(No Model.)

H. MYERS.

DOOR HANGER.

No. 327,450. Patented Sept. 29, 1885.

Fig. 1.

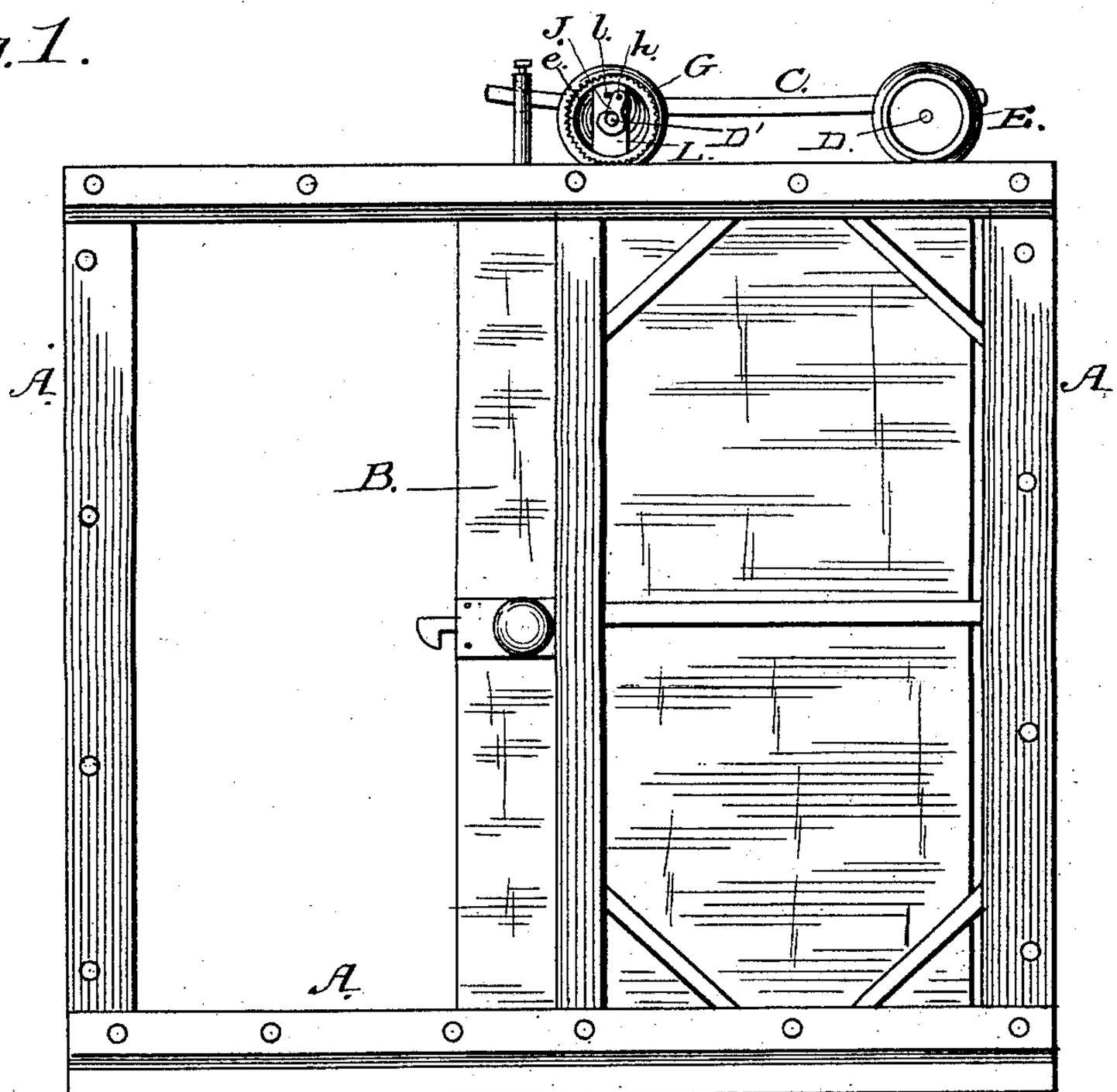


Fig. 2.

