(No Model.)

B. RENTZ.

DOOR CHECK.

No. 448,767. Patented Mar. 24, 1891.

FIG_1_

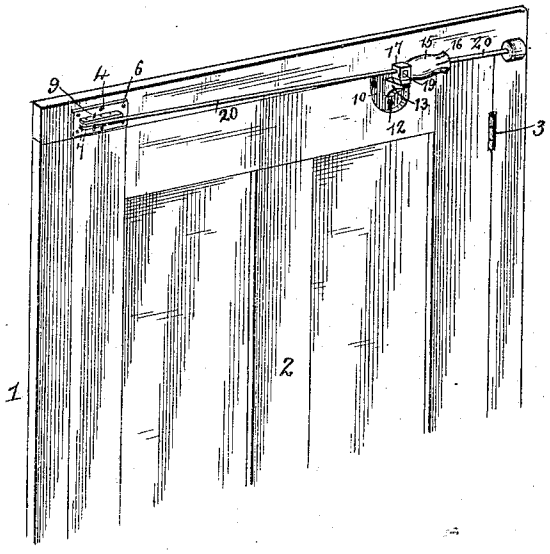


FIG_2_

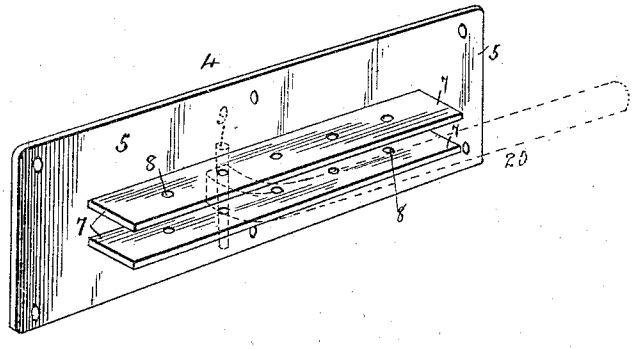
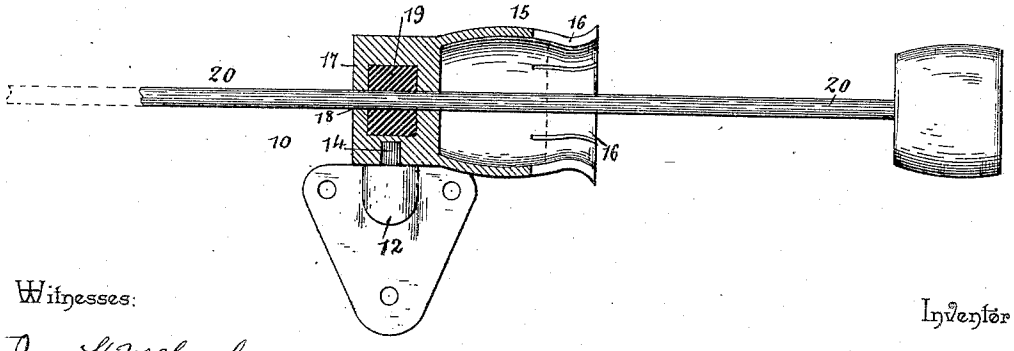


FIG_3_



Witnesses:

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Inventor

Burnum Rentz

By his Attorneys,

C. A. Snow & Co.

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

BARNUM RENTZ, OF WACO, NEBRASKA.

DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 448,767, dated March 24, 1891.

Application filed July 11, 1890. Serial No. 358,391. (No model.)

To all whom it may concern:

Be it known that I, BARNUM RENTZ, a citizen of the United States, residing at Waco, in the county of York and State of Nebraska, have invented a new and useful Door-Check, of which the following is a specification.

This invention has relation to improvements in door-checks, and has for its object to provide a very simple, inexpensive, and durable check adapted to be applied to doors and their casings and to effect a checking of the door when the same has reached a certain point in opening and to prevent a slamming of the door from any intermediate point, and to act to retain the door in any of its open positions.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be particularly pointed out in the claims.

