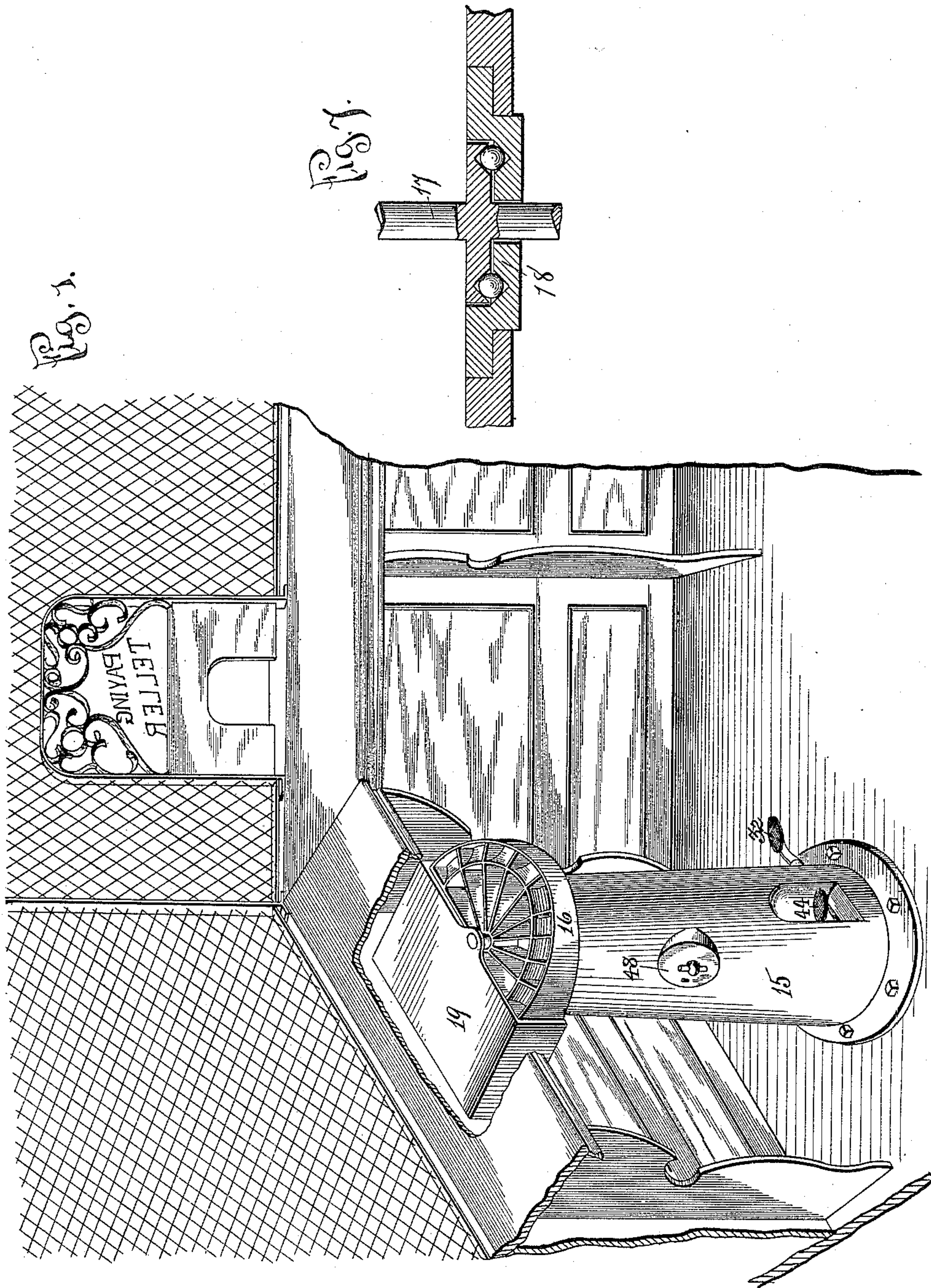


(No Model.)

3 Sheets—Sheet 1.

P. F. KING.  
APPARATUS FOR SECURING FUNDS OF BANKS AGAINST ROBBERY.  
No. 584,309. Patented June 8, 1897.



Witnesses  
J. B. Stein  
L. M. Bulkley

Inventor  
Phineas F. King  
By Chas. C. Bulkley  
Attn



(No Model.)