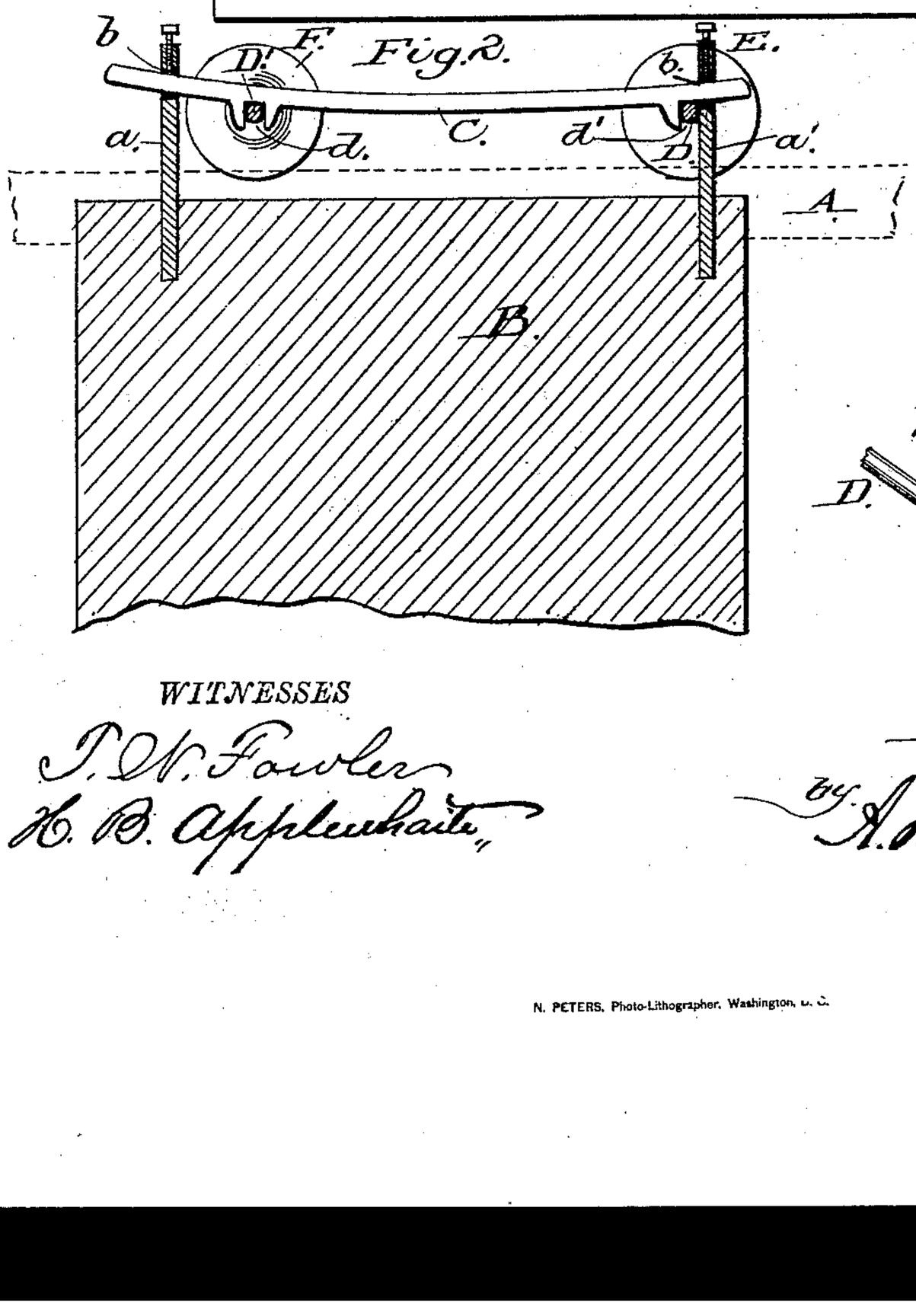
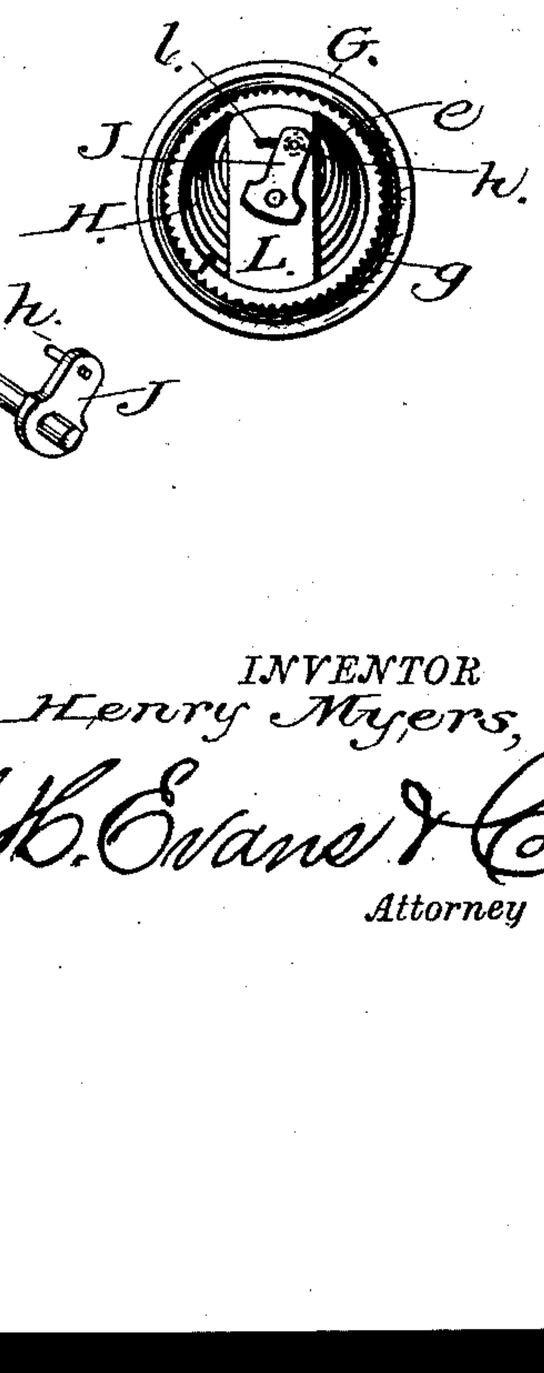


