(No Model.)

R. W. LUNDY.

DOOR HANGER.

No. 509,131. Patented Nov. 21, 1893.

Fig. 1.

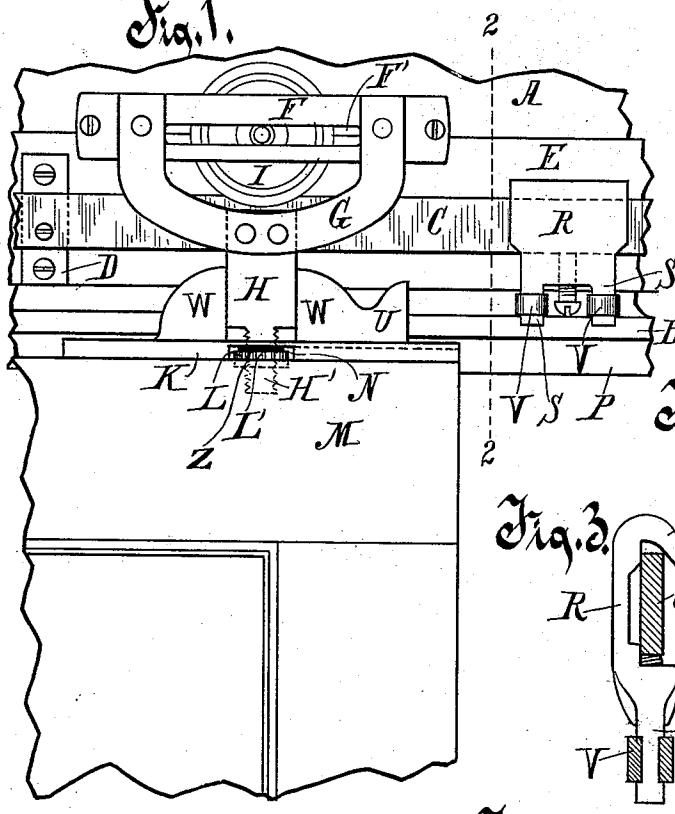


Fig. 2.

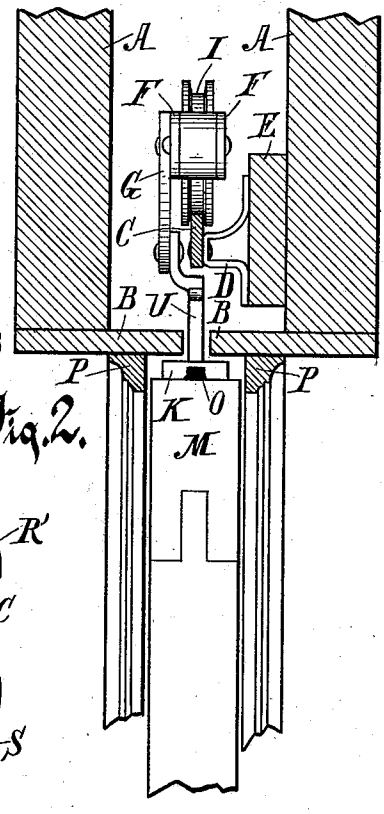


Fig. 3.

Fig. 4.

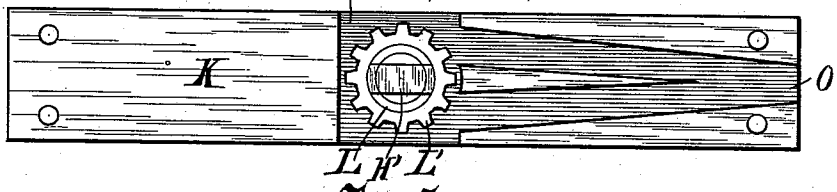
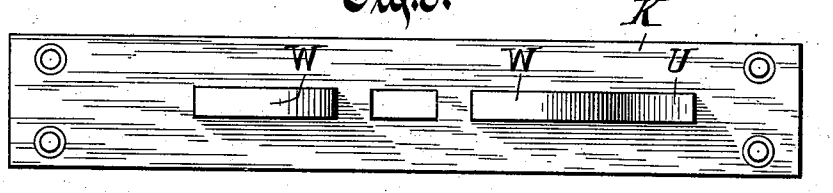


Fig. 5.



Witnesses.

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RICHARD W. LUNDY, OF SOUTH BEND, INDIANA.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 509,131, dated November 21, 1893.

Application filed April 13, 1892. Serial No. 429,027. (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 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 door hangers of the class that are adapted for supporting and carrying laterally moving or sliding doors in residences.

My invention consists in the means provided for adjusting the door with reference to the hanger frame whereby the door is raised or lowered vertically to adapt it suitably for being carried by the hanger on the track, and in the adjustable stop whereby the travel of the door on the track is limited and controlled as desired, and in such manner as to obviate the shock and noise commonly occurring in the devices heretofore in use.

