

(Model.)

H. E. RICHARDS.

DOOR HANGER.

No. 262,120.

Patented Aug. 1, 1882.

*Fig. 1.*

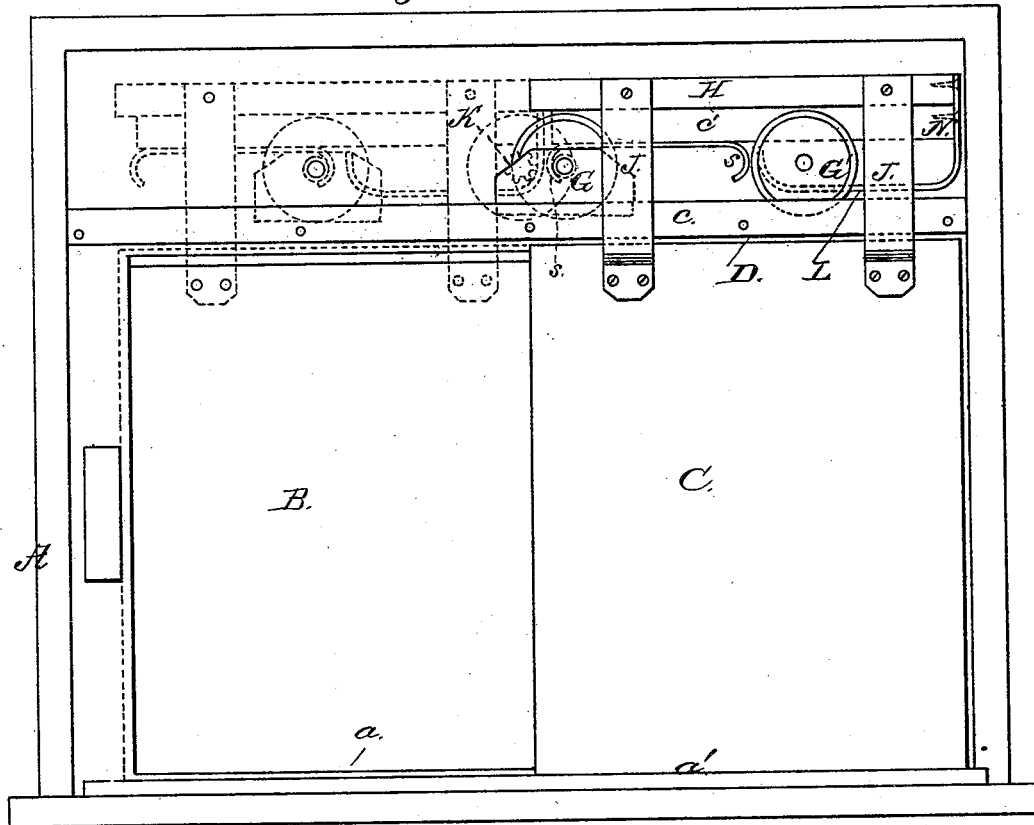
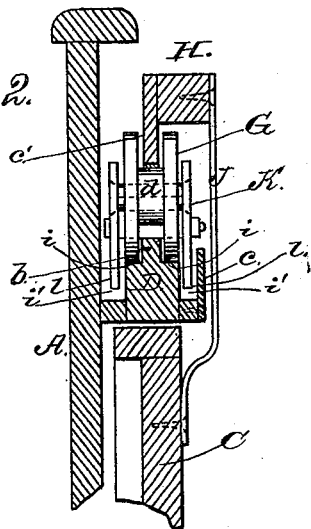


Fig. 2.



WITNESSES

WITNESSES  
Villette Anderson  
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Henry E. Richards,  
by E. W. Anderson  
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# UNITED STATES PATENT OFFICE.

HENRY E. RICHARDS, OF OTTAWA, ILLINOIS.

## DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 262,120, dated August 1, 1882.

Application filed May 26, 1880. Renewed March 25, 1882. (Model.)

*To all whom it may concern:*

Be it known that I, HENRY E. RICHARDS, of Ottawa, in the county of La Salle and State of Illinois, have invented a new and valuable Improvement in Door-Hangers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a side view of my improved gate-hanger, taken inside. Fig. 2 is a transverse section of the same.

This invention has relation to improvements in door-hangers for the sliding doors of warehouses, depots, barns, and the like; and the nature of the invention consists in certain novel combinations of parts, as will be hereinafter shown and described.

In the annexed drawings, the letter A designates the side of a building, having the doorway B and door C, sliding endwise between the floor and a horizontal beam, D, arranged above the doorway, as shown. The lower edge of the door C is guided, when the said door is opened, between the strips *a a'*. The upper edge of the beam D is provided with a central longitudinal rib, *b*, and an outside metallic plate, *c*, extending its whole length and rigidly secured thereto.

G G' indicate metallic wheels having deep peripheral grooves, mounted on the track-beam D, with their flanges embracing the rib *b* and the perimeters thereof bearing on the shoulders at each side of said rib. Resting on these wheels is the upper track-rail, H, provided on its under side with a depending rib, *c'*, fitting between the flanges of the wheels G G'. The door is suspended from the upper track-rail, H, by means of the metallic plates J. The wheel G has its bearings in a metallic box, K, having free endwise sliding motion on the lower track-rail, D, and having its lower edges, *l*, extending down past the bearing-shoulders *i* of said rail in recesses or grooves *i'*, formed for

the purpose. This wheel is prevented from running from under the upper track-rail H by means of the downwardly-extending hook-form stops *s*, that pass readily between the flanges of said wheel and engage the central hub thereof; or I may use a long flat staple, L, secured at its ends to the said track-rail, with its horizontal portion passing between the flanges of the wheel, as shown in Fig. 1, applied to wheel G', the object being in either case to prevent the wheels G G' from running from under the upper track-rail. The form of the stop is immaterial.

During the opening and closing of the door the box K of the wheel G acts as a rudder, and by the engagement of its flanges or lower edges in the recess of the track-rail D steers the hanger in right lines, preventing the twisting of the top rail and the wheel G' from jumping the track.

It will be observed that the wheels G G' have double bearings, the one being on the track-rail D and the other on the upper track-rail, H. Consequently the sliding of the door is both rapid and of easy accomplishment.

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

The combination, with the lower track-rail, D, having the raised rib *b* and side recesses, *i'*, the wheels G G', resting on said rail, the gate C, and the top track-rail, H, having rib *c'* extending down between the flanges of the wheels and connected to the gate by the depending plates J, of the stops upon the under side of the upper track-rail engaging the hub of the wheels between its flanges, and the box K upon the journals of one of the wheels, having lower edges, *l*, extending down into the recesses *i'*, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

HENRY EUGENE RICHARDS.

Witnesses:

CYRUS POAGE,

JULIUS FRANKLIN RICHARDS.