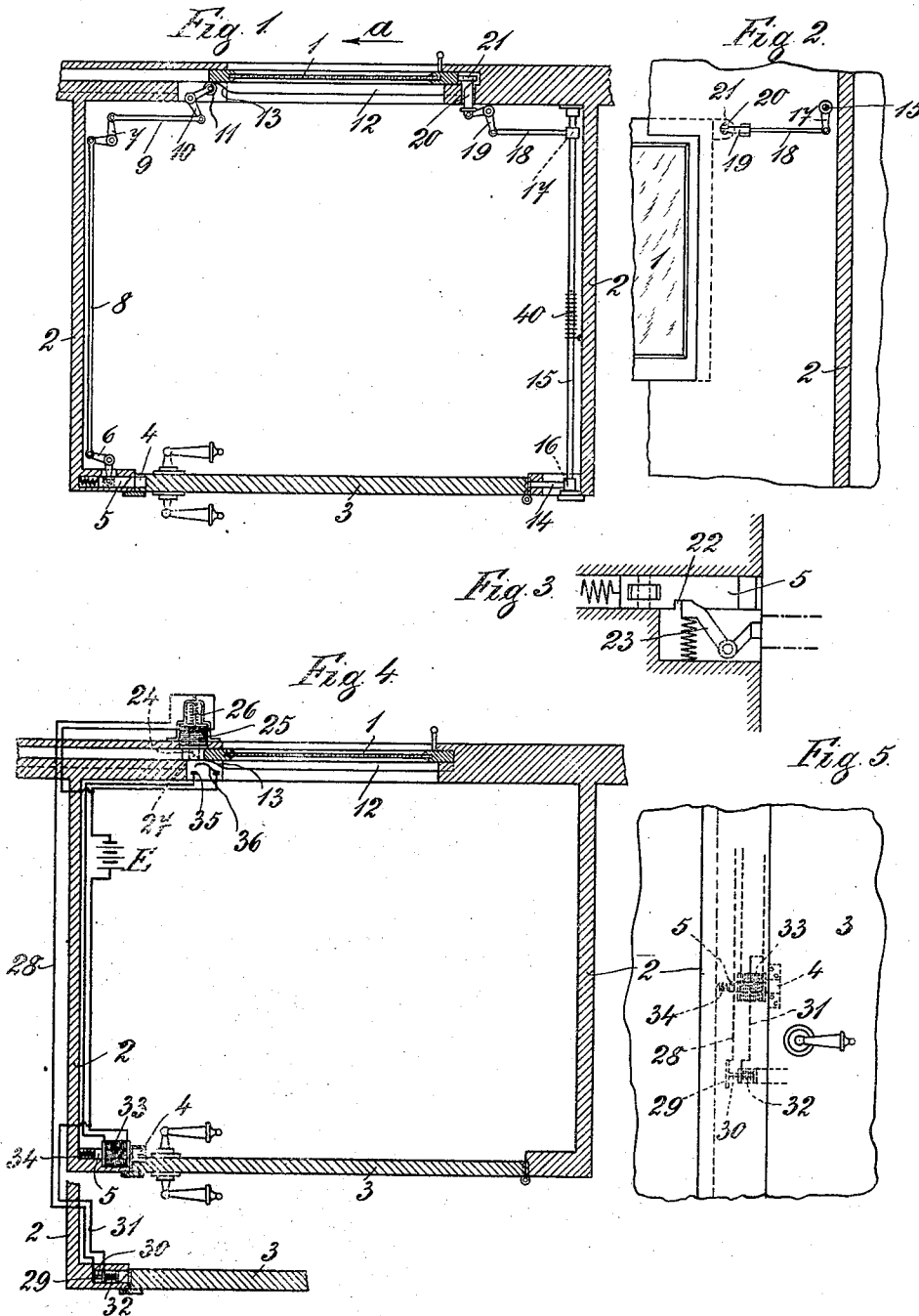


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SAFETY DEVICE FOR CASH DESKS.
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1,008,125.

