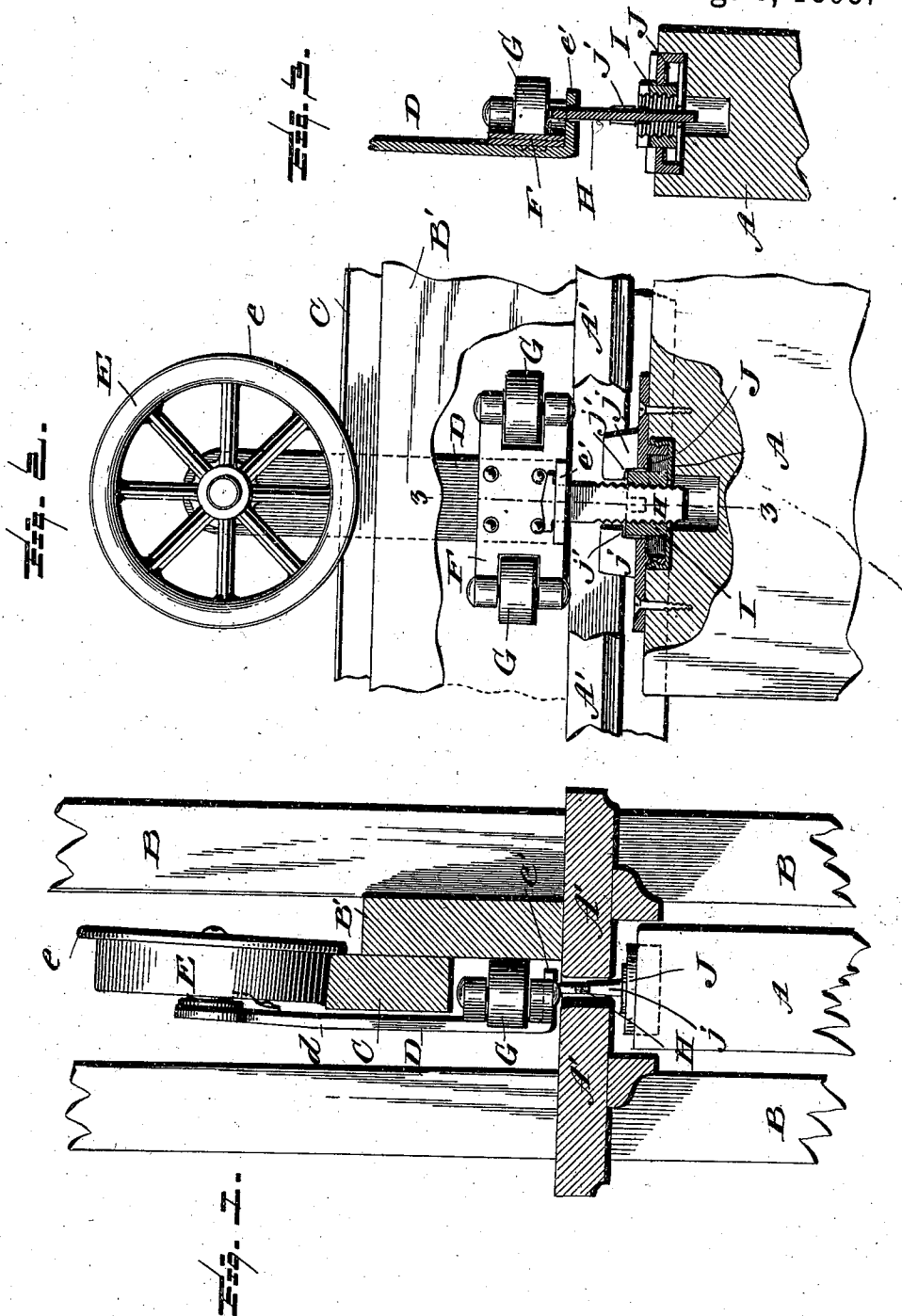


(No Model.)

G. A. COLTON.
DOOR HANGER.

No. 502,705.

Patented Aug. 8, 1893.



Witnesses:

L. C. Hills,
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Inventor

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UNITED STATES PATENT OFFICE.

GEORGE A. COLTON, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE MUNGER-COLTON MANUFACTURING COMPANY, OF SAME PLACE.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 502,705, dated August 8, 1893.

