H. J. FERRIS.

DOOR HANGER.

APPLICATION FILED JULY 28, 1915.

1,178,065. Patented Apr. 4, 1916.

Fig. 1.

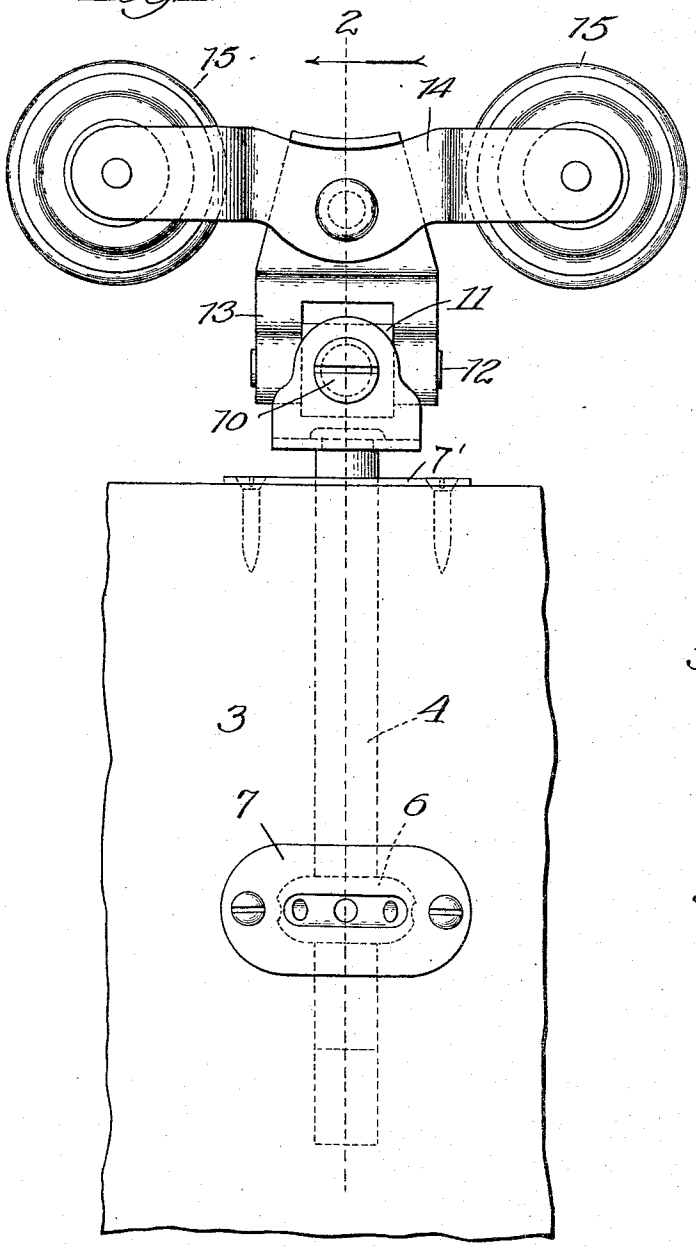
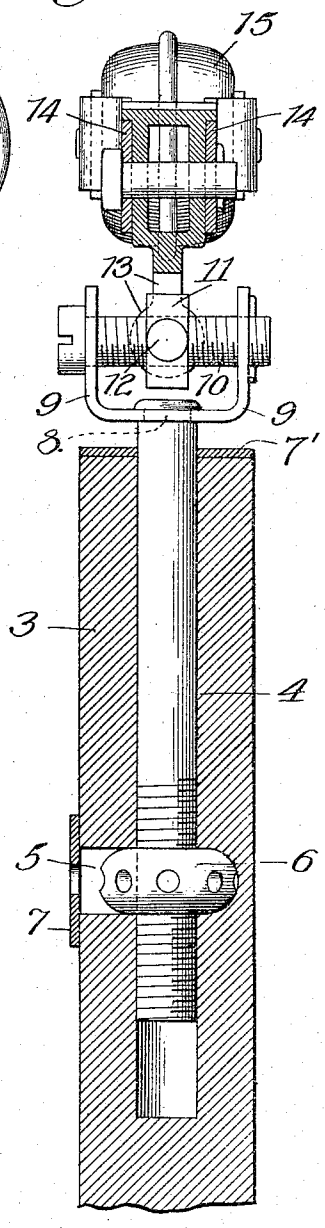


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

HOWARD J. FERRIS, OF HARVARD, ILLINOIS, ASSIGNOR TO HUNT, HELM, FERRIS & COMPANY, OF HARVARD, ILLINOIS, A CORPORATION OF ILLINOIS.

