

No. 657,990.

Patented Sept. 18, 1900.

J. H. PHELPS.

HOUSING AND HANGER TRACK FOR SLIDING DOORS.

(Application filed June 30, 1900.)

(No Model.)

FIG. 2.

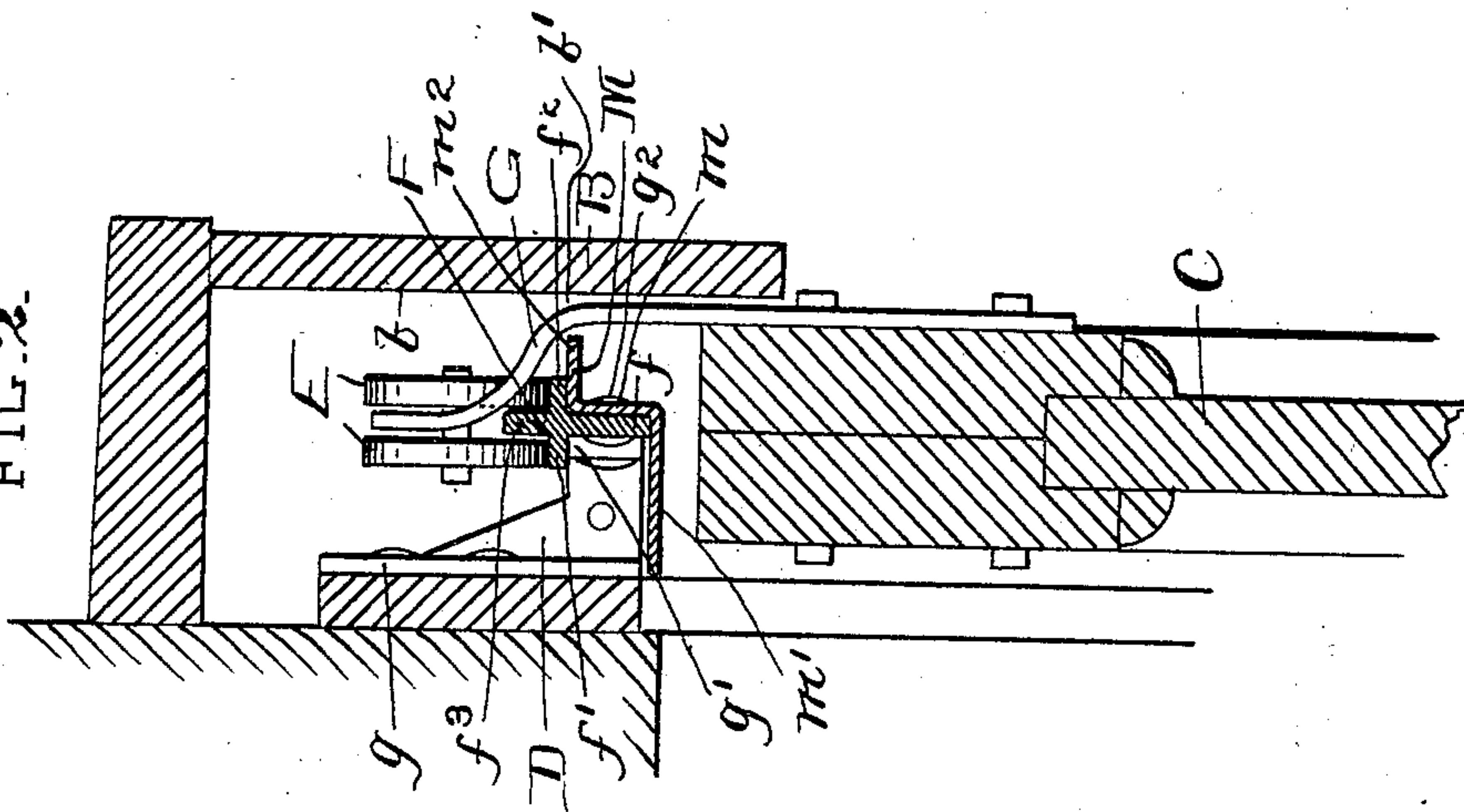
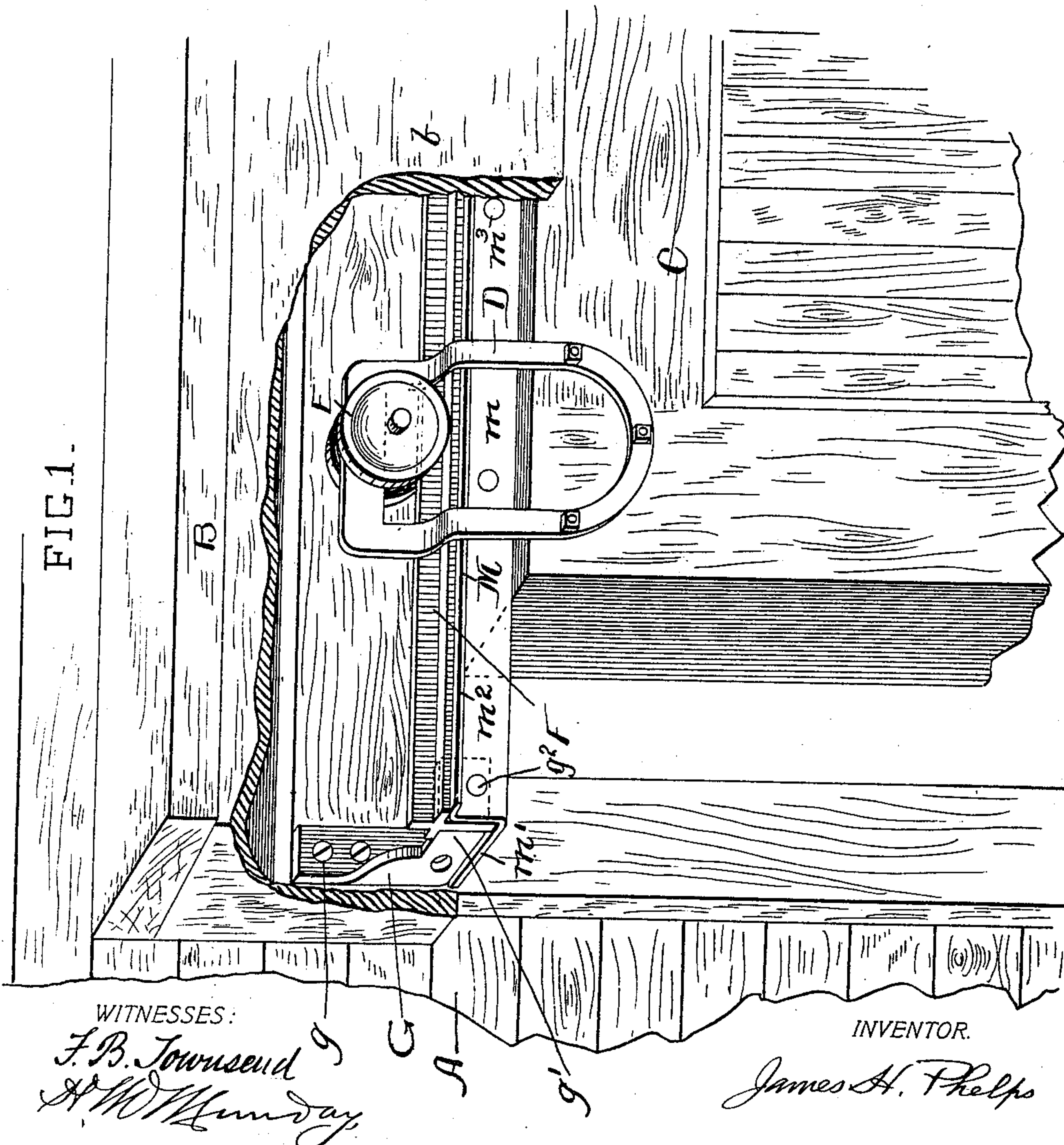


