of each rod and turn up the other nut thereof, thereby forcing the rod longitudinally. In this manner the blocks E' can be moved either upwardly or downwardly on their inclined guides to bring the ends of the track on a level with the center of the track, the blocks being always maintained in contact with their guides by springs. If desired, the center of the track may be adjusted also by turning the bolts *d'*, the nut *d*² being held against movement by any suitable means.

It will be observed from Fig. 4, wherein the position of the track is shown in dotted lines, that the hanger is symmetrically disposed with reference to the track and that it is impossible with this construction for the door to become derailed. The advantage of being able to detach the ends of the track to bring them to a level with the center of the

track without the necessity of injuring the wall which receives the sliding door is self-evident. In addition to acting as adjusting-rods the rods E^2 assist to a certain extent in
5 preventing lateral and perpendicular flexure of the track between its central point of support and its ends, it being understood that the springs b' may be of sufficient length to hold the blocks E' with considerable pressure
10 against their guides.

Changes in details of construction within the spirit of my invention may be made. Hence no limitation is to be understood from the foregoing detailed description except as
15 shall appear from the appended claims.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a door-track having a central support, of end supports for the
20 track comprising inclined guides and track-supporting blocks movably mounted thereon, springs for yieldingly holding said blocks in contact with said guides, and adjusting means for said blocks.

25 2. The combination with a door-track, of

end supports therefor comprising brackets having inclined guides, studs on said brackets equipped with springs serving to depress the ends of the track, and track-supporting
30 blocks on said guides.

3. The combination of a track comprising a member a , having a wheel-receiving ridge on its upper surface and a web-receiving recess at its lower side and a depending web a' set into said recess, and a hanger comprising
35 side frames equipped with interposed wheels bearing respectively upon said ridge and upon the lower edge of said web.

4. A door-hanger comprising side frames, track-engaging wheels, cross-bolts connecting the lower portions of the side frames, and
40 hook-bolts depending from said cross-bolts and equipped with nuts serving to prevent disengagement of the hooked portions of the bolt from said cross-bolts.

JOHN E. AHLVIN.

In presence of—

D. W. LEE,

W. B. DAVIES.