

No. 677,524.

Patented July 2, 1901.

W. LOUDEN.
DOOR HANGER.

(Application filed Aug. 30, 1900.)

(No Model.)

Fig. 1.

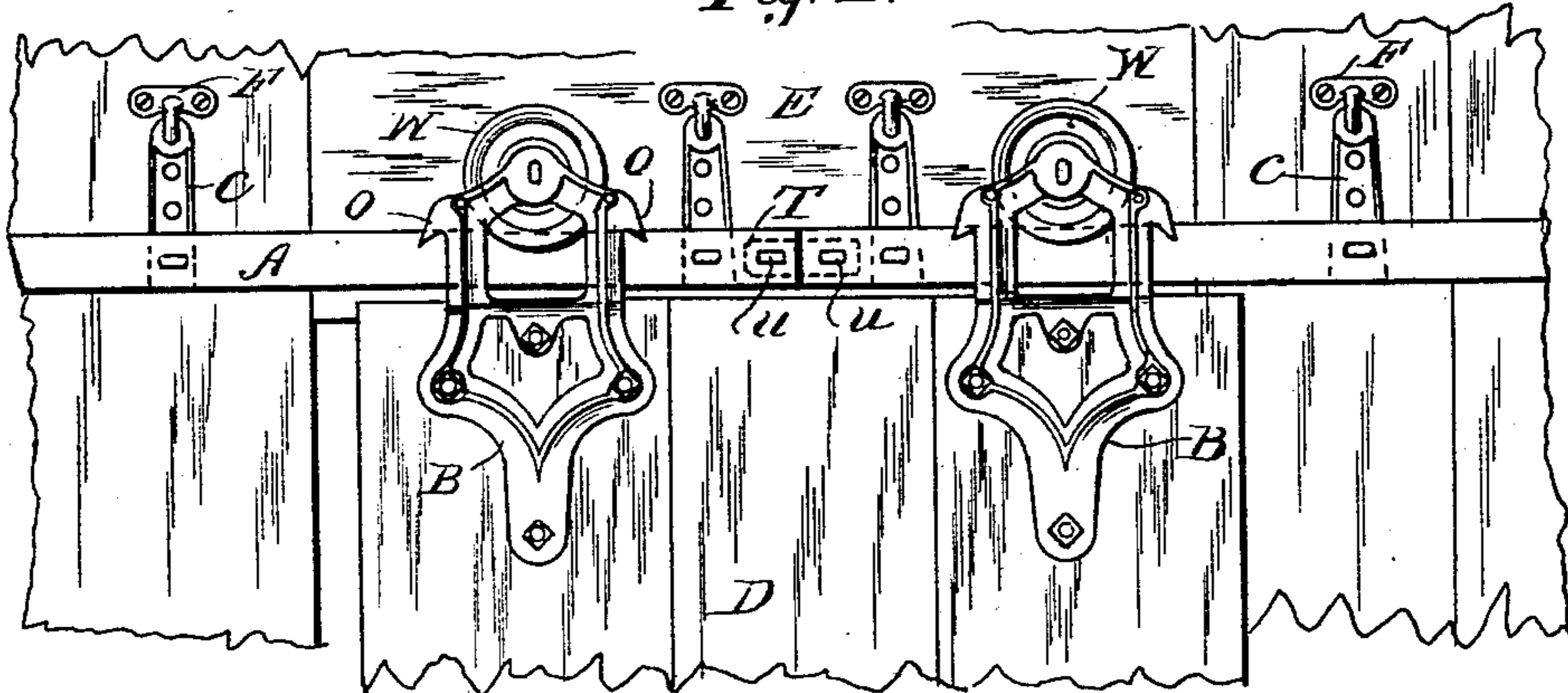


Fig. 2

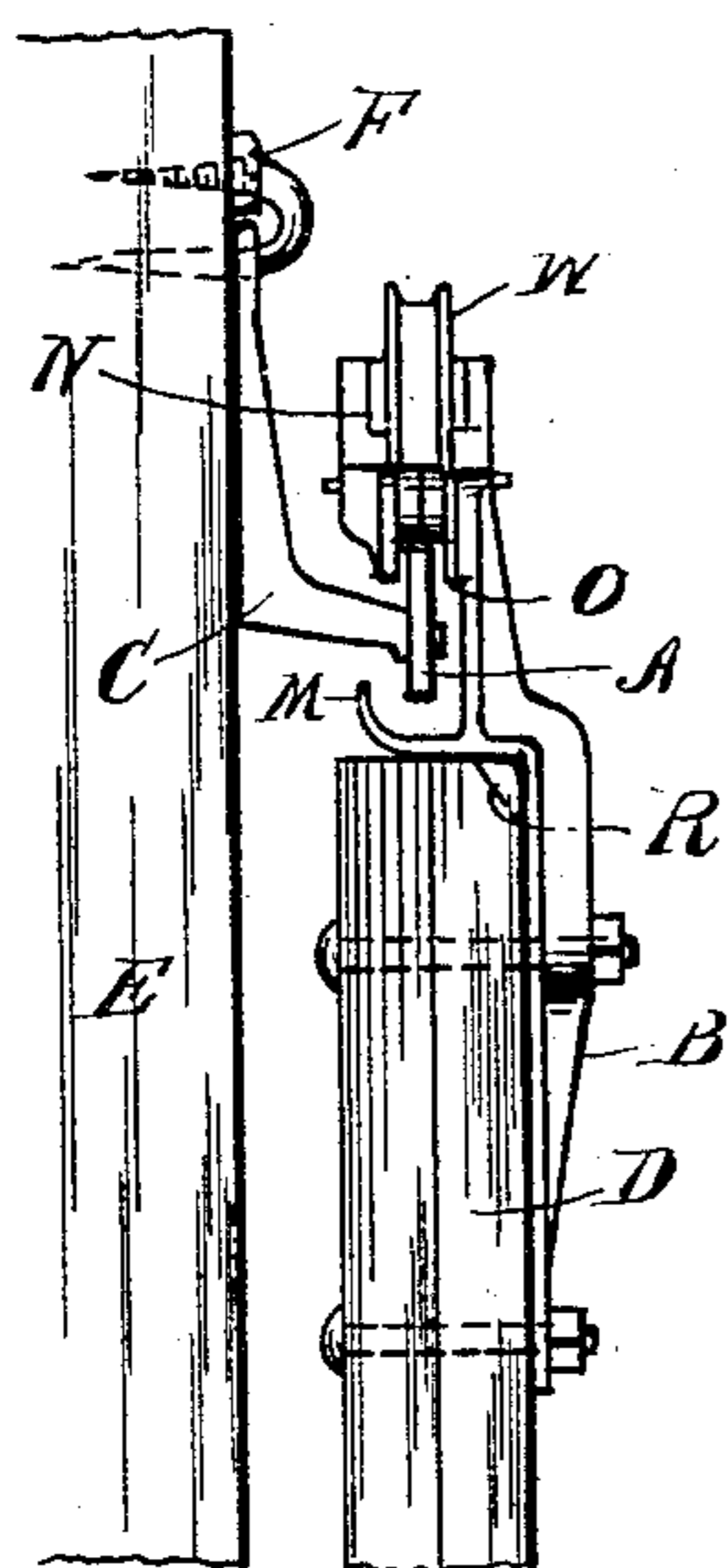


Fig. 3.

