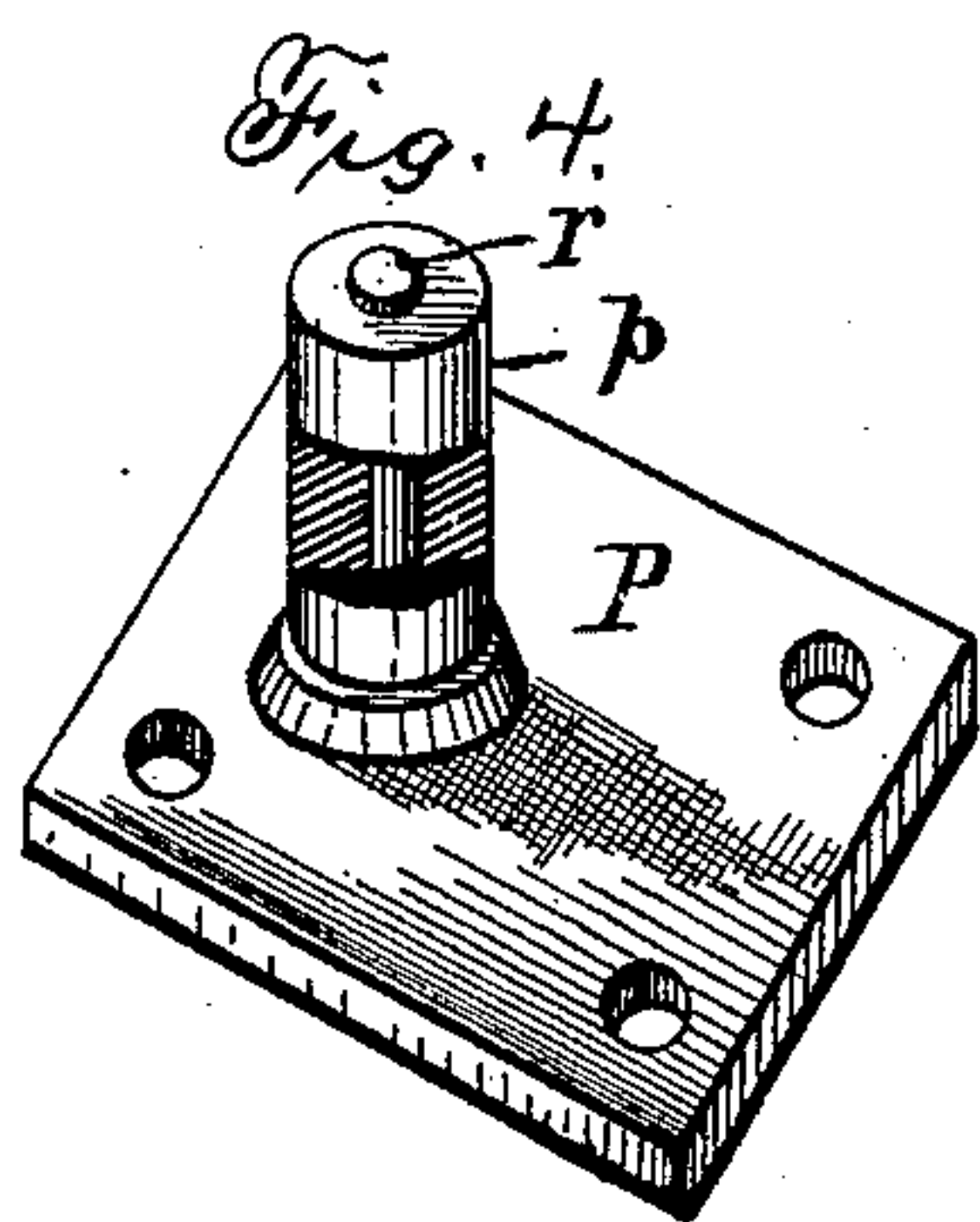
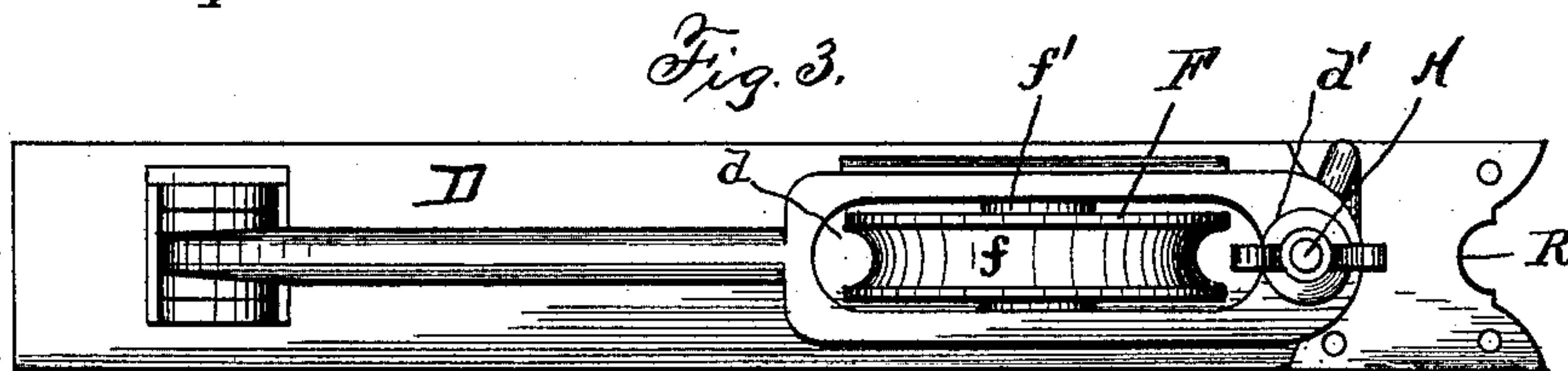
