

J. G. B. LAMB.

DOOR HANGER.

APPLICATION FILED MAR. 25, 1908.

930,393.

Patented Aug. 10, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

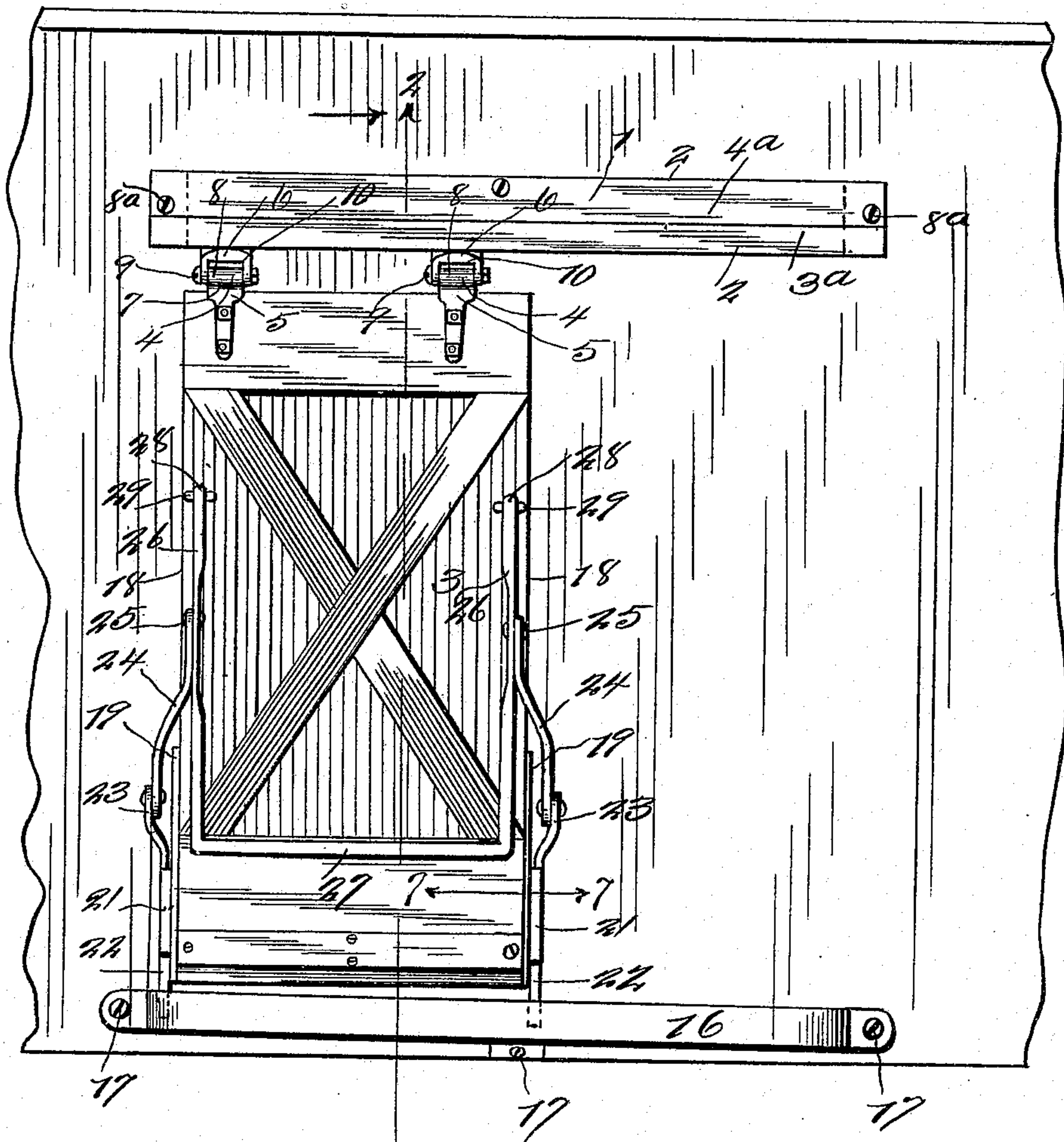
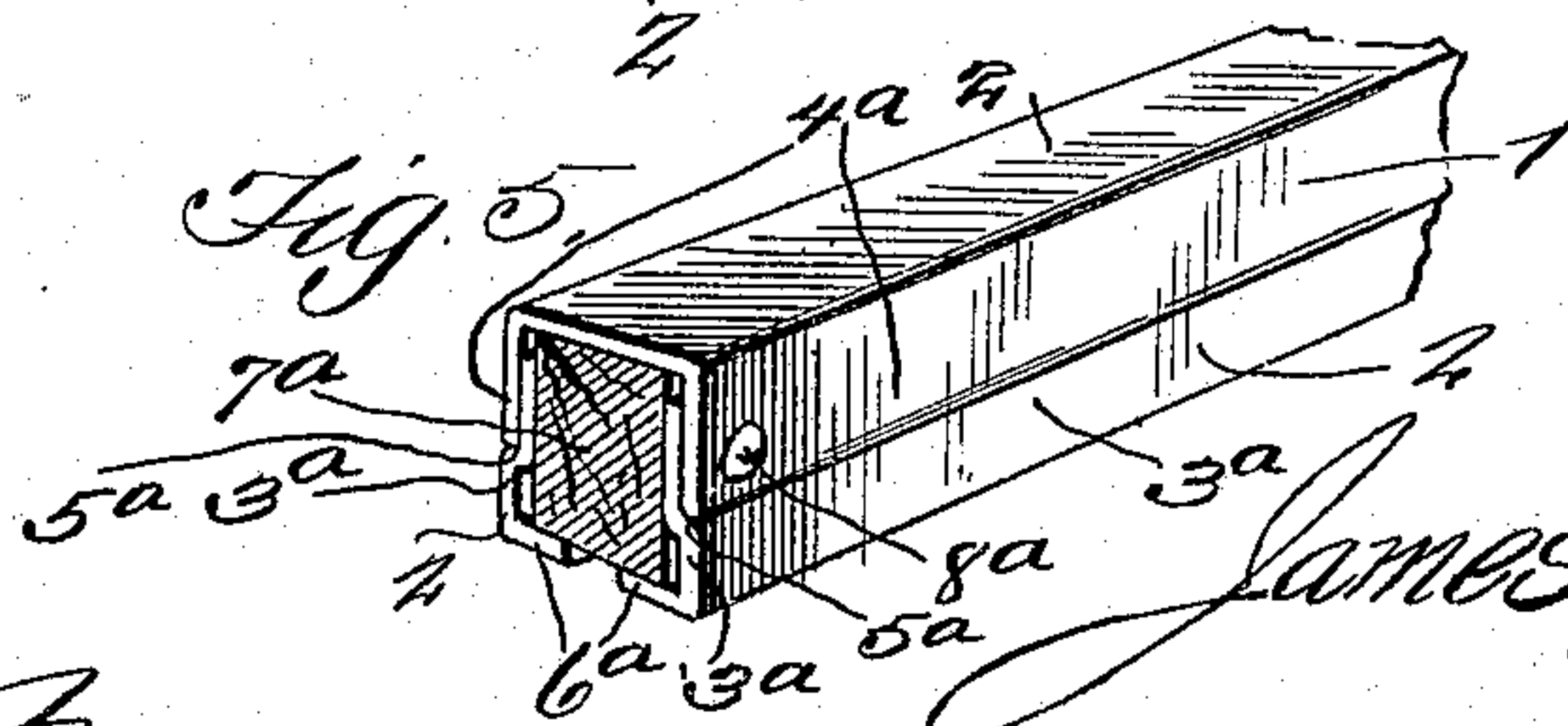


