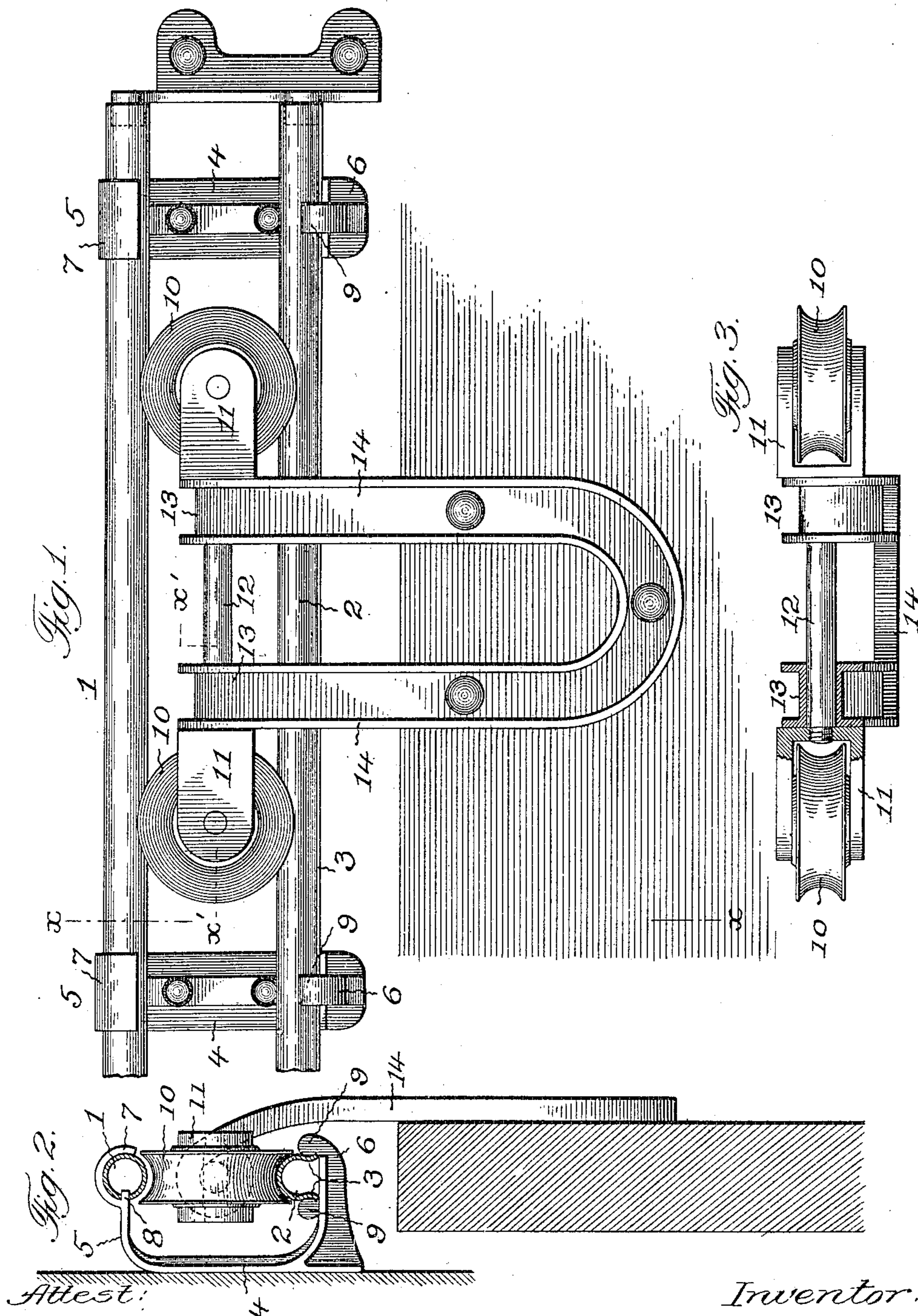


No. 812,346.

PATENTED FEB. 13, 1906.

J. H. LAWRENCE.
DOOR HANGER.
APPLICATION FILED FEB. 2, 1905.



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DOOR-HANGER.

No. 812,346.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN H. LAWRENCE, a citizen of the United States of America, and a resident of Sterling, in the county of Whiteside and State of Illinois, have invented certain new and useful Improvements in Door-Hangers, of which the following is a specification.

This invention relates to overhead hangers for doors and the like, and has for its object to provide a simple and efficient structural formation and combination of parts affording lightness and strength and with which accidental disengagement of the track-wheels from the track-rails is prevented and in which a tilting movement of the door with relation to the track structure is attained without side strain upon the track-wheels and the subsequent tendency of such track-wheels to bind against and become dislodged from the track, all as will hereinafter more fully appear.

