

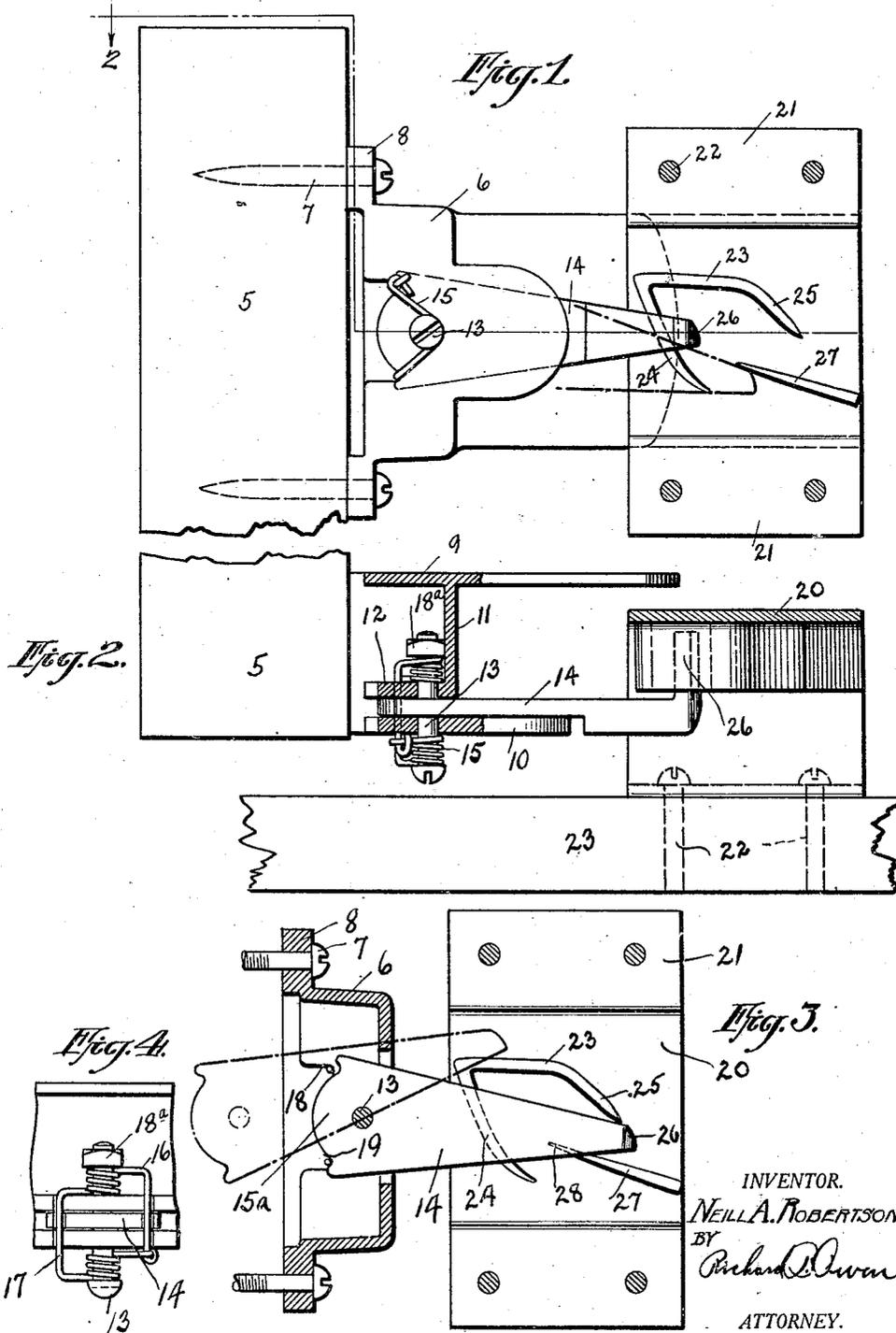
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N. A. ROBERTSON

DOORCHECK

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UNITED STATES PATENT OFFICE.

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DOORCHECK.

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To all whom it may concern:

Be it known that I, NEILL A. ROBERTSON, a citizen of the United States, residing at Oakfield, in the county of Aroostook and State of Maine, have invented certain new and useful Improvements in Doorchecks, of which the following is a specification.

This invention relates to door catches or door checks and has for an object to provide a novel and improved device particularly adapted to retain a door, window or the like in an open position permitting the same to automatically disengage the catch when the door or window is moved slightly forward to permit the catch to be released whereby the door may move to its initial closed position.

The primary object of my invention is the provision of a pivoted swinging catch attachable to a door, window or a movable closure including provision for engaging the pivoted member in one position and permitting said member to be disengaged when the door or closure is moved slightly toward a still further open position permitting the door to be closed.

Another and very important object of my invention is to provide a pivoted lever catch adapted to be secured to a swinging door or window including a novel and improved stationary keeper cooperating with the lever in such manner as to guide the same to one position in retaining the door open and in another position to release the lever permitting the door to close.

Another and very important object of my invention is the construction of a door catch of the character above specified wherein the parts are extremely simple in construction, highly efficient in operation and use, practical, durable, adapted for use in connection with any type of swinging door or closure and otherwise capable of being manufactured at different grades of material and at comparatively low cost whereby its commercial possibilities are greatly enhanced.

