

(No Model.)

B. DEFFENBAUGH.

DOOR CHECK.

No. 475,388.

Patented May 24, 1892.

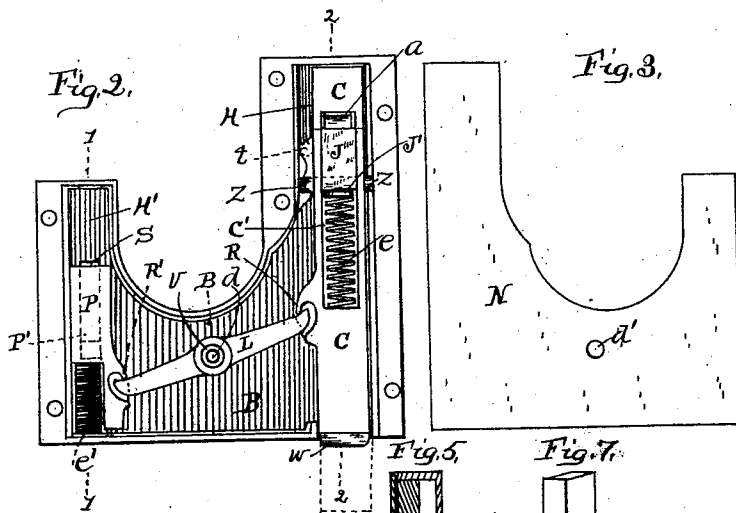
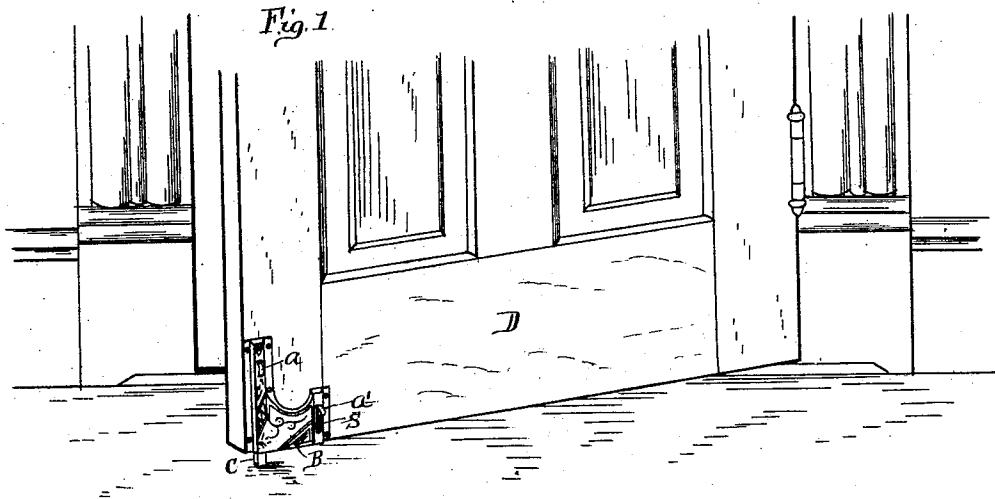


Fig. 4.

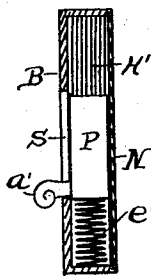
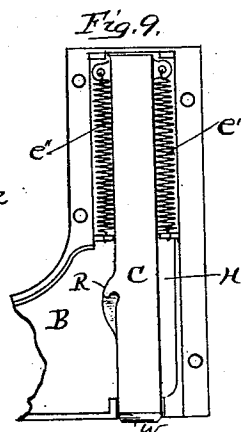
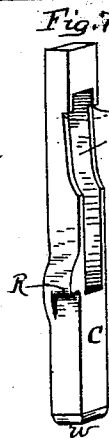
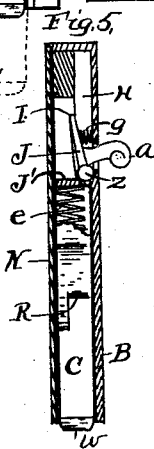


Fig. 6.



Witnesses.

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UNITED STATES PATENT OFFICE.

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DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 475,388, dated May 24, 1892.

Application filed January 26, 1891. Serial No. 379,004. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN DEFFENBAUGH, a citizen of the United States of America, residing at Wichita, in the county of Sedgwick and State of Kansas, have invented certain new and useful Improvements in Door-Checks, of which the following is a specification, reference being had therein to the accompanying drawings, and the letters of reference thereon, forming a part of this specification, in which—

Figure 1 represents the door-check applied to a door in the act of holding the door partially open. Fig. 2 is a rear interior plan of the same; Fig. 3, a plan of the rear inclosing plate thereof; Fig. 4, a vertical cross-section of Fig. 2 on line 1, representing the inclosing plate in place; Fig. 5, a similar view of same figure on line 2; Fig. 6, a perspective view of the sliding head-block thereof; Fig. 7, a similar view of the sliding bolt thereof; Fig. 8, a similar view of the bolt-retaining latch thereof; and Fig. 9 is a modified plan of the sliding bolt thereof represented within the case and having modified means for operating it in one direction.

