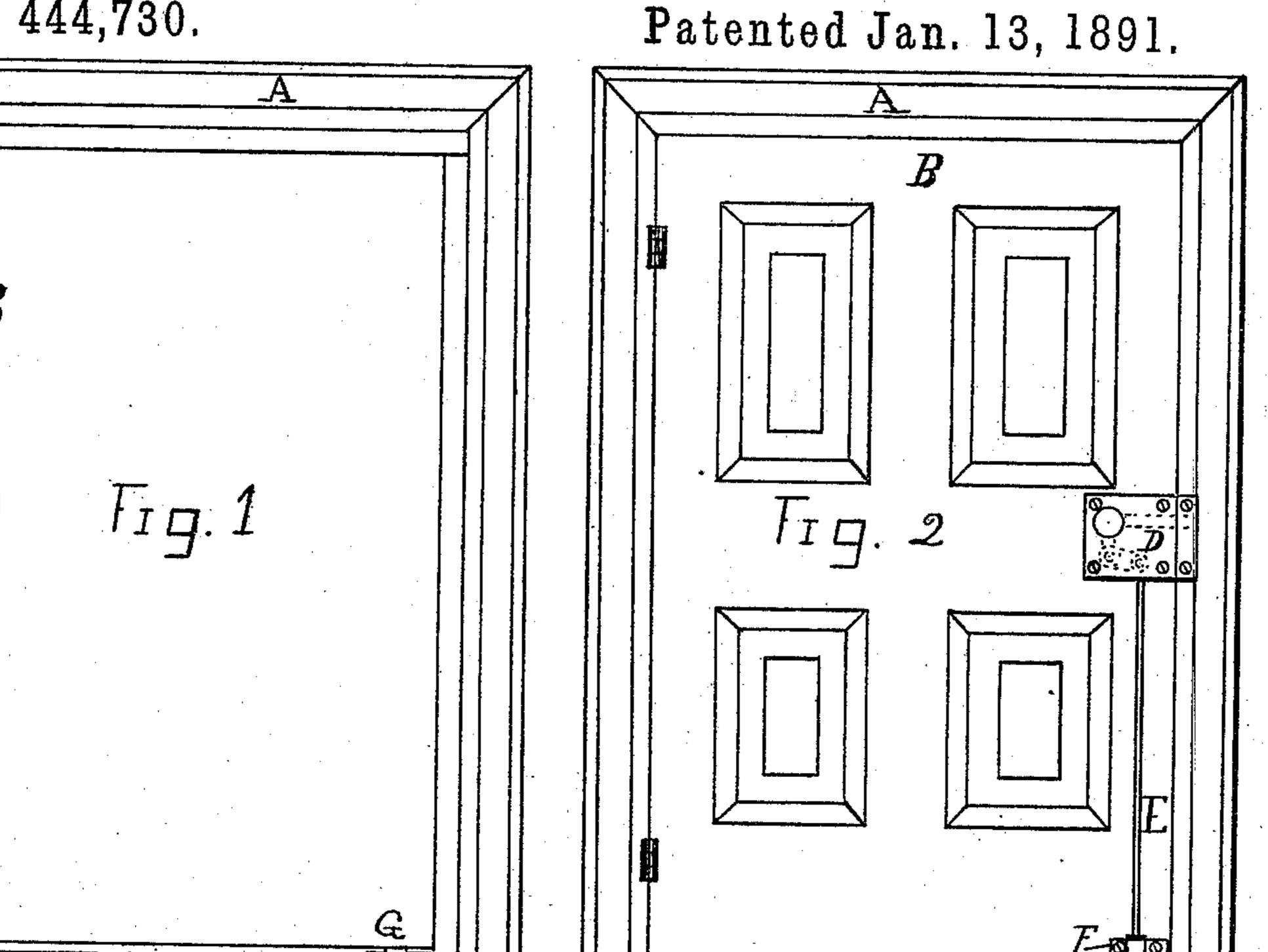
