(No Model.)

S. & W. F. MASON.

DOOR CHECK.

No. 465,185. Patented Dec. 15, 1891.

Fig 1

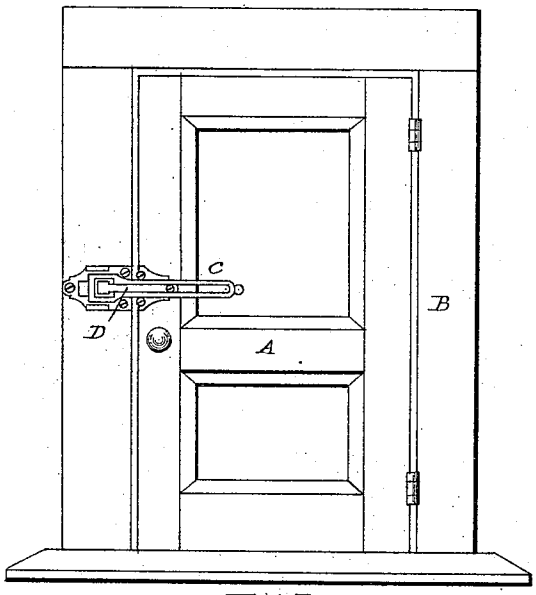


Fig 2

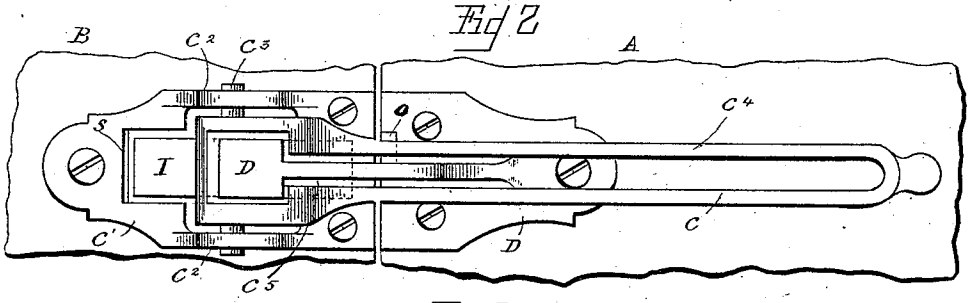


Fig 3

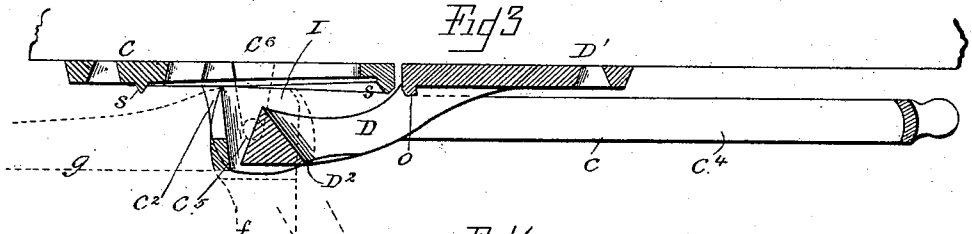
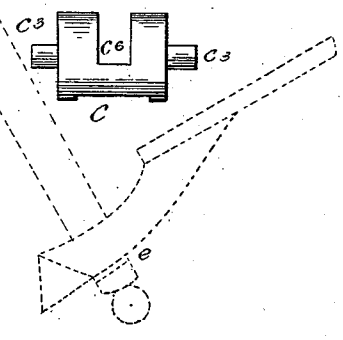


Fig 4



Witnesses
J. M. Fowler Jr.
H. B. Burch

Inventors.
Samuel Mason
Willard F. Mason
By Chas. E. Barber,
Attorney.

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

UNITED STATES PATENT OFFICE.

SAMUEL MASON, OF NEWARK, NEW JERSEY, AND WILLARD F. MASON, OF BROOKLYN, NEW YORK.

DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 465,185, dated December 15, 1891.

Application filed January 10, 1891. Serial No. 377,330. (No model.)

To all whom it may concern:

Be it known that we, SAMUEL MASON, of Newark, county of Essex, State of New Jersey, and WILLARD F. MASON, of Brooklyn, county of Kings, State of New York, citizens of the United States, have invented a certain new and useful Improvement in Door-Checks, of which the following is a specification.

Our invention relates to that class of door-checks incorporating a hasp for attachment to the door-frame and a bolt engaging with said hasp for attachment to the door, whereby the position of the door may be controlled.

The essential features of our invention are hereinafter fully described, and illustrated in the accompanying drawings, in which—

Figure 1 represents a side view of a door and frame with our invention in position thereon. Fig. 2 represents a side view of our invention on a larger scale than in Fig. 1. Fig. 3 represents a longitudinal section taken on the line *x x*, Fig. 2. Fig. 4 represents an end view of the hasp.