Referring to the drawings, Figure 1 is a perspective of the upper portion of a door and its casing, the two being connected and provided with a check constructed in accordance with my invention. Fig. 2 is an enlarged detail in perspective of the adjustable bracket for connecting the rod to the casing. Fig. 3 is a detail in longitudinal vertical section of the socket and its friction-box.

Like numerals of reference indicate like parts in all the figures of the drawings.

1 designates the door-casing, and 2 the door, which latter is hinged to the former, as at 3, in the usual manner.

4 designates a bracket, which may be either formed of sheet metal or cast, as desired, and comprises a flat securing-plate 5, having screw-openings through which are passed screws 6, by which the plate is secured to the casing of the door immediately above the free end of the latter. The bracket also consists of a pair of parallel longitudinal flanges 7, spaced a slight distance apart and each provided with a series of perforations 8, the perforations of one flange aligning vertically with those of the opposite flange, and through any pair of the perforations is passed a removable pin 9.

10 designates a bracket having its securing-plate 11 connected to the upper front face of the door by means of screws 12. From the plate extends forwardly a bracket-arm 13, which at its upper end is reduced to form a cylindrical bearing 14.

15 designates a socket, made hollow and cylindrical in cross-section. The mouth of the socket is slightly reduced or contracted, and a series of slits is formed at the edge of the same, said slits forming spring-tongues 16, whereby the mouth of the socket is expansible. In rear of the socket there is secured thereto a metallic box 17, having a transverse cylindrical bore 18, which is continued through the bottom of the socket. The box is hollow and is filled with a suitable packing 19 of leather or rubber.

20 designates a connecting rod or plunger, one end of which is pivotally mounted upon the removable pin 9. The rod or plunger passes through the cylindrical opening of the friction-box, through and beyond the socket when the door is closed, and to such a distance as to bring its end within the socket when the door is opened to the fullest extent desired. The end of the rod or plunger is provided with a rubber or other ball or buffer, and is of a size slightly larger than the contracted neck or opening of the socket and adapted to fit within said socket in rear of said contracted portion. The packing within the box bears snugly upon the rod or plunger, and the door may be opened to any degree and maintained in such open position against ordinary influences, and any slamming of the same is positively prevented. By throwing the door open to its fullest extent the buffer passes into the socket, expanding the mouth of the same until it passes beyond the contracted portion in rear of the mouth, where the spring-tongues act to maintain the buffer within the socket, and the door is thus held securely open. While the tension of the spring-tongues is sufficient to prevent the door from slamming accidentally, yet the door may be closed very readily by hand and by a slight pressure.

Having thus described my invention, what I claim is—

1. The combination, with the door-casing and the door, of a bracket secured to the casing and a bracket provided with a bracket-arm terminating in a bearing secured to the

door, a cylindrical socket, the mouth of which is contracted and provided with a series of slits, and provided at its rear end with an opening and mounted upon the bearing of the arm, and a plunger-rod pivoted to the bracket of the casing, passing through the socket and beyond the same, and provided at its free end with a cylindrical buffer slightly larger than the contracted mouth of the socket and adapted to fit within the socket in rear of the mouth, substantially as specified.

2. The combination, with the door-casing and the door, of a bracket having a securing-plate provided with a pair of parallel perforated flanges, a bracket secured to the door and provided with a forwardly-projecting bracket-arm terminating in a bearing, a friction-box pivotally mounted on the bearing and provided with a friction-packing and at one side with a cylindrical socket having a reduced mouth provided with a series of spring-tongues, and a plunger-rod passing through the socket and friction-box and adjustably pivoted at its inner end between the flanges of the bracket, and a buffer secured to the free end of the rod, being of slightly greater diameter than the contracted mouth and adapted to fit the socket in rear of said contracted mouth, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

BARNUM RENTZ.

Witnesses:
F. M. FINCH,
WILLIAM WHITE.