

No. 748,285.

PATENTED DEC. 29, 1903.

W. K. KAYE.
LOCK.

APPLICATION FILED MAY 21, 1903.

NO MODEL.

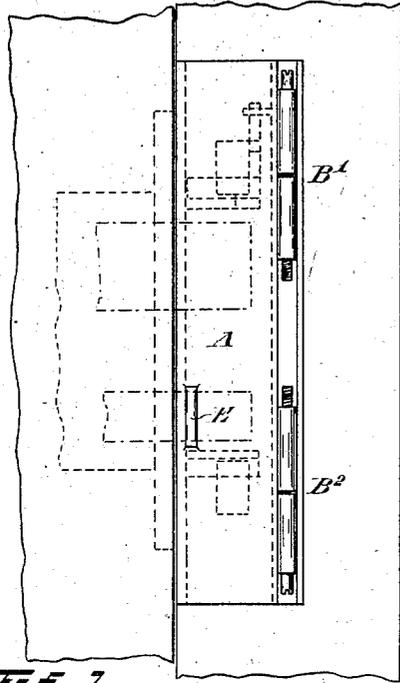


FIG. 1.

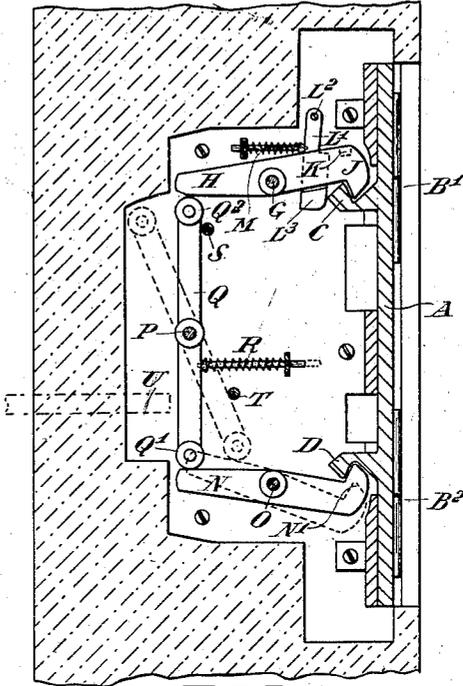


FIG. 2.

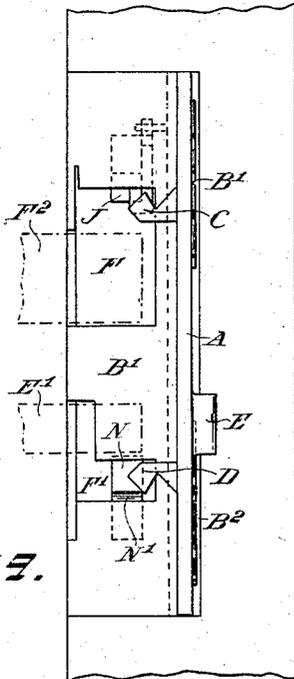


FIG. 3.

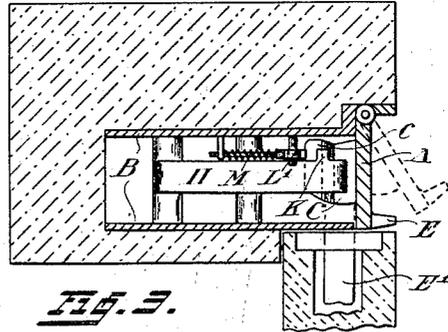


FIG. 4.

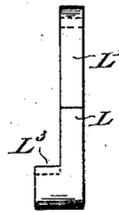


FIG. 5.

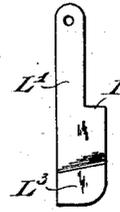


FIG. 6.

WITNESSES

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INVENTOR

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ATTORNEYS

UNITED STATES PATENT OFFICE.

WALTER K. KAYE, OF LEEDS, ENGLAND.

LOCK.

SPECIFICATION forming part of Letters Patent No. 748,285, dated December 29, 1903.

Application filed May 21, 1903. Serial No. 158,103. (No model.)

To all whom it may concern:

Be it known that I, WALTER KELITA KAYE, a subject of the King of Great Britain and Ireland, whose postal address is South Accommodation Road, Leeds, in the county of York, England, have invented certain new and useful Improvements in and Relating to Locks for Asylums and other Public Institutions, of which the following is a specification.

This invention is for improvements in and relating to locks for asylums and other public institutions. Hitherto the chief object in such institutions as regards locks has been to prevent the possibility of communication by the inmates confined in one ward with those of another to insure the safekeeping of the inmates within their respective areas—that is to say, the locks for the most part are constructed in such a manner as not only to lock them in the ordinary manner, but to check-lock by a second key and double check-lock by a third key, a master-key, the latter being in the possession of the principal medical officer or other superior officer in charge of the institution. These precautions are deemed wise in view of the object already described. This security, though desirable under ordinary conditions, is in case, say, of fire an element of danger to the inmates if the person or persons in charge of the three several keys are not immediately forthcoming in the instant the fire breaks out.

