(No Model.)

F. A. PHELPS.

DOOR CHECK.

No. 526,164. Patented Sept. 18, 1894.

Fig. 1

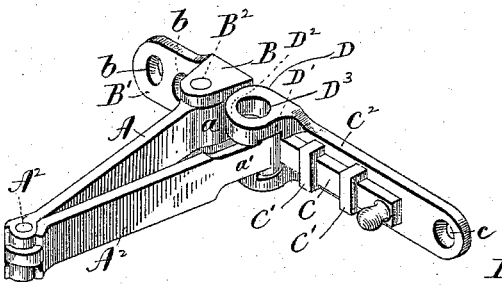


Fig. 2

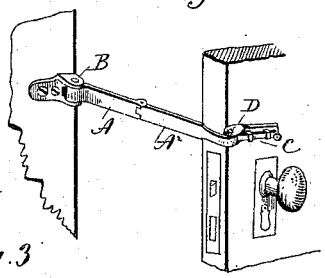


Fig. 3

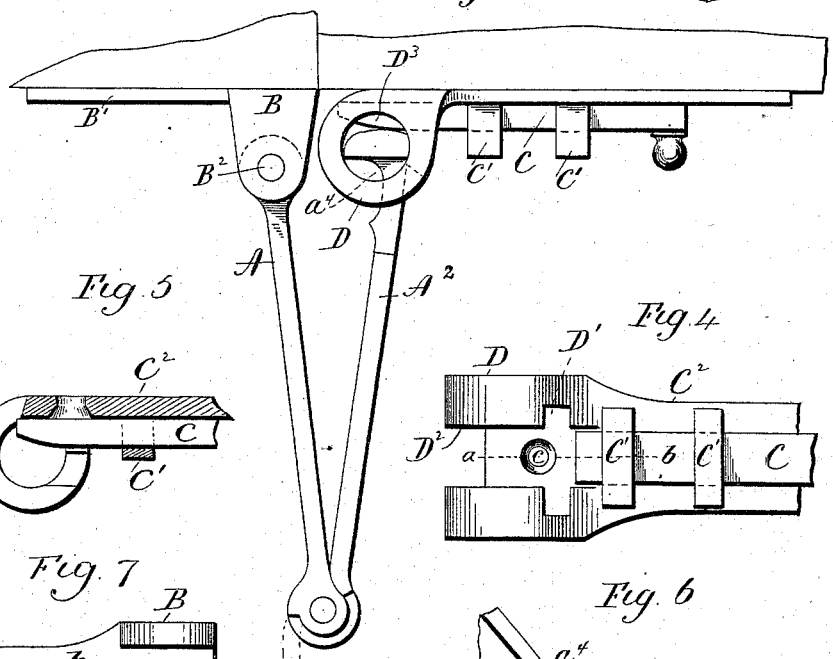


Fig. 5

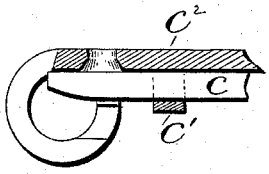


Fig. 4

Fig. 7

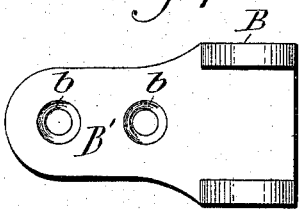
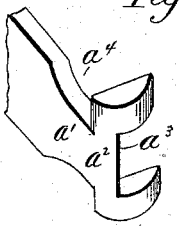


Fig. 6



Witnesses.
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Lillian D. Kelsey

Frank A. Phelps
Inventor.
By Atty
Earle & Seymour

UNITED STATES PATENT OFFICE.

FRIEND A. PHELPS, OF NEW HAVEN, CONNECTICUT, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO THE NEW HAVEN SAFETY DOOR-GUARD COMPANY, OF SAME PLACE.

DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No. 526,164, dated September 18, 1894.

Application filed April 2, 1894. Serial No. 506,050. (No model.)

To all whom it may concern:

Be it known that I, FRIEND A. PHELPS, of New Haven, in the county of New Haven and State of Connecticut, have invented a new Improvement in Safety Attachments for Door-Bolts; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view of a safety attachment for door-bolts constructed in accordance with my invention, with the parts of the device in the positions which they will assume when the door is closed; Fig. 2, a similar view showing the door open to the extreme limit allowed by the attachment; Fig. 3, a plan view of the device; Fig. 4, a detached broken plan view of the bolt-plate with the bolt shot back; Fig. 5, a sectional view of the said plate on the line *a*—*b* of Fig. 4; Fig. 6, a perspective view of the outer end of the bolt-plate link; Fig. 7, a detached view in elevation of the strike-plate with the strike-plate link removed.

My invention relates to an improvement in safety attachments for door-bolts, the object being to provide a simple, convenient and effective device, composed of few parts, and not liable to derangement, by means of which a door may be securely locked ajar, for the purpose of ventilation.