This invention relates to certain improvements in a door-check, and is of the class adapted to be attached to the lower portion of a door having a vertically-sliding bolt actuated by means of springs adapted to be retained within its case when swinging a door and be released from its case and bear against the floor for holding the door either partially or fully open, and is especially adapted to be operated by the pressure of one's foot when retaining or releasing the bolt, and which improvements are fully set forth and explained in the following specification and claim.

Referring to the drawings, B represents the case, and is provided with side flanges which are provided with screw-holes, by means of which it is attached to a door, and with two vertical chambers H H', with an intermediate lever-chamber communicating with the vertical chambers with sockets for a retaining-latch and with a rear inclosing plate N.

P is a vertically-sliding head-block arranged within the vertical chamber H', and is provided with an offset for providing space for a coil-spring e', upon which it rests, with a side-reaching lug R' and with a front-extend-

ing pin or knob a', which is arranged extending through a face-slot S' of chamber H'.

C is the sliding bolt, and is provided with a corresponding side-extending lug R, with a longitudinal cross-recess C', with the face notches or offsets I, and with a buffer, consisting of rubber or some equivalent material, fixed to its lower end. This bolt is arranged in the vertical chamber H with a lug J' of said chamber extending within the recess C' thereof, and is provided with a coil-spring e, arranged within said recess, bearing at one end against said lug J' and at its opposite end against the bolt, the tendency of which is to force the bolt downward from the case or chamber H, as shown by dotted lines in Fig. 2.

L is a lever about centrally fulcrumed within the intermediate chamber of case B on a stud V, and is so constructed and arranged that its ends respectively bear under the lugs R R' of the head-block and bolt, as shown. The purpose of the lever is to connect the said head-block and sliding bolt in such manner that when the head-block is pressed down the bolt will, through the agency of said lever, be raised within the case.

J is the bolt-retaining latch, and is provided with trunnions Z Z and with the forwardly-extending arm a, and is arranged in the upper front portion of chamber H, with its trunnions suitably arranged in socket-bearings, as shown, and with its arm a extending through a face-slot of said chamber. This latch is provided with a coil-spring g, arranged between its extending side portion and the wall of said chamber, the tendency of which is to yieldingly hold the free end of the latch against the bolt C, and is arranged in such manner that when the bolt is raised its full limit it will engage under the offsets I of the bolt and hold the bolt from escape until released by a downward pressure on its arm a, which will cause the latch to swing toward the face-wall of the bolt-chamber and from under said offsets. The case B is made with a marginal shoulder, against which the rear inclosing plate N bears, and when said plate is arranged in position it is held by means of a screw arranged through the plate-hole d' and turned into the screw-threaded hole d of the lever-stud V, and, also, when said plate is

thus arranged it serves as a retainer to properly hold the operating parts in proper working position.

In the modification shown in Fig. 9 I have represented a solid bolt C and the chamber H somewhat broader than in Fig. 2, and have therein shown two coil-springs e'', arranged one on either side of the bolt, connected at one end to lugs of the bolt and at their opposite end to guide-lugs of the chamber in such manner that they will draw down on the bolt to force it from its chamber; also, I wish to state that, if so desired, I may use the chambered bolt C with the spring e in connection with the springs e'' and thereby attain greater downward pressure of the bolt.

In use the door-check is secured to a door in the manner shown in Fig. 1, and when not in service holding a door the bolt C is retained within the case by means of the latch J.

The essential object in my invention is to provide a door with means whereby it may be held at any desired place within the limit of its swinging space when open, so that wind will not disturb it or permit it to be violently blown closed; and the essential features of its operation are that when the door is opened and it is desired that the bolt should be released

to hold the door it is done by pressing down with one's foot on the arm a of the retaining-latch J, and when it is desired to close the door and it therefore becomes necessary to raise and retain the bolt it is done by a similar downpressure with one's foot on the extending pin or knob a' of the sliding head-block, which raises the bolt through the agency of the lever L and permits the spring-latch J to engage under the bolt-offsets and thereby hold the said bolt.

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

The door-check described, consisting of the combination, with the chambered case, of the sliding spring head-block provided with a pin or knob extending therefrom through a face-slot of the case, the sliding spring-bolt provided with the latch-retaining offsets, the intermediate lever arranged connecting said head-block and bolt, and the spring-retaining latch, substantially as set forth.

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Witnesses:

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