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TIME LOCK FOR CASH RECEPTACLES.
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Patented June 17, 1913.

Fig. 1.

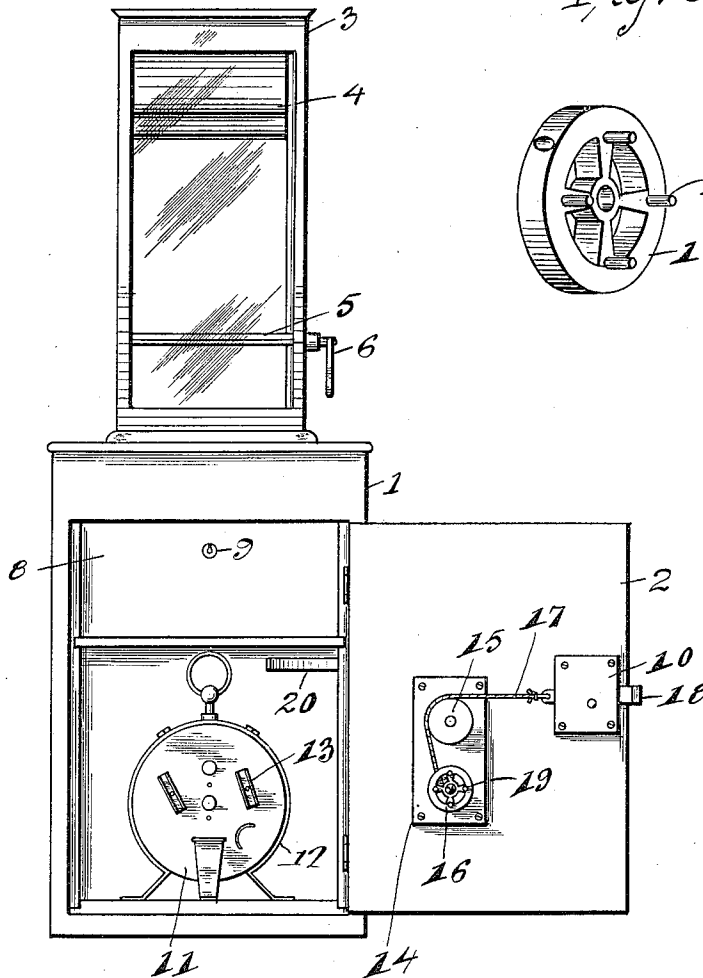
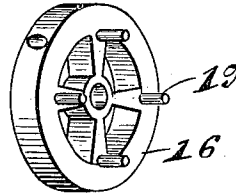


Fig. 2.



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TIME-LOCK FOR CASH-RECEPTACLES.

1,064,860.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM SCHACK, a citizen of the United States, residing at St. Louis, in the State of Missouri, have invented certain new and useful Improvements in Time-Locks for Cash-Receptacles, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to new and useful improvements in time locks and more particularly to a time lock for cash receptacles adapted for use in connection with street cars, the object of the invention being to provide a device of this character which will automatically open the cash receptacle at a predetermined time.

15 A further object of the invention resides in providing a time lock which will release the door of the cash receptacle from its locked position at a predetermined time and also to provide a device in which the cash receptacle is out of view and locked within a casing until such time as the door of the receptacle is automatically opened.

20 A still further object of the invention resides in providing a device which is extremely simple and durable in construction, inexpensive to manufacture and one which will be very efficient and useful in operation.

25 With these and other objects in view, the invention consists in the novel features of construction, combination and arrangement of parts as will be hereinafter referred to and more particularly pointed out in the specification and claim.

30 In the accompanying drawings forming a part of this application, Figure 1 is a front elevation of the device showing the door thereof in its open position. Fig. 2 is a perspective view of the drum removed.

35 In describing my invention, I shall refer to the drawings in which similar reference characters designate corresponding parts throughout the several views and in which—

1 indicates a housing having a door 2 hinged thereon, forming the front wall of the device when closed, and leading from the top of said housing is a casing 3, the front and rear walls of which are formed of glass, as in the ordinary cash receiving boxes used on street cars and the like. The casing 3 has a downwardly tapering and rearwardly bent chute 4 mounted in the upper end thereof which is adapted to re-

ceive the coins as the same are dropped in the casing to conduct the same through the latter.