With these and other objects in view the invention consists in the construction and novel combination of parts hereinafter fully described, illustrated in the accompanying drawing, and pointed out in the subject matter being claimed, it being understood that various changes in the form, proportion, size and minor details of construction

may be resorted to without departing from the spirit and scope of the invention.

In the drawings, Figure 1 is an inverted plan showing the device attached to the door frame and the keeper cooperating therewith.

Figure 2 is a view partly in section taken along the line 2—2 of Figure 1.

Figure 3 is a plan partly in section showing the movement of the lever when the same is released to permit the door to close.

Figure 4 is a detail view of the spring controlling the movement of the lever.

Referring now to the drawings wherein like reference characters designate corresponding parts throughout the several views, 5 designates a portion of the door frame and 6 is a bracket secured thereto by screws 7 or other fastening element passing through the flanges 8 of said bracket to rigidly maintain the same in its proper position with respect to the keeper subsequently to be referred to. The bracket is formed with top and bottom plates 9, 10, the rear wall 11 of which is preferably formed integral with the top plate 9 and is provided with a rear extension 12. The bottom plate 10 and the extension 12 are apertured to receive a screw or stud 13 upon which I have mounted a spring controlled pivoted lever catch designated in its entirety by numeral 14, the bottom plate 10 partly supporting the lever in its pivoted movement. A resilient spring or element 15 retained on the screw by the nut 18^a is wound around that portion of the screw or stud above and below the extension 12 and the plate 10, the arms 16, 17, of the spring extending upwardly within the recesses or cut-out portions 18 of the bracket. The lever catch 14 is triangular in shape, the rear portion 15^a of which is provided with notches 19 which engage the arm 16, 17, of the spring when the lever catch is engaged by the keeper subsequently to be referred to.

The keeper cooperating with the pivoted lever catch 14 comprises a substantially U-shaped metallic member designated in its entirety by numeral 20 the flanges 21 of which are secured by suitable screws or other fastening elements 22 to the floor 23 as is well understood. Formed preferably integral with the U-shaped element 20, I have provided a substantially depending Y-shaped raised hook, the arms 23, 24, of

which are disposed at an angle with respect to the normal horizontal position of the U-shaped member and the lever 14. The extreme outer end of the arm 23 is bent slightly inwardly as at 25 so to engage the upwardly extending extension 26 of the lever catch 14 when it is moved slightly forward thus releasing the same from its keeper. A guide 27 also formed with the U-shaped element 20 is provided, the extreme ends of the arms 23, 24, to guide the extension 26 so that the same will be properly engaged by the Y-shaped member to retain the door or window in its open position.

The Y-shaped element above referred to and the guide 27 extend considerably above the base of the U-shaped element so as to be properly engaged by the extension 26 upon the movement of the door. Of course the bracket 6 must be so positioned with respect to the door that the extension 26 will be engaged by the Y-shaped element and the guide when the door is swung to its open position. It will thus be seen that as the door and the bracket holding the lever 14 is swung in the arc of a circle with respect to the keeper, the extension 26 will first be engaged by the arm 24 so that the lever will be moved outwardly against the resistance of the spring, in which instance the lever will strike the guide 27 and upon release of the door, the lever catch 14 will ride into the Y-shaped element above referred to, and thus hold the door in its open position. Now, when it is desired to close the door, a slight movement of the same will tend to cause the extension 26 to engage the inwardly bent end 25 of the arm 23 in which instance the spring will tend to turn the lever 14 to its initial position, and the extension 26 will ride on the outside of the arm 23 as shown by dotted lines in Figure 3 to permit the door to again return to its initial closed position.

While I have illustrated and described my invention with some degree of particularity, I realize that in practice various alterations therein may be made. I therefore reserve the right and privilege of changing the form of the details of construction or otherwise altering the arrangement of the corre-

lated parts without departing from the spirit of the invention or the scope of the appended claims.

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

1. A door check comprising a stationary member and a movable member, a pivotally mounted element carried by the movable member movable in two directions, means depending from the stationary member to engage the pivotally mounted element and retain the same in one direction, said movable element being automatically releasable upon further actuation in the same direction when engaged by the depending portion of the stationary member.

2. A door check comprising a stationary member and a movable member, a pivotally mounted lever catch carried by the movable member, a hook shaped element depending from the stationary member for engaging and retaining the lever catch in one position, a guard disposed between the hook shaped element to guide the movement of the catch, said catch being automatically releasable upon further actuation in the same direction when engaged by the depending portion of the stationary member.

3. A door check comprising a U-shaped stationary member and a movable member, a spring controlled lever catch pivotally mounted on the movable member, a hooked shaped element depending from the top of the stationary member for engaging the catch to retain the same in one position, an angularly disposed guard extending substantially intermediate the free ends of the hooked shaped element to guide the movement of the lever catch, said catch being automatically releasable upon further actuation in the same direction when engaged by the depending portion of the stationary member.

In testimony whereof I affix my signature in presence of two witnesses.

NEILL A. ROBERTSON. [L. s.]

Witnesses:

NETTIE E. TIDD,
DORA S. MARTIN.