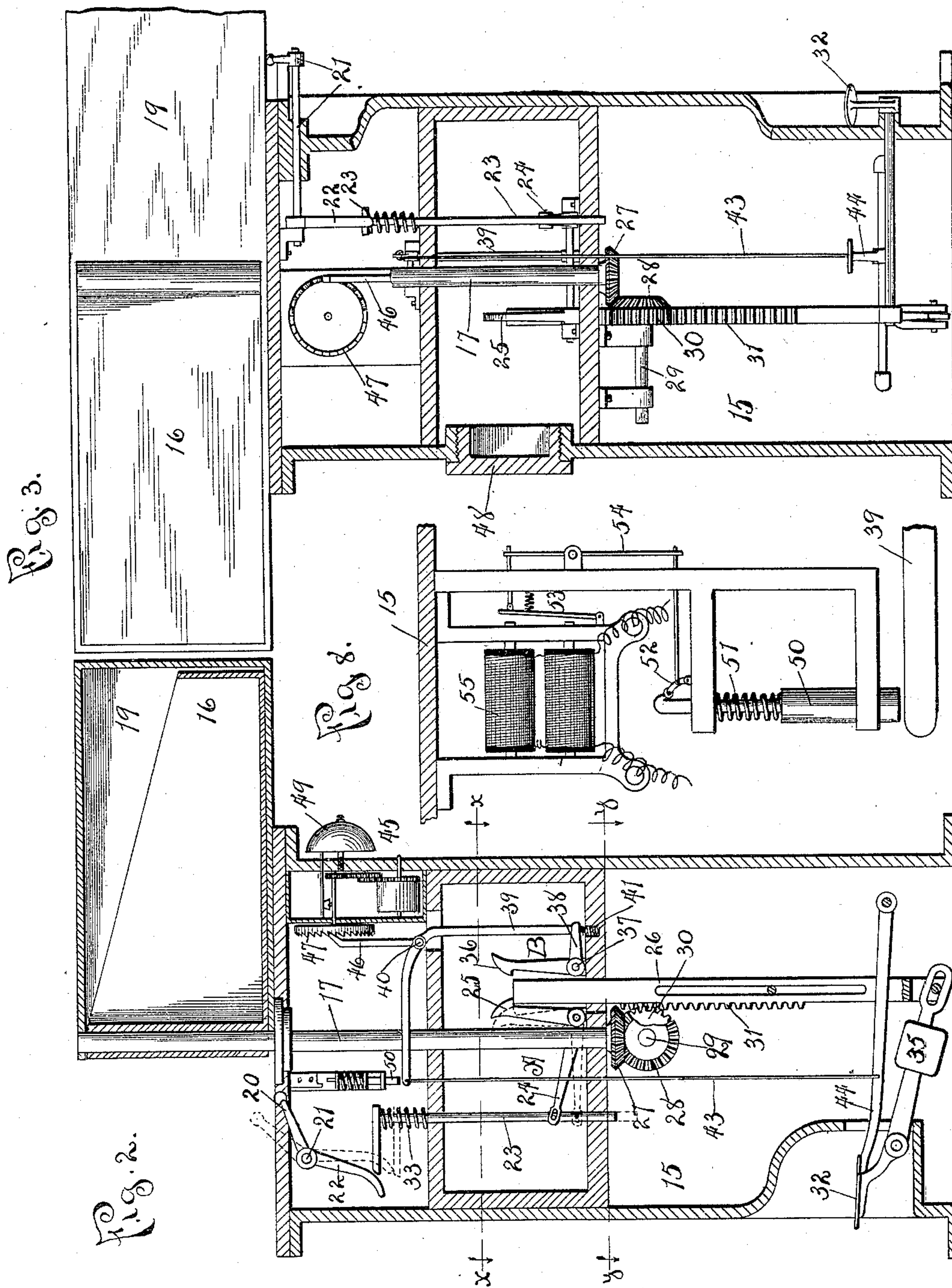
3 Sheets—Sheet 2.