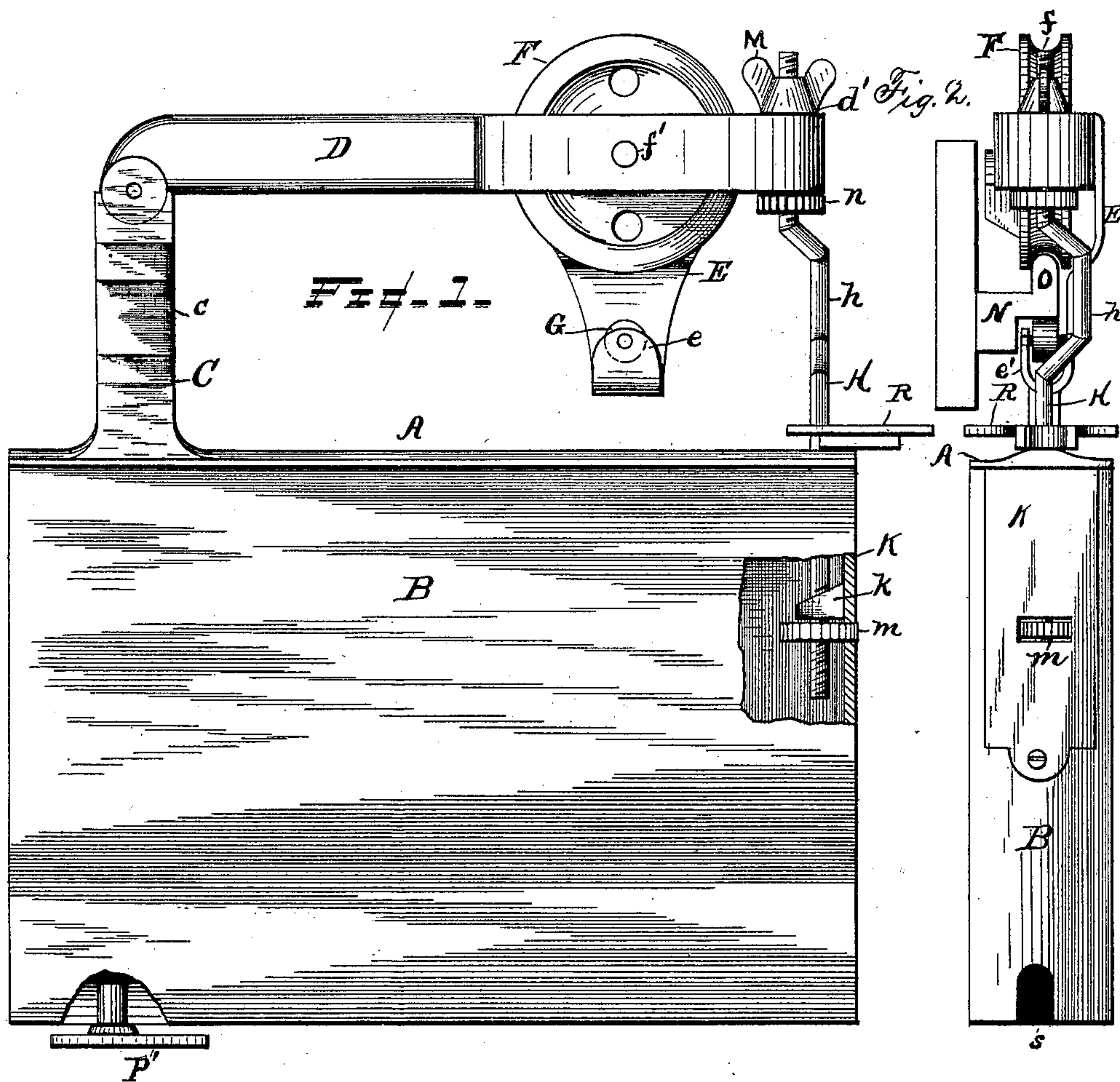