The object of my invention is in the first instance not to interfere in any way with the system of check-locking above described, but to construct the striking-plate of the locks for such institutions in such a manner as to permit of its instant removal, and thereby allow of the opening of the doors so fitted. By "striking-plate" I mean a plate which so long as it is in position and the bolts are shot forms the abutment for the bolt and prevents the door from opening. The said removable portion of the striking-plate is so arranged that pressure upon the same will not affect the falling away of the plate when operated.

In describing one form of my invention in detail reference is made to the accompanying sheets of drawings, similar letters indicating similar parts, in which—

Figure 1 represents an elevation of a portion of a door and door-jamb, showing the

door closed. Fig. 2 is a side elevation of the striking-plate with one of its sides removed. Fig. 3 is a plan of the striking-plate. Fig. 4 is an elevation of the striking-plate, showing the front portion liberated. Figs. 5 and 6 are details of the lever L' hereinafter referred to.

In carrying out this form of my invention I construct the casing to which the striking-plate A is attached deeper than usual to allow for the reception of the mechanism for holding or releasing such striking-plate, such casing being fitted into the jamb of the door, the lock being of the ordinary construction. The striking-plate A is hinged to the casing B by hinges B' and B², as shown in Figs. 1 and 3, two hooks C and D being formed on the inner side of striking-plate A, as shown in Figs. 2, 3, and 4. Attached to the edge of the said striking-plate A is what might be termed a "small" striking-plate E for engaging with the ordinary latch E' of the lock. The inner casing B is cut away, as shown in Fig. 4, at F and F' to allow of the said hooks C and D passing through the same, also to allow of the bolt F² and latch E' of the lock passing through such openings when the locked door is to be opened.

In the interior of the casing B and free to move on fulcrum G is a lever H, having at its outer end a catch J to engage with the before-mentioned hook C. Formed toward the end of lever H is a projection K, which will engage with a projection L on lever L', fulcrumed at L² and pressed toward the striking-plate by spring M of suitable strength in such a manner that when the lever H is turned upward on its fulcrum G the projection L will engage with projection K and at the same time the point J of lever H will rest on projection L³, formed on lever L', as shown in Figs. 5, 6, and retain the lever H. On the hook C engaging with projection L³ on lever L' on closing the striking-plate the lever L' will be forced back and allow the catch J to fall and engage with hook C.

Engaging with the hook D is a catch N', forming part of lever N and fulcrumed at O. Fulcrumed at P is a vertical lever Q, having rollers Q' and Q² at each end to engage with the under and upper sides of levers H and N, said lever Q having engaging with its lower sides the point of spring R, as shown in Fig.

2, stops S and T being provided in casing B, as shown in Fig. 2.

In order to release the striking-plate A in case of emergency, and thereby allow a locked door to be opened, the lever Q is moved, as shown by dotted lines in Fig. 2. This movement can be caused by sliding forward a rod, such as U, by mechanical, magnetic, or pneumatic means. The point at which the power to operate the rod may be set in motion may be in any part of the building, and there may be more than one of such points, and all the doors in the building may be operated, if desired, from any one point. Each of the switches, taps, levers, or other devices by which the striking-plates can thus be operated in case of emergency can conveniently be inclosed in a locked case provided with a glass front, as commonly used for fire-alarms, so that in case of emergency the glass front can be broken and the striking-plates released without the use of any key. The rod U will be forced against the lower portion of lever Q, thereby turning lever Q into position, as shown in Fig. 2 in dotted lines, causing the catch N' on lever N to disengage with hook D on the striking-plate A, and on spring M exerting pressure on lever L' the catch C is forced back, and thereby the hinged striking-plate and the lever H retained in its lifted position. To fasten the door again, the door is closed and the striking-plate returned to its original position, where it is held, as before.

It will be readily understood that other mechanism than that hereinbefore described may be used for the operation of the hinged striking-plate.

Having now particularly described and ascertained the nature of this invention and in what manner the same is to be performed, I declare that what I claim is—

1. In combination, a door-lock, a removable striking-plate, lugs on said plate having notches therein, rocking levers having hooked ends engaging the notches in the lugs, a lever Q when in a vertical position having both of its ends engaging with the ends of the rocking levers to keep their hooked ends in engagement with the notches, a spring for keeping said lever in a vertical position and means for disengaging said lever Q from the rocking levers to allow said striking-plate to move, substantially as described.

2. In combination, a door-lock, a removable striking-plate, lugs on said plate having notches therein, rocking levers having hooked ends engaging with said notches and a spring-controlled lever for holding one of said rocking levers when it is out of engagement with the lug on the striking-plate.

In witness whereof I have hereunto set my hand in the presence of two witnesses.

WALTER K. KAYE.

Witnesses:

CLIVE WAUGH,
CHAS. GILLIARD.