Fig. 5.



Witnesses

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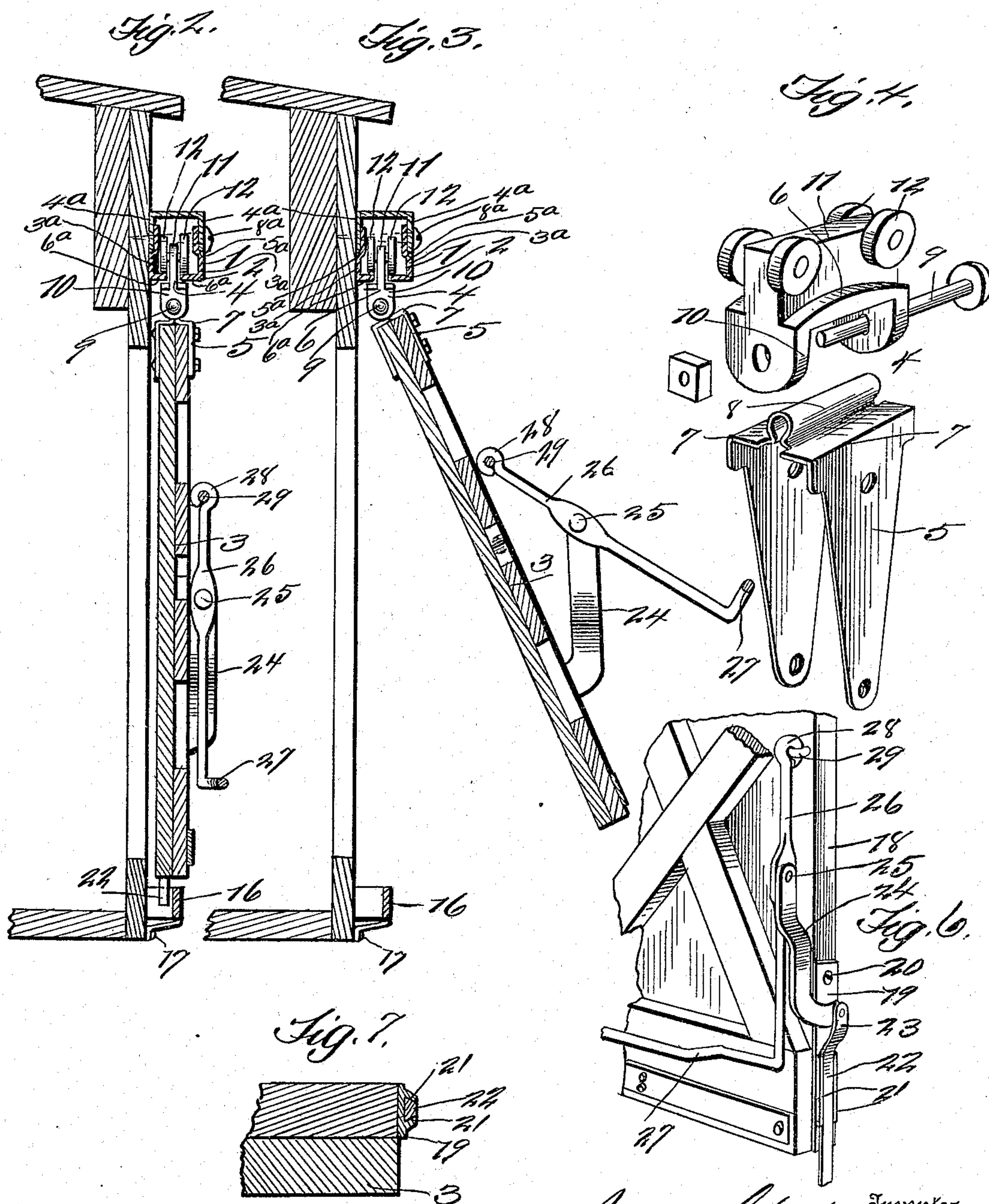
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# UNITED STATES PATENT OFFICE.

JAMES G. B. LAMB, OF WILLIAMSTON, MICHIGAN.

## DOOR-HANGER.

No. 930,393.

Specification of Letters Patent.

Patented Aug. 10, 1909.

Application filed March 25, 1908. Serial No. 423,091.

*To all whom it may concern:*

Be it known that I, JAMES G. B. LAMB, a citizen of the United States, residing at Williamston, in the county of Ingham and State of Michigan, have invented a new and useful Door-Hanger; 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 appertains to make and use the same.

My invention relates to improvements in door hangers, especially designed for doors of cars particularly, of the freight type.

It has for its object among other things, to provide for readily suspending the door in position and for its convenient manipulation, as in moving it into open and closed position and for its lateral or outward movement when that may become necessary in order to move the door into open position, such a contingency arising as when lateral pressure from within of the car contents may render it difficult to otherwise move the door; and to carry out these ends in a simple, expeditious and effective manner.

Said invention consists of certain instrumentalities or features substantially as hereinafter fully disclosed and pointed out by the claim.

In the accompanying drawings, illustrating the preferred embodiment of my invention, Figure 1 is a front elevation thereof in the usual parallel relation to the car body. Fig. 2 is a vertical section produced through Fig. 1, the section line passing through the door. Fig. 3 is a view of like general character, with the door standing outward at an angle to the car body. Fig. 4 is an enlarged perspective view of a hanger with its respective parts or members disassembled. Fig. 5 is a perspective view of a portion of the track-way. Fig. 6 is a perspective view of the door 3, and its locking mechanism. Fig. 7 is a sectional view on line 7-7 of Fig. 1.