(No Model.)

C. A. REYNOLDS.
DOOR HANGER.

No. 432,247.

Patented July 15, 1890.



WITNESSES
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UNITED STATES PATENT OFFICE.

CHARLES A. REYNOLDS, OF NORWALK, CONNECTICUT.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 432,247, dated July 15, 1890.

Application filed November 20, 1889. Serial No. 330,987. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. REYNOLDS, a citizen of the United States, residing at Norwalk, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Door-Hangers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to apparatus for hanging doors.

Heretofore in hanging doors it has been found that after the doors have hung for a certain time, or more especially if they are heavy doors, they will sag to such an extent that it is impossible to open or close them, and often in the attempt to make them operate they jump the track and become practically useless. This I propose to obviate, and the object of my invention is to construct a door-hanger that will not only be available for hanging doors of any weight, but will allow of their being adjusted to their proper working position, after they have become sagged and inoperative, without the aid of a skilled mechanic and without removing any portion of the door or studding, and prevent their jumping the track; and to this end the nature of my invention consists of constructions and combinations, all as will hereinafter be set forth in the specification and particularly pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation, a part being broken away to show the adjusting device and anti-friction roller; Fig. 2, a front elevation; Fig. 3, a top elevation, and Fig. 4 a perspective view of the anti-friction roller.

A represents the base of the hanger, secured by screws or in any well-known manner to the top of the door B. At one end of said base is an upright standard or arm C, cut away at *c* to allow of its free passage along the trackway. Hinged to the upright arm C is a swinging lever or arm D, having an opening or slot *d* formed in its forward end. On the rear side of this swinging lever or arm and along the slot *d* is secured a bracket E, having its lower end extended and turned up-

ward at *e* to form a guide for the track-rail support and a bearing for a small wheel G, which abuts against the lower edge of the track-rail and its support to prevent the track-wheel from jumping the track.

Within the opening or slot *d* in the forward end of the swinging lever or arm D is a large track-wheel F, having a groove *f* in its periphery, in which the track-rail runs, the shaft *f'* of which passes through the swinging arm D and the bracket E. In the forward end of the swinging lever or arm D and in front of the slot *d* is another opening *d'*, through which a metal rod H, having screw-threads at each end, passes. The rod H is bent at *h*, as shown, to allow of its free passage along the trackway. One end of said rod passes through the base A of the hanger down into the door B, where it passes through a guide-lug *k* on a countersunk plate K in the edge of the door B, and is secured by a milled nut *m*. One side of this milled nut *m* passes through an opening in the front of the countersunk plate K for the purpose hereinafter described. On the other or upper end of rod H is a thumb-nut M, which acts in connection with the milled nut *n* on the under side of the swinging lever or arm D to adjust the door to its working position when first hung upon the track. Instead of this thumb-nut M and milled nut *n*, a groove can be cut in the rod H and a set-screw inserted through the swinging lever or arm D, if desired.

An anti-friction roller, composed of a base P, roller *p*, and shaft *r*, is secured to the floor at a point near the rear of the door B, which works in the groove *s* in the lower edge of the door, and the doors are prevented from running too far forward by a stop R.

The operation is as follows: The door having been secured to the base of the hanger, the groove *f* in the track-wheel F is placed upon the track-rail O, secured to its support. The door now being suspended in position upon the track, it is adjusted to the proper working position by means of the swinging lever or arm D, metal rod H, and the thumb-nut M, and milled nut *n*, when it can be moved forward and backward. As soon as the door sags and refuses to operate, the milled nut *m*, projecting through the countersunk plate K, is turned, which causes the

door to be raised to its proper working position again, when it will operate freely. It will be seen that by this arrangement doors can be raised or lowered after they have become sagged and inoperative without removing any portion of the door or studding, as the milled nut projecting through the countersunk plate is always accessible. It will also be noted that the metal rod H assists the upright arm or standard C in suspending the track-wheel F, and that by this construction only a half-inch space is required between the head-jaws.

I have described my invention as applicable to doors only; but it is obvious that it may be applied to windows and blinds as well.

What I claim is—

1. In a door-hanger, the combination of a track-rail, a base-plate secured to the top of the door, a standard on said base-plate, an arm hinged at one end to said standard, a bracket secured to said arm, wheels on the arm and bracket for contact, respectively, with the upper and lower edges of said track-

rail, a supporting-bar at the outer or free end of said arm, and adjusting mechanism on said supporting-bar for effecting the vertical adjustment of the door, substantially as shown and described.

2. In a door-hanger, the combination of a track-rail, a base-plate secured to the top of the door, a standard on said base-plate, an arm hinged at one end to said standard, a bracket secured to said arm, wheels on the arm and bracket for contact, respectively, with the upper and lower edges of said track-rail, a supporting-bar at the outer or free end of said arm, and separate adjusting mechanism at the top and lower ends of said supporting-bar for effecting the vertical adjustment of the door, substantially as shown and described.

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

CHARLES A. REYNOLDS.

Witnesses:

GEO. R. BYINGTON,

LEDRU R. MILLER.