P. F. KING.

# APPARATUS FOR SECURING FUNDS OF BANKS AGAINST ROBBERY.

No. 584,309.

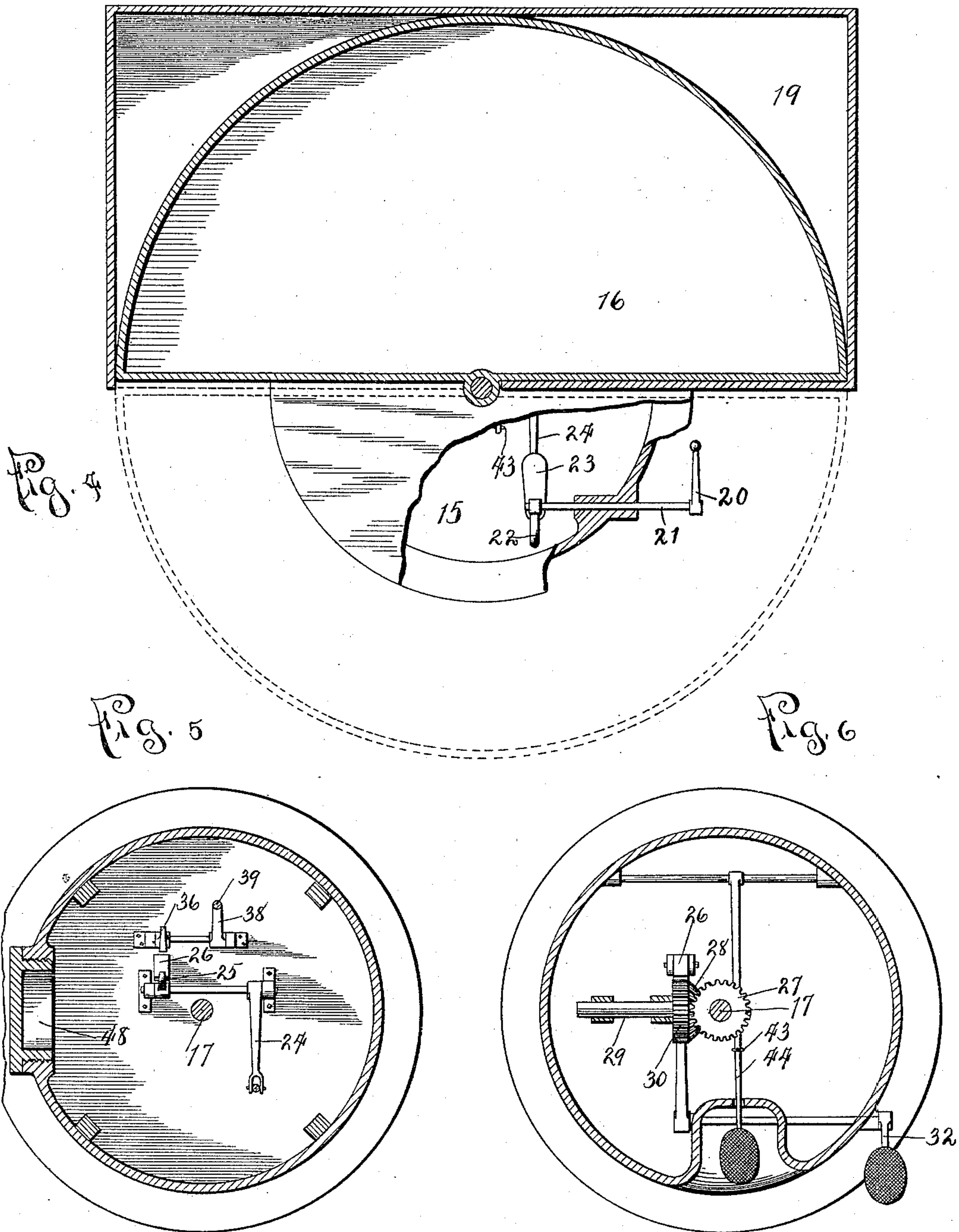
Patented June 8, 1897.



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APPARATUS FOR SECURING FUNDS OF BANKS AGAINST ROBBERY.  
No. 584,309. Patented June 8, 1897.