Patented Nov. 7, 1911.



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UNITED STATES PATENT OFFICE.

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SAFETY DEVICE FOR CASH-DESKS.

1,008,125.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WALTER EICHELKRAUT, a subject of the King of Prussia, and resident of 6/8 Seehofstrasse, Zehlendorf, near Berlin, Germany, architect, have invented certain new and useful Improvements in Safety Devices for Cash-Desks, of which the following is a specification.

This invention relates to apparatus for regulating and controlling the access of persons to cashier's windows and like payment apertures in banks, post-offices, theaters and similar public buildings and has for its object to provide an arrangement for preventing the public on the one hand and the cashier on the other hand from being robbed.

In order that the invention may be clearly understood reference is made to the accompanying drawings which show, by way of example, various methods of carrying out my invention.

Figure 1 is a cross-section of one arrangement. Fig. 2 is a detail elevation of part of the arrangement shown in Fig. 1. Fig. 3 is a detail view of a slight modification. Fig. 4 is a cross-section of an electrical arrangement. Fig. 5 is a partial elevation of the same.

In Fig. 1 of the drawings, 1 is the cash window in front of which is built a chamber 2 having a door 3 admitting thereto. In the edge of the door is a recess 4 in which a bolt 5 can engage. This bolt is connected to a bell-crank lever 10 through bell-cranks 6 and 7 and rods 8 and 9, the bell-crank 10 carrying preferably a roller 11 which may project into the path of the window which is slidable sidewise. The cash window has a strip 12 with an inclined surface 13 on which the roller 11 of the bell-crank lever 10 can run, so that when the cash window is moved in the direction of the arrow *a* the lever 10 is turned and thereby the bolt 5 caused to engage the recess 4 in the door and lock the latter through the medium of the bell cranks 6 and 7 and the connecting rods 8 and 9. Now, in order only to be able to open the cash window 1 when the door 3 is closed, a rod 14 is positioned in the door frame on the opposite side to that of the recess 4, this rod being articulated with a lever 16 fixed on a rod 15 which carries another lever 17 connected with a bell-crank lever 19 through a connecting rod 18, the bell crank 19 being articulated with a bolt 20 which, under the action of a spring 40 sur-

rounding the rod 15 and secured at one end thereto and at the other end to the wall of the chamber 2, engages a recess 21 or the like in the cash window. The cash window can therefore only be moved, if the rod 14 is pressed back by the closing of the door and the bolt 20 withdrawn from the recess 21 by means of the levers 16 and 17 and the connecting rods 15 and 18. At the same time as the cash window is moved, the bolt 5 engages with the recess 4 of the door in the manner already described and the door is thereby locked. The unbolting of the door can only take place again if the cash window is fully closed and the roller 11 enabled to take up the position again shown in Fig. 1.

The bolting arrangement 14 to 21 of the cash window may be dispensed with, if the arrangement shown at Fig. 3 is provided. In this case the bolt is engaged by means of a spring actuated latch 23 engaging a recess 22 in the same, so that the inclined surface of the strip 12 cannot move the roller 11 of the bell-crank and so that, the movement of the cash window is prevented. The withdrawal of the latch 23 takes place by means of the latch bolt of the door which presses against the latch 23 and thereby withdraws it from the recess 22 of the bolt 5 against the action of its spring. The cash window can thus only be moved and the roller 11 moved outward and the bolt 5 caused to engage the recess 4 in the door, when the door is closed.

