

Sept. 6, 1932.

W. E. ADAMS
SAFETY DEPOSITORY
Filed May 18, 1929

1,875,690

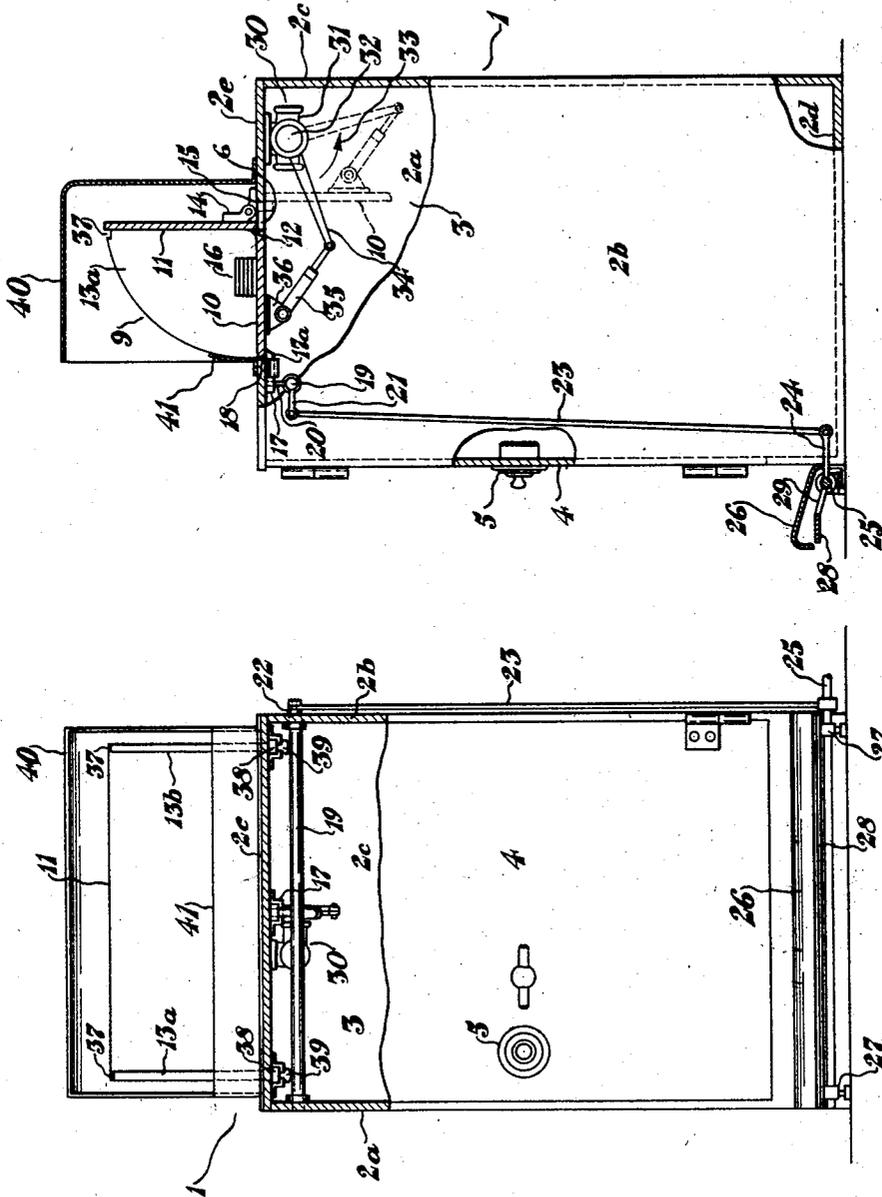


Fig. 2

Fig. 1

Inventor

William E. Adams

By Harry Trease

Attorney

UNITED STATES PATENT OFFICE

WILLIAM E. ADAMS, OF CLEVELAND, OHIO, ASSIGNOR TO DIEBOLD SAFE & LOCK COMPANY, OF CANTON, OHIO, A CORPORATION OF OHIO

SAFETY DEPOSITORY

Application filed May 18, 1929. Serial No. 364,299.