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# UNITED STATES PATENT OFFICE.

PHINEAS F. KING, OF CHICAGO, ILLINOIS, ASSIGNOR, BY DIRECT AND  
MESNE ASSIGNMENTS, OF TWO-THIRDS TO HENRY L. GIFFORD, OF  
SAME PLACE, AND WILLIAM S. ROGERS, OF CLEVELAND, OHIO.

APPARATUS FOR SECURING FUNDS OF BANKS AGAINST ROBBERY.

SPECIFICATION forming part of Letters Patent No. 584,309, dated June 8, 1897.

Application filed December 31, 1896. Serial No. 617,562. (No model.)

*To all whom it may concern:*

Be it known that I, PHINEAS F. KING, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Apparatus for Securing the Funds of Banks and Business-Houses Against Robbery in the Daytime, of which the following is a specification.

In banking-houses and in other places of business it is customary and necessary to handle and expose to a more or less extent large sums of money during the transaction of business in the daytime. The deposit of large sums of money in exposed and readily accessible positions has given occasion to successful raids and attacks of robbers, who, obtaining access to these places of business in the ordinary course of business, intimidate, kill, or injure the employees or officers and seize and make off with sums of money thus exposed.

The object of my invention is to avoid these raids and attacks and to provide a safe and secure means for holding the funds of the day of such a business-house during business-hours.

To this end my invention consists in a rotatable cash-receptacle positioned so as to be readily accessible, in service mechanism which normally causes the receptacle to assume and remain in a closed and locked position when not in use, and emergency mechanism which is adapted to be actuated to permanently lock the receptacle closed, so that it cannot be opened under any circumstances by any person within the building and which in any event requires time and knowledge to remove the permanent lock.

My invention has certain other objects in view; and it consists in certain further features about to be described, and pointed out in my claims, reference being now had to the accompanying drawings, in which—

Figure 1 is a perspective view of the interior of a banking-house, showing my improved apparatus in position, the cash-receptacle being open. Fig. 2 is a side elevation of the mechanism for service and emergency locking and for closing the cash-receptacle, the pedestal-casing being in section. Fig. 3 is a

front elevation of the same. Fig. 4 is a plan view of the apparatus, partly broken away, with the containing-box in section to show the cash-receptacle nested therein, the dotted lines showing the extended open position of the said receptacle. Fig. 5 is a cross-section on the line *xx* of Fig. 2. Fig. 6 is a like view on the line *yy* of Fig. 2. Fig. 7 is a view showing a ball-bearing arrangement for the cash-receptacle shaft. Fig. 8 is a detail view of a modified form, showing the application of electricity as a means of initiating the operation of the emergency-lock.

In the constant manipulation of large sums of money in business-houses it has hitherto been impossible to keep the funds with any sort of security during the ordinary transaction of business in the daytime.

If the money is distributed about in exposed and insecure positions upon the desks or tables of the interior, it may be readily seized by thieves who intimidate or kill the employees. If the funds are deposited in a drawer or other receptacle within the control of any one or more of the employees, the funds may be secured by intimidation of the employee in charge.

In carrying out my invention it is my design to provide a receptacle for the funds controlled by service mechanism which causes the cash-receptacle to normally tend to close and be locked when not absolutely in use, this service mechanism including the means whereby the apparatus is employed in the ordinary routine of the usual daily business. That is, the cash-receptacle is rotatably mounted and adapted to be swung from its normally-maintained closed and locked position into its open position by means of service mechanism controlled and operated by the person in charge of the cash, which cash-receptacle normally tends to rotate into a closed and locked position when the service mechanism is released by the operator. I also provide emergency locking mechanism which may be instantly applied by the employee upon any intimation of danger or which may be applied by any person at various different points, which locking mechanism applies a permanent lock to the cash-receptacle in a



closed position, which cannot be removed except by procuring a key kept at a place distant from the business-house and which requires skill and experience to effect an un-

locking, this emergency locking mechanism including the means whereby the apparatus is operated under circumstances out of the ordinary daily routine of business and when danger is imminent or present.

Referring to the drawings, the cash-receptacle support is designated at 15, having mounted thereon the semicircular cash-receptacle 16, which is fitted with suitable divisional spaces to receive coin and currency.