DOOR-HANGER.

1,178,065. Specification of Letters Patent. Patented Apr. 4, 1916.

Application filed July 28, 1915. Serial No. 42,340.

To all whom it may concern:

Be it known that I, HOWARD J. FERRIS, a citizen of the United States, residing at Harvard, in the county of McHenry and State of Illinois, have invented a new and useful Improvement in Door-Hangers, of which the following is a specification.

My invention relates to certain new and useful improvements in door-hangers, and is fully described and explained in the specification and shown in the accompanying drawings, in which:—

Figure 1 is a side elevation of my improved door-hanger showing it in place upon a door, and Fig. 2 is a section on the line 2 of Fig. 1.

Referring to the drawings, 3 is a door provided near its top edge with a vertical hole in which is mounted a bolt 4.

5 is a lateral recess intersecting the vertical hole and in which rests a nut 6 threaded on the bolt, so that the bolt can thereby be adjusted up and down. Suitable plates 7 and 7′ surround the perforations. The upper end of the bolt 4 is grooved at 8 to receive a U-shaped clip 9 across the ears of which extend a screw 10 on which is threaded a block 11 provided with integral oppositely extending ears 12 in the plane of the screw 10. By rotating the screw 10 the blocks can be adjusted transversely across the top of the door. Pivoted upon the projecting pins 12 on the block 11 is a member 13 which extends upwardly and is pivoted between the side plates 14 of the door-hanger, the rollers of which are shown at 15.

The present device is peculiarly simple in its manner of attachment to a door. The cutting of the two intersecting openings in which the movable parts lie is exceedingly simple. It is adapted to support very heavy doors without difficulty because, while it lies immediately above the door, the pull of the door upon the hanger is straight down through the bolt 4. Furthermore, by forming the block 11 with the integral pins 10 in the same plane as the central perforation, it is possible to put the hanger very close to the door so that, when the hanger is used in connection with a track having a shield to come down and cover the edge of the door, the shield is reduced to the least possible width. The structure thus combines the maximum simplicity in attachments to the door, the greatest possible strength with the minimum vertical dimensions between the hanger rollers and the top edge of the door, whereby the space to be spanned by a track-shield is reduced to the minimum.

I realize that considerable variation is possible in the details of the construction herein shown, and I do not intend to limit myself thereto, except as pointed out in the following claim, in which it is my intention to claim all the novelty inherent in the device as broadly as is permitted by the state of the art.

I claim as new and desire to secure by Letters Patent:—

A door-hanger comprising in combination, a frame, rollers mounted in the frame, a member depending from the roller carrying frame and provided with downwardly extending separated arms, a block provided with trunnions by means of which it is pivoted in said last named member between the arms thereof and also provided with a screw-threaded perforation therethrough the axis of such perforation being located in the same plane as the axis of the pivots of the block and at a right angle thereto, a U-shaped member having openings alining with the perforation in the block, a screw threaded through the perforation in the block and having its ends journaled in the openings in the U-shaped member whereby turning of the screw will cause the block to travel thereon and effect transverse adjustment of the parts, a bolt having its upper end connected to said U-shaped member and extending vertically downward in a perforation in the door, and a nut threaded on the bolt and lying in an intersecting transverse opening in the door whereby turning of said nut will cause vertical adjustment of the door.

In testimony whereof I have hereunto set my hand this 23d day of July, 1915.

HOWARD J. FERRIS.

In presence of two subscribing witnesses:

L. L. HAMILTON,

WM. A. MUELLER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."