

P. W. HODGKINSON.
EMERGENCY EXIT DOOR LOCK.
APPLICATION FILED OCT. 4, 1909.

990,358.

Patented Apr. 25, 1911.

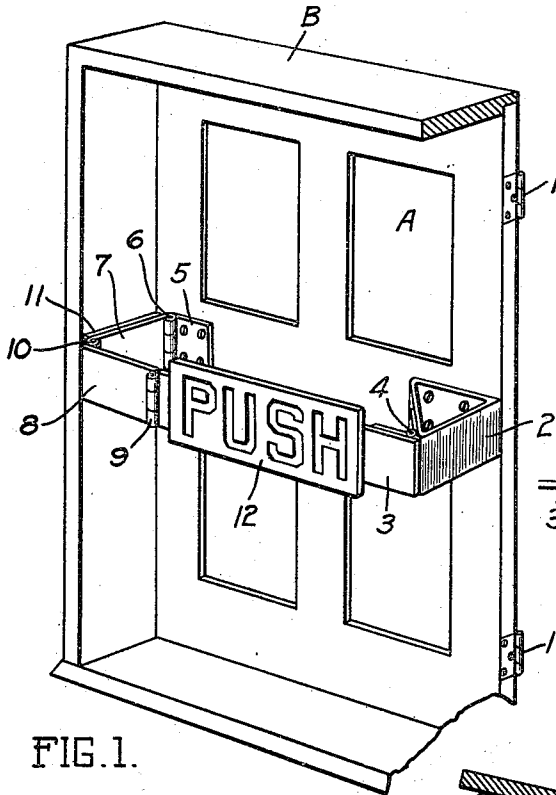


FIG. 1.

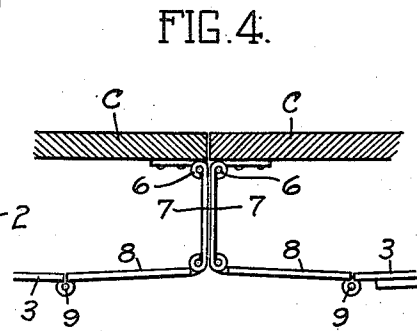


FIG. 4.

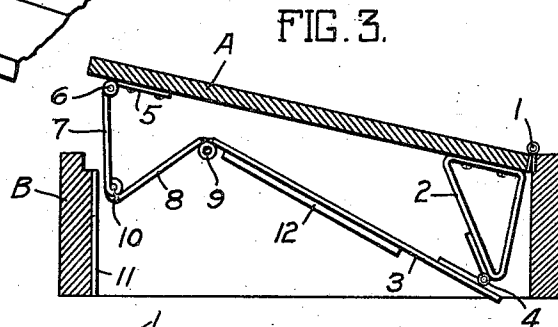


FIG. 3.

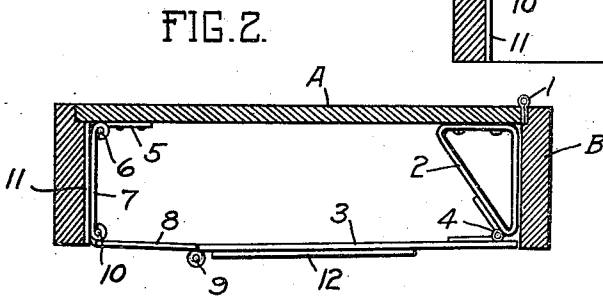


FIG. 2.

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UNITED STATES PATENT OFFICE.

PERCY W. HODGKINSON, OF ROCHESTER, NEW YORK, ASSIGNOR TO CALDWELL MANUFACTURING COMPANY, OF ROCHESTER, NEW YORK, A CORPORATION OF NEW YORK.

EMERGENCY EXIT-DOOR LOCK.

990,358.

Specification of Letters Patent.

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To all whom it may concern.

Be it known that I, PERCY W. HODGKINSON, a citizen of the United States, and resident of Rochester, in the county of Monroe and State of New York, have invented certain new and useful Improvements in Emergency Exit-Door Locks, of which the following is a specification.

This invention relates to emergency exit door locks, and the object is to produce a simple attachment that can easily be applied to any outwardly-opening door, and which will unlock when pressure is exerted against it.

In the drawings:—Figure 1 is a perspective view of the inner side of a door equipped with this device; Fig. 2 is a horizontal cross-section of a door and casing, showing the device in its locked position; Fig. 3 is a similar view, showing the door partly opened; and Fig. 4 is a horizontal cross-section, showing the manner of attaching the device to double doors.

The door A shown in Fig. 1, is supported on the casing B by hinges 1, 1, in the usual manner, so that it opens outwardly. On the inside of the door, close to its hinged edge, is fastened a bracket 2, and to the inner end of this bracket is hinged a wide plate 3 by a vertical hinge 4 that permits the plate to swing in a horizontal direction.

Near the other edge of the door is fixed a plate 5, having a hinge 6 on its end close to the casing B. A clamping plate 7, substantially equal in length to the depth of the door casing, is pivoted in said hinge 6, and a similar plate 8 is hinged to the plate 3 at 9, while the plates 7 and 8 are hinged together at 10.

When the door A is closed, a pull inwardly on the plate 3 causes the parts to assume the positions shown in Fig. 2, forming a strut between the sides of the casing. The dimensions of the parts 3 and 8 are such that as said parts move away from the door, a toggle-lever action is set up between them, and the clamping plate 7 is thereby jammed against a chafing strip or friction piece 11 on the door casing. When the plates 3 and 7 are pulled inwardly beyond the point of greatest toggle action, they are out of line with each other, and so held extended.

When outward pressure is applied on the

plate 3, it moves toward the door, drawing one end of the plate 8 with it. The other end of the plate 8 pulls the plate 7 away from the friction strip 11 and releases the door, so that it is free to swing open.

A plate 12 may be fastened to the inner face of the plate 3, if desired, both to reinforce the latter and to afford a wider surface to press against.

The method of applying the device to double doors is shown in Fig. 4. The plates 7, 7, are so placed that they are in alignment with the meeting edges of the doors C, C, and the toggle-lever action of the plates 3, 3, and 8, 8, jams said plates 7, 7, against each other, each plate 7 thus constituting an abutment coöperating with the other plate 7.

What I claim is:—

1. An emergency exit door lock, consisting of a bracket adapted to be attached to the door; a toggle-joint hinged at one end to said bracket; and a clamping plate hinged to the other end of the toggle-joint, and having a hinge at its free end whereby it is attached to the door; substantially as shown and described.

2. In combination with an outwardly-opening door and a fixed abutment adjacent the edge of the door, locking mechanism for the door coöperating with said abutment and comprising a toggle lever pivotally mounted at one end at the inside of the door and with its other end extending toward said abutment, and connections between the latter end of the toggle lever and the door.

3. In combination with an outwardly-opening door and a fixed abutment adjacent the edge of the door, locking mechanism for the door coöperating with said abutment and comprising a member carried by the door and movable into and out of engagement with said abutment, and a toggle lever connected at one end with said member, extending substantially across the inner surface of the door and pivotally mounted at its other end near the hinged edge of the door.

PERCY W. HODGKINSON.

Witnesses:

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