This cash-receptacle 16 is mounted upon the shaft 17, which latter rotates upon the ball-bearings 18, Fig. 7. The cash-receptacle is also adapted to maintain a closed position within the sheathing-box 19, as shown in Figs. 2 and 3.

I provide a service locking mechanism, which is designated generally at A, and the emergency locking mechanism B, and will proceed now with a description first of the service locking mechanism and the means of operating the same and of operating the cash-receptacle 16.

A hand-lever 20 is pivotally mounted at 21, which when the cash-receptacle is closed is in a depressed position, Fig. 2.

The push-arm 22 of the lever 20 is adapted to rest against the presser-rod 23, and when the lever 20 is raised manually this rod depresses the lock-arm 24 of the locking-pawl 25, which latter engages over the upper end of the rack-bar 26. The lower end of the cash-receptacle shaft 17 carries a bevel gear-wheel 27, which meshes with the bevel gear-wheel 28 on the counter-shaft 29, the gear-wheel 28 also having a toothed periphery 30, meshing with the teeth 31 of the rack-bar 26. This rack-bar 26 is reciprocated by means of the service foot-lever 32, extended to the outside of the pedestal-support 15.

It will be observed that the rack-bar 26 is withheld from movement by the locking-pawl 25, engaged over it, and as the said rack-bar 26 is geared to the shaft 17 the cash-receptacle is locked in its closed position, the pawl being thus held engaged by the spring 33 on the presser-rod 23, and this spring 33 normally causing the pawl to tend to engage the rack-bar.

In order to open the cash-receptacle 16, it is necessary first to remove the service-lock A by raising manually the lever 20, which effects a release of the locking-pawl 25 from the rack-bar 26, the push-arm 22 engaging and holding the presser-rod 23 depressed, as shown by the dotted lines in Fig. 2, thus holding the parts in an unlocked position. The operator then places the foot upon the lever 32 and pushes up, reciprocatively, the rack-bar 26, which rotates the shaft 17 and also the cash-receptacle 16, mounted thereon, causing said receptacle to swing out into an open position, as shown in Fig. 1. As this cash-

receptacle thus swings outwardly it engages against the end of the lever 20 in the plane of its traverse and dislodges the push-arm 22 from the presser-rod 23, which permits the spring 33 to raise said rod and to engage the locking-pawl 25 over the rack-bar 26 when the latter arrives at its lowermost position and the service foot-lever 32 is released.

It will be observed that as the cash-receptacle shaft 17 is sensitively mounted upon ball-bearings, the cash-receptacle swings easily, and thus it normally tends to close by virtue of the downward tendency of movement of the rack-bar 26, which may be weighted, as shown at 35, and which when released by the lever 32 in moving downward rotates the shaft 17 in a direction opposite to that when the cash-receptacle is caused to assume an open position.

It is evident from the foregoing that the cash-receptacle tends to close and lock itself closed and that the operator must first manipulate the lever 20 and the foot-lever 32 before the cash-receptacle can be opened. Thus a receptacle for the cash is provided of a character insuring temporary safety, as it is constantly closed and locked except when actually in use, which receptacle may quickly and readily be unlocked and caused to assume an open position. By virtue of the provision of the unlocking hand-lever 20 and the foot-lever 32 it is apparent that the cash-receptacle cannot be inadvertently opened, as it requires two distinct movements.

Having thus described the service mechanism for locking and unlocking the cash-receptacle and swinging it into and out of use during the usual routine operations of the daily business, I will now describe the emergency locking mechanism, which accomplishes certain results when danger from robbery is imminent or threatened. This emergency mechanism, (designated at B,) as stated, consists of a locking-pawl 36, pivoted at 37 and connected with a lock-arm 38, the end of which bears loosely against the end of a trip-lever 39, of bell-crank form, pivoted at 40. A spring 41 bears against the lock-arm 38 and normally tends to force the pawl 36 into engagement over the end of the rack-bar 26, but is withheld by the engagement with the trip-lever 39 in a normal condition of things. A pull-rod 43 is connected to the free outer end of the trip-lever 39, which rod is secured at its lower end to an emergency foot-lever 44. An alarm mechanism is designated at 45, normally withheld from action by the pawl 46, engaging the teeth of the ratchet-wheel 47, which pawl is withdrawn by the movement of the trip-lever 39. Access to the interior of the pedestal-support 15 is had only through the screw-door 48, which is always kept securely locked and the key kept in some place remote from the place of business in which the cash-receptacle is located.