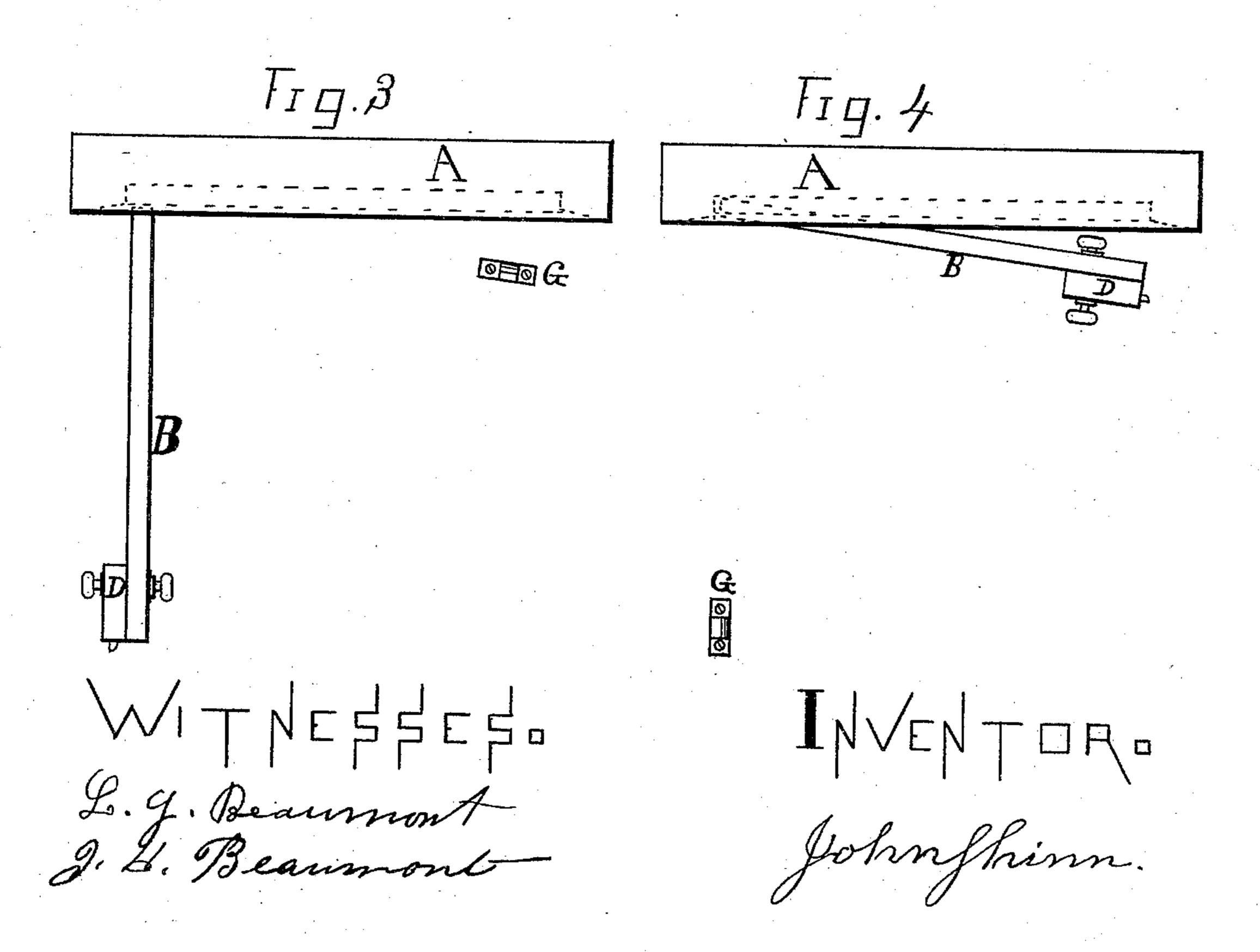
J. SHINN. DOOR CHECK.

