(No Model.)

F. V. PHILLIPS.

DOOR CHECK.

No. 365,536. Patented June 28, 1887.

Fig. 1.

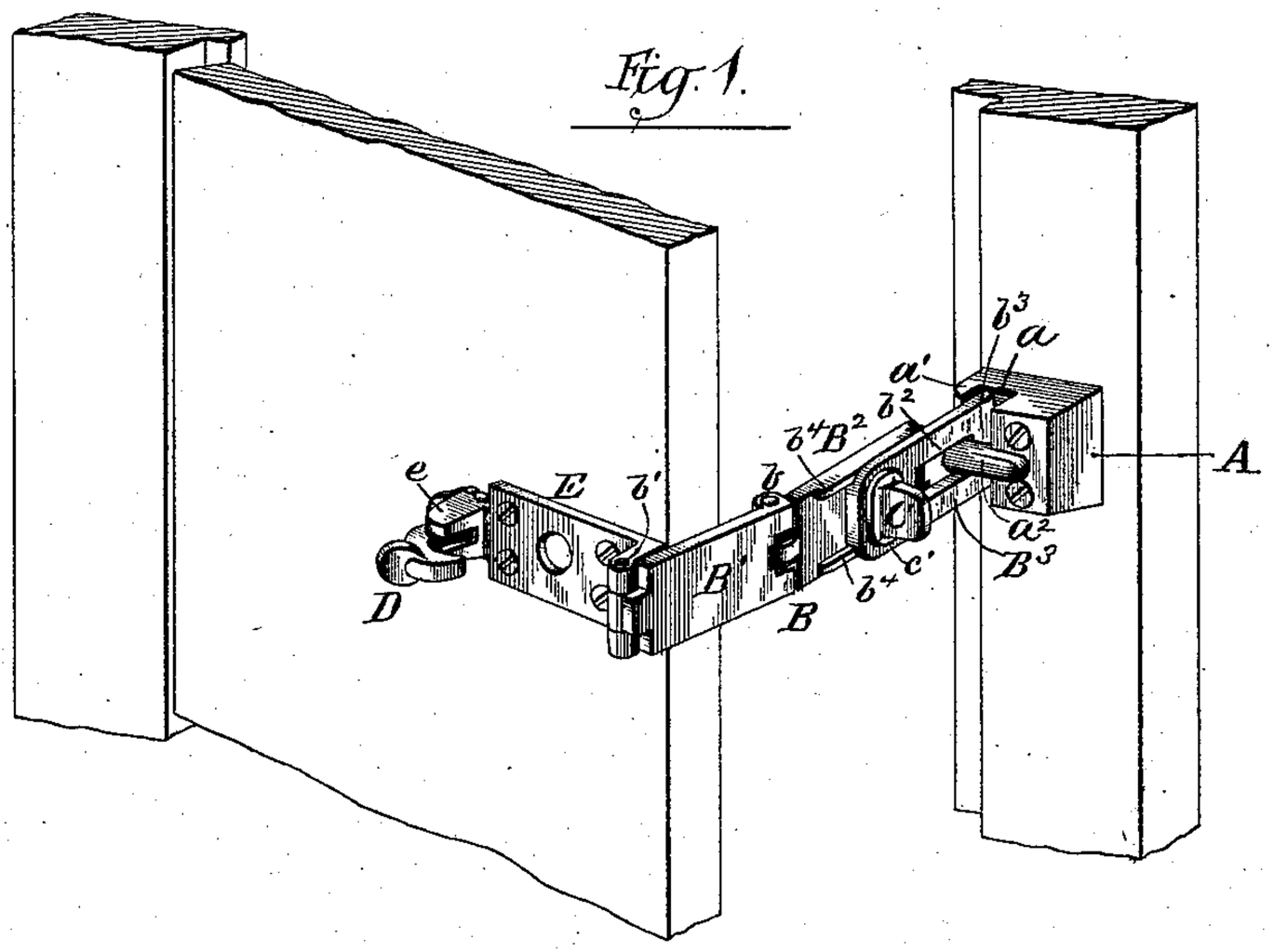


Fig. 2.