It is evident, if the apparatus is not in use, that the cash-receptacle is in a closed posi-



tion and locked by the service locking mechanism. Upon the slightest intimation or apprehension of danger from a "hold-up" or robbery the person in charge of the cash has only to depress the emergency foot-lever and thus pull down upon the pull-rod 43 and dislodge the lower end of the trip-lever 39 from engagement with the lock-arm 38, permitting the spring 40 to force the locking-pawl 36 into engagement with the end of the rack-bar 26. When this is accomplished, the cash-receptacle is locked permanently by the emergency locking mechanism, and this lock cannot be removed except by obtaining an entrance to the interior of the pedestal-support 15. It is manifest that under such conditions intimidation of the employees in charge is fruitless, as the key for unlocking the screw-door 48 to obtain access and manually remove the permanent lock is not in the possession of any one within the business-house.

As daylight robberies can only be effected with celerity and in the shortest possible time, it is evident that the thieves have not the requisite time to force an entrance to the pedestal-support 15 and manually remove the lock. Further, when the trip-lever 39 moves, the pawl 46 is withdrawn from engagement with the alarm mechanism 45 and the gong 49 gives notice of the attempted robbery.

If the cash-receptacle is open, the person in charge simply removes his foot from the service foot-lever 32, the cash-receptacle instantly swings closed, and the emergency locking mechanism is applied by the emergency foot-lever 44.

In the construction and arrangement just described it is evident that the cash-receptacle is maintained in an extended and open position only when the foot is upon the service foot-lever 32, but of course I do not desire to be understood in each instance as having confined myself to such manner of operation.

It will be apparent that the emergency locking mechanism is applied by a simple and instantaneous movement of the foot which does not interfere with the throwing up of the hands in compliance with the usual command of the thieves.

It will be understood that the cash-receptacle operates through an opening in one half of the front of the sheathing-box 19, the other half of which is closed.

In Fig. 8 I have shown means, the operation of which is initiated electrically, for applying the emergency locking mechanism from any part of the business-house at points remote from the cash-receptacle. The mechanism for this purpose consists of a push-rod 50, the lower end of which is positioned directly over the upper end of the trip-lever 39, said push-rod 50 being surrounded by a coiled spring 51, which tends to force the push-rod 50 forcibly into contact against the said end of the trip-rod 39. A pivoted latch 52 normally engages the notched upper end of the push-rod 50 and holds it elevated against the

resistance of the spring 51. A pivoted armature 53, connected by intermediate rods 54 with the latch 52, is operated by the electromagnets 55, the circuits of which lead to several points remote from the cash-receptacle. Thus, for instance, at some point remote from the cash-receptacle the emergency locking mechanism may be applied by some employee upon the slightest intimation of danger, and push-buttons may be distributed about the interior of the business-house to close the electromagnet-circuit and operate the emergency locking mechanism and sound the alarm.

When the improved apparatus is adopted, then daylight robberies will be prevented, as thieves will be deterred from attempting the impossible.

Having thus described my invention, what I claim as new therein, and desire to secure by Letters Patent, is—

1. An apparatus for securing the funds of the day of a bank or business-house against robbery consisting of a rotatably-mounted cash-receptacle, a sheathing therefor within which the cash-receptacle normally tends to remain when not in use, service locking mechanism for locking the said cash-receptacle in such closed position, service mechanism for removing such service-lock and for swinging the cash-receptacle into an open position, an emergency-lock normally withheld from locking engagement but adapted to engage and lock the cash-receptacle in a closed position and emergency mechanism for initiating the operation of the emergency-lock whereby a permanent locking is effected.

