

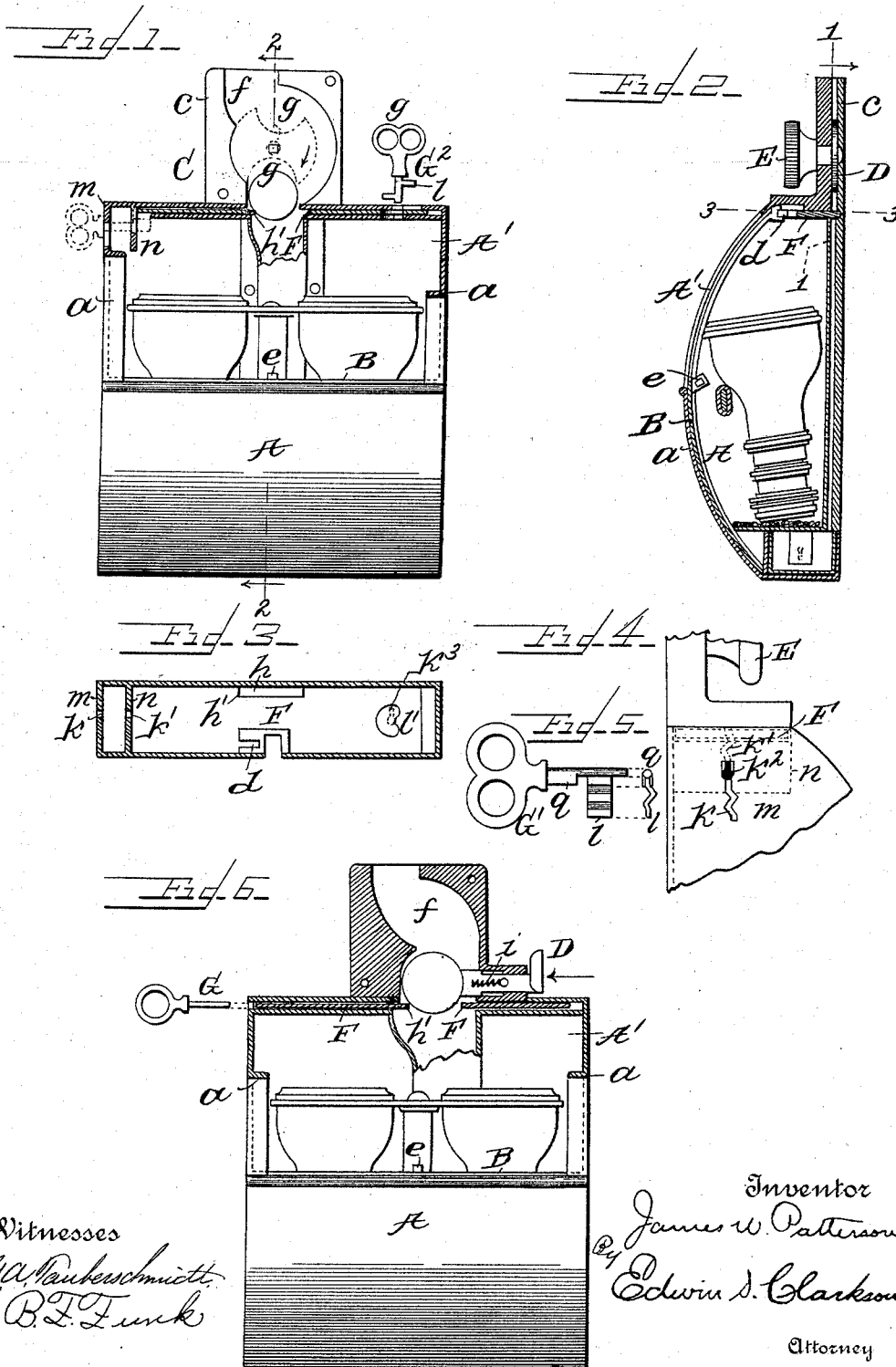
(No Model.)

2 Sheets—Sheet 1.

J. W. PATTERSON.  
APPARATUS FOR RENTING OPERA GLASSES.

No. 526,635.

Patented Sept. 25, 1894.



