

No. 755,607.

PATENTED MAR. 29, 1904.

F. F. BISCHOFF.  
DOOR HANGER.

APPLICATION FILED MAY 29, 1903.

NO MODEL.

*Fig. 1.*

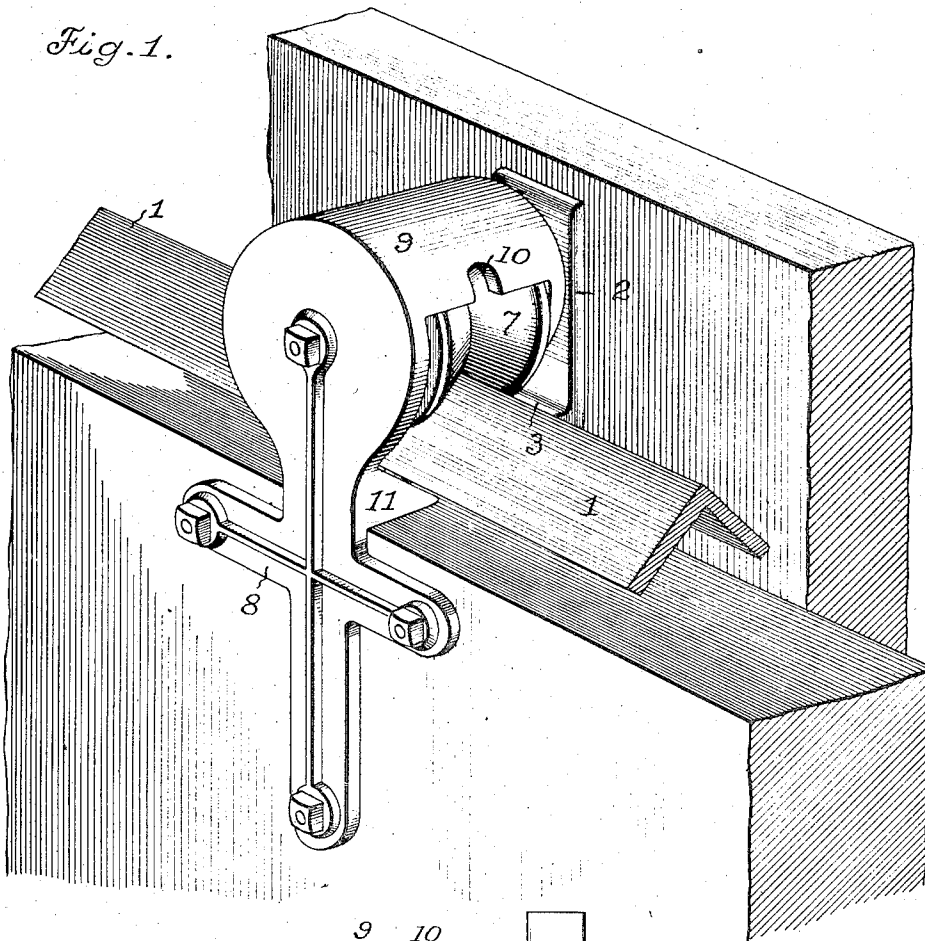
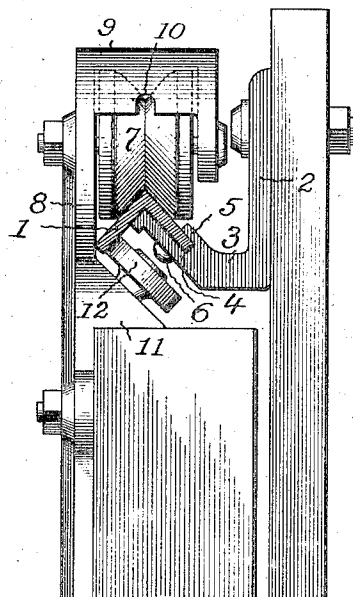


*Fig. 2.*



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# UNITED STATES PATENT OFFICE.

FREDERICK F. BISCHOFF, OF CHICAGO, ILLINOIS.

## DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 755,607, dated March 29, 1904.

Application filed May 29, 1903. Serial No. 159,227. (No model.)

*To all whom it may concern:*

Be it known that I, FREDERICK F. BISCHOFF, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Door-Hangers, of which the following is a specification.

The present invention relates to single-track hangers for sliding doors and the like, and has for its object to provide a simple, light, and durable construction and arrangement of parts in which a substantial attachment and support of the track-rail is provided and the accidental disengagement of the pulley and pulley-frame from the track-rail prevented without liability to binding of the parts, all as will hereinafter more fully appear and be more particularly pointed out in the claims.

