(No Model.)

2 Sheets—Sheet 1.

R. W. LUNDY.

ADJUSTABLE TRACK FOR DOOR HANGERS.

No. 509,132. Patented Nov. 21, 1893.

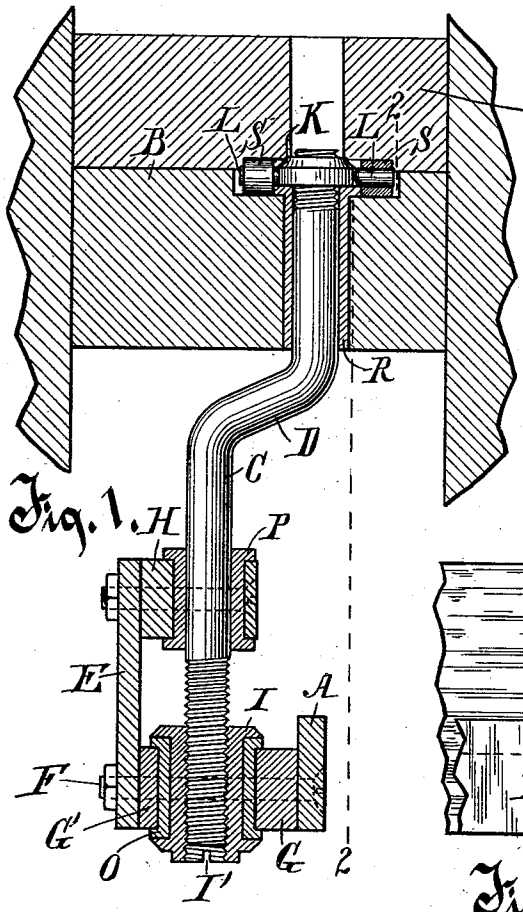


Fig. 1.

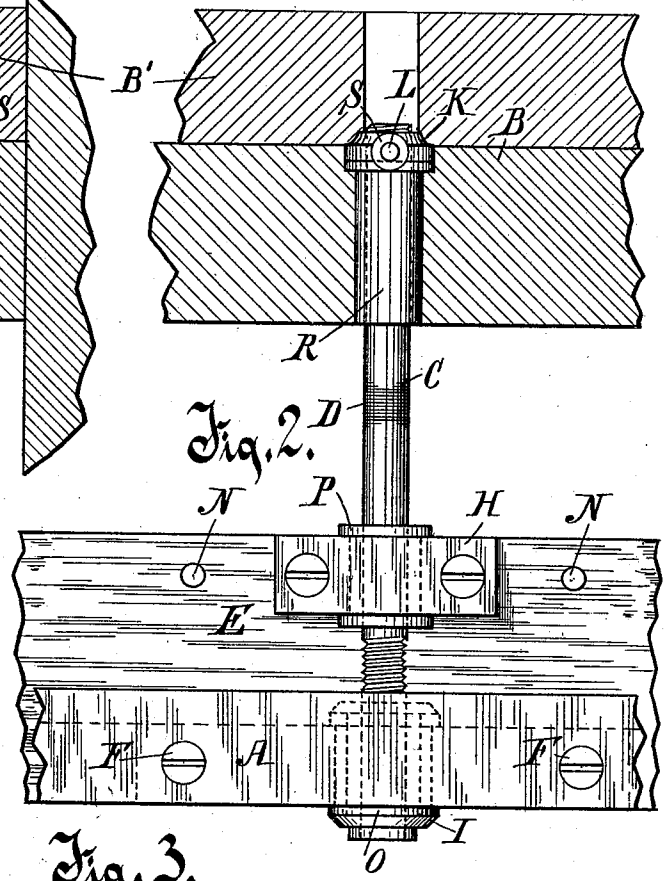


Fig. 2.