Witnesses

G. A. Pauberschmitt  
B. F. Funk

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Attorney

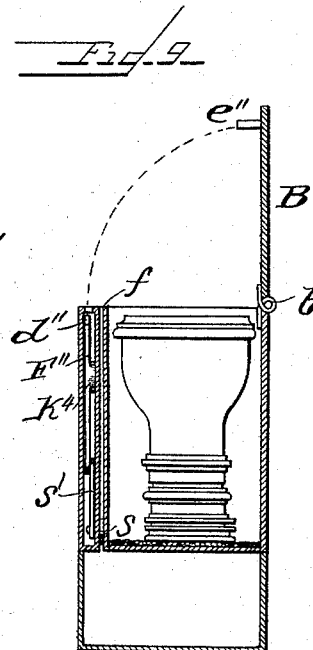
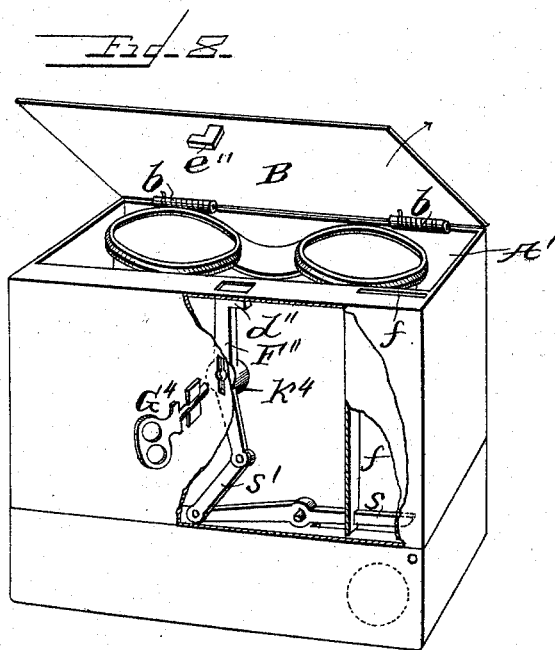
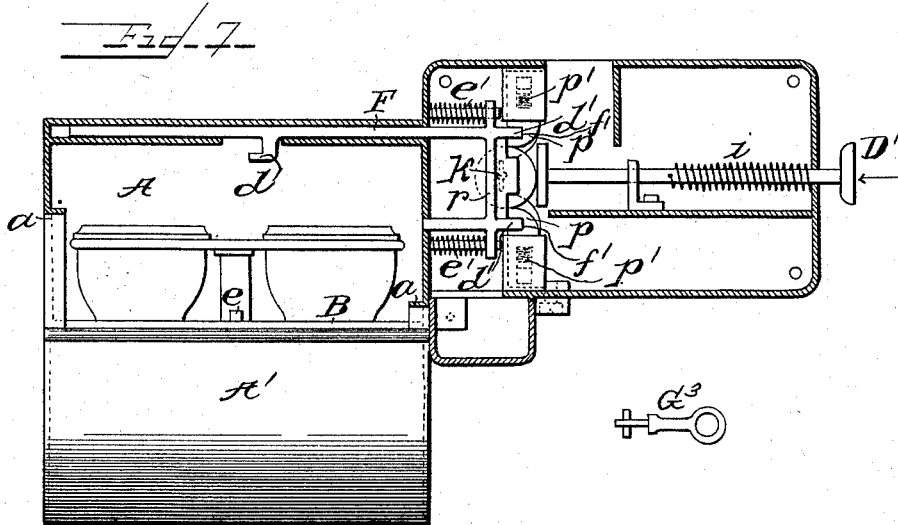
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# UNITED STATES PATENT OFFICE.

JAMES WILLIAM PATTERSON, OF NEW YORK, N. Y.

## APPARATUS FOR RENTING OPERA-GLASSES.

SPECIFICATION forming part of Letters Patent No. 526,635, dated September 25, 1894.

Application filed December 23, 1889. Serial No. 334,642. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES WILLIAM PATTERSON, a resident of the city, county, and State of New York, have invented certain new and useful Improvements in Apparatus for Renting Opera-Glasses, &c., of which the following is a specification.

This invention relates to rental boxes so called, for use in theaters or auditoriums for renting opera-glasses, fans or other articles to persons in the audience automatically upon the insertion into the apparatus of a prescribed coin.

The object of the invention is to provide means for practically insuring the return of the opera-glass or other rented article to the box from which it was taken, or for facilitating the detection of the purloining or carrying away of the opera-glass or other article.

To this end the invention provides a construction of coin-actuated or coin-released lock for normally holding the box closed, which upon being unlocked by the insertion of a coin will remain unlocked until it is relocked by the use of a special key which will be furnished for that purpose to the attendant who has charge of the boxes; also in constructing the lid of the box to have a normal tendency to open, either by its own weight or by the application to it of the tension of a spring, so that upon the unlocking of the box by a coin this lid shall open and render visible the interior of the box, and by reason of the construction of the lock above referred to it cannot be closed or fastened by any one unprovided with the requisite special key. It results from my invention that if a person who has rented an opera-glass be disposed to carry it away with him, he will be unable to close the box in order to conceal the theft, and the absence of the opera-glass must be apparent to any one by reason of the open condition of the box which renders its interior plainly visible. The fact that the theft cannot thus be concealed is calculated to and has in practice been found to serve as an important deterrent to those who otherwise would be disposed to carry away the opera-glasses. In case of any theft of the glasses their absence can be readily detected by the watchfulness of the attendants as the audience is preparing to depart, or during its departure, and

such detection can usually be effected in time to effect the recovery of the glasses which are being taken away. After the audience has left the theater an attendant provided with the special key examines those rental boxes which are open and after inspecting the glasses therein he closes the lid of each and relocks the coin-released lock by the use of this special key, thereby leaving them ready for the next operation.