In the drawings, Figure 1, is an elevation of my improved door hanger and stop shown in connection with a fragment of the door and door casing. Fig. 2, is a vertical section on line 2—of 2, Fig. 1, looking toward the left. Fig. 3, is a detail of the adjustable stop, part being in section to show the method of construction. Fig. 4, is an under side view of the plate that is affixed to the door for attaching the hanger to the door. Fig. 5, is a top view of the same plate shown in Fig. 4.

A is the fixed frame forming a part of the building above the door, which frame is of any suitable form or construction to provide the necessary chamber or passage way for the travel of the hanger above and beyond the door laterally to the extent of the movement of the door.

B B is the casing or soffit of the door aperture above the door fixed to the frame, usually and preferably in two pieces at a little distance apart forming the central longitudinal aperture for the travel of the door-supporting stem of the hanger.

The track C arranged horizontally above the door centrally is supported rigidly and conveniently by being fastened to brackets D D, which are fixed to the frame conveniently by being secured to the strip E which is rigid to and a part of the frame.

The hanger frame consists of two opposite parallel rider bars F F at a little distance apart connected rigidly at their ends; a yoke G secured at its upper extremities to one of the rider bars and the stem H secured to the lower part of the yoke and projecting downwardly therefrom. The rider bars are provided with opposite longitudinal slots F′ F′ in which the extremities of the axle of the wheel I are received and travel. The wheel I is grooved in its periphery and travels on the track C. The stem H is bent inwardly near its top, from the yoke G near to and immediately below the track C and projects downwardly so that in their normal positions the wheel I, the track C and the downwardly projecting part of the stem H are in the same vertical plane. The lower portion H′ is of diminished extent laterally, is screw threaded, passes movably through the plate K and is provided with a nut L turning thereon beneath and bearing upwardly against the plate K. The plate K is secured rigidly to the upper edge of the door M. The nut L is provided with lugs or teeth L′ on its periphery adapted to receive the thrust of a tool, by which it can be conveniently rotated. The plate K is provided with a recess N in its under surface in which the nut L is received and rotates, which recess preferably extends transversely of the plate to its lateral edges, and a groove O expanding or diverging laterally inward from the outer end of the plate extends to the recess N whereby provision is made for inserting a rod or similar tool from the edge of the door against the nut L to rotate it in either direction as desired. The nut L can also be rotated by a tool inserted in the recess N laterally from either side of the door, but to do this it would be necessary to remove one of the moldings P, which are secured to the soffits at the sides of the door at the top forming a channel in which the door is received and travels. It is therefore more convenient to use the grooves O for inserting a tool to rotate the nut L as this is done from the edge of the door and without removing any parts. It will be understood, that this plate K is a part of the door hanger, manufactured and sold with the hanger-frame, to which it is directly attached by inserting the stem H in the plate K, and securing it there-

to adjustably by the nut L, and as the grooves O are located in the plate, which is to be secured directly to the top of the door by screws, that therefore no cutting of grooves or openings or other carpentry work, is necessary in securing the hanger to the door, or in suspending the door thereby on the track.

The device, including the means for adjusting its parts to each other, and thereby elevating or lowering the door, is complete when the device leaves the shop.

This class of door hangers is quite generally used with two or more doors for closing the door aperture and in such cases it is usually desirable to have a stop arranged to limit the travel of the door, and for this purpose I have provided a stop adapted to be attached adjustably to the track. My improved stop is constructed principally of metal and consists of the body part R having an overturned or hook part R′ adapted to engage the top of the rail C and a downwardly extending part or parts S S. The stop is secured adjustably to the track by a set screw T turning through the stop against the track. The parts S S are immediately below the track in the line of the movement of the lugs or buffers U projecting vertically from and rigid on the plates K. These parts S are located respectively near the ends of the stop to receive the thrust of the buffers U on the doors coming thereto from opposite directions. To obviate the shock and sound of the buffers striking the stop I provide rubber cushions V on the parts S for directly receiving the thrust of the buffers. These cushions are conveniently made in the form of rings or short sections of rubber tubing which are slipped over the ends of the parts S and into grooves therefor about the parts S whereby they are retained in place. A sound deadening device, consisting of a rubber washer Z, Fig. 1, is inserted between the upper face of nut L and the top of recess N. Similar devices may be employed between other parts liable to create a sound by contact, so as to secure, as far as possible, a perfectly noiseless structure.

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

1. A door hanger, comprising a rigid hanger frame, provided with a depending screw-threaded stem, a nut turning on the stem, and a plate adapted to be secured to the top edge of a door, through which plate the stem passes adjustably, said plate being provided with a transverse recess in its under side for the stem-nut, and with a longitudinal groove extending from its end to the recess, for inserting a tool from the edge of the door to which the plate is attached, for rotating the nut on the stem and thereby raising or lowering the door on the hanger, substantially as described.

2. The combination with a door, a hanger secured thereto provided with a buffer, and a track on which the hanger travels, of an adjustable stop consisting of a body portion having a hook passing over and engaging the track, a set screw turning in the stop against the under edge of the track whereby the stop is secured to and made adjustable on the track and depending parts provided with cushions arranged to receive the thrust of the buffers on the hangers, substantially as described.

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

RICHARD W. LUNDY.

Witnesses:
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