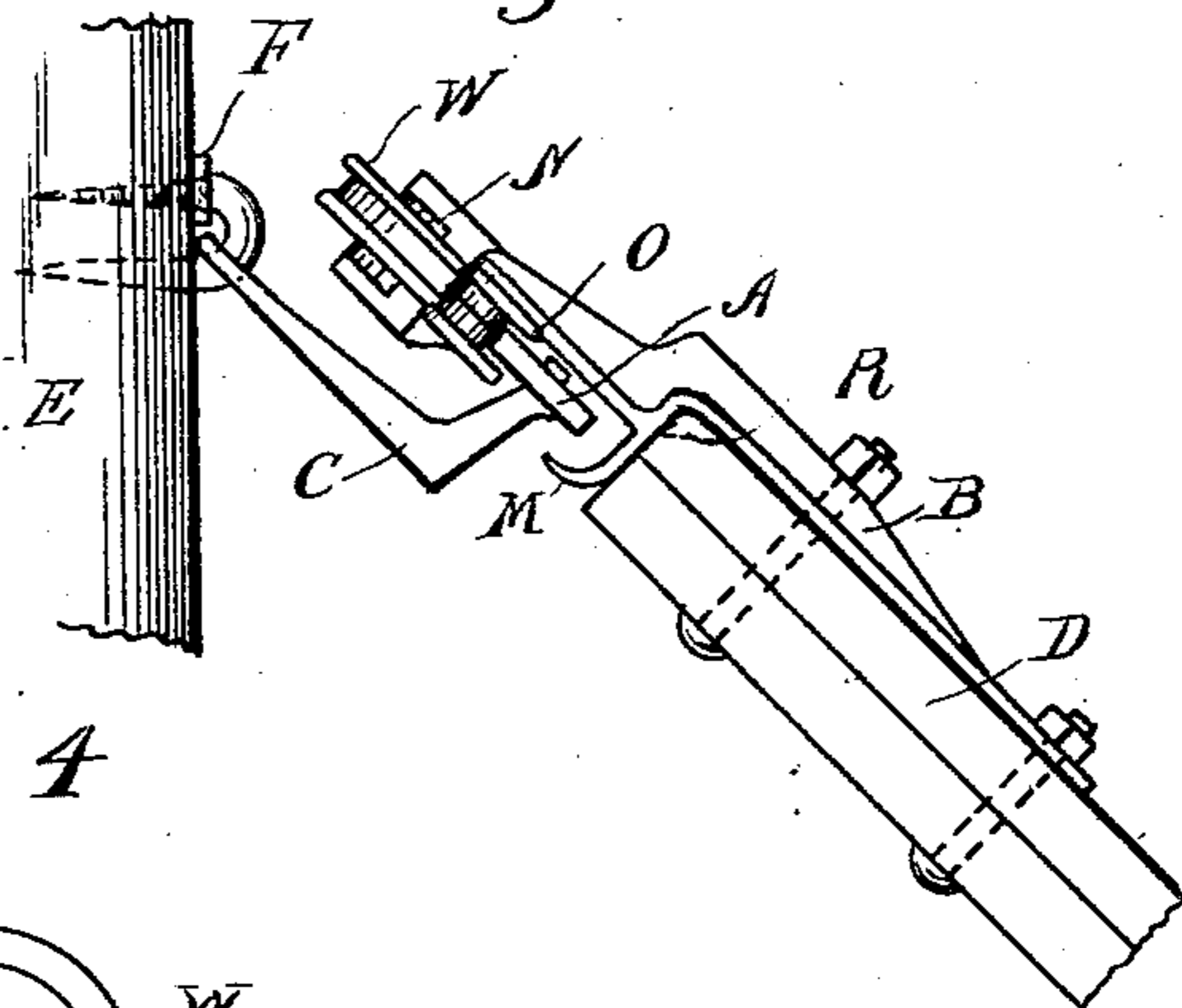


Fig. 4