I will proceed to describe some different means for applying my invention with reference to the accompanying drawings, wherein—

Figure 1 is a front elevation of one form of rental box partly in vertical section in the plane of the line 1—1 in Fig. 2. Fig. 2 is a vertical transverse section thereof in the plane of the line 2—2 in Fig. 1. Fig. 3 is a horizontal section on the line 3—3 in Fig. 2. Fig. 4 is a fragmentary end elevation of the left hand end. Fig. 5 is a side and end view of the special key to be used with the construction of lock shown in Fig. 4. Fig. 6 is a fragmentary front view in vertical section similar to Fig. 1 and showing a modified construction of lock. Fig. 7 is a view similar to Fig. 1 but showing a modified construction of lock. Fig. 8 is a sectional front view of a different construction of box, and Fig. 9 is a vertical transverse section thereof.

Referring to the several drawings let A designate the box or receptacle for containing the opera-glass or other article to be rented. The box is formed with a large opening A' through which the opera-glass may be inserted or removed, and this opening should be so placed and of such size that the interior of the box may be so readily visible through it that the presence or absence of the opera-glass in the box may be readily discovered at a glance. For this purpose it is preferable to form the opening A' in the front of the box and at its upper side, as shown in Figs. 1 and 2.

A lid or cover B is provided to close the opening and this cover is movable out of the way to expose the opening in any known manner common with box covers. Preferably it is made in the form of a sliding plate, which when released drops down by its own weight into the space behind the lower front portion

of the box, being guided in its up and down sliding movements by grooves or guide ways *a* at the sides. It may however be a hinged lid, as shown in Figs. 8 and 9, opening upwardly and backwardly. In either case, or however it be constructed, the lid is provided with means for causing it normally to open, these means being its own weight in the case of a vertically sliding plate as in Fig. 1, or being a spring tending to throw the cover open, such as the coiled springs *b b* at the hinge in Figs. 8 and 9.

When the cover is closed, it is held so by a coin-released lock C. Numerous constructions of such locks are already known in the art, and the particular construction of the lock in so far as its operation in unlocking upon the insertion of a coin is concerned, is immaterial to my invention. The particular construction of lock shown in Figs. 1, 2, 3 and 4 is one invented by A. H. Fancher and claimed in his application for patent filed July 5, 1889, Serial No. 316,506. In this lock the lock case *c* incloses within it a rotatively mounted notched disk or carrier wheel *D*, the spindle of which extends out at the front of the case and has fixed to it a knob *E*, or other means of turning it. Beneath this disk and out of contact with it is a sliding plate *F* the front side of which carries a fastening bolt or locking catch *d*, which normally enters a hasp *e* formed on the sliding door *B*. Normally the turning of the knob *E* does not influence the plate *F*, but if a coin be dropped into the coin-slot *f* and the knob be then turned toward the right, one of the notches *g* of the carrier wheel will receive the coin and carry it around and the coin will drop into a notch *h* in the back of the plate *F* and against the shoulder *h'* at the side of this notch, as shown in Fig. 1, and by the continued turning of the disk its motion will be communicated through the coin to this shoulder and the plate be thrust or slid toward the left sufficiently to move the bolt *d* out of the hasp *e* and leave the lid *B* unsupported, whereupon the lid falls and opens the box.

The construction of lock shown in Fig. 6 is one invented by C. S. Patterson and claimed in his patent, No. 423,947, granted March 25, 1890. It has the same plate *F* engaging the lid in the same manner. Upon inserting a coin it runs down the coin-conduit *f* and stands in front of a plunger *D'* which is pressed to the right by a spring *i*. The operator then presses in this plunger whereupon it pushes the coin before it and communicates the thrust through the coin to the shoulder *h'* on the plate *F*, thereby displacing this plate to the unlocked position.

With either of these two constructions of coin-released lock when applied as the coin lock of my invention, the lock when once unlocked remains so indefinitely, and while it is in this condition there is no means for fastening the lid *B* in its closed position. If a person were to raise the lid to close the open-

ing the lock would not re-engage the lid and hold it closed, and the lid as soon as it was let go would fall open again. Hence a person wishing to close the box to conceal the absence of the opera-glass which he had taken would be unable to do so.

In order to relock the box it is necessary to push or slide the plate *F* toward the right again while holding the door *B* in its closed position. As this plate *F* is entirely inclosed in the casing of the lock it is hence inaccessible to an ordinary person. To provide the authorized attendant with means for relocking the box a special key is made which may be thrust through a suitable key-hole or opening in the casing and by the proper manipulation may be made to displace the plate to its locked position. The simplest construction of such a key is that shown at *G* in Fig. 6 where it consists simply of a slender pin or wire which may enter a hole *k* in the end of the box and in line with the left hand end of the plate *F*. The hole *k* is so small as to be imperceptible to an ordinary observer and its presence remains unknown to most users of the box. By inserting the key in this hole and pushing against it the plate *F* is slid over and the lock is relocked. This construction has been found to give sufficient security for practical purposes. If, however, a more secure construction, or one more difficult to pick, is desired, one of