In the accompanying drawings, illustrative of the present invention, Figure 1 is a perspective view of a door-hanger embodying the present improvements. Fig. 2 is an end elevation of the same with the track-rail in section.

Similar numerals of reference indicate like parts in both views.

Referring to the drawings, 1 represents the track-rail, which in the present invention is formed by an angle-bar of metal, the longitudinal apex of which is arranged uppermost to afford an inclined track-surface on each side of such apex, as shown.

2 is one of the supporting-brackets of the track-rail, having the usual base for attachment to the wall of the building or other object and a horizontally-projecting arm 3 for attachment to the track-rail, as hereinafter described.

4 is an angular or oblique extension on the outer end of the arm 2 aforesaid, and such extension is adapted to fit the under surface of the angle-bar track-rail 1 and afford an extended abutment or support for such rail.

5 is an angular tongue near the outer end of the arm 3 aforesaid and having a spaced relation to the aforesaid extension 4 to form a receiving-recess for the inner edge of the track-rail to aid in the rigid and substantial attachment of said rail to the supporting-bracket.

6 is a transverse screw or rivet passing through the rail 1 and the extension 4 to lock the parts in position after assemblage.

7 is the track-pulley, the periphery of which is formed with an angular groove to fit the track-rail aforesaid and be guided thereby in the actual use of the hanger.

8 is the pulley-frame, the upper portion of which is of an arched form to afford bearings for the respective ends of the journal-shaft of the track-pulley 7, while its lower portion is of the usual strap form for attachment to the face of the door. In the present construction the upper arched portion of the pulley-frame 8 has an expanded top or hood 9 for inclosing the track-pulley from the weather, &c., and said hood is provided with a centrally-arranged gap 10 at one side edge, which is adapted to receive the nozzle of an oil-can and maintain the same in proper position during the operation of oiling the pulley and track.

11 is a lateral lug on the inner face of the pulley-frame 8 and against which the upper end of the door is adapted to abut in the application of the pulley-frame to such door. In the present construction such lug is of an angular form and is adapted to constitute a bearing-support for the retaining-roller by which the pulley-frame and pulley are held from accidental disengagement from the track.

12 is the retaining-roller, which in the present construction is journaled in an oblique direction upon the lateral lug 11 aforesaid and has bearing upon the under side of the outer inclined longitudinal member of the track-rail, as shown. With the described arrangement a limited movement of the pulley-frame and its connections with relation to the track-rail and in an oblique direction is permitted without a disengagement from the track-rail, and by this provision any ordinary tendency of the parts to bind in the normal operation of the appliance is avoided.

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 a track-pulley, a pulley-frame,

a track-rail of an angle-bar form with its apex arranged uppermost, and a supporting-bracket having an obliquely-disposed upward extension at its outer end fitting the under side of said track-rail, substantially as set forth.

2. In a hanger for doors and the like, the combination of a track-pulley, a pulley-frame, a track-rail of an angle-bar form with its apex arranged uppermost, and a supporting-bracket having an obliquely-disposed upward extension at its outer end fitting the under side of said track-rail, and provided with a tongue having spaced relation thereto to form a receiving-recess for the inner edge of the track-rail, substantially as set forth.

3. In a hanger for doors and the like, the combination of a track-pulley, a pulley-frame, a track-rail of an angle-bar form with its apex arranged uppermost, a supporting-bracket having supporting connection with said rail, and an obliquely-arranged retaining-roller journaled on the pulley-frame and having bearing upon the under side of the inclined outer member of the track-rail, substantially as set forth.

4. In a hanger for doors and the like, the combination of a track-pulley, a pulley-frame, a track-rail of an angle-bar form with its apex arranged uppermost, a supporting-bracket having supporting connection with said rail, a triangular lug on the inner side of the pulley-frame, and an obliquely-arranged retaining-roller journaled on said lug and having bearing upon the under side of the inclined outer member of the track-rail, substantially as set forth.

5. In a hanger for doors and the like, the combination of a track-rail of an angular form, a grooved track-pulley, and a pulley-carrying frame having a hood at its upper end, said hood having a central gap at one of its side edges and adapted to afford a guiding means in oiling the track and track-roller, substantially as set forth.

Signed at Chicago, Illinois, this 26th day of May, 1903.

FREDERICK F. BISCHOFF.

Witnesses:

ROBERT BURNS,  
M. H. HOLMES.