H. E. BALLARD.

DOOR HANGER.

APPLICATION FILED JUNE 30, 1909.

956,025. Patented Apr. 26, 1910.

Fig. 2.

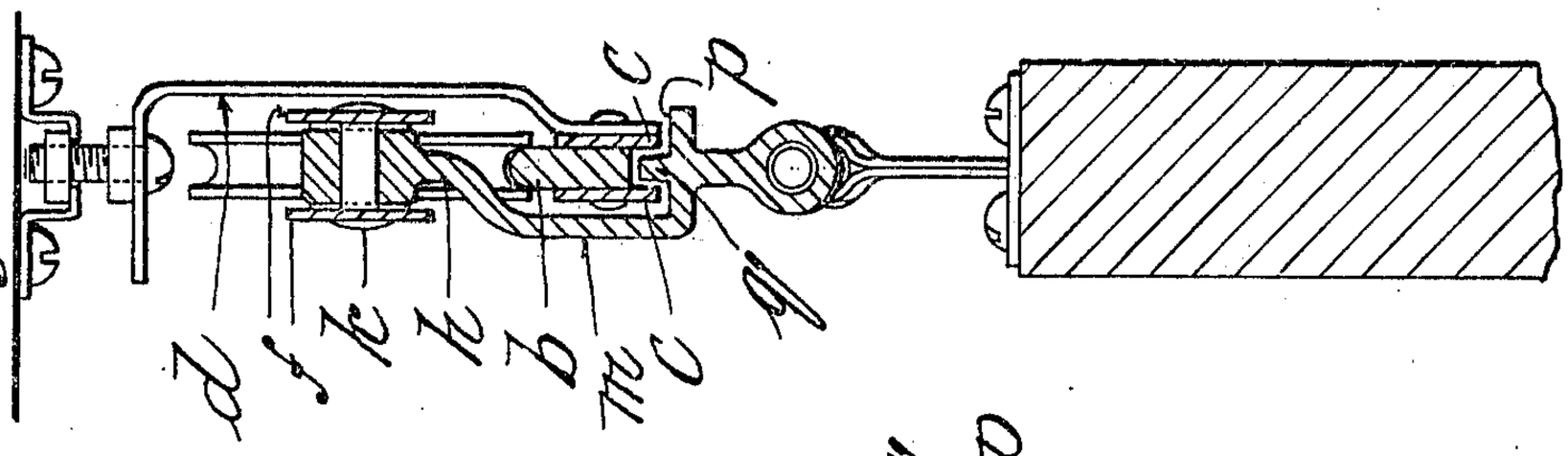


Fig. 3.