No. 444,730.

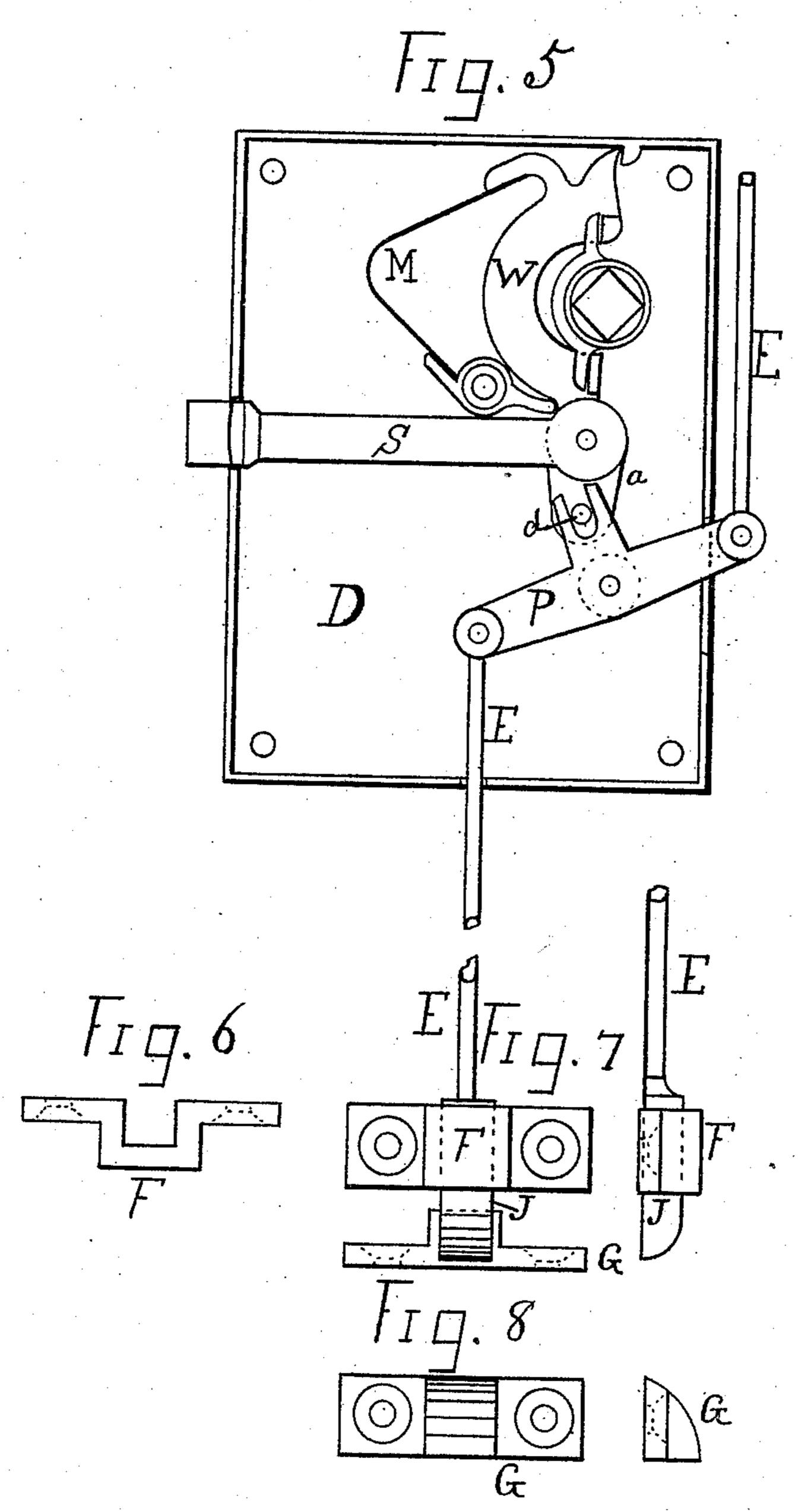




J. SHINN.
DOOR CHECK.

No. 444,730.

Patented Jan. 13, 1891.



VITNESSES. L. G. Beaumont J. H. Beaumont

INVENTOR.

## United States Patent Office.

JOHN SHINN, OF ROXBOROUGH, ASSIGNOR OF ONE-HALF TO WASHINGTON C. SNYDER, OF ASHBOURNE, PENNSYLVANIA.

## DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 444,730, dated January 13, 1891.

Application filed August 18, 1890. Serial No. 362,319. (No model.)

