

(No Model.)

W. LUITINK.
DOOR HANGER.

No. 453,150.

Patented May 26, 1891.

Fig. 1.

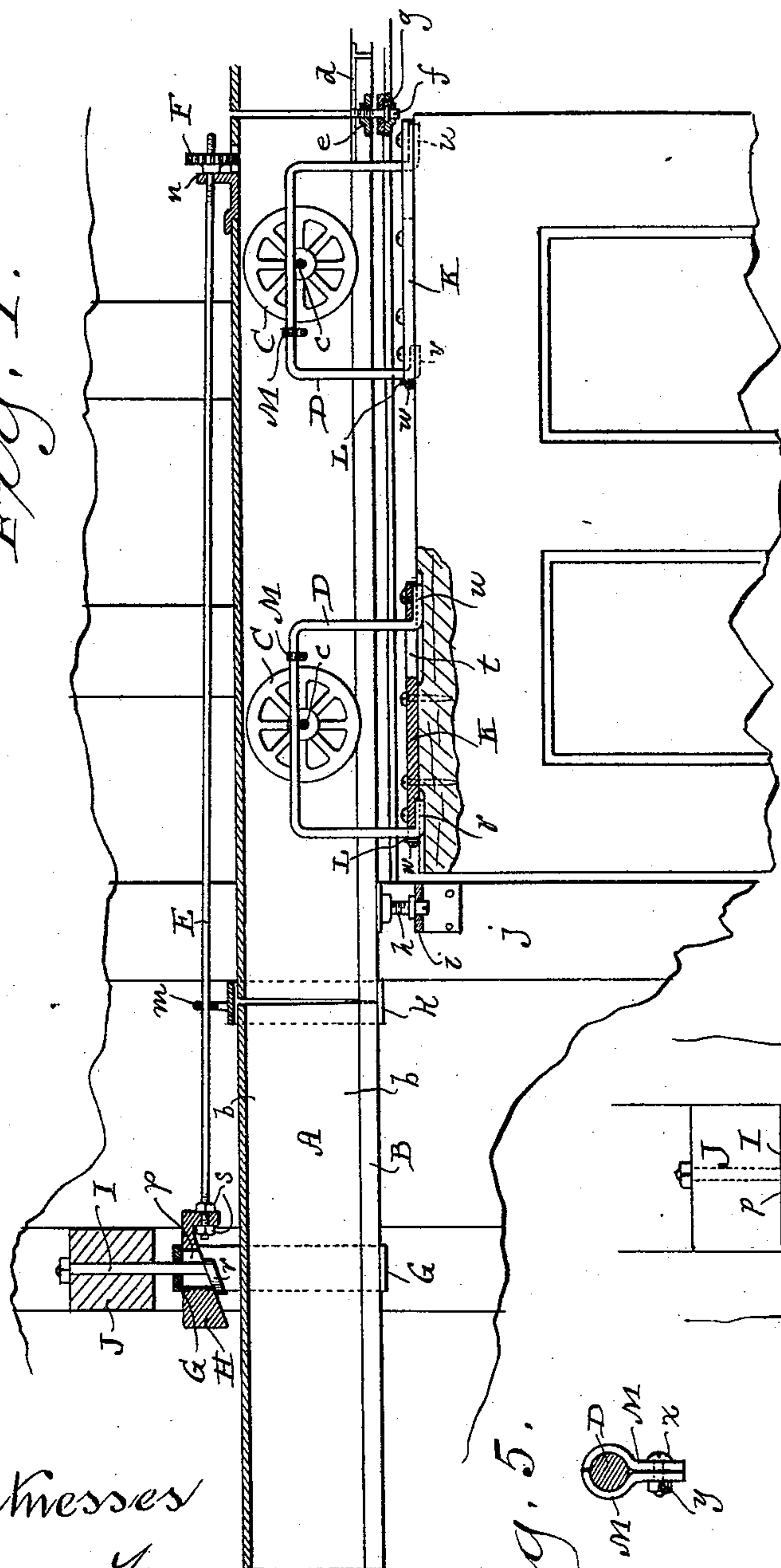


Fig. 3.