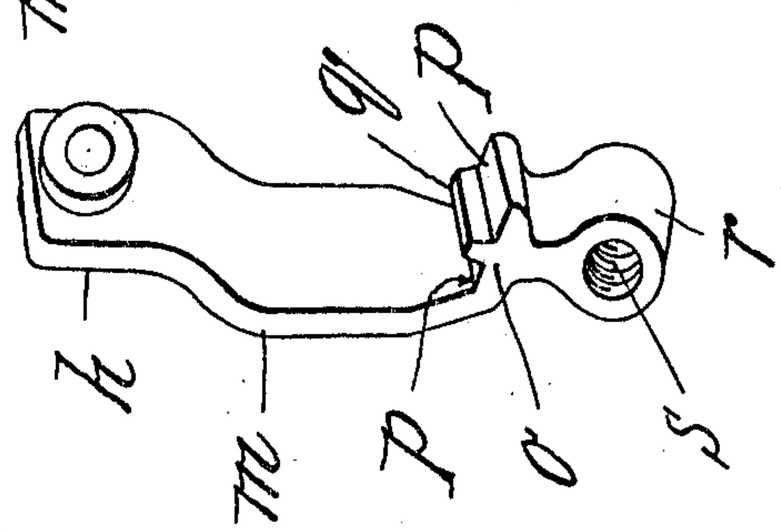
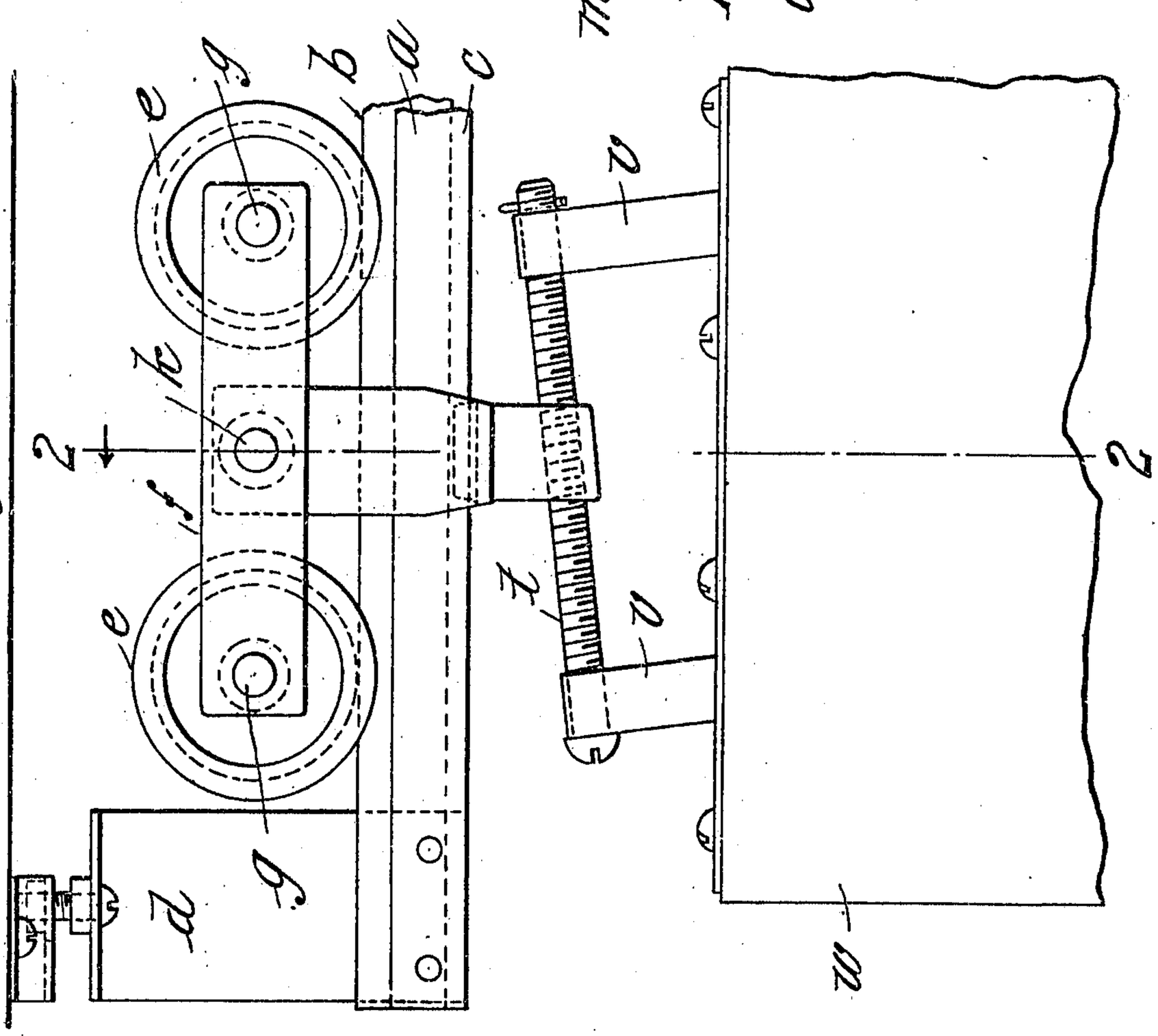


Fig. 1.



WITNESSES:

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UNITED STATES PATENT OFFICE.

HARRY E. BALLARD, OF HOLYOKE, MASSACHUSETTS, ASSIGNOR TO THE COBURN TROLLEY TRACK MANUFACTURING COMPANY, OF WILLIMANSETT, MASSACHUSETTS, A CORPORATION.

DOOR-HANGER.

956,025. Specification of Letters Patent. Patented Apr. 26, 1910.