FIG. 1.



WITNESSES:

F. B. Townsend
A. W. Hunday

INVENTOR.

James H. Phelps

UNITED STATES PATENT OFFICE.

JAMES H. PHELPS, OF SHARON, WISCONSIN, ASSIGNOR TO JAMES H. PHELPS
AND LOUIS RADKE, OF SAME PLACE.

HOUSING AND HANGER-TRACK FOR SLIDING DOORS.

SPECIFICATION forming part of Letters Patent No. 657,990, dated September 18, 1900.

Application filed June 30, 1900. Serial No. 22,155. (No model.)

To all whom it may concern:

Be it known that I, JAMES H. PHELPS, a citizen of the United States, residing in Sharon, in the county of Walworth and State of Wisconsin, have invented a new and useful Improvement in Housings and Hanger-Tracks for Sliding Doors, of which the following is a specification.

My invention relates to improvements in housings and hanger-tracks for sliding doors.

In mounting the sliding doors of barns and other buildings the rollers or wheels of the door-hangers are supported and travel upon a rolled-steel rail or track in length twice the width of the door and extending centrally and longitudinally in the housing that caps or surrounds the upper end or edge of the door and the hangers, rollers, and track to protect the same from exposure to the weather, and consequent deterioration or obstruction by rain, snow, ice, &c. The metal rail is thus supported centrally of the housing by a series of metal brackets secured to and projecting outwardly from the side of the barn or building somewhat more than half the thickness of the door, so that the door may be suspended about centrally under the track, and to which brackets the metal rail is attached by bolts or rivets. As the width of the door is only half the length of the track and its housing, it will be readily understood that the upper end or edge of the door can only close the bottom of the housing for half its length, whether the door be open or closed or whatever may be its position in the housing, and consequently open space is always left on both sides of the track-rail for admission into the housing of swallows, sparrows, or other birds that build nests of straw, feathers, binding-twine, grass, mud, or sticks, and as these barn-door housings thus open at the bottom on each side of the central track-rail offer a sheltered and favored place for such birds to build their nests great difficulty, inconvenience, and annoyance has heretofore been experienced from the birds entering the housings and filling them up with their nests and from the straw, feathers, binding-twine, grass, mud, and sticks or dried nests built upon the track and obstructing the running of the hanger wheels or rollers, fre-

quently making it impossible to open or close the door and often wrecking it by throwing its hanger wheels or rollers off their track.