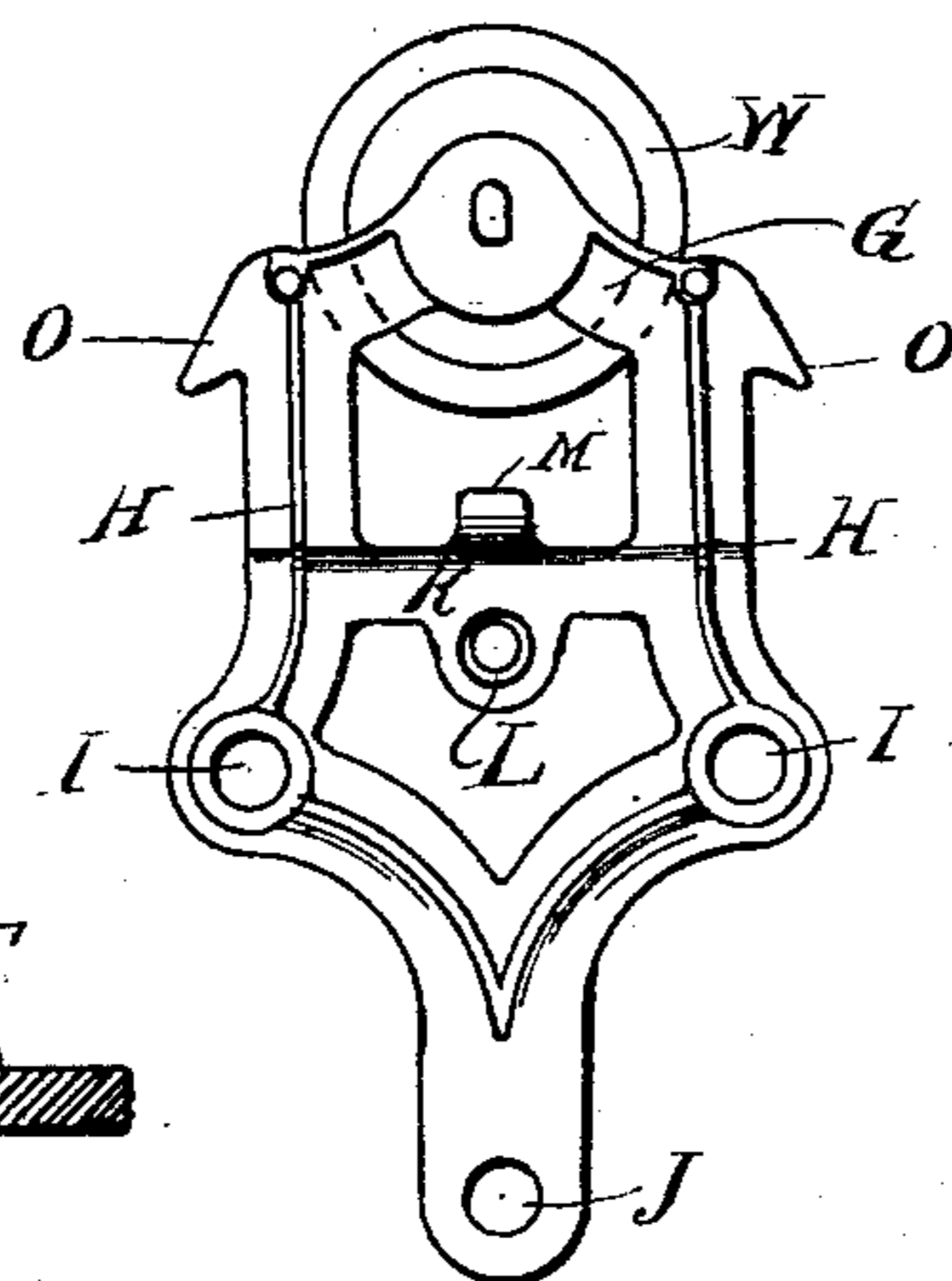


Fig. 5

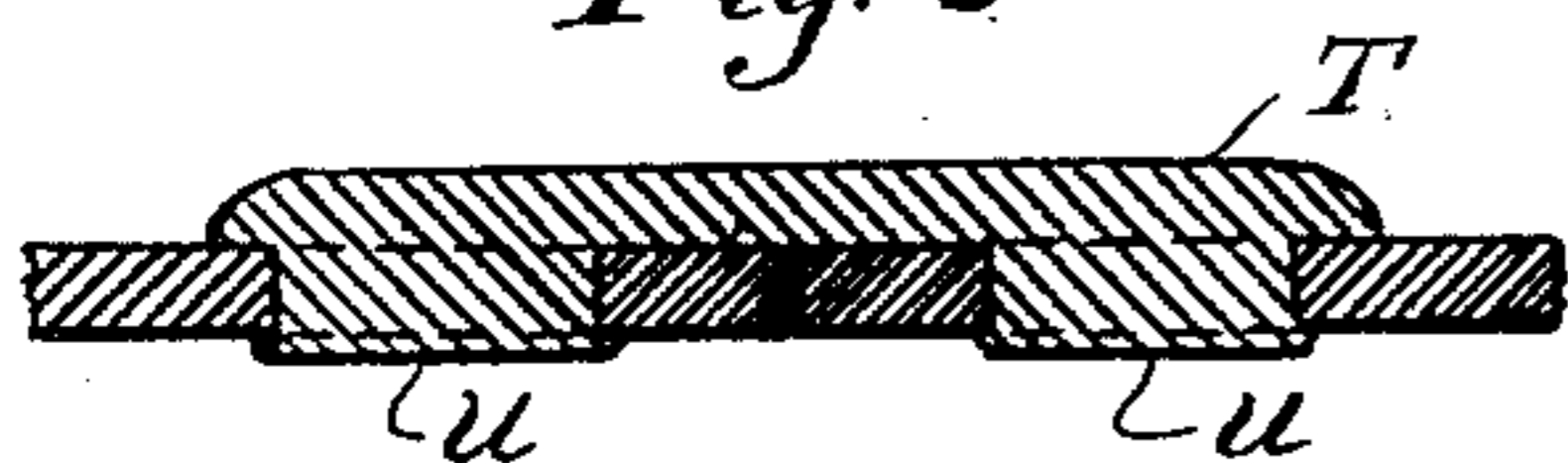