To all whom it may concern:

Be it known that I, John Shinn, a citizen of the United States, residing at Roxborough, in the county of Philadelphia and State of Pennsylvania, have invented a new and useful Improvement in Door-Checks, of which the following is a specification.

My invention relates to certain new and useful improvements in a device for preventing doors from "jarring" or "slamming;" and it consists in the details of construction and arrangement of said device, which will be hereinafter fully described, and particularly

pointed out in the claim.

My invention is applicable to doors of houses and swinging doors generally, and is especially adapted for doors of passenger-cars used on steam-railroads. The doors of passenger-cars used on steam-railroads are mostly hung on hinges, which doors, if left unlatched while the cars are in motion, will swing violently, and when the cars give a lurch will violently slam the door, break the glass, and in many cases pinch and mash the fingers of passengers that may be passing from car to car or passing to the platform of the car before the train comes to a stop at a station.

The mechanism by which my invention is worked is illustrated in the accompanying drawings, making a part of this specification, in which—

Figure 1 is a view of a door-frame and door with my improved check applied. The door is shown as being open. Fig. 2 is a view of a door-frame and door with my improved check applied. The door is shown as being closed. Fig. 3 is a top view of Fig. 1. Fig. 4 is a top view of Fig. 2. The door is shown as being partly open. Fig. 5 is an interior view of a door-spring latch-case with my check connected, the connecting-rods in section. Fig. 6 is a view of a guide-clamp. Fig. 7 are views of the check-rod, clamp-guide, and stop. Fig. 8 is a view of the stop.

Similar letters refer to similar parts through-

out the several views.

A represents the door-frame; B, the door;

D, the spring-latch case.

The spring-latch S is operated in the usual manner by a knob.

The yoke W, Fig. 5, is made with an extension a. In this extension is fixed a pinstud d.

P is a three-arm lever. In the middle arm 55 is formed a slot which engages the stud d in yoke W. From the lever P is a connecting-rod E. At the lower end of rod E is formed a bolt J. (See Fig. 7.)

F is a clamp-guide. The clamp Fisshown 60 in the drawings as fastened at the bottom of the door and the stops G as fastened on the floor; but, if desired, the stop G may be fixed at the top of the door-frame, with the clamp F at the top of the door and bolt J connected 65 to rod E, running up from lever P, as shown

in section, Fig. 5.

The operation of my improved door-check is as follows: The bolt J is supposed to be connected to the lower end of the door, as 70 shown in Fig. 2, and the stops G fastened to the floor, as shown in Figs. 3 and 4. The spring M, Fig. 5, will force out the latch-bolt S, and the weight of rod E will keep down the bolt J, and if the door be pushed wide open, 75 as shown in Fig. 1, the bolt J will rise up over the stop G, Fig. 4, and drop down back of the stop G, and the door will be held open. To release the door, the knob is turned as in opening the door, which will raise the bolt J 80 above the stop G, and the door will be relieved, so as to swing on the hinges. If the door is left in this position and a gust of wind or a lurch of the car (if the door be on a car) shuts it, the door will be arrested by the bolt 85 J striking the stop G, Fig. 3, which will stop the door at a position shown in Fig. 4, and as the door does not strike the door-frame but at one corner of the door it will not strike solid, but spring and not break the glass, (if 90 there be glass in the door,) and as the door cannot close tight it will not pinch and mash the hand or fingers that may be placed on the door-frame when the door is slammed by a lurch or gust of wind. To close and latch the 95 door the knob is turned as in opening the door. This lifts up the bolt J over the stop G and allows the door to be fastened by the latch-bolt S in the usual manner.

Fig. 5 shows a three-arm lever P and two 100 connecting-rods E. This is not generally needed. A right-angled lever and one rod

will be sufficient, and the bolt I may be at the bottom, as shown in Fig. 2, or it may be at the top of the door, as desired.

Having as above fully described my inven-5 tion, what I claim as new, and desire to secure by Letters Patent, is—

A door-check for swinging doors, consisting of the combination of a knob-operated yoke

W, having a pin d, a pivoted and slotted lever P, a connecting rod and bolt E, and stops G, 10 as shown, described, and for the purpose specified.

Witnesses:

GEO. C. BOWKER, WALTER W. ELLISON.