The invention relates to safety depositories more particularly for use by cashiers and tellers in banks and the like.

The objects of the improvements include the provision of simplified means, which are reliable and certain in operation, for instantaneously placing the cashier's or teller's supply of money in an automatically locking safety deposit box upon the appearance of a bank robber, when the cashier or teller actuates a trip mechanism controlling the operation of the safety depository.

Further objects of the improvements include the provision of a safety depository, which may be connected with other safety depositories, so that all of the safety depositories may be actuated from a position adjacent any one of them by a single cashier or teller.

The objects of the improvements also include the provision of a delayed time lock for the door of the safety deposit box, so that after the money has been placed into the box, the door of the box may not be immediately opened even though the bank officer is forced to operate the lock by a key or combination.

These and ancillary objects are attained in the present invention, as will be set forth hereinafter in detail and claimed.

A preferred embodiment of the invention is illustrated in the accompanying drawing forming part hereof, in which

Figure 1 is a front elevational view of one of the improved safety depositories hereof with portions broken away; and

Fig. 2, a side elevation thereof with portions broken away.

Similar numerals refer to similar parts throughout the several views.

The improved safety depository indicated generally at 1 includes side walls 2a and 2b, a back wall 2c, a bottom wall 2d, and a top wall 2e, preferably made of any suitable burglar proof material, such as hardened steel, and forming a burglar proof compartment 3, having a front opening provided with a burglar proof door closure 4 hinge connected at one side to the compartment side wall 2b, and provided with a lock 5 at the other side,

and the lock 5 is preferably a combination lock and a delayed time lock combined, of any well known construction.

A money receiving opening 6 is formed in the top wall 2e, and is provided with a hopper closure indicated generally at 9.

The hopper closure 9 includes laterally extending plates 10 and 11 preferably at right angles with each other and joined to each other at the corner 12.

The ends of the plates 10 and 11 are preferably connected by sectoral end plates 13a and 13b.

Both of the plates 10 and 11 are of such size as to substantially close the opening 6 in the top wall 2e when either plate is placed in the plane of the top wall 2a.

Hinges 14, which are connected adjacent the corner 12 to the hopper, and to the top wall at the rear edge 15 of the opening 6, mount the hopper that it may swing about a horizontal axis. When the plate 10 is swung into the plane of the top wall 2a as indicated in full lines in Fig. 2, the plate 10 forms a closure for the opening 6; and when the plate 10 is swung downwardly to the position indicated in dot and dash lines in Fig. 2, the hopper plate 11 forms a closure for the opening 6.

The hopper 9 is normally maintained in the position illustrated in full lines in Fig. 2, with the plate 11 extending vertically upward, and money indicated at 16 is stacked on the upper surface of the plate 10.

A latch 17 which may be centrally mounted on the under-surface of the top wall 2e adjacent the forward edge 18 of the opening 6, normally maintains the hopper in the position indicated in full lines in Fig. 2.

The latch 17 includes a slide bolt 17a which is normally spring pressed beneath the forward edge of the plate 10, and means for withdrawing the slide bolt may include a laterally extending horizontal shaft 19 journaled at opposite ends in the side wall 2a and extending through the side wall 2b.

A bolt withdrawing arm 20 is secured to and extends upwardly from the shaft 19 into a suitable aperture in the bolt 18. A shaft rotating arm 21 is secured on the outer end 22 of

the shaft 19 and extends forwardly from the shaft; and its outer end is pivotally connected to the upper end of a link rod 23, the lower end of which is pivotally connected preferably with the rear outer end of a trip lever 24, which is secured to and extends rearwardly from a horizontal trip shaft 25, extending in front of the safety depository 1, preferably beneath a laterally extending combined foot rest and guard 26.

The shaft 25 is journaled in suitable bearing brackets 27 beneath the guard 26, and a laterally extending trip bar 28 extends alongside of and in front of the shaft 25 beneath the guard 26 and is connected at its inner edge with the shaft, as by means of spokes 29.