With these ends in view, my invention consists in a safety-attachment for door-bolts, having certain details of construction and combinations of parts as will be hereinafter described and pointed out in the claim.

As herein shown, my improved attachment consists of a strike-plate link A and a door-plate link A′, each adapted at its inner end to be pivotally secured together by a pintle A^2, and constructed to form a knuckle joint. I do not, however, limit myself to constructing them to form a knuckle joint, for their swinging movement on the said pintle might be limited in some other way.

The outer end of the strike-plate link A, is constructed with a vertically arranged eye *a*, adapted to fit between two vertically perforated horizontal lugs B B, formed integral with and projecting outward from the end of the strike-plate B′ of the bolt, which has two screw-holes *b b* formed in it for securing it to the casing of a door, and which is also constructed with a shallow groove *b*′, to receive the bolt proper C. A pin B^2 passing through the lugs B B, and through the eye *a*, pivotally secures the link A to the said strike-plate.

The outer end of the bolt-plate link A′ is constructed to form a T-shaped hook, and comprises a narrow shank *a*′, formed by cutting the opposite edges of the link away, and a cross-piece a^2, located at the outer end of the said shank, having its outer face beveled or convexed, and constructed with a wide central slot a^3, provided for the clearance of the bolt C. The said cross-piece A^2 stands at an angle with respect to the link, and projects beyond the inner face thereof. As shown it is something over twice as wide as the link is thick. The said bolt, as herein shown, is secured by straps C′ C′ to the bolt-plate C^2, which is constructed with screw-holes *c c* for its application to a door, but which may be of any approved construction, so far as its provision to receive the bolt and to be put up is concerned.

The inner face of the shank *a*′ is constructed with a cam-like face a^4, arranged to co-operate with the beveled inner end of the bolt, as will be set forth later on. The inner end of the said bolt-plate has a chambered head or housing D, formed integral with it, the said head being constructed with a vertical entrance slot D′, to receive the cross-piece a^2 of the said T-shaped hook, with a wide transverse slot D^2, to permit the swinging movement of the shank *a*′ in the head, and with a circular chamber D^3, adapted in diameter to permit the cross-piece a^2 to turn in it after it has entered it through the transverse entrance slot D′. The entrance slot D′ is located in a plane substantially parallel with the plane of the bolt, and under the construction described, the transversely arranged cross-piece of the hook is only brought into that plane when the two links are in their closed positions, which they assume only when the

door is closed. It will be observed by reference to Figs. 3 and 5 of the drawings that the bolt passes through the said head and through the chamber thereof.

When the door is closed into position for the bolt to be engaged with the strike, in the usual manner for bolting the door, the links A and A′ will stand in position in which they are shown in Figs. 1 and 3 of the drawings, or, if preferred, the T-shaped hook of the link A′ may be disengaged from the chambered head of the bolt-plate C^2, so as to permit the links to be swung back upon the casing of the door.

If it is desired to hold the door ajar, or partly open for the purpose of ventilation, or for any other purpose, the T-shaped hook of the link A, is inserted into the entrance-slot of the chambered head of the bolt-plate, and that, as I have already remarked, can be done only when the door is closed. Now just as soon as the door is moved, the cross piece of the T-shaped hook is turned in the chamber of the chambered head, so that it is impossible to disengage the T-shaped hook therefrom, whereby the door is as securely locked against being opened farther than allowed by the length of the two links, as though it were closed and bolted. It will be readily seen that it is impossible to free the door for opening it by introducing the hand from the outside, and taking hold of the links and manipulating them, for the T-shaped hook of the link A′, cannot be brought into the position required for disengaging it from the chambered head of the bolt-plate without closing the door. In case the bolt should be shot outward when the attachment is in use, it will be pushed back without injury to the device, by means of the cam face a^4 formed upon the inner face of the shank a', the said face acting upon the beveled inner end of the bolt.

It will be understood that it is not necessary to have the door opened to the full limit allowed by the two links for it is as securely locked with the links partially extended as when they are fully extended.

It is apparent that in carrying out my invention, some changes in the construction herein shown and described may be made, and I would therefore have it understood that I do not limit myself to the exact construction herein shown and described, but hold myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of my invention.

I am aware, however, that it is old to construct a safety attachment for doors with two links pivotally connected to each other at their inner ends, and respectively connected at their outer ends to the door and its jamb. I do not, therefore, claim such a construction broadly.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a safety attachment for door-bolts, the combination with the strike and bolt-plates of a door-bolt, of two links having their inner ends pivoted together, the outer end of one link being pivoted to the strike-plate, and the outer end of the other link being constructed with a hook adapted to be entered into a chambered head with which the bolt-plate is provided, through an entrance-slot located in the said chambered head in such a position that the hook can be entered thereinto and removed therefrom only when the door is closed, and a door-bolt mounted on the bolt-plate, and extending at its inner end through the chambered head thereof, substantially as described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

FRIEND A. PHELPS.

Witnesses:
FRED C. EARLE,
GEO. D. SEYMOUR.