Application filed June 30, 1909. Serial No. 505,126.

To all whom it may concern:

Be it known that I, HARRY E. BALLARD, a citizen of the United States of America, residing at Holyoke, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Door-Hangers, of which the following is a specification.

This invention relates to an improvement in door-hangers and particularly to an improvement in tracks from which sliding doors are suspended, the object of the invention being fully set forth and claimed in the following specification.

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

Figure 1 is a side elevation of a door-hanger embodying the invention, showing it in position on a portion of a track adapted to receive it; a portion of the door suspended from the track being also shown. Fig. 2 is a cross sectional elevation in the plane of line 2—2, Fig. 1, showing particularly the relation of the wheels of the hanger to the track. Fig. 3 is a perspective view of the pendent hanger arm extending from the supporting wheel to a point below the track and constituting the support for the suspended door or one end thereof.

Referring now to the drawings, *a* indicates a track as a whole consisting of the tread portion *b* thereof having a rounded upper edge, which is clamped between two metal plates *c*, the lower edge of the plates extending somewhat below the lower edge of the wooden tread portion *b* whereby a channel, rectangular in cross section, is formed at the underside of the track. The track is supported from the ceiling in brackets *d*, of any desired and convenient construction.

The hanger-wheels are indicated by *e*, these being spaced apart by the means of two bars *f* in the ends of which the axles *g* of the wheels are mounted. These wheels are grooved to run on the rounded upper edge of the track portion *b*, and are mounted on the axles *g* between the two bars *f*.

Midway between the axis of the wheels the pendent hanger *h* is located being pivotally supported between the bars *f* on a pin *k* in such manner that it may swing freely in the plane of the wheels *e*. This pendent hanger *h* has an offset *m* formed therein to clear the track, the lower part thereof, however, being located in the same vertical plane as that end which lies between two bars *f*; and at *o* (which is the portion of the hanger located directly under the lower edge of the track) two plane surfaces *p* are provided which are parallel with the underside of the track and in close proximity to the lower edges of the plates *c*. Between these surfaces *p* is cast, or otherwise formed, a long rib *q* parallel with the track and extending up into the rectangular channel in the lower edge thereof, referred to above. This rib *q* is intended to fit so closely the sides of the plates *c* which constitute the sides of said channel that it will be impossible for the hanger *h* to be oscillated transversely of the track far enough to bring said pendent hanger *h* into contact with the track at any point. Furthermore, the space between the lower ends of the plates *c* and the plane surfaces *p* of the hanger is less than the height of the rib *q* measured from the surfaces *p*. It is therefore impossible to remove the supporting-wheels from the track, except by sliding it over a free end of the track.

In the hub *r* at the lower extremity of the hanger *h* is a threaded hole *s*, whose axis is in a plane parallel with, and inclined relative to, the track. In this hole is located a screw *t* on which is rotatably supported a couple of standards *v* secured to the top of the door *w*. The door may swing freely on this screw transversely of the track. Heretofore, much inconvenience has been occasioned by the fact that such swinging of the door on its support *t*, has imparted swinging movement to the hanger-wheels on the track, not infrequently causing the hangers to strike some obstruction within the casing or boxing which incloses it, sometimes derailing it, and it is to obviate this inconvenience that the present invention was devised.

In the present construction, by means of the engagement of the rib *q* with the smooth inner faces of the channel extending along the lower edge of the track, the hanger *h* is prevented from oscillating transversely of the track to any appreciable degree; and, once put in place, the hanger-arm is so interlocked with the track that its dislodgment can not be effected, it being impossible to lift the wheels enough to disengage their edges from the track.

What I claim, is:—

In a door-hanger, the combination with a

track portion of wood or the like, and metal plates between which the track is clamped, said plates extending below the track portion to constitute a channel; of a truck comprising a frame, grooved wheels mounted tandem therein, a hanger-arm suspended from said frame and extending around the side of the track, the lower end of the arm being located in the plane of the track and having a projection thereon parallel with the sides of said channel and extending into the latter in close proximity to the sides thereof to restrain the arm against swinging movements transversely of the track.

HARRY E. BALLARD.

Witnesses:
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