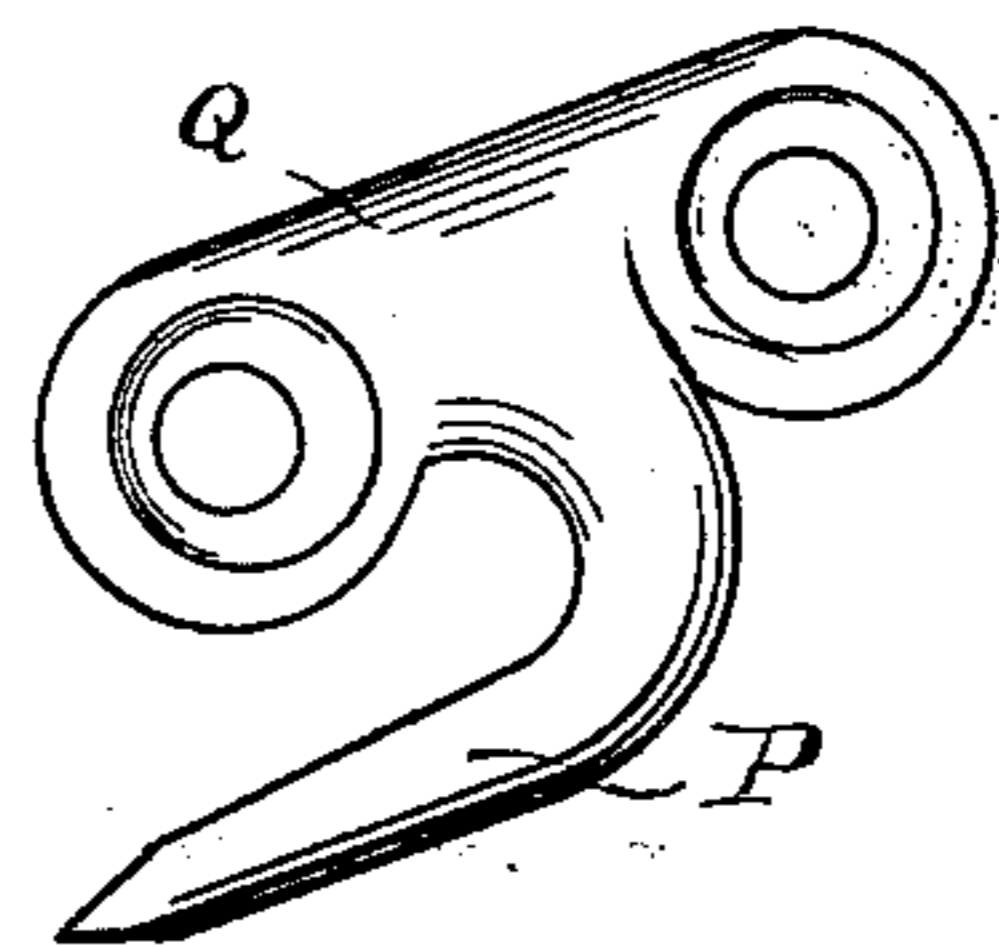


Fig. 6.