Similar letters indicate similar parts.

The letter A indicates the door, and B the door-frame.

C indicates the hasp, and D the bolt constituting the door-check. In practice the hasp C is secured to the door-frame by a plate C′, while the bolt D is secured to the door by a plate D′. The hasp-plate C′ has side pieces C^2, in which the hasp is pivoted by means of pins C^3, cast on the hasp for its adjustment to the bolt, and in the hasp is formed a slot C^4 to receive the bolt, the direction of this slot being longitudinal of the hasp and it being enlarged, as at C^5, at the inner or pivoted end of the hasp for adapting it to the bolt-head, presently described.

In the side pieces C^2 of the hasp-plate are formed slots *k* (see Fig. 3) to receive the pivot-pins C^3, these slots being open at their inner ends for admitting said pins thereto when, as in this example, the pins constitute integral parts of the hasp.

The bolt D is an arm projecting from the bolt-plate D′, usually in a curved line, and on the outer or free end of said bolt is formed a head D^2, which is of a suitable shape to fit the enlarged end C^5 of the hasp-slot, the remaining portion or shank of the bolt fitting the smaller part of the slot, so that when the hasp C is brought into a position toward and parallel with the door the door may be partially opened, its opened position being controlled by the hasp-slot arresting the bolt, as indicated by dotted lines at *e*, Fig. 3.

In door-checks as heretofore constructed with a hasp and bolt the bolt becomes released when the hasp is brought to a position at a right angle with the door, permitting the door to be entirely opened. In our structure, however, the bolt D is so arranged on its plate and in relation to the hasp C that when the hasp is brought to a right angle with the door the bolt-head D^2 maintains its position in the enlarged end C^5 of the hasp-slot, as indicated by dotted lines at *f*, Fig. 3, and if an attempt is now made to open the door the bolt-head abuts against the outer side of said enlarged end of the slot, with the effect of locking the door in closed position, it being necessary to set the hasp beyond said angle as to the position indicated by dotted lines at *g*, Fig. 3, for releasing the bolt.

The face of the hasp-plate C′ has a recess, into which is fitted a flat spring I, as a strip of steel or other suitable metal. This spring I permanently engages the hasp at the pivoted end of the hasp by impinging against the rim or periphery thereof, and by the ensuing action of the spring on the hasp it is firmly retained in either of the positions to which it may be adjusted relatively to the bolt, preventing its accidental displacement.

In order to insure a proper action of the spring I, the hasp C is made approximately square at its pivoted end, where it bears against the spring, as shown in Fig. 3; but a good result may also be obtained by a round end to the hasp.

The hasp-plate C′ is cast with an opening beneath the spring I, intermediate of the ends thereof, as shown in Fig. 3, for permitting the required play of the spring under the impulse of the hasp C, which bears against said intermediate portion of the spring at its pivoted end. By this arrangement of the spring I in relation to the hasp C a maximum force is exerted by the spring, while it is firmly held in

its position upon the hasp-plate C′ by means of the hasp, so that no extraneous fastening is required for that purpose.

At the end of the face recess of the hasp-plate C′, containing the spring I, are cast ribs *s*, which extend transversely to said plate, forming stops or abutments for the ends of the spring, so that the spring is firmly held endwise by that means, and the recess can be made comparatively shallow, thereby least reducing the thickness of the plate.

At the inner edge of the bolt-plate D′ is cast a lug or offset *o*, which serves to keep the hasp C out of contact with the face of said plate as well as with the door when the hasp is brought parallel therewith—namely, by contacting with the adjacent surface of the hasp, as shown—the effect of which is to regulate the position of the hasp in relation to the door and reduce the friction thereof with the bolt-plate, thereby materially facilitating the opening of the door.

A notch or recess C^6 is formed in one edge of the hasp, at the extremity of its pivoted end, for permitting the hasp to clear the bolt D when it is brought to a reversed position, as *g*, the shank of the bolt being received in said notch when the hasp is brought to the position named.

What we claim as new, and desire to secure by Letters Patent, is—

A door-check in which are combined the hasp-plate C′, having side pieces C^2, with slots *k*, open at their inner ends, and transverse ribs *s*, the hasp C, flat at its pivoted end when it abuts against the spring I, having the longitudinal slot C^4, pivot-pins C^3, integral therewith, fitted in said open slots of the side pieces, and the recess C^6 in one edge thereof, the flat spring I, fitted in a recess of the hasp-plate to engage the hasp at its pivoted end, as shown, the ends of the spring abutting against said ribs of the hasp-plate, the bolt D, fitted in said slot of the hasp, and the bolt-plate D′, having the lug or offset *o* at its inner edge, the whole adapted to operate substantially as herein described, for the purpose set forth.

SAMUEL MASON.
WILLARD F. MASON.

Witnesses:
FRANCIS C. BOWEN,
CHAS. WAHLERS.