In the construction shown at Figs. 3 and 4 the locking takes place through electrical means. The locking of the cash window 1 is effected by means of a bolt 24 which is movable within a solenoid 25 and brought into engagement with a recess or the like by means of a spring 26. The solenoid 25 is connected with a contact piece 29 in the door frame by means of a wire 28. Opposite this contact piece is a spring actuated bolt 30 which is connected by means of connections 31 and through a battery E with the other end of the winding of the solenoid 25. The spring 32 of the bolt 30 tends to withdraw the bolt from the contact piece 29. The bolt itself is pressed against the contact piece 29 on the closing of the door by means of the door latch against the action of the spring 32 and thereby completes the circuit. The solenoid is therefore excited and withdraws the bolt 24 out of the recess of the cash window freeing the latter, so

that it can be opened. The bolt 5, which serves to bolt the door, is in this case arranged within a solenoid 33 and is actuated by a spring 34 which tends to withdraw the bolt from the recess 4 of the door. The solenoid is likewise arranged in the circuit of a battery E and with a contact piece 35, opposite which is positioned a spring contact 36 connected with the other end of the solenoid 33. As soon as the cash window is moved from its closed position, the inclined surface 13 of the strip 12 contacts with the spring contact 36, so that the latter is pressed into contact with the contact piece 33 and the circuit of the solenoid 33 completed, so as to draw the bolt 5 into the recess 4 when the door is bolted. When the window is again closed, the spring contact 26 is released and the circuit of the solenoid 33 broken. The bolt 5 within the solenoid 33 is therefore withdrawn from the recess 4 of the door by means of its spring 34, so that the door can then be opened. When the door is opened, the bolt 30 is drawn out of contact with the contact piece 29 by means of its spring 32 and the circuit of the solenoid 25 broken, so that the spring 26 of the bolt 24 thereby presses the bolt into the recess 27 of the cash window and locks the latter. It is well evident that the constructions may be readily varied without departing from the essential feature of the invention. For example the locking arrangement may be effected by pneumatic or hydraulic means.

I claim:—

1. An apparatus for regulating and controlling the access of persons to cash desks, comprising, in combination, a chamber in front of the cash desk, a door admitting to said chamber, a window for the cash desk, and an interlocking arrangement between said door and window whereby the window can only be opened when the door is closed and whereby the door can only be opened when the window is closed.

2. An apparatus for regulating and controlling the access of persons to cash desks, comprising, in combination, a chamber in front of the cash desk, a door admitting to said chamber, a window for the cash desk, a bolt adapted to lock the window when the latter is closed, a bolt adapted to lock the door when the latter is closed, means for operating the window bolt from the door to lock the window on the opening of the door and to release the window on the closing of the door, and means for operating the door bolt from the window to lock the door on

the opening of the window and to release the door on the closing of the window.

3. An apparatus for regulating and controlling the access of persons to cash desks, comprising, in combination, a chamber in front of the cash desk, a door admitting to said chamber, a window for the cash desk, a bolt adapted to lock the window when the latter is closed, a bolt adapted to lock the door when the latter is closed, means for operating the window bolt from the door to lock the window on the opening of the door and to release the window on the closing of the door, and means for operating the door bolt from the window to lock the door on the opening of the window and to release the door on the closing of the window.

4. An apparatus for regulating and controlling the access of persons to cash desks, comprising, in combination, a chamber in front of the cash desk, a door admitting to said chamber, a window for the cash desk, a bolt for the door, a bolt for the window and electrical connections whereby the window bolt is operated to release the window when the door is closed, and whereby the door bolt is operated to lock the door when the window is opened.

5. An apparatus for regulating and controlling the access of persons to cash desks, comprising, in combination, a chamber in front of the cash desk, a door admitting to said chamber, a window for the cash desk, a door bolt normally held withdrawn under the action of a spring, a solenoid surrounding the door bolt, an electric battery in circuit with the solenoid, contacts adapted to complete the circuit through said solenoid on the opening of the window so as to operate the door bolt and lock the door, a window bolt normally held in locking position under the action of a spring, a solenoid surrounding the window bolt and in circuit with the battery, and contacts adapted to complete the circuit through the solenoid of the window bolt on the closing of the door so as to withdraw the window bolt and release the window.

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

WALTER EICHELKRAUT.

Witnesses:

WOLDEMAR HAUPT,
HENRY HASPER.