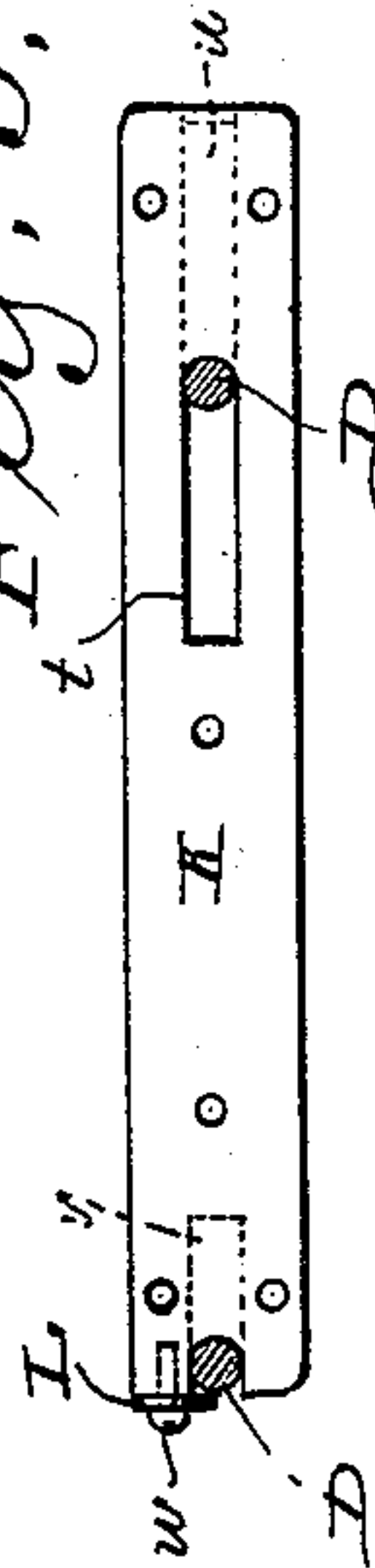


Fig. 2.