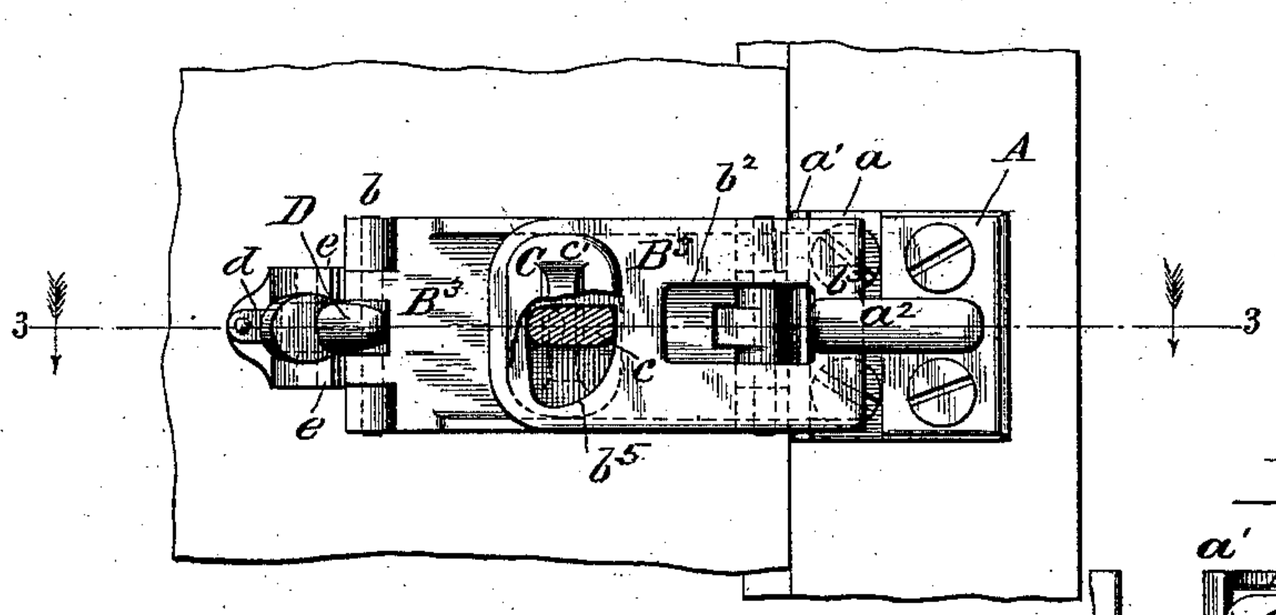


Fig. 4.

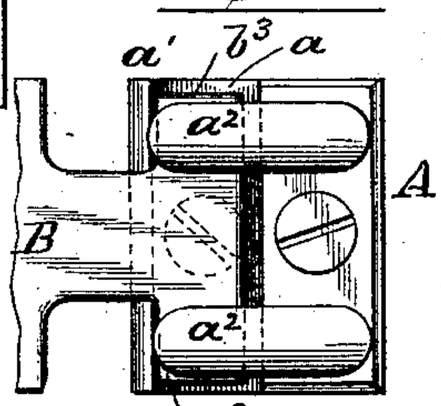
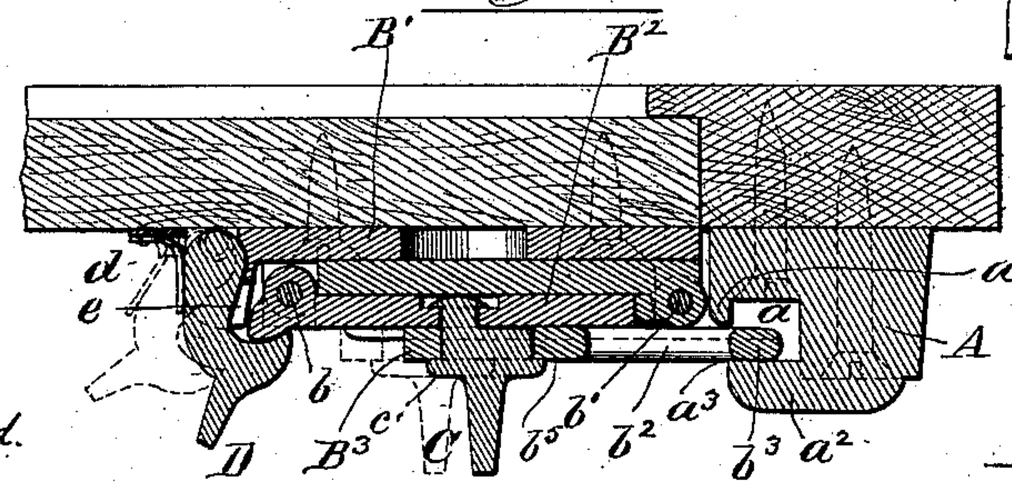


Fig. 3.