Fig. 3.



WITNESSES

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HENRY MYERS, OF ALTON, ILLINOIS.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 327,450, dated September 29, 1885.

Application filed July 16, 1885. (No model.)

To all whom it may concern:

Be it known that I, HENRY MYERS, a citizen of the United States, residing at Alton, in the county of Madison and State of Illinois, have invented certain new and useful Improvements in Sliding Doors, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a side elevation of a sliding door and showing my improvements applied thereto. Fig. 2 is a sectional view of the upper part of the door and showing the connecting-bar which engages the shaft of the rollers. Fig. 3 represents details of construction to be hereinafter referred to.

My invention relates to sliding doors; and it consists, essentially, in a friction-roller mounted on the door and provided with a coiled spring, which automatically returns the door to its normal position after it has been opened, or which will open the door upon releasing a suitable catch.

It further consists in the peculiar construction and combination of devices which I shall hereinafter fully describe, and point out in the claims.

To enable others skilled in the art to make and use my invention, I will now proceed to describe the manner in which I have carried it out.

In the said drawings, A represents a suitable frame in which the sliding door B works, and this frame may be constructed to receive either single or double doors, as desired.

The door B has projecting from its upper surface the hangers *a a'*, which are slotted at *b*, to receive a connecting-bar, C, which separates each pair of rollers from the other. The ends of the connecting-bar C engage the slots in the hangers, and the bar is notched at *d d'* for the reception of the shafts D D' of the flanged rollers E E, F, and G. These shafts engage the notched portions of the connecting-bar, so that when the door is opened or closed the rollers which support the door are caused to travel backward or forward upon their tracks.

The rollers F and G are loosely mounted upon their shafts D', and the periphery of the roller G is serrated or roughened at *e*, so that the roller will more readily engage the track. The roller G is also provided with a chamber, *g*, in which is placed a coiled spring, H, one end of said spring being secured to the roller, while the opposite end engages a pin, *h*, on the end of a crank-arm, J, secured on the shaft.

To the outer face of the roller G is secured a plate or disk, L, provided with a slot, *l*, through which passes the pin *h*, before described.

From the foregoing description it is evident that when the door is closed the roller G is revolved and the pin *h* engages the inner end of the spring. The said spring is coiled, but as soon as the door is released the spring immediately uncoils and automatically causes the door to resume its normal position.

If it be desired to have the door close after it has been opened, the same devices are used, the spring being wound or coiled by the door being opened; but the door automatically closes itself upon being released.

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

1. The combination, with a sliding door and its hangers, of the rollers E, F, and G, the latter having a serrated or roughened surface, whereby it is held in frictional contact with its track, and provided with a coiled spring which automatically returns the door to its normal position when released, substantially as herein described.

2. As an improvement in sliding doors, a roller having an internally-placed spring, and provided with an arm having a pin which engages and coils the spring by the revolution of the rollers, substantially as herein described.

HENRY MYERS.

Witnesses:
PAUL MAUL, Jr.,
LUCAS PFEIFFENBERGER.