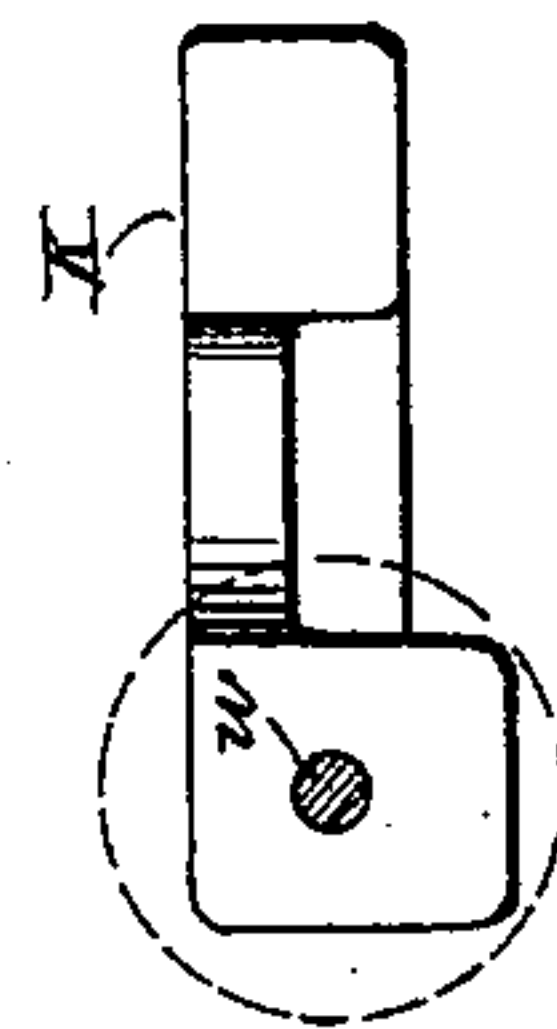
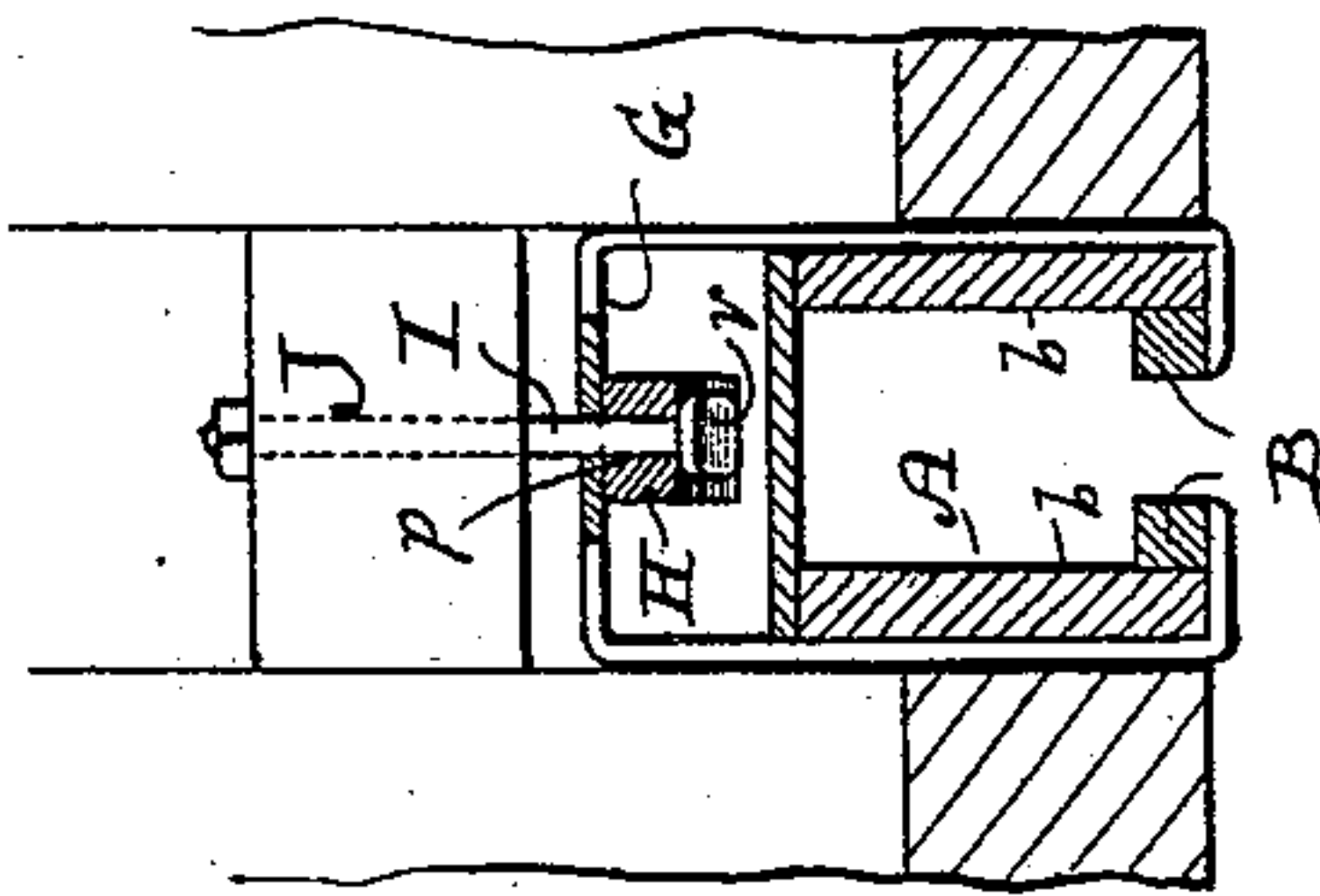
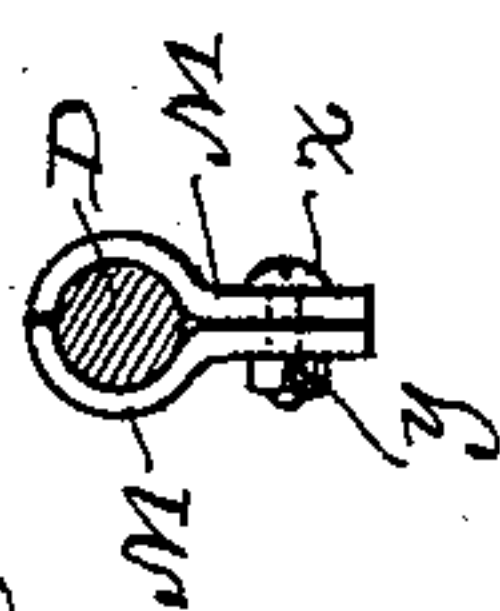


Fig. 4.

Fig. 5.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM LUITINK, OF MILWAUKEE, WISCONSIN, ASSIGNOR TO THE WILLIAM LUITINK & SONS MANUFACTURING COMPANY, OF SAME PLACE.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 453,150, dated May 26, 1891.

Application filed January 12, 1891. Serial No. 377,448. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM LUITINK, a citizen of the United States, and a resident of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Tracks and Hangers for Sliding Doors; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings and subsequently claimed.

In the drawings, Figure 1 represents an elevation, partly in section, and illustrates the construction and relative arrangement of the parts embodied in my invention; Fig. 2, a transverse section on an imaginary line passing through the door-casing and track; Fig. 3, a plan view, partly in section, of one of the hangers; and Fig. 4, an end view of said hanger. Fig. 5 illustrates a stop that forms part of my invention.

Referring by letter to the drawings, A represents a box open at the bottom throughout its length, and fast on the inner faces of the box sides *b* are opposing rails B, that with said box constitute a track, the rails being preferably of maple or some other hard wood.

Arranged to travel on the rails B are rollers C, and the roller-axes *c* support yokes D, connected to a door E, the wheels and yokes forming hangers for said door.

