J. S. UNDERWOOD.

DOOR LATCH.

APPLICATION FILED MAY 14, 1912.

1,068,466. Patented July 29, 1913.

Fig. 1.

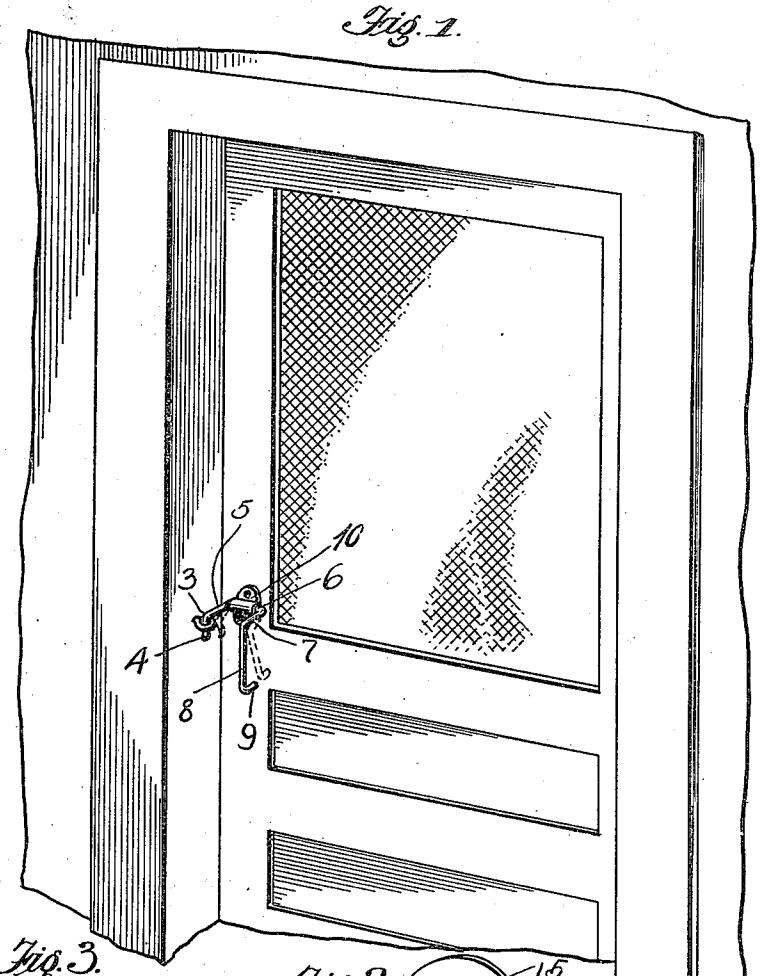


Fig. 3.

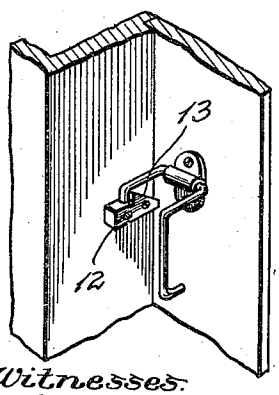
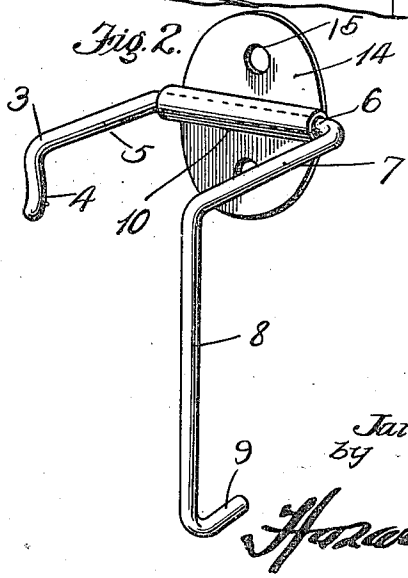


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES S. UNDERWOOD, OF LOS ANGELES, CALIFORNIA.

DOOR-LATCH.

1,068,466. Specification of Letters Patent. Patented July 29, 1913.

Application filed May 14, 1912. Serial No. 697,127.

To all whom it may concern:

Be it known that I, JAMES S. UNDERWOOD, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles and State of California, have invented new and useful Improvements in Door-Latches, of which the following is a specification.

My invention relates more specifically to that class of latches known as "hook and eye" latches, and an object thereof is to provide such a latch mechanism that may be quickly and easily operated, without injury to the person.

A further object is to provide a simple latch mechanism that will automatically lock the door, to which it is applied on a closure thereof.

I accomplish these objects by means of the device described herein and illustrated in the accompanying drawing in which—

Figure 1 is a perspective view of a screen door shown in locked position by my device. Fig. 2 is a perspective view of the device. Fig. 3 is a view of a modified form.

Heretofore it has been the universal practice to utilize the ordinary and inexpensive "hook and eye" for securing screen doors and similar structures, and while this form of latch has proven satisfactory to a greater or less degree, yet its placement in the corner formed by the door and its frame has often caused trouble in the manipulation of the hook member when latching or unlatching the door, owing to its crowded arrangement and the additional difficulty of obtaining a hold of the hook by the operator. In my improved form of "hook and eye" latch I overcome the above noted objections by providing a latch operating arm or handle, whereby an operator may quickly operate the latch without injury to himself.

In the drawing 3 designates the hook formed with the usual point 4 at an angle of about 90° to the arm 5, these parts being continuous with the bearing 6 and the operating handle 7 with its hand hold 8 and limiting stop 9. The bearing portion 6 is pivoted in bearing 10 provided with suitable means to secure or fasten the device where required. The latching member is preferably formed of one continuous piece of metal rod or heavy wire with the arms 5 and 7 in the same relative plane and approximately at right angles to the bearing portion 6.

When the device is in its locking position the arm 5 and operating handle 7 are in substantially horizontal position, and the hand hold 8 in a substantially vertical position and the stop 9 is then clear of the surface of the door. Grasping the hand hold with a slight pulling and lifting movement liberates the hook from engagement with the eye or catch and the door can be opened and the releasing of the handle permits the whole to fall and the stop coming in contact with the door brings the arm 5 into a position lower than the plane of the eye 11, thus clearing the latter and permitting the door to be closed without securing the same.

In Fig. 3 a modification is shown in which a catch 12 is substituted for an eye and the latch member is so shortened and formed that it is held by the handle stop so that the hook will ride up on the inclined surface 13 of the catch and automatically latch the device.

I have shown pivotal bearings 10 formed of a piece of sheet metal provided with the ears 14 and screw holes 15, the bearings 10 being of such length as to embrace the entire length of the bearing portion 6 and not permit any unnecessary lateral movement.

What I claim is:

As a new article of manufacture in combination with a fixed catch, of a door latch formed of a single piece of wire bent to form a latch member and a latch operating handle and having a pivotal bearing portion intermediate the latch member and the latch operating handle, said latch member and operating handle being bent at right angles to said pivotal bearing portion and extending therefrom in the same direction, the ends of said latch member and operating handle being bent downwardly to form a hook point and handle respectively, and a bearing for said bearing portion of said

door latch, said bearing adapted to be secured to the face of a door, said operating handle being bent to form a stop to limit the downward movement of the latch member and to also form a hand hold for operating the handle.

In witness that I claim the foregoing I have hereunto subscribed my name this 6th day of May, 1912.

JAMES S. UNDERWOOD.

Witnesses:
E. STADLMAN,
EARLE R. POLLARD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."