Witnesses:-

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UNITED STATES PATENT OFFICE.

FRANCIS V. PHILLIPS, OF CHICAGO, ILLINOIS, ASSIGNOR TO NATHAN B. HUBBARD, OF SAME PLACE.

DOOR-CHECK.

SPECIFICATION forming part of Letters Patent No 365,536, dated June 28, 1887.

Application filed December 27, 1886. Serial No. 222,553. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS V. PHILLIPS, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Door-Checks; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to a device which may serve both to fasten the door in its fully-closed position or in a partially-opened position, or, in other words, one which may be used either as a door-bolt or a door-check.

The invention embraces a two-part link having one of its parts hinged to the door and the two parts hinged to each other, a slide upon the outer part of the link adapted, in the closed position of the door, to be pushed outward beneath a projection on the door-jamb, with which it engages when the door is open in such manner as to be undetachable therefrom while the door is ajar, and a catch which holds the link in its folded position against the door when the latter is closed, all substantially as set forth in the following description, and pointed out in the appended claims.

In said drawings, Figure 1 shows the fastening in perspective view applied to a door and its frame and in action as a check. Fig. 2 is a front view of the device applied and acting as a bolt or fastening for the door when closed. Fig. 3 is a horizontal section through the line 3 3 of Fig. 2. Fig. 4 shows a modification.

A is a keeper having a vertical recess or depression, *a*, which is bounded by a projection, *a'*, on the side adjacent to the door, and over which projects a horizontal and relatively narrow tongue, a^2, proceeding from the opposite side of said depression *a*. A space, a^3, is provided between the projection *a'* and tongue a^2, as shown in Fig. 3. The keeper A is desirably held to the door-frame by screws inserted through the bottom of the recess or depression *a*, as also indicated in Fig. 3 and less distinctly in Fig. 2.

B is a two-part link composed of the rigid parts B' B^2, hinged together by a vertical pivot at *b*, the hinge being set inward to allow the parts B' and B^2 to fold closely upon each other, as shown in Fig. 3. The part B' is hinged to the door by an outstanding pivot, *b'*, supported far enough outward from the face of the door to allow said plate or part B' to fold flatly against or parallel with the door, as also shown in Fig. 3.

Upon the outer face of the part or plate B^2 of the jointed link B is fitted a longitudinally-sliding plate, B^3, provided with a slot, b^2, near its outer end, of proper width to admit the tongue a^2, said slot being closed by a cross-bar, b^3, at its outer extremity, which is wider than the thickness of the plate. The plate B^3 is guided in its movement upon the plate B^2 of the link by any suitable conformation of the faces in contact, marginal ribs b^4 on the part B^2 of the link being here shown for that purpose, the plate B^3 sitting down between said ribs against the face of the part B^2. A lengthwise movement of the slotted plate B^3 upon the part B^2 of the link is imparted by any suitable means, and desirably by means of a rotating button, C, pivoted in the plate B^2, and having an eccentric, *c*, which works in an opening, b^5, through the plate B^3. The button has a flange, *c'*, which bears upon the outer surface of the plate. The object of the lengthwise movement of the plate B^3 is to enable the latter to be slid forward beneath the tongue a^2 on the keeper A, as shown in Figs. 2 and 3, when the door is closed and the link is folded against the door, as also illustrated in these figures, the space a^3 being of only sufficient width to admit the cross-bar b^3 flatwise.

Adjacent to the central joint of the folded link when in the position shown in Figs. 2 and 3 is placed a catch, D, which is intended to engage the link and hold it firmly back against the door. This catch is preferably automatic in its action, and beveled and hook-shaped, as indicated, so that it will automatically engage the link when the latter is folded back. To this end a flat spring, *d*, or one of any other suitable construction may be applied to the catch.

The opening a^3, between the projection *a'*

and the tongue a^2, is arranged to stand directly opposite the end of the sliding plate B^3 when the door is closed and the link is in its backwardly-folded position, as best seen in Fig. 3.