Witnesses:

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DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 677,524, dated July 2, 1901.

Application filed August 30, 1900. Serial No. 28,495. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LOUDEN, a citizen of the United States, residing at Fairfield, in the county of Jefferson and State of Iowa, have invented a new and useful Improvement in Door-Hangers, of which the following is a specification.

My invention relates to door-hangers adapted to run on an overhead track; and it consists of the features hereinafter set forth, and more particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is an elevation of a door and wall of a building with the hanger and track embodying my invention applied thereto, the door and wall being broken off. Fig. 2 is an end view in elevation of the same. Fig. 3 is the same, showing the door, hanger, and track swung out from the wall to which they are connected. Fig. 4 is a view in elevation of the hanger detached from the door and track. Fig. 5 is a horizontal section of the track-rail, showing how the splice is made. Fig. 6 is a detail view.

In the drawings, A represents the track-rail, and B two hangers carrying wheels W and mounted upon the track-rail A and supporting the door D.

C represents brackets secured to the rail A and connected to the wall E by holders F.

The frame of the hanger is provided with an upper horizontally-disposed part G, which may be somewhat arched, as shown, two side parts H, vertically set and extended downward to the bolt-holes I and then inwardly contracted and joined together to form a single lower end with the bolt-hole J, and a horizontally-disposed brace K, connecting the vertical sides together immediately below the track-rail A and adjoining the door D. It is preferable to make the parts G, H, and K integral, as shown in the drawings; but, if desired, they may be constructed separately and then suitably joined together.

On the lower edge of the brace K is a downwardly-extending plate in which is a bolt-hole L, and on its upper edge near the center is an upwardly and inwardly extending lug M, which is adapted to pass behind the lower part of the track-rail and form a guide to prevent the hanger from getting off the track. A cap-piece N is secured to the upper part G,

and between these the wheel W is mounted in the usual manner. The ends of the cap-piece N and also the upper corners of the main frame are formed with upwardly and inwardly inclined edges O, the object of which is to run under, lift up, and throw off birds' nests and other obstructions which may get on the track. The edges are arranged to pass along both sides of the track-rail A, and their lower ends are extended sufficiently below the upper edge of the rail to run under obstructions thereon, while their upper ends are extended to the upper edges of the hanger-frame, so as to carry said obstructions away and prevent them from getting between the track and the wheel and wedging the hanger fast. It is preferable to extend the lower ends of these inclined edges beyond the side pieces H, so as to form projections thereon, as shown in the drawings.

The central part of the hanger-frame is offset inwardly in a horizontal plane coincident with the upper edge of the brace K, so as to form an angle adapted to fit closely over the upper side and top of the door, and on the inner faces of the angles so formed I place one or more vertically-set webs R. This web, being thin, is readily driven into the edge of the door without injury, and the hanger-frame is considerably strengthened thereby.

This construction of door-hanger is a superior one. It is strong and well braced, while light and open. The upper central bolt passing through the depending plate on the lower edge of the brace K is valuable in holding the upper part of the hanger-frame from springing away from the door and getting the wheel W out of line. The guide-lug M being placed on the upper central portion of the brace K, where the frame is open, can be cast without a core, and it can be easily straightened should it be bent or be readily smoothed should it be rough when cast, and other advantages accrue from this location.