Mounted to oscillate in the side walls of the casing 3, is a plate 5 which is adapted to receive the coins as the same are dropped in the chute 4 and a shaft carried on the plate which supports said plate in the side walls of the casing 3 extends beyond one of said side walls and is bent to form a crank or handle member 6. Slidably mounted in the upper portion of the housing 1 is a cash box or drawer 8 which is adapted to receive the coins as the same are dropped from the oscillating plate 5. A lock 9 is provided for use in connection with the drawer or coin box to be operated by the proper authorities.

The lock 10 is so arranged upon the door 2 of the housing 1 as to be incapable of operation from the outside of the device and adapted to be effectively disposed when the door 2 is closed. I have provided means, however, for the automatic unlocking of this lock and simultaneously opening of this door and to this end, I provide an alarm clock or the like 11 which is mounted in the bottom of the housing 1. An opening 12 is formed in the rear face of the housing 1 so that the face of the clock may be observed therethrough to indicate the time and the rear face of said clock is provided with the usual alarm winding key 13 and the other winding and setting keys which are not necessary to be mentioned.

Mounted on the rear face of the door 2, is a plate 14, which has a grooved pulley 15 rotatably mounted thereon and a drum 16 similarly mounted thereon a short distance therebelow. The drum 16 has engaged therewith the one end of a yielding flexible connection 17 which extends over the pulley 15 and the opposite end of said connection is engaged with an eye or the like on the inner end of the locking bolt 18 of the lock 10. The peripheral side edge of the drum 16 has extending therefrom at regular intervals therearound, a plurality of pins or studs 19 and this drum is so disposed on the plate 14 that when the door 2 is closed, the alarm winding key 13 will be received between these studs or pins 19. Thus, when the alarm winding key is turned, the drum 16 will be rotated on its axis to wind the flexible connection 17 therearound and cause the bolt 18 to be withdrawn from its effect-

tive locking position. A leaf spring 20 has one end thereof secured to the one side wall of the housing 1 and is so arranged as to allow the free end thereof to engage the inner face of the door 2, as the latter is closed so that when the locking bolt of the lock 10 is retracted, by the automatic action of the alarm winding key, said door will be automatically forced outwardly to its open position.

In practice, after the device has been set up for position on the car, or other device upon which the same is to be used, the alarm of the clock is set for a particular time. If the device is being used upon a street car, the alarm will be set to a time at which the particular car carrying the same is due at a particular station. The coin box or drawer 8 is then locked and the door 2 disposed to its closed position, the latter action locking said door and permitting the alarm winding key 13 of the clock to be disposed between the pins or studs 19 above referred to. As coins are dropped through the chute 4 of the casing 3, the same will be passed to the plate 5 in sight of the person or persons dropping the same therein and the conductor or other person in charge of the box or the device may then turn the crank 6 to allow the coin or coins to be deposited in the box 8. At the particular time set, the alarm winding key 13 will be caused to rotate counter-clockwise, which operation will cause the drum 16 to be simultaneously rotated and thus withdraw the locking bolt 18 of the lock 10 from its effective position. As this locking bolt is withdrawn, the door 2 will be automatically opened through the medium of the spring 20 and the drawer or coin box may then be opened, whereby to remove the money deposited therein. It will, of course, be understood that at the time set for the opening of the door, the proper authorities to remove the coins from the drawer or box 8 are at hand, so that theft by the care-taker of the device is practically impossible.

From the foregoing it will be seen that I having provided an improved time lock for cash receptacles which is particularly adapt-

ed for use in connection with street cars and the like, whereby the care-taker has no opportunity to place his hands on the coin or coins deposited therein. It will further be seen that the device is not capable of being opened except at the particular time set for the releasing of the lock, so that all tampering with the device with malicious intent will be in vain. It will still further be seen that the device is one which is extremely simple and durable in construction, inexpensive to manufacture and one which will be very efficient and useful in operation.

While I have particularly described the elements best adapted to perform the functions set forth, it is obvious that various changes in form, proportion and in the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the principles of the invention.

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

The combination with a housing having a hinged door thereon, a cash receptacle arranged within the housing and a time piece within the housing having a winding key thereon, of a lock for the door adapted to be affected when said door is in a closed position, a winding drum rotatably mounted upon said door, a pulley also rotatably mounted upon the door and disposed above the winding drum, a yielding flexible connection between said winding drum and the locking bolt of said lock, the said connection being extended over the pulley, a plurality of studs extending at right angles from the peripheral side edge of said drum and adapted for engagement with the key on the time piece to rotate the drum at a predetermined time and correspondingly retract said locking bolt whereby the door may be opened.

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

WILLIAM SCHACK.

Witnesses:

CHAS. S. LUCE,
JAMES T. CLARK.