T. A. STEVENSON.

MEANS FOR AUTOMATICALLY UNLOCKING THE DOORS OF PUBLIC BUILDINGS.

APPLICATION FILED SEPT. 21, 1908.

911,177.

Patented Feb. 2, 1909.

Fig. 2.

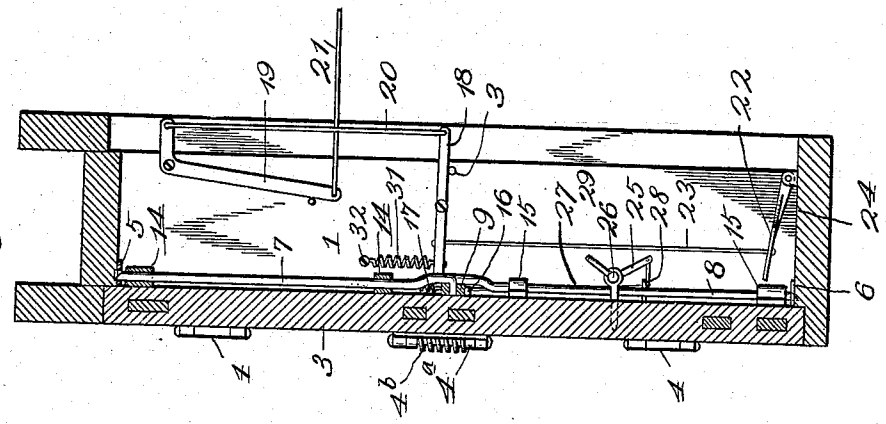
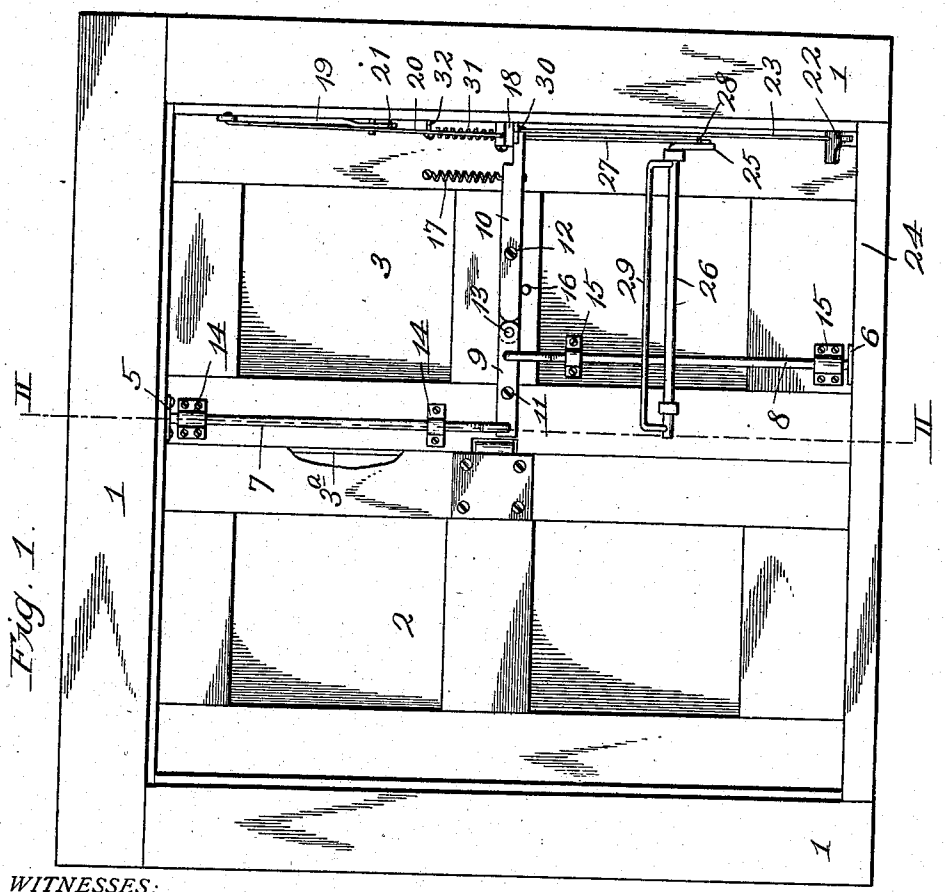


Fig. 1.