For the purpose of imparting a certain amount of flexibility to the track the latter is vertically slitted at intervals, and the space cut out of the rails at the center of the door-opening to permit of the placing of the rollers is covered by a bridge-piece *d*, as shown in Fig. 1. The track is centrally provided with a bearing *e* for the engagement of an adjusting-screw *f*, that turns in a bearing *g*, connected to the adjacent casing, and that portion of said track that extends outside the pocket for each door is further supported by means of another adjusting-screw *h*, that turns in a bearing *i*, secured to the jamb-studs *j* of said casing. Wherever the track is slitted I hold the same against warping by means of a bail *k*, provided with an eye *m* for engage-

ment with a rod E, that has its outer end loose in a bracket *n* on said track and screw-threaded to engage an adjusting-nut F, as shown in Fig. 1.

Generally speaking, the construction thus far described is well known and forms no part of my invention, except in combination with certain novel features to be hereinafter specified.

That portion of the track contained in the pocket for each door is embraced by a bail G, that rests on a block H, having a wedge-shaped under side and a longitudinal slot *p*, the latter engaging a rod I, that depends from a brace J between studs of the casing, the lower end of the rod being provided with an inclined foot *r*, that impinges against the wedge side of said block. The outer end of the wedge-block is provided with a vertical lip having an opening therein that engages the rod E, the latter being secured in place by means of set-nuts *s*, as shown in Fig. 1. By operating the adjusting-nut F on the rod E the wedge-block H is longitudinally adjusted on the inclined supporting-foot, and that portion of the track supported by the bail G is raised or lowered in order that the outer edge of its relative door will come flush with the adjacent jamb of the casing when said door is run back in its pocket, that portion of said track extending outside of the pocket being adjusted by means of the screws *f h* in order that opposing doors may come flush together at the center of the casing. The rod E in the arrangement shown also acts as a truss to support and stiffen that portion of the track to which it is connected. The hanger-yokes D have their ends turned at right angles in the same direction, one of these ends being preferably longer than the other, and said ends of the yokes come between the upper edge of the doors and plates K rigidly secured thereto by screws or other suitable means. Each of the plates is provided with a slot *t* to permit of the insertion of the long end *u* of the relative yoke into a seat formed by recessing the adjacent door-edge and the under side of one end of said plate, the short end *v* of said yoke being inserted in a similar seat at the opposite end of the aforesaid plate. The latter end of the plate is recessed to a depth suf-

ficient to receive the opposing portion of the yoke, and the latter is held against withdrawal by means of an overlapping washer L, secured to said end of the plate by means of a screw
5 w, as best illustrated in Fig. 3.

By the construction and arrangement of the parts constituting the hangers I am enabled to cheapen the cost of production without losing the advantages of detachable yokes.

10 In order to utilize a standard size of the yokes D in connection with doors of different widths, as well as to prevent the rollers C from becoming misplaced, I provide the horizontal portion or rider-bar of each yoke with
15 an adjustable stop opposed to the adjacent roller-axle. The preferred form of stop consists of opposing plates M, shaped at their upper ends to fit the rider-bar portion of a yoke, a bolt x, passed through the lower ends of the
20 plates, and a clamping-nut y on the bolt, this construction and arrangement of parts being clearly illustrated in Fig. 5.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

25 1. The combination, with a sliding-door track, of a bail embracing the same, a longitudinally-slotted wedge-block opposed to the bail, an inclined support having a shank engaging the slot in the wedge-block, a rod connected to said wedge-block, a bracket arranged on the track to loosely engage the rod, and an adjusting-nut on said rod in opposition to the bracket, substantially as set forth.

2. The combination, with a sliding door and track, of hangers comprising rollers arranged on the track, slotted plates recessed at one end and secured to the upper edge of the door, yokes supported on the roller-axles and having angle ends seated between said door-edge
40 and plates, and retaining devices on the plates in opposition to the yoke, substantially as set forth.

3. The combination, with a sliding door and track, of rollers arranged on the track, yokes
45 secured to the upper edge of the door to individually rest upon a single one of the roller-axles, and a stop adjustable on each yoke in the path of the adjacent axle, substantially as set forth.

4. The combination, with a sliding door and track, of rollers arranged on the track, yokes
50 secured to the upper edge of the door to individually rest upon a single one of the roller-axles, opposing plates shaped at their upper ends to fit the rider-bar portion of each yoke, a bolt passed through the lower ends of the plates, and a clamping-nut on the bolt, substantially as set forth.

In testimony that I claim the foregoing I
60 have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

WM. LUITINK.

Witnesses:

N. E. OLIPHANT,
WM. KLUG.