Application filed January 3, 1893. Serial No. 457,083. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. COLTON, a citizen of the United States, residing at Chicago, in the county of Cook, State of Illinois, have invented certain new and useful Improvements in Sliding-Door Hangers, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in sliding door hangers, and it has for its objects among others to provide an improved door hanger in which the center of the door, or gravity, will be thrown on a line with the center of the wheel whereby the door will run easier and more true. I provide a track with a beveled upper face which serves to cause the wheels to crowd toward the low side and thereby force the guide rolls to travel close to and straight with the guide board to which the track is secured. The track is secured with its upper edge sufficiently above the guide board to provide for the treads of the wheels and still prevent said flanges from riding upon the upper face of the guide board. The guide board extends below the track beneath which latter the guide rolls travel. The guide roll carrier extends inward under the track and prevents the wheels from lifting off the track. The suspension rod is of thin material and is bent near its upper end to throw the wheel over the track. The guide roll carrier also supports the door-supporting devices. By my construction and arrangement of parts the door can be easily hung and will run true and smooth and with little or no milling.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification and in which—

Figure 1 is a vertical cross section showing a door provided with my improved hanger, the latter being shown in end elevation. Fig. 2 is a side elevation, with parts broken and parts in section. Fig. 3 is a vertical section on the line 3 3 of Fig. 2.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates a portion of a door and A' the soffit.

B is the studding to which is secured the guide board B' in any suitable manner and to this guide board is secured in any desired way (or it may be an integral part therewith) the track C which is preferably of a flat straight piece with its upper side preferably beveled as seen in Fig. 1, the upper edge of the track extending above the top face of the guide board a sufficient distance to provide room for the flanges of the wheel and yet prevent the said flanges from coming in contact with the upper face of the said board as clearly shown in Figs. 1 and 2. The track also terminates at a distance from the lower edge of the guide board as seen in Fig. 1 to provide room therebeneath for the guide rollers as seen in Fig. 1.

D is a flat plate or bar in the upper end of which is suitably journaled the wheel E of any approved construction having a flange *e* and its lower end which extends below the under face of the track, is bent horizontally inward under the track as seen at *e'* and to the said plate or bar near its lower end is secured a horizontal plate F at right angles to the portion *e'* as seen best in Fig. 2, which plate carries near each end a guide roller G, which is suitably journaled in bearings on the said plate as seen in Figs. 1 and 2. The plate or bar D is given a slight bend inward near its upper end as seen in Fig. 1 at *d* so as to bring the center of gravity in line with the center of the wheel.

H is a thin bar having a flanged head which is supported on the horizontal portion *e'* of the bar D, the bar H passing through a hole in the portion *e'* as seen in Fig. 3. The bar H has its edges notched or toothed as seen in Fig. 2 to engage a nut I rotatably held in a casting or socket J secured to the upper face of the door, lugs *j* being provided to limit the lateral movement of the bar H as seen in Fig. 2. These lugs are shouldered as seen at *j'* to prevent displacement of the nut as will be understood from Fig. 2.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What I claim as new is—

- 5 1. A track and a guide board, the track extended above the upper face of the guide board and the guide board extended below the lower face of the track, the guide board and track being in different vertical planes
10 and the latter in vertical line over the opening between the soffits, substantially as specified.
- 15 2. A track and guide board, the track extended above the face of the guide board and the guide board extended below the lower face of the track, the guide board and track being in different vertical planes and the latter in vertical plane over the opening between the soffits, the upper face of the track being
20 beveled toward the guide board, combined with a hanger having its upper end bent toward the vertical plane of the track and carrying a flanged wheel, substantially as specified.
- 25 3. The combination with the hanger plate having its lower end bent horizontally, of the bar passed through a slot in the horizontal

portion thereof and threaded, a socket for attachment to the upper face of a door and provided with shouldered lugs, and a nut rotatably held in said socket and engaging the bar and held against displacement by the shoulders of said lugs, substantially as specified. 30

4. The combination with a track and the guide board, the track extended above the upper face of the guide board and the guide board extended below the lower face of the track and the upper face of the track being beveled toward the guide board, of a plate bent inward above the track, a wheel journaled in the upper end of said plate with its flanged bar against the side of the track above the guide board, rollers carried by said plate and engaging the face of the guide board below the track and door attaching device detachably supported on the lower end of said plate, substantially as specified. 40 45

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

GEORGE A. COLTON.

Witnesses:

RALPH S. CHILDS,
HATTIE M. COLTON.