Preferably, a plate, E, is provided as a support for both the hinge b' and the catch D, in order that all the parts applied to the door may be connected in their proper positions and together secured to the door by screws passed through said plate E, as shown. To prevent the outer part, B^2, of the link B from swinging outward from its fellow, the plate E may have a projection, *e*, Figs. 1 and 3, which will bear against said part B^2 at a point outside the line of the pivot *b*, and, as shown, this projection may be identical with the lug or lugs upon or between which the catch D is pivoted.

The operation of the device described is as follows: When the door is closed, the two-part link B is folded upon itself against the door and is held back by the catch D. In this position of the link the sliding plate may be shot forward under the tongue a^2, thus securing the door in its closed position so long as the catch D is retained in its engagement with the link, as in Figs. 2 and 3. To obtain the effect of a check which will stop the door in a partially-opened position, as shown in Fig. 1, the sliding plate is first thrust forward beneath the tongue a^2 of the keeper A, as above described, and after that is done the catch D is pressed back out of engagement with the link, and the door is opened. The first action resulting from opening the door is to swing the folded link outward from the door on the hinge b', by reason of the engagement of the cross-bar b^3 with the tongue a^2. In this movement the cross bar b^3 is rotated in the recess *a*, and the tongue a^2 enters the slot b^2. The next action in further opening the door is to extend the link, as shown in Fig. 1. The door will of course be permitted to open only to the length of the extended link. The cross-bar b^3 being of greater width than thickness, and the space a^3 being only sufficient to admit said cross-bar flatwise, said bar will rotate in the recess *a*, but cannot be released from the keeper except when in the same position as when it entered, or, in other words, when the door is closed.

The holding-screws which are set in the recess of the keeper are inaccessible when the cross-bar b^3 is in said recess, and the keeper cannot therefore be removed from the outside when the door is held partly open by the check.

Fig. 4 shows an obvious modification, in which the sliding plate B^3 is T-shaped at its outer end, instead of being slotted, as in the preceding figures, and the keeper A is provided with two tongues, a^2, instead of one, which pass over the ends of the cross bar b^3 instead of over the middle thereof. This modification is intended to be embraced in the appended claims.

I reserve the right to make future application for patent upon any feature herein described or shown but not claimed.

I claim as my invention—

1. The combination, with a two-part hinged link, one of which parts is hinged to the door, of a plate fitted to slide upon the other part of the link while held thereto and provided with a cross-bar at its outer end which is of greater width than thickness, and a keeper adapted to be secured to the door-frame having a recess bounded by a rib or stud on the side thereof adjacent to the door, and provided with a tongue which projects from the opposite side of the keeper over the recess and in position to engage the cross-bar, the space between the rib and the tongue being sufficient to admit the cross-bar of the sliding plate flatwise only, substantially as described.

2. The combination, with a two-part jointed link, one part of which is hinged to the door and the other part of which is provided with a slide having a cross-bar at its outer extremity, which cross-bar is of greater width than thickness, of a keeper provided with a recess, a rib or stud at the side of said recess adjacent to the door, and a tongue which projects over said recess in position to engage the cross-bar of the slide, and a catch applied to the door in position to engage the link when folded against the door, substantially as described.

3. The combination, with the keeper A, provided with a recess, *a*, rib or stud *a'*, and tongue a^2, of a centrally-hinged two-part link, B, adapted to fold upon itself, a slide, B^3, having a lengthwise movement on the part B^2 of the link, and provided with a cross-bar at its outer extremity adapted to engage with the keeper, as set forth, a plate, E, for attachment to the door, having an outstanding hinged connection with the part B' of the link, a projection, *e*, at the opposite end of the plate E, in position to oppose the opening of the link when the latter is folded against said plate, and a spring-catch, also attached to the plate, in position to engage and hold the link in its folded position against the plate, substantially as described.

4. The combination, with the centrally-hinged two-part link flexibly joined to the door and with a recessed keeper provided with a rib or stud, *a'*, and a tongue, a^2, of a slide, B^3, provided with a cross-bar at its extremity of greater width than thickness and adapted to engage the keeper, substantially as described, and a rotatable button passing through the slide and pivoted in the subjacent part of the link, and having a lateral projection working in a hole in the slide to throw the same, substantially as described.

In testimony that I claim the foregoing as my invention I affix my signature in presence of two witnesses.

FRANCIS V. PHILLIPS.

Witnesses:

M. E. DAYTON,

C. CLARENCE POOLE.