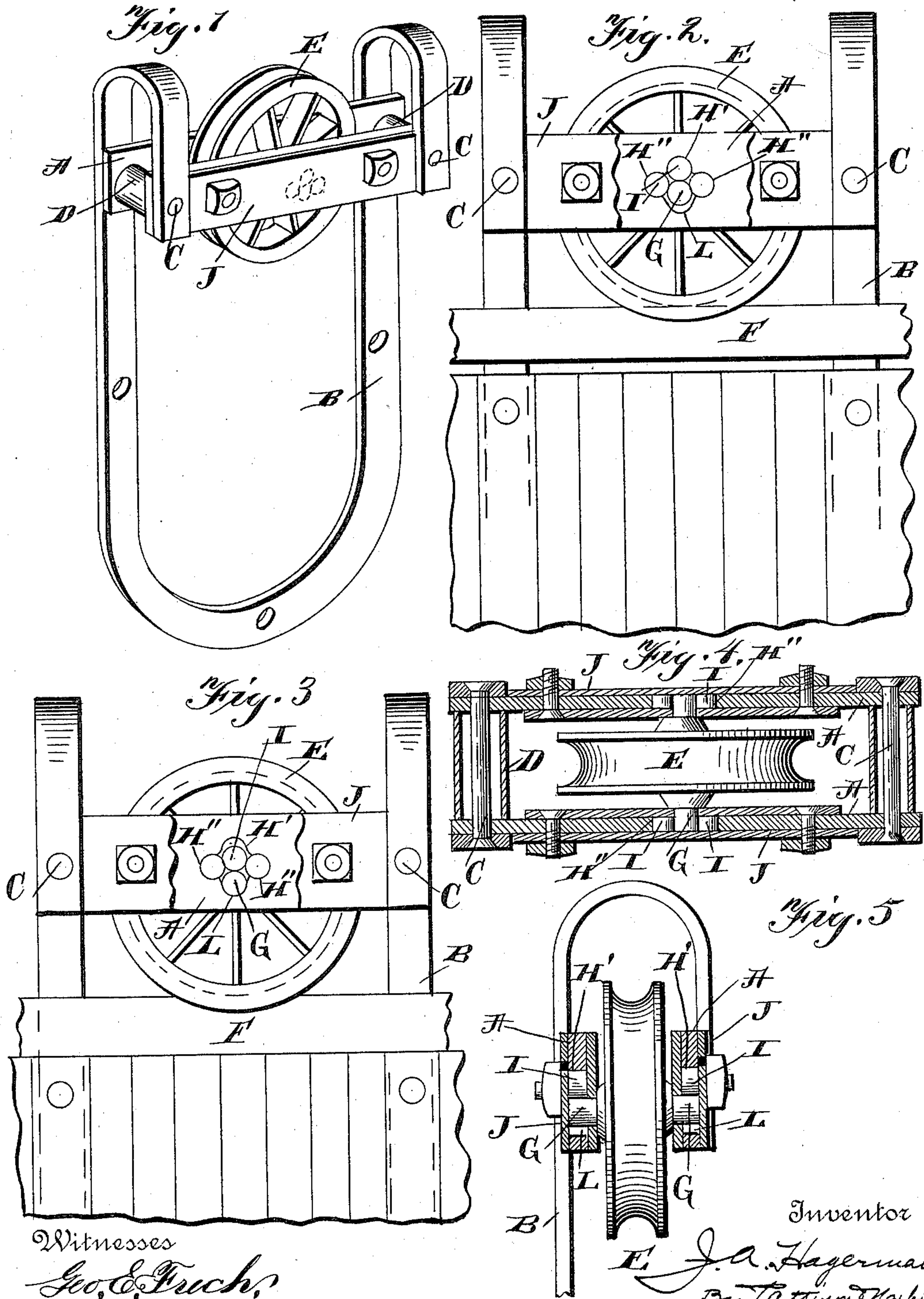


(No Model.)

J. A. HAGERMAN.
DOOR HANGER.

No. 582,055.

Patented May 4, 1897.



Witnesses

Geo. E. Frick,

James W. Evans

Inventor

E. J. A. Hagerman
By Tatum & Habitt

Attorneys

UNITED STATES PATENT OFFICE.

JOSEPH A. HAGERMAN, OF FINDLAY, OHIO.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 582,055, dated May 4, 1897.

Application filed July 18, 1896. Serial No. 599,644. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH A. HAGERMAN, of Findlay, in the county of Hancock and State of Ohio, have invented certain new and useful Improvements in Door-Hangers; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

This invention relates to door-hangers; and the object thereof is to provide an exceptionally strong and durable hanger of simple form, and a further object is to so arrange the same that the door may be displaced vertically without throwing the hanger-roller from the track.

With these objects in view the invention consists in the novel features of construction herein fully described and claimed and illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view of the hanger. Fig. 2 is a front elevation thereof shown in connection with a portion of a door and track, the front plate being partially removed to clearly show the roller-bearings. Fig. 3 is a similar view showing the door raised or displaced vertically with the roller still remaining upon the track. Fig. 4 is a sectional plan view. Fig. 5 is a cross-sectional view.

The frame consists of the two horizontal parallel bars A, which are secured in the upper bowed end of door-supporting strap B by means of bolts C, passing through the strap end as well as the bars and passing also through the sleeve D, arranged between bars A, so as to properly space them and also to make the construction perfectly rigid and very strong.

Roller E, which travels on track F, is arranged between bars A, the journal G thereof extending into openings in bars A. The top portion H' as well as the side portions H'' of these openings are rounded outward, as shown, to accommodate rollers I, said rollers being confined in the openings H' and H'' by side plates J, secured to the inner and outer surfaces of bars A, as shown. When ar-

ranged as here shown, the rollers cannot become displaced from their respective openings, while at the same time their inner surfaces are engaged by roller-journal G and afford a non-frictional bearing therefor. The openings are cut downward immediately beneath the journals, as indicated at L, so as to afford the hanger-frame vertical movement with respect to the roller, whereby if the door is displaced vertically the hanger-frame will simply move upward, allowing the roller E to remain upon the track, and this movement is provided for without affecting the friction-rollers in the slightest degree, as the latter cannot become displaced.

The displaced position of the door is indicated in Fig. 3, and when it resumes its normal position the hanger-frame simply descends until the friction-rollers are brought to bear upon the journals, as will be readily understood. The door is usually mounted with a comparatively short space between the same and the rail, and it is my intention to afford the frame sufficient adjustment upon the roller to cause the door depending from the hanger and beneath the track to engage the latter when displaced vertically before lifting the roller therefrom. When thus arranged, it becomes practically impossible to derail the hanger.

Ball-bearings instead of friction-rollers may be used in openings H' H'', if so desired, without departing from the spirit of my invention, as the same would operate quite effectually and serve the desired purpose.

I do not desire that my invention shall be understood as limited to door-hangers with respect to the arrangement of the roller and the friction-bearings and the vertical adjustment afforded the roller-frame with respect to the roller, for this principle may be embodied in other arts and at the same time be fully within the scope of the present invention.

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

An improved door-hanger comprising a frame having separated sides formed with

aligned journal-openings and the top and side
openings H' H'' respectively communicating
with said journal-openings, the roller having
its journal bearing in said journal-openings,
5 and the friction-rollers fitting loosely in open-
ings H', H'', and capable of vertical and lat-
eral displacement respectively, the journal
loosely fitting in the frame-openings and bear-

ing at its top and sides upon the friction-roll-
ers, substantially as shown and described. 10

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

JOSEPH A. HAGERMAN.

Witnesses:

A. N. DICKERSON,
M. D. SOURS.