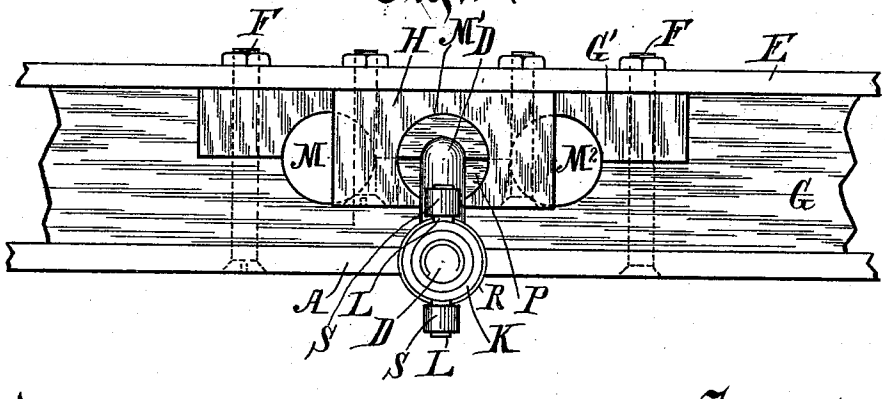


Fig. 3.

Witnesses.

C. N. Keeney.

Wm. M. Foster.

Inventor.

Richard W. Lundy

By Benedict & Morsell

Attorneys.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

(No Model.) 2 Sheets—Sheet 2.

R. W. LUNDY.

ADJUSTABLE TRACK FOR DOOR HANGERS.

No. 509,132. Patented Nov. 21, 1893.

Fig. 4.

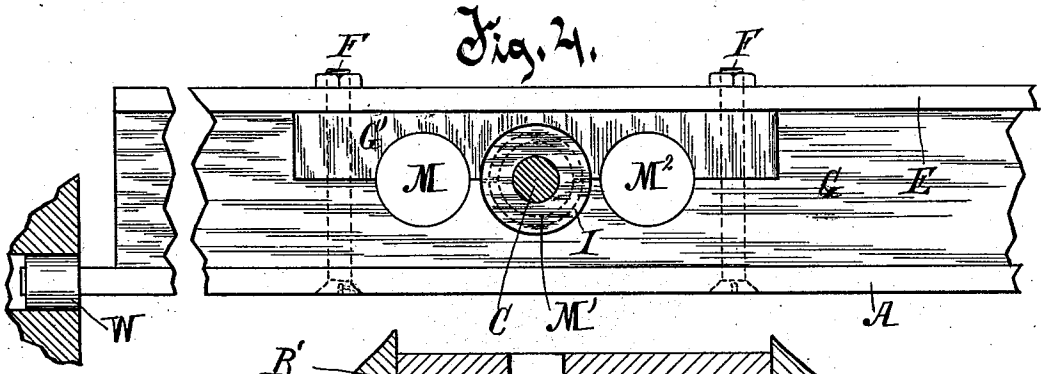
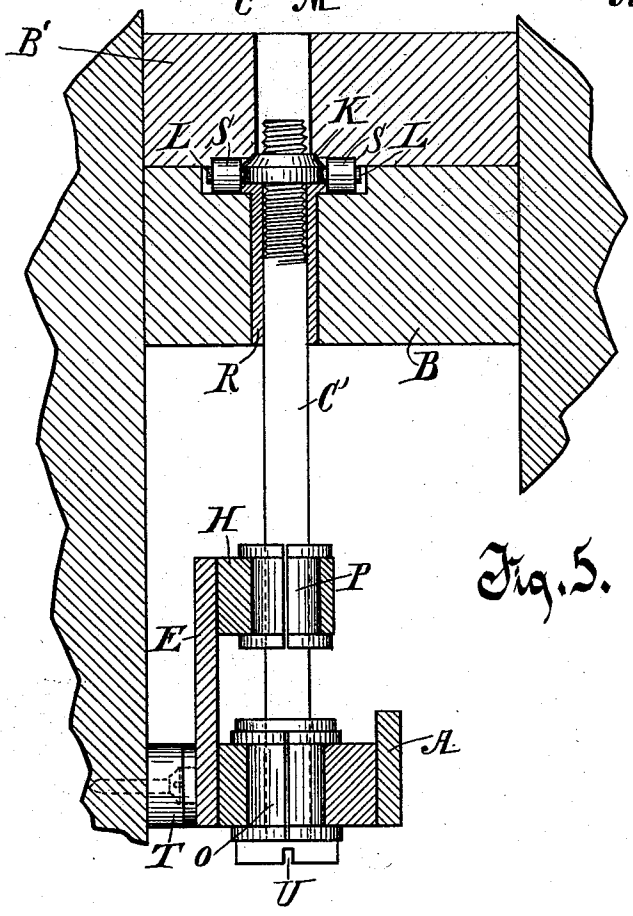


Fig. 5.



