(No Model.)

H. FLEMING.

DOOR HANGER.

No. 302,628. Patented July 29, 1884.

Fig. 1

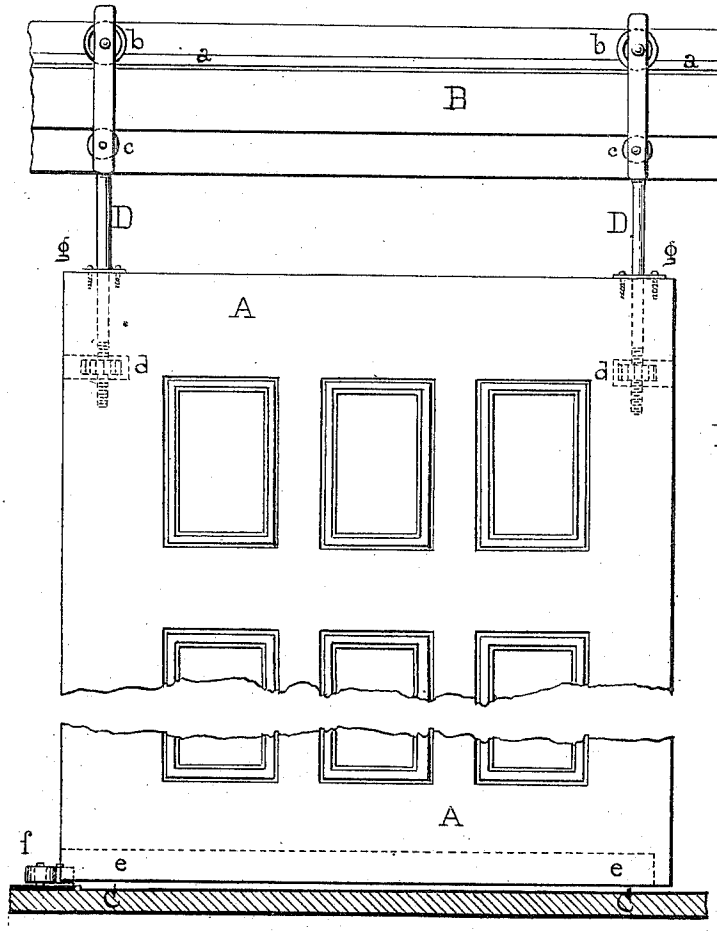


Fig. 2

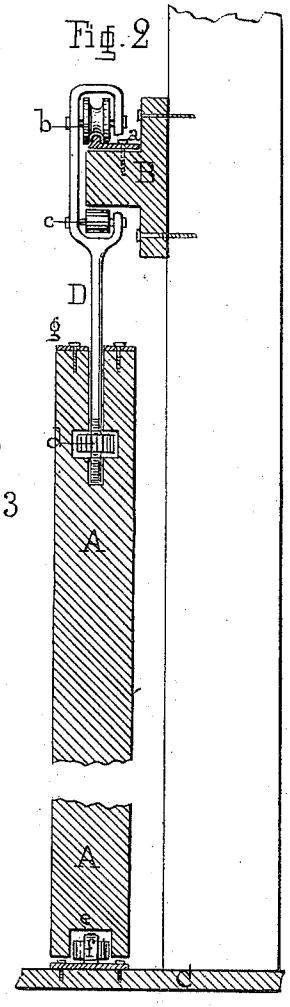
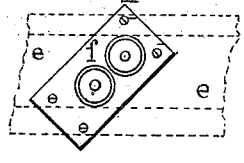


Fig. 3



Fig. 4



WITNESSES:

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UNITED STATES PATENT OFFICE.

HENRY FLEMING, OF KANSAS CITY, MISSOURI.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 302,628, dated July 29, 1884.

Application filed March 3, 1884. (No model.)

To all whom it may concern:

Be it known that I, HENRY FLEMING, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Sliding Doors; and I do 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in the art of hanging and operating inside sliding doors; and its objects are to dispense with the usual double track and lateral guiding-rollers, as applied to the top of a door; and, further, to provide improved means for keeping the door in a vertical line while in operation.

It consists in using two independent single-piece hangers having journaled in the upper extremity a track-wheel with a circular groove upon its tread or face, and having fixed in a similar manner, beneath the wood track, a plain-faced roller which is adapted to prevent any tendency of the door toward tipping, and so raising the other hanger from the track while being operated. A metal track having a circular or convex head, and a flange on one side thereof, is employed, and it is attached to the wood track by means of screws.

Figure 1 represents an elevation of one of my improved sliding doors. Fig. 2 is a sectional elevation of the edge of a door. Fig. 3 is a plan of the adjusting-nut as used upon the threaded end of the hangers. Fig. 4 is a plan of my improved guiding-rollers for the bottom of the door.

A represents an inside sliding door, suspended from the single ⊣-shaped track B, faced by the round-headed track-plate *a*, and attached to the timbers of a building in the usual manner. The under rollers, *c*, which are journaled within the intermediate fork of the hangers D, are adapted by contact with the under side of the said track to keep the door A in a longitudinally-vertical position. Lateral movement of hangers is prevented by means of the concave groove upon the face of the suspending-wheels *b*, fitting over the round head of metal track *a*. The openings in the top of the door A, in which the threaded end of the hangers are fixed, are protected by the metal plates *g*, and by reason of the square opening in the same the hangers D are prevented from turning therein. The door A is guided and held in a vertical position by means of the double-roller guide-plate *f*, which is adapted to operate within a groove, *e*, formed in the lower end of the door. The said guide-rollers may be attached to the floor C in such position that the two centers will be in line with the said groove; or the line of the groove *e* may form an angle with the line of the roller-centers, as shown. In the manner last described the guide-rollers can be so adjusted to a groove that is larger than the diameter of a single roller as to avoid looseness and rattling. This rattling is a common defect in the usual method of guiding the lower end of sliding doors.

The hangers described possess the advantage of being easily applied, as there is no leveling of double tracks, and the weight of the doors being hung directly beneath the center of the round track, there is, consequently, no side draft, as is the case when one side of a double track settles with the building. The hangers are put in place by cutting a small notch in the center of the length of track B.

I prefer to stop my door by means of a small block having a rubber face, which is fixed across the track and attached to the upper door-jambs in such a manner as to intercept the square shank of the hanger D just above the top of the door.

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

1. In a sliding door, the combination of ⊣-shaped track-rail B, having round-headed track *a* fixed thereon, and double-forked wheel-frame D, in the upper fork of which is journaled the track-wheel *b*, grooved as shown and described.

2. The combination, with the solid double-forked wheel-frame D, of the under roller, *c*, and track-wheel *b*, grooved as shown, substantially as described.

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

HENRY FLEMING.

Witnesses:
HENRY D. ASHLEY,
WM. TINKLE.