Accordingly, when the trip bar 28 is rotated upwardly as by means of a teller's toe inserted beneath the same, the trip lever 24 will be rotated downwardly, and through the link 23 and the arm 21, will rotate the shaft 19 to rotate the bolt withdrawing arm 20 forwardly, thus withdrawing the bolt 17a from engagement beneath the forward edge of the money supporting plate 10.

Gravity will then immediately urge the hopper to fall downwardly about the axis of its hinges, thereby dropping the money 16 into the safety deposit compartment 3.

For increasing the velocity of movement of the hopper, automatic door moving means indicated generally at 30, which may be any well known spring-urged fluid-check mechanism, are mounted within the compartment.

The automatic door moving means may include a cylinder housing 31 mounted upon and depending from the lower surface of the top wall 2e, and the cylinder housing has operatively mounted therein a shaft 32 extending horizontally as illustrated, which shaft is normally urged by the spring-urged fluid-check mechanism within the housing 31 to rotate in the direction of the arrow 33.

An arm 34 is secured upon and extends forwardly from the shaft 32, and a preferably length adjustable link 35 is pivotally connected at one end with the outer end of the arm 34 and at the other end with the bracket 36 depending from the lower surface of the plate 10, in the position illustrated in full lines in Fig. 2.

Accordingly, when the latch bolt 17a is withdrawn from engagement with the plate 10, the door moving means 30 will operate to rapidly rotate the hopper 9 about the axis of its hinges, until close to the end of its travel, when the velocity of the rotating hopper will be checked, and the plate 11 will be silently and quietly rotated into the plane of the top wall 2e.

The sectoral end plates 13a and 13b of the hopper are each preferably provided with a notch 37 adjacent the plate 11. Each of the notches engages with a spring latch 38 mounted in alinement therewith on the lower sur-

face of the compartment top wall 2e adjacent the front edge 18 of the opening 6.

Thus when the hopper 9 is rotated downwardly, the latches 38 engage with the notches 37 and securely lock the plate 11 in closing position for the opening 6.

Each latch 38 may be provided with a knob 39, whereby the latch bolt may be withdrawn from engagement with the notch 37 by opening the door 4 and reaching within the compartment, after the danger of robbery has passed.

Preferably a guard cover 40 is provided for the hopper on the upper surface of the top wall 2e, and a laterally and upwardly extending edge guard 41 may be likewise provided if desired at the front edge 18 of the opening 6.

By providing the delayed time lock 5, after the money has been dropped into the safety depository, even though the robber may force a bank officer to operate the combination of the lock, the door 4 of the safety depository may not be opened till after a predetermined period of time has elapsed, the length of which is longer than the robber will care to remain at the scene of the hold-up.

The aforesaid safety depository thus provides a simple and effective means for rendering a daylight hold-up or robbery very difficult if not impossible.

I claim:

1. A device of the kind described comprising a housing having a door opening and a door therefor, said housing having an apertured top wall, a pivoted closure member for the aperture in said top wall, a shelf constrained to move with said closure member and adapted to close said aperture when said closure member is in its open position, spring-actuated fluid-check means for displacing said closure member into its closed position, and a spring-pressed latch accessible solely through said door for locking said closure member in its closed position, said latch being held in a retracted position by said closure member while said closure member is moving into its closed position.

2. A safe comprising a housing having a door opening and a door therefor, said housing having an apertured top wall, a closure member for the aperture in said top wall, said closure member being disposed outside of said housing when it is in its open position, a shelf operatively connected to said closure member to be lowered into the safe when said closure member is moved into its closed position, means having sufficient power to force said closure member into its closed position, and a spring-pressed latch accessible solely through said door for locking said closure member in its closed position.

3. A safe comprising a housing having an apertured top wall, a closure member for said aperture, said closure member being disposed

outside of said housing when it is in its open position, a shelf in said safe movable toward and away from said aperture, means operatively connecting said shelf to said closure member for moving said shelf away from said aperture when the closure member is brought into its closed position, means having sufficient power to force the closure member into its closed position, manually operable means for controlling said forcing means, and latch means which automatically locks said closure member when it is forced into its closed position.

In testimony that I claim the above, I have hereunto subscribed my name.

WILLIAM E. ADAMS.

20

25

30

35

40

45

50

55

60

65