2. An apparatus for securing the funds of the day of a bank or business-house against robbery consisting of a rotatably-mounted cash-receptacle, a sheathing-box therefor, means which cause the cash-receptacle to tend to remain, when not in use, within the container, a supporting-pedestal upon which the cash-receptacle is mounted, means for obtaining access to the supporting-pedestal located at a point remote from the bank or other business-house, service locking mechanism for locking the said cash-receptacle in its closed position, service mechanism for removing such service-lock and for swinging the cash-receptacle into an open position, which service lock and mechanism is disposed within the interior of the pedestal, means for operating the service mechanism from the exterior of the pedestal, an emergency-lock normally held from locking engagement but adapted to engage and lock the cash-receptacle in a closed position and emergency mechanism for operating the emergency-lock whereby a permanent locking is effected, said emergency lock and mechanism being disposed within the pedestal, together with means for operating said emergency-lock to lock the same from the exterior of the said pedestal.

3. In an apparatus of the character described a rotatable cash-receptacle, a sheath-



ing-box within which the said receptacle normally tends to remain when not in use and means for locking and unlocking said cash-receptacle and causing it to swing into an open position.

4. In an apparatus of the class described the combination of a rotatable cash-receptacle, a sheathing-box within which the said receptacle normally tends to remain when not in use, a supporting-pedestal upon which the cash-receptacle is mounted, means for obtaining access to the supporting-pedestal located at a point remote from the bank or other business-house, means for applying permanent or temporary locks interchangeably for the cash-receptacle and mechanism for accomplishing said application operated from the exterior of the pedestal.

5. In an apparatus of the character described a rotatable cash-receptacle, a sheathing-box within which the said receptacle normally tends to remain when not in use, a service-lock and mechanism for withdrawing said lock and causing the cash-receptacle to swing into an open position together with an emergency-lock, mechanism for operating said lock to lock the cash-receptacle and an alarm operated simultaneously with the application of the emergency-lock.

6. In an apparatus of the class described the combination of a rotatably-mounted cash-receptacle, a sheathing-box within which the said receptacle remains when not in use, means for causing the said receptacle to assume a closed position, a pedestal upon which the receptacle is mounted, means for obtaining access to said pedestal located at a point remote from the bank or other business-house, a service-lock which normally locks the cash-receptacle in its closed position, manually-operated means for withdrawing said service-lock and releasing the cash-receptacle, service mechanism pedally operated to swing the cash-receptacle into an open position and an emergency-lock together with emergency locking mechanism pedally operated from the exterior of the casing to apply a permanent lock to the cash-receptacle in a closed position.

7. In an apparatus of the class described the combination of a rotatably-mounted cash-receptacle, a sheathing-box within which the said receptacle remains when not in use, means for causing the said receptacle to assume a closed position, a pedestal upon which the receptacle is mounted, means for obtaining access to said pedestal located at a point remote from the bank or business-house, a service-lock which normally locks the cash-receptacle in its closed position, manually-operated means for withdrawing said service-lock and releasing the cash-receptacle, the operating-lever of which is extended into the path of the cash-receptacle whereby the service-lock is applied by the cash-receptacle when it swings outwardly, service mechanism pedally operated to swing the cash-receptacle

into an open position and an emergency-lock together with emergency locking mechanism pedally operated from the exterior of the casing to apply a permanent lock to the cash-receptacle in a closed position.

8. In an apparatus of the character described the combination with a rotatable cash-receptacle of a sheathing-box for said receptacle, a pedestal upon which the said cash-receptacle is mounted, a service-lock for holding the cash-receptacle in a closed position consisting of a pivoted lever and spring-pressed locking-pawl, a lever operating a rack-bar together with intermediate gearing mechanism operated by the rack-bar to swing the cash-receptacle into an open position, whereby the service-lock is removed by the first-mentioned lever, the arm of which extends into the path of the swinging cash-receptacle and is engaged thereby to automatically apply the service-lock.

9. In an apparatus of the character described the combination with a rotatable cash-receptacle of a sheathing-box therefor, a pedestal upon which the cash-receptacle is mounted, means for obtaining access to said pedestal located at a point remote from the bank or the business-house, an emergency-lock which holds, when applied, the cash-receptacle in a closed position, which lock is normally disengaged when the apparatus is in service use and means for applying said emergency-lock from the exterior of the pedestal upon intimation of danger.

