(No Model.)

J. B. FLANDERS & J. M. SMITH.

DOOR HANGER.

No. 444,725. Patented Jan. 13, 1891.

Fig. 1.

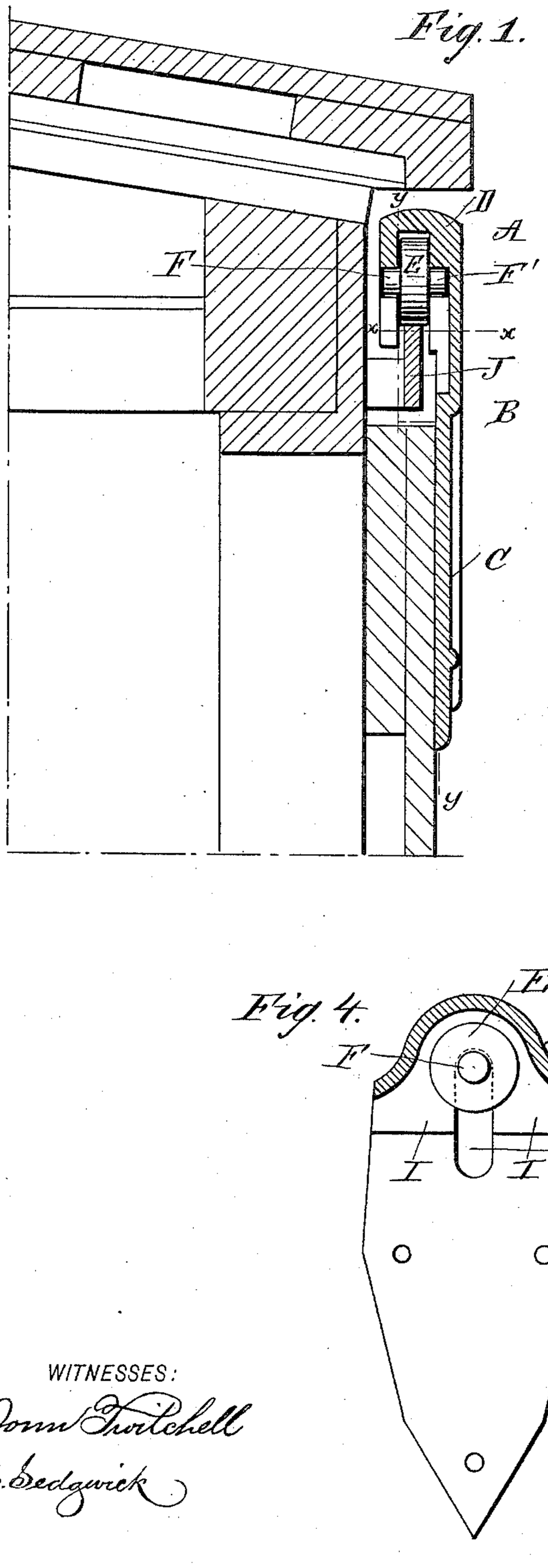

Fig. 2.

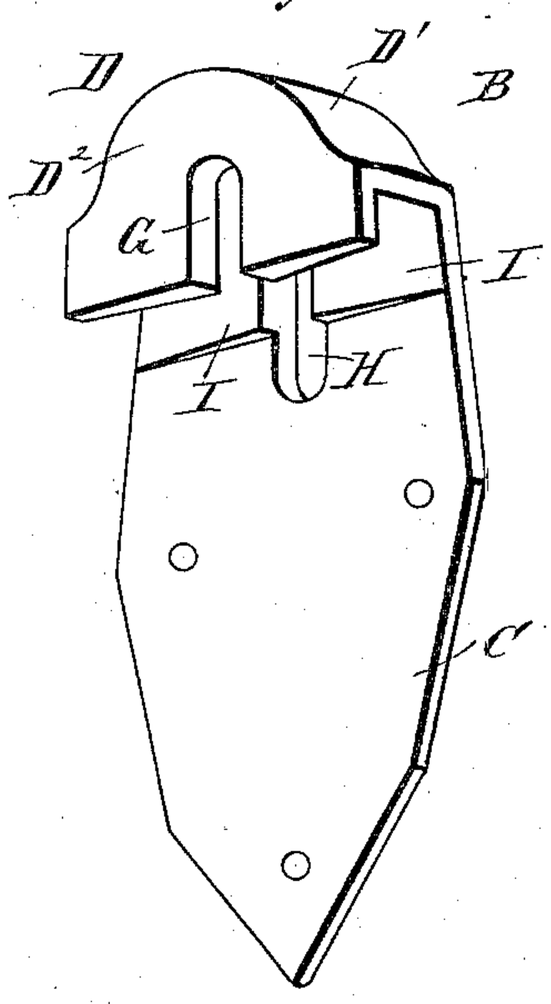

Fig. 3.