The object of my invention is to provide a simple and efficient means for practically overcoming these objections or difficulties.

My invention consists in the novel construction and novel combinations of parts and devices by which I accomplish this object or result—that is to say, it consists, in connection with the open-bottom housing and the central track-rail therein and its supporting-brackets, of a sheet-metal protecting-strip fitting against and secured to the rail and projecting to each side of the central rail to effectually close the openings on each side of the rail against admission of birds. The sheet-metal protecting-strip has an upright flange or portion fitting against and secured by bolts or rivets to the lower upright web or flange of the rail and two horizontal flanges, one projecting under the rail-supporting brackets to the side of the building or inner side of the housing to close the openings between the brackets on the inside of the rail and the other projecting under the outer horizontal flange or web of the rail nearly to the outer side or member of the housing and closing the opening on the outer side of the rail and between it and the housing against entrance of sparrows or other small birds, while leaving a narrow slot for the hanger-straps to pass through and reciprocate in. By this means the open-bottom housing is effectually closed on both sides of the central track-rail without interfering with the operation of the other parts, and at the same time the thin sheet-metal protecting-strip, which is preferably made of galvanized iron, is secured to and supported from the steel track-rail at numerous points throughout the length of the long strip, so that there is no danger of its sagging or getting bent or twisted out of place, and thus interfering with the operation of the door or its own efficient action in excluding the birds from the housing.

In the accompanying drawings, forming a part of this specification, Figure 1 is a perspective view of a portion of a sliding door and track-rail embodying my invention, and Fig. 2 is a vertical cross-section.

In said drawings, A represents a portion of the side of a barn or other building; B, the door-housing secured to the building over the door and its track-rail; C, a sliding door; D, one of the hangers; E, its wheel or roller; F, the central longitudinal track-rail extending from end to end of the housing, the same being preferably cross-shaped in cross-section and having a lower vertical web or flange f , two horizontal flanges f' f^2 , and an upper flange f^3 . This rail is supported centrally in the open-bottom housing by bent brackets G, each having a flange g fitting against the side A of the building and a parallel bent flange g' fitting under the inner horizontal flange f' of the track-rail and against the lower web f thereof and to which the rail is secured by bolts or rivets g^2 , extending through the track-rail and bracket.

M is my sheet-metal protecting-strip, preferably made of galvanized iron or other thin sheet metal. It has an upright portion m , fitting against the lower web or flange f of the track-rail, an inner horizontal flange m' , projecting under the track-rail and its supporting-brackets and extending to the side of the building, thus effectually filling and closing the open space between the building and the inner side of the track-rail and between the supporting-brackets of the rail. The protecting-strip M is also furnished with a horizontal flange m^2 , projecting outwardly from the track-rail and under the outer flange f^2 thereof and near to the inner face of the outer side or member b of the housing, but leaving a narrow slot b' between the outer edge of the protecting-strip and the housing for the straps of the hangers to pass through and reciprocate in as the door is opened or closed. The protecting-strip is secured at intervals to the track-rail by bolts or rivets m^3 , extending through the same. The protecting-strip may thus be very quickly and conveniently put up, as it may be applied and secured to the rail before the rail itself is mounted in

the housing, or the rolled-steel track-rail may be manufactured and sold with the thin sheet-metal protecting-strip already riveted or bolted thereto. The protecting-strip extends the entire length of the rail and housing, so as to close the open-bottom housing throughout its entire length and on both sides of the central track-rail against the admission of birds.

I claim—

1. In a sliding door, the combination of an open-bottom housing and a central track-rail therein and its supporting-brackets, with the door and its hangers, and a sheet-metal protecting-strip fitting against and secured to the central track-rail and projecting to each side thereof and closing the openings on each side of the central track-rail against admission of birds, there being a narrow slot between the outer edge of said protecting-strip and the outer member of said housing for the hanger-straps to pass through and reciprocate in as the sliding door opens and closes, substantially as specified.

2. In a sliding door, the combination of an open-bottom housing and a central track-rail therein and its supporting-brackets, with the door and its hangers, and a sheet-metal protecting-strip fitting against and secured to the central track-rail and projecting to each side thereof and closing the openings on each side of the central track-rail against admission of birds, there being a narrow slot between the outer edge of said protecting-strip and the outer member of said housing for the hanger-straps to pass through and reciprocate in as the sliding door opens and closes, said sheet-metal protecting-strip having an upright portion m and two horizontal flanges m' m^2 , one projecting to each side of the central track-rail, substantially as specified.

JAMES H. PHELPS.

Witnesses:

GEORGE C. MANSFIELD,
CHAS. W. SEARL.