10. In an apparatus of the character described the combination with a rotatable cash-receptacle of a sheathing-box therefor, a pedestal upon which the cash-receptacle is mounted, means for obtaining access to said pedestal located at a point remote from the bank or business-house, and emergency-lock which holds, when applied, the cash-receptacle in a closed position, which lock is normally disengaged when the apparatus is in service use and means for applying said emergency-lock from the exterior of the pedestal together with an alarm simultaneously operated with the application of the emergency-lock.

11. In an apparatus of the character described the combination with a rotatable cash-receptacle and shaft therefor of a sheathing-box for said receptacle, a pedestal upon which the receptacle is mounted, a service-lock therefor, service mechanism for swinging the cash-receptacle into an open position consisting of a foot-lever operated from the exterior of the pedestal, a rack-bar moved upwardly by said foot-lever, gearing between the rack-bar and the shaft of the cash-receptacle, the service-lock consisting of a pawl engaging the end of the rack-bar and means for withdrawing said lock operated from the exterior of the pedestal together with an emergency-lock consisting of a pawl also adapted to engage the end of the rack-bar, a pivoted trip-lever withholding the locking-pawl aforesaid from engagement and an



emergency foot-lever operated from the exterior of the pedestal which is connected with the switch-lever, said locking mechanism and lock being disposed within the pedestal.

5 12. In an apparatus of the character described the combination with the rotatable cash-receptacle of an emergency-lock therefor and means for swinging the cash-receptacle into an open position, said emergency-lock and mechanism for operating the same  
10 consisting of an engaging pawl, a trip-lever withholding said pawl from engagement and a foot-lever operated from the exterior of the pedestal upon which the cash-receptacle is  
15 mounted.

13. In an apparatus of the character described the combination with the rotatable cash-receptacle of an emergency-lock therefor and means for swinging the cash-receptacle into an open position, said emergency-lock and mechanism for operating the same  
20 consisting of an engaging pawl, a trip-lever withholding said pawl from engagement, a foot-lever operated from the exterior of the pedestal upon which the cash-receptacle is  
25 mounted and means for obtaining access to said pedestal located at a point remote from the banking-house or other place of business together with an alarm mechanism operated  
30 by the trip-lever simultaneously with the engagement of the emergency-lock.

14. In an apparatus of the character described the combination with a rotatable cash-receptacle and sheathing-box therefor of a  
35 pedestal upon which the cash-receptacle is mounted, an emergency-lock for said cash-receptacle disposed within the pedestal, means for obtaining access to said pedestal located at a point remote from the house or other  
40 place of business, mechanism for applying the emergency-lock also disposed within the pedestal and an electro magnet or magnets adapted, when energized, to initiate the operation of the locking mechanism whereby  
45 the emergency-lock is applied together with

an electric circuit or circuits, including a source of current-supply, leading to a point or points in the banking-house or other place of business, relatively remote from the cash-receptacle.

15. In an apparatus of the character described the combination with a rotatable cash-receptacle and sheathing-box therefor of a pedestal upon which the cash-receptacle is  
50 mounted, an emergency-lock for said cash-receptacle disposed within the means for obtaining access to said pedestal located at a point remote from the banking-house or other place of business, mechanism for applying the emergency-lock also disposed within the pedestal  
60 and an electro magnet or magnets adapted, when energized, to initiate the operation of the locking mechanism whereby the emergency-lock is applied together with an electric circuit or circuits, including a source of  
65 current-supply, leading to a point or points in the banking-house or other place of business, relatively remote from the cash-receptacle and an alarm operated to sound simultaneously with the engagement of the emergency-lock.  
70

16. In combination the sheathing-box, the rotatable cash-receptacle with means for rotating it, the emergency-lock comprising the locking-pawl tending normally to hold the  
75 cash-receptacle against movement, the trip-lever for holding said locking-pawl out of locking position and adapted to be operated to release the same, an armature adapted to move said trip-lever, a magnet for attracting  
80 said armature, and a circuit or circuits from said magnet to points in the banking-house or other place of business relatively remote from the cash-box, substantially as described.

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

PHINEAS F. KING.

Witnesses:

CHAS. C. BULKLEY,  
L. M. BULKLEY.