In the accompanying drawings, Figure 1 is a detail front elevation illustrating the application of the present invention to a barn-door hanger. Fig. 2 is a transverse sectional elevation at line $x x$, Fig. 1. Fig. 3 is a detail horizontal sectional elevation at line $x' x'$, Fig. 1.

Similar numerals of reference indicate like parts in the several views.

Referring to the drawings, 1 is the upper track-rail, and 2 the lower track-rail, arranged in separated vertical relation to constitute a runway for the flanged track-wheels of the door-hanger.

In the preferred form of the present invention, as illustrated in Figs. 1 and 2, the upper track-rail 1 is of a tubular form and circular in cross-section, while the lower track-rail is of a tubular form having an inverted-U shape in cross-section with outturned webs 3 at bottom for engagement in manner hereinafter described with the wall-brackets by which the rails are supported in place above the doorway.

4 represents the supporting-brackets, having upper and lower lateral arms 5 and 6 extending out from the attaching-base of the bracket for the support of the respective track-rails 1 and 2.

7 is an extension or saddle on the outer end of the bracket-arm 5, with its under side formed into a semicircular socket adapted to

receive the upper half-circumference of the upper track-rail 1, as illustrated in Fig. 2.

8 is a horizontal tongue arranged on the bracket-arm 5 in opposed relation to the free end of the extension or saddle 7 and adapted to engage in an orifice in the side of the upper track-rail 1 and form, in connection with the aforesaid semicircular socket, a cheap and efficient means for attaching the upper track-rail in place.

9 represents a pair of ribs, preferably of the rounded form shown in Fig. 2, arranged in parallel and separated relation on the outer end of the lower bracket-arm 6 to form a receiving-channel for the bottom portion of the lower track-rail, the outturned webs 3 of which are adapted to engage the base of said ribs to attain a substantial attachment of the track-rail in place. With such structural arrangement of parts a downward stress upon the lower track-rail will tend to spread the webs 3 outward and attain a still firmer attachment of the said track-rail in place.

10 represents the flanged track-wheels, moving between the upper and lower track-rails aforesaid, with their flanges projecting beyond the tread of said rails, so that with the wheels once in place accidental disengagement is entirely prevented.

In the preferred form of the present invention, as shown in Fig. 1, a pair of track-wheels are mounted in a frame common to both wheels and comprising a pair of yokes 11, individual to the track-wheels and intermediately connected by a horizontal round bar 12, which in turn is engaged by eyes 13 at the upper ends of the suspension-yoke 14, secured to the upper end of the door or other article intended to have movement upon the track-rails. With the above-described arrangement of parts the bar 12 is on substantially the same horizontal plane as the axles of the track-wheels, so that when the door or other article is tilted outwardly at its lower end the movement of the yoke-eyes 13 will take place upon the bar 12 without imposing any lateral stress upon the track-wheels to cause the same to bind upon or become dislodged from the track-rails.

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

1. In a hanger for doors and the like, the combination of upper and lower stationary

track-rails, brackets for supporting said rails in separated relation, a frame located between said track-rails, and means for movably connecting the frame and rails together, said frame having supporting connection with a door or the like, substantially as set forth.

2. In a hanger for doors and the like, the combination of an upper track-rail, a tubular lower track-rail of an inverted-U shape in cross-section, a supporting-bracket having upper and lower lateral arms carrying said rails, the lower arm having a receiving-socket for the base of the lower rail, a frame located between said track-rails, and means for movably connecting the frame and rails together, said frame having supporting connection with a door or the like, substantially as set forth.

3. In a hanger for doors and the like, the combination of a tubular upper track-rail circular in cross-section, a tubular lower track-rail of an inverted-U shape in cross-section, a supporting-bracket having upper and lower lateral arms carrying said rails, the upper arm having a semicircular socket and a longitudinal tongue at its outer end for engagement with the upper track-rail, the lower arm having a receiving-socket for the base of the lower track-rail, a frame located between said track-rails, means for movably connecting the frame and rails together, and said frame

having supporting connection with a door or the like, substantially as set forth.

4. In a hanger for doors and the like, the combination of an upper and lower track-rail arranged in separated relation, supporting-brackets for said track-rails, a pair of flanged track-wheels confined between said track-rails, yokes in which said track-wheels are mounted, a horizontal bar connecting said yokes, and a suspension member pivotally connected to said bar, substantially as set forth.

5. In a hanger for doors and the like, the combination of a tubular track-rail of an inverted-U shape in cross-section, and a bracket having a lateral supporting-arm formed with a receiving-socket for the base of said track-rail, substantially as set forth.

6. In a hanger for doors and the like, the combination of a tubular track-rail of an inverted-U shape in cross-section, and a bracket-arm having a lateral arm provided with a pair of parallel ribs in separated relation to form a receiving-socket for the base of said track, substantially as set forth.

Signed at Sterling, Illinois, this 30th day of January, 1905.

JOHN H. LAWRENCE.

Witnesses:

JOHN ROYER,
MAUDE POTTER.