Witnesses.

A. P. Keeney,

Wm. M. Foster.

Inventor.

Richard W. Lundy

By

Benedict & Morsell

Attorneys.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

RICHARD W. LUNDY, OF SOUTH BEND, INDIANA.

ADJUSTABLE TRACK FOR DOOR-HANGERS.

SPECIFICATION forming part of Letters Patent No. 509,132, dated November 21, 1893.

Application filed April 13, 1892. Serial No. 429,029. (No model.)

To all whom it may concern:

Be it known that I, RICHARD W. LUNDY, of South Bend, in the county of St. Joseph and State of Indiana, have invented a new and useful Improvement in Adjustable Tracks for Door-Hangers, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention relates to improvements in the support for the track of that class of door hangers which are adapted for use in residences with laterally traveling or sliding doors.

The object of my invention is first, to provide a desirable support for the rail or tracks so constructed as to permit of the adjustment of the rail vertically either entirely or at one end for the purpose of leveling it up; and second, to make the track nearly or quite noiseless, under the travel of the wheels of the door hangers thereon.

In the drawings, Figure 1, is a view of my improved device, parts being shown in section. Fig. 2, is an elevation of the same device shown in Fig. 1, taken at a right angle thereto on line 2—2 of Fig. 1. Fig. 3, is a top plan view of the device, the supporting timber being omitted. Fig. 4, is a top plan view of the rail, the strengthening or reinforcing plate and the interposed strip. Fig. 5, is a view of a modified form of the device, parts being shown in section.

The hanger track or rail A is constructed of a flat bar of steel supported horizontally in a longitudinal chamber therefor above the door aperture of a building. The door frame above the door includes the permanent beam or timber B located above the hanger chamber to which the track bolts or suspending rods C are attached. In the form of device shown in Figs. 1, 2, 3 and 4 these suspending rods or bolts C are bent medially at D thereby carrying the lower portion of the rod to one side of and at a little distance from the vertical axis of its support in the beam so that the track A which is affixed thereto at its lower end is in the plane of the vertical axis of the support of the rod. Three of these supporting rods are used with each track, two being located at or near the side of the door opening and one in the center of the opening, only one of which however is shown, as the rods and their allied parts are duplicates of each other. The center bolt prevents the track from springing upward out of line when the doors are open and hanging upon the unsupported ends. A reinforcing plate E also of steel and substantially as long as the rail A, is located at a little distance therefrom parallel thereto, and is connected rigidly therewith by the transverse bolts F F through the rail, the interposed strip G and the plate E at the rear. The strip G is preferably of wood and is advisedly as long as the rail, though several short strips or blocks of wood may be used for this purpose instead of a single strip. Stay blocks H are bolted to the upper edge of the plate E in proper positions thereon, through which the bolts C pass. The bolts at their lower extremities are screw threaded and each enters a nut I, which turns thereon, the nut being overturned or headed at both ends forming a medial peripheral channel in which the surrounding edge of the strip C is received, the nut being inserted revolubly in a rod or bolt aperture therefor in the strip G. The nut is provided with a slot I′ in its end for rotating it by means of a proper tool, which it will be understood can be inserted therein upwardly through the longitudinal slot in the casing or soffit of the door in which the hanger frame travels. The nut I is revoluble in the strip G but is held against endwise movement therein by its overturned head which prevents also all tilting of the track.