In regard to the drawings, which as will be observed, thoroughly illustrate the invention, 1 designates the track-way, which is in the form of a trough. This trough is formed of three lengths of sheet metal 2 which are provided with side flanges 3<sup>a</sup> and 4<sup>a</sup>. The flanges 3<sup>a</sup> are bent to form shoulders 5<sup>a</sup>, against which the longitudinal edges of the flanges 4<sup>a</sup> abut, as shown clearly in Figs. 2, 3 and 5. The lower lengths of metal are provided with flanges 6<sup>a</sup>, which, as is

evident, form the rails or tracks, upon which the wheels 12 travel, as the door 3 is moved horizontally. As clearly disclosed in Fig. 5 of the drawings, it will be observed that the flanges 4<sup>a</sup> overlap the flanges 3<sup>a</sup>, and in constructing the track-way or trough in this manner, wood blocks 7<sup>a</sup> are positioned within either end thereof, and into which blocks the screws 8<sup>a</sup> are forced, as shown clearly in Figs. 1 and 5. The blocks 7<sup>a</sup> provide means whereby the lengths of metal are held in their proper position.

The usual door 3, which is hung in position parallel with the side or lateral portion of the car or structure, is provided at its upper edge with hangers 4, arranged near its forward and rear edges, respectively, and adapted to suspend the door from the track way 1, for endwise movement, or allow of said door being moved laterally or outwardly from the car-body as will be explained, and when the said door is in a closed position, the same may be held in such position. Each of said hangers consists of a strap hinge member 5 and an upper end truck member 6, the former being suitably extended down upon, and bolted to the outer side of the door and having its upper end portion carried inwardly at a right angle as at 7, over the top edge of the door and further extended upwardly to provide for effecting connection with the truck member in alinement with said edge of the door and for centrally suspending the weight of the latter. Said hinge member has its extreme upper end formed or terminated into an elongated eye 8 which receives a bolt or pintle 9 pivotally connecting or hinging it to the truck member 6, the last-named being formed with a stirrup 10 having alining eye-ended terminals also receiving said bolt or pintle for the purpose aforesaid. Said truck member has also an integral upwardly extending central plate-like portion 11 equipped near its ends with pulleys or wheels 12 traveling upon the rails of the track way 1, fixed as stated, to the car body for the ready endwise movement of the car-door, which latter also, by reason of the hinging or pivoting connection aforesaid, is adapted as above intimated, to be swung or moved outwardly from the car body, for a purpose noted.

The aforesaid combination and arrangement of parts provides a simple, convenient and effective door hanger and one which fa-



cilitates the suspending of the door, in addition to being characterized by the additional advantages above recited.

The door 3 is provided with a new and useful locking mechanism, by which the same may be prevented from being swung outward, at an angle, as shown in Fig. 3 of the drawings. This locking mechanism comprises a bolt retaining strip 16, which is fastened by means of screws or other suitable means 17 to the car body, as shown clearly in Figs. 1, 2 and 3 of the drawings. The opposite edges 18 of the door 3 are provided with metallic plates 19, which are secured thereto by screws or other suitable means 20; these metallic plates 19 are provided with dove-tailed guides 21, between which the sliding bolts or bars 22 operate, as will be clearly seen in Figs. 6 and 7 of the drawings. These bolts or bars engage between the metallic strip 16 and the body of the door, so as to prevent outward movement of said door. To the upper ends 23 of said rods or bars are pivoted links 24, the upper ends of which links, are pivoted, as at 25, to the arm 26 of a U-shaped gravitating lever 27, which arms 26 are provided with eyes 28, which engage eyes 29 secured to the door 3, as clearly shown. The cooperating eyes 28 and 29 form a pivotal connection for the said U-shaped lever, as will be clearly manifest. The upper ends of said bolts or bars are slightly outwardly bent so as to allow a pivotal connection with

the said links, which are disposed between said bolts or bars and the metallic plates, as seen clearly in Fig. 6 of the drawings.

From the foregoing, the essential features, elements and the operation of the device, together with the simplicity thereof, will be clearly apparent.

Having thus fully described the invention, what is claimed as new and useful, by the protection of Letters Patent, is:—

The combination of a car-body and a track-way, of a pivoted, slidable door suspended from said track-way adapted to be manipulated for uncovering or closing an opening in said car-body, said door having dovetailed guides secured to either side thereof, sliding bolts having offset portions mounted in said guides, a U-shaped gravitating lever pivoted to the outer face of said door, and links pivoted at their lower ends to the said offset portions while their upper ends are pivoted at a point between the pivots and the swinging free portion of said gravitating lever, the gravitation of said lever assisting in moving or sliding said bolts, as and for the purpose specified.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES G. B. LAMB.

Witnesses:

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W. A. STEELE.