No. 774,229. PATENTED NOV. 8, 1904.

C. A. BOREIN.

DOOR CATCH.

APPLICATION FILED DEC. 26, 1902.

NO MODEL.

Fig. 1.

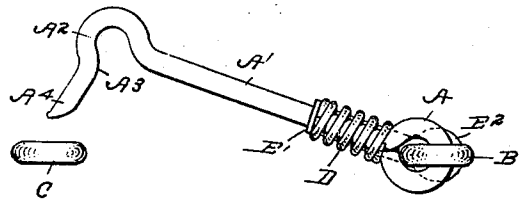


Fig. 2.

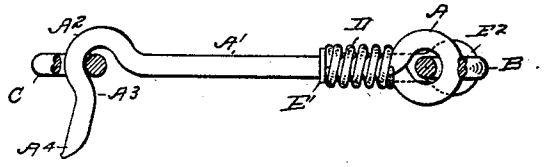
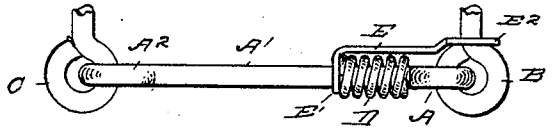


Fig. 3.



WITNESSES:

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No. 774,229. Patented November 8, 1904.

UNITED STATES PATENT OFFICE.

CHARLES A. BOREIN, OF OAKLAND, CALIFORNIA.

DOOR-CATCH.

SPECIFICATION forming part of Letters Patent No. 774,229, dated November 8, 1904.

Application filed December 26, 1902. Serial No. 136,711. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. BOREIN, a citizen of the United States, residing at 472 Seventh street, in the city of Oakland, county of Alameda, and State of California, have invented certain new and useful Improvements in Door-Catches; and I do hereby declare the following to be a full, clear, and exact description of the said invention, such as will enable others skilled in the art to which it most nearly appertains to make, use, and practice the same.

This invention relates to improvements in door-fasteners, and particularly to that class wherein a hook swung in a screw-eye in the door extends across and engages a similar screw-eye in the door-jamb. This construction is subject to the great disadvantage that the play necessary to allow for warping in the door and free action of the hook results in disengagement of the hook if the door is rattled or jarred. This disadvantage is particularly annoying on shipboard, where the rattling and straining are constant. To overcome this disadvantage, which is the object of this invention, the construction consists of the additions to the construction described of a spiral spring encircling the shank of the hook and tied to the screw-eye by a bridle member and coacting with the hook in such a manner as to normally take up all play between the hook and said supporting screw-eye.

In the drawings, Figure 1 is a side elevation of a door-catch constructed in accordance with this invention, showing the hook disengaged. Fig. 2 is a similar view showing the hook engaged. Fig. 3 is a plan view from above of the same.

In detail the construction consists of a hook member having its end bent into an eyelet A, linked into the supporting screw-eye B and having the extended shank A′, terminating in the hook A^2, having a slight overhang A^3 and a pointed extension A^4. The hook thus formed is adapted to engage a screw-eye C, screwed into the door-jamb. The spiral spring D encircles the shank A′ adjacent the eyelet A, between which and the plate E′ it expands. The plate E′ forms a part of the bridle, which consists of a strip of sheet metal having the plate E′ bent at right angles thereto, through which the shank A′ extends, and the backward extension E, having the circular head E^2, through which the stem of the screw-eye extends.

The invention is assembled, applied, and operated as follows: The hook member having been formed and linked to its supporting screw-eye, the spiral spring is slipped onto the shank before or after the hook is formed, the plate of the bridle is passed over the shank, following the spring, and the stem of the supporting screw-eye passed through the circular head of the bridle and screwed into the door the proper distance from the screw-eye in the door-jamb. The influence of the spring controlled by the bridle tends to normally take up the play of the hook member, so that the operative position Fig. 2 is assumed against the tension of the spring, which causes the hook to hug the screw-eye C, the overhang A^3 preventing disengagement of the hook except by design. The bridle may be attached to the screw-eye B to lie alongside of the eyelet A, instead of, as shown, to permit the lateral swing of the hook member. The bridle may be dispensed with and the forward end of the spring bent back upon itself to perform the same function.

The tension of the spring accomplishes the further purpose of preventing rattling of the door or window to which it is applied by holding the parts snugly in place.

Having thus described this invention, what I claim, and desire to secure by Letters Patent, is—

1. In a door-fastener, the combination with a screw-eye, of a hook member pivoted to said screw-eye, a spiral spring surrounding said hook member, and a bridle member anchored

to said screw-eye and adapted to compress said spring.

2. In a door-fastener, the combination with a screw-eye, of a hook member pivoted to said screw-eye, a spiral spring surrounding said hook member forward of said pivotal point, and a bridle member anchored to said screw-eye at one end and surrounding said hook member at the other and engaging said spring to compress it.

In testimony whereof I have hereunto set my hand this 28th day of November, 1902.

CHARLES A. BOREIN.

Witnesses:
BALDWIN VALE,
GEORGE F. HATTON.