To provide for placing the nuts I in the strip G, a section G′ of the strip is made removable, the sections being severally held in position by the removable bolts F which pass through them. The upper extremities of the rods C pass through the beam B and are secured therein by nuts K turning thereon. These nuts are preferably provided with radially extending arms L which are let into recesses therefor in the top of the beam, the arms providing additional supporting surface to the nuts, and being adapted to prevent the rotation of the nut, and the possible swaying of the rods under the weight of the hanger and its load. A series of rod apertures M M′ M^2 are formed in the strip G to provide for the proper location of the suspending bolts C

which are placed at or near the sides of the door opening. A corresponding arrangement of the blocks H must of course be made and screw holes N in the strip E are provided therefor.

For making the track noiseless it is sound-insulated by means of suitable material that is substantially a non-conductor of sound, and preferably by means of rubber packing about the supporting rods at their various points of contact with other parts. This packing consists preferably of rubber bushings O, P, R and S, the bushings O and P being preferably provided with radially extending flanges at their ends and for convenience of application being preferably made in two equal longitudinal sections or halves. The bushing O is placed about the nut I in its peripheral groove and between it and the surrounding parts of the strip G. The bushing P is interposed about the rod and between it and the surrounding parts of the block H. The bushing R is interposed about the rod between it and the beam B and the bushings S cover and protect the arms L from direct contact with the beam.

In the form shown in Fig. 5, straight bolts C′ are used in the place of the rods C for supporting the track, and as in such case the track is at one side of the vertical plane of support of the bolts, sound insulated bearing blocks T are placed behind the track and prevent it from tilting. The bolts C′ are provided with slots U to receive a suitable tool therein for rotating them whereby they can be turned in the nuts K and the track thereby raised or lowered.

In some cases it is desirable to extend the track to and insert its ends in parts of the door frame and in such cases for the purpose of completing the sound insulation of the track, it is necessary to protect its ends thus inserted in the frame, by means of a rubber or other non-conductor of sound in the form of a packing W to prevent direct contact of the metal rail with the door frame.

It will noticed that above the beam B is located a cap plate, B′, to prevent tilting of the track. This plate is provided with an opening registering with the opening of beam B. It is also provided with registering recesses for the accommodation of the radially extending arms L.

No claim is made herein for the devices claimed in my application, Serial No. 429,030, filed on the same day herewith for improvements in tracks for door hangers, so far as the same are covered by the claims in that application.

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

1. The combination with a door frame, of track suspending rods secured at their upper extremities to the frame, which rods are bent medially laterally, a horizontal track supported adjustably on the lower vertical parts of the rods at a distance therefrom and in the vertical plane of the attachments of the rods to the door frame, and nuts revoluble in blocks affixed to and projecting laterally from the side of the track, which nuts turn on the rods whereby the track so suspended is adjusted up or down, substantially as described.

2. The combination with a door hanger track, a reinforcing plate at a distance therefrom and parallel thereto, an interposed strip between the track and the plate, the track, the plate and the interposed strip being secured rigidly together, of suspending bolts or rods each rod being bent or offset medially and nuts turning thereon, which nuts are inserted revolubly in the strip between the track and plate but without endwise movement therein, substantially as described.

3. The combination of a door hanger track, a reinforcing plate secured thereto parallel therewith, a strip interposed between the rail and the plate, blocks secured to the plate above the strip and rods or bolts passing through the blocks and entering nuts revoluble in the strip, substantially as described.

4. The combination with a door frame, of rods depending therefrom, a horizontal track supported on the lower extremities of the rods at the side thereof, nuts turning on the rods and revoluble in blocks affixed to the track, a sound insulating material interposed between the nuts and the blocks and between the rods and the door frame, substantially as described.

5. The combination with a door frame, of track suspending rods fixed at their upper extremities in a part of the frame, which rods below their points of attachment are bent to one side of the vertical plane of their attachments, and a hanger track supported horizontally on the lower extremities of the suspending rods at a distance therefrom but in the vertical plane of their supporting attachments in the door frame, substantially as described.

6. The combination of a beam provided with an opening terminating at one end in a recess, a track suspending rod passing through the opening, a nut on the end thereof having radial arms extending into the recess, a cap plate provided with an opening and recess registering with the opening and recess of the beam, and a hanger track supported horizontally on the lower extremity of the suspending rod, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

RICHARD W. LUNDY.

Witnesses:
ARTHUR T. MORSELL,
C. F. BENEDICT.