The track-rail A is supported by the brackets C, which in turn are secured to the wall E by the holders F. These holders consist of the tang P, having an arched connection with the lower central edge of a horizontally-elongated plate Q, having perforations in its elongated ends on opposite sides of the tang, as shown in Fig. 6. The tang is first passed through

an eye in the upper end of the bracket C and is then driven into the wall, and screws or other suitable fastenings are passed through the perforations in the plate Q and into the wall. This gives the holder an extended attaching-surface, while it permits the bracket to swing freely on the tang, as shown in Fig. 3.

The track is composed of abutting sections of metallic rails A, which have the brackets C secured to them at one side along their longitudinal center or midway of their width, so as to hold their opposite edges in a vertical plane with each other and leave the upper edge of the rail free for the passage of the wheels W and the lower edge for the passage of the side pieces H on one side and the guide-lug M on the other. To splice the abutting sections together and leave both edges of the rail free, I use a splice-plate T of less width than the track-rail A and form flattened lugs in the longitudinal center of one of its faces on each of its ends. I further make slotted holes in the longitudinal center of the abutting ends of the rails to fit the flattened lugs on the splice-plate.

In manufacturing the track one end of the splice-plate is riveted to one end of the rail, and when fitting the track on the wall the other ends are riveted together as needed. By this means a secure splice is made, both edges of the rail are left free, and there are no loose rivets or pieces to get lost in putting the sections together. The plate is also preferably made half-oval and placed with the flat side to the rail, so that while it may have sufficient strength the edges will be kept as close to the rail and as much out of the way as possible. This splicing arrangement is simple, inexpensive, reliable, not in the way, can be turned either end to or either edge up, and can be easily and quickly attached. The splice-plate being independent of the brackets C the brackets can be placed some distance from the ends of the rail-sections, and said ends will be securely held together and in line with each other by the splice-plate alone and independently of the supporting-brackets.

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

1. A door-hanger having a frame consisting of a horizontally-disposed top part carrying a wheel, two vertically-set side parts connected thereto and extending downwardly to and containing bolt-holes for connection to a door, then inwardly contracted and joined together to form a single lower end, also containing a bolt-hole, and a horizontally-disposed brace connecting the vertical sides together adjoining the track and the door, substantially as described.

2. A door-hanger having a frame consisting of a horizontally-disposed top part carrying a wheel, two vertically-set side parts connected

thereto and extending downwardly to and containing bolt-holes for connection to a door, then inwardly contracted and joined together to form a single lower end, also containing a bolt-hole, a horizontally-disposed brace connecting the vertical sides together adjoining the track and the door, and a downwardly-extending plate formed on the lower edge of said brace and having a bolt-hole, substantially as described.

3. A door-hanger having a frame consisting of a horizontally-disposed top part carrying a wheel, two vertically-set side parts connected thereto and extending downwardly to and containing bolt-holes for connection to a door, then inwardly contracted and joined together to form a single lower end, also containing a bolt-hole, a horizontally-disposed brace connecting the vertical sides together adjoining the track and the door, and an upwardly and inwardly extending guide-lug formed on the upper edge of said brace between the side parts, substantially as described.

4. In a door-hanger, the combination with a track of a frame carrying a wheel to run on said track, and the sides of said frame having upwardly and inwardly inclined edges adjacent to the track-rail, the lower ends of said inclined edges being extended below the upper edge of the track-rail, and their upper ends to the upper edges of the hanger-frame, whereby they are adapted to run under, lift up and carry off any obstructions which may be on the track, substantially as described.

5. In a door-hanger the combination of a track composed of abutting sections of rail supported so their opposite edges will be left free from attachments and be held in the same vertical plane and having slotted holes midway of their width near each abutting end, and a splice-plate of less width than the rail and having flattened lugs on one of its faces near each of its ends adapted to enter said slotted holes whereby the abutting sections will be held in alinement with each other, substantially as described.

6. A door-hanger having a frame formed with an angle adapted to fit the side and top of a door, and a web connecting the faces of the angle and adapted to be driven into the edge of the door, substantially as described.

7. In a door-hanger having a track with abutting sections of rail, and fixed supports secured thereto at a distance from the abutting ends, an independent splice-plate joining said ends together and holding the rails in alinement with each other independently of said supports, substantially as described.

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Witnesses:

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