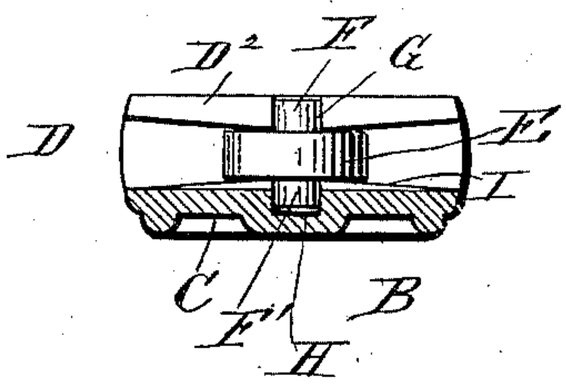

Fig. 4.

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UNITED STATES PATENT OFFICE.

JOHNSON B. FLANDERS AND JOHN M. SMITH, OF TOLEDO, OHIO.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 444,725, dated January 13, 1891.

Application filed March 6, 1890. Serial No. 342,884. (No model.)

To all whom it may concern:

Be it known that we, JOHNSON B. FLANDERS and JOHN M. SMITH, both of Toledo, in the county of Lucas and State of Ohio, have invented a new and Improved Hanger for Sliding Doors, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved hanger specially adapted for sliding doors of railroad cars, gates, &c., and which is very simple and durable in construction and not liable to get clogged up by ice or snow or to bind on the guide-rail.

The invention consists of certain parts and details and combinations of the same, as will be hereinafter fully described, and then pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a transverse section of the improvement as applied to the door of a railroad-car. Fig. 2 is a perspective view of the hanger-frame. Fig. 3 is an inverted sectional plan view of the improvement on the line *x x* of Fig. 1, and Fig. 4 is a rear sectional side elevation of the same on the line *y y* of Fig. 1.

The improved hanger A is provided with a frame B, having a plate C, adapted to be secured by screws or other means to the door on which the hanger is to be applied. On the upper end of the plate C is formed an overhanging head D, having a curved top plate D′ and a rear plate D^2, which forms, with the plate C, a recess for the roller E, provided with trunnions F F′, adapted to fit loosely in a slot G, formed in the middle of the rear plate D^2, and in a recess H, formed on the inside of the plate C, as is plainly shown in Figs. 1 and 2. The lower end of the rear plate D^2 also forms, with the front plate C, a slot for the passage of the guide-rail J, on which the door is to be supported, to slide forward and backward, the roller E traveling on the top of the said rail J.

In order to prevent the roller E from binding, the inner surface of the upper part of the plate C is beveled at I, as is shown in Figs. 2 and 3, and in a similar manner the inside of the rear plate D^2 is beveled, so that the roller does not touch the said inner surface of the plates D^2 and C. The slot G extends to the lower end of the plate D^2, while the recess H for the trunnion F′ extends a suitable depth into the plate C, but does not pass to the front of the said plate, so that no ice or snow can pass into the passage of the head D and to the roller E. The recess H for the said trunnion F′ extends below the slot G for the trunnion F, so as to conveniently insert the trunnions into the recess H and the slot G.

When the roller E is in its place in the head D and rests on the top of the rail J, then the said trunnions F and F′ are in their uppermost positions—that is, at the upper ends of the slot G and the recess H. The top of the roller E does not bind on the inside of the top plate D′ of the head D.

By thus forming a hanger for railroad-car doors ice and snow are prevented from passing onto the roller E, as the latter is completely covered by the plate C and the head D. It will be seen that the roller is not liable to bind in its bearings, as the inner surfaces of the plate C and head D near the faces of the roller are beveled, as above mentioned and illustrated in the drawings.

Having thus fully described our invention, we claim as new and desire to secure by Letters Patent—

In a hanger for sliding doors, a hanger-frame comprising a plate having on its inner face a vertical recess for the reception of a trunnion, an overhanging head formed on the said plate and provided with a curved top plate, and a rear plate having a slot for the reception of a trunnion, the inside of the main plate and the inner face of the rear plate of the head being formed with bevels, substantially as shown and described.

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JOHN M. SMITH.

Witnesses:
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