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MEANS FOR AUTOMATICALLY UNLOCKING THE DOORS OF PUBLIC BUILDINGS.

No. 911,177. Specification of Letters Patent. Patented Feb. 2, 1909.

Application filed September 21, 1908. Serial No. 454,106.

To all whom it may concern:

Be it known that I, THEODORE A. STEVENSON, a citizen of the United States, residing at Lansing, in the county of Leavenworth and State of Kansas, have invented certain new and useful Improvements in Means for Automatically Unlocking the Doors of Public Buildings, of which the following is a specification.

This invention relates to improvements in means for automatically unlocking the doors of public buildings, and is an improvement over my copending application filed June 18, 1908, Serial Number 439,167.

The principal feature of my present invention is means whereby the doors may be automatically opened by persons falling against the same, in an attempt to escape from the building.

In the accompanying drawing, which illustrates the invention: Figure 1 shows an interior view of a pair of doors equipped with the invention. Fig. 2 is a vertical section on line II—II of Fig. 1.

1 designates a door-casing, and 2 and 3 a pair of doors secured to the casing by hinges 4 and 4^a to open outwardly. Hinges 4^a are provided with springs 4^b whereby door 3 is automatically thrown open when the latch-bars are released from their keepers. Casing 1 is provided with an upper keeper 5 and a lower keeper 6 to receive the ends of the latch-bars 7 and 8, respectively. Door 2 is held closed by a rabbeted portion 3^a, on door 3, in the usual manner. Latch-bars 7 and 8 are pivotally connected to a section 9 of a compound latch-lever consisting of section 9 and a section 10, pivotally secured to door 3 by screws 11 and 12, respectively, and pivotally connected to each other by a pin 13. Latch-bars 7 and 8 extend through guides 14 15, respectively, secured to door 3.

16 designates a stop-pin projecting from door 3 to limit the upward movement of the free end of section 10, which is normally held against pin 16 by a spring 17 in order to hold the latch-bars in engagement with their keepers.

18 designates an unlocking-bar which engages the free end of section 10 and is connected to a bell-crank lever 19 by a rod 20. Bell-crank lever 19 is pivotally secured to one side of the door-casing and provided with a rod or cable 21, whereby it may be actuated at a point distant from the doors for the purpose of opening the same. The unlocking-bar 18 is also connected to a foot-lever 22 by a connecting-rod 23 so that it may be actuated by said foot-lever which is pivoted at the threshold 24 of the door, it being located near one side of casing 1, so that it will be out of the way of persons passing in and out.

Section 10 of the compound lever is connected to the crank-arm 25, of a rocker-shaft 26, by means of a cable 27 extending through an eye 28 on door 3. Rocker-shaft 26 extends transversely across the lower portion of door 3, and is provided with a handle 29 extending substantially the full length thereof, so that if a person is pushed or falls against door 3, they will contact with said handle and in pushing the same towards door 3 will, through the intermediacy of the intervening mechanism, unlock the door. The unlocking-bar is normally held against a stop-pin 30 by a retractile spring 31, connected to said unlocking-bar and a screw 32 projecting from the adjacent side of the casing.

Having thus described my invention, what I claim is:—

1. In combination, a pair of doors, a casing therefor, locking-devices on one of said doors adapted to engage keepers on the casing, a compound lever connected to said locking-devices and the door carrying the same, and a foot-lever suitably connected to said compound lever for actuating the same.

2. In combination, a pair of doors, a casing therefor, locking-devices on one of said doors adapted to engage keepers on the casing, a compound lever connected to said locking-devices and the door carrying the same, an unlocking-lever mounted on the door-casing for actuating the compound lever, and flexible means leading some distance from the doors for actuating said unlocking-lever.

3. In combination, a pair of doors, a casing

therefor, locking-devices on one of said doors adapted to engage keepers on the casing, a compound lever pivotally connected to said locking-devices and the door carrying the same, a rocker-shaft provided with a crank-arm suitably connected to said compound lever and extending transversely across the door carrying the same, and a handle secured to said rocker-shaft whereby the same may be actuated.

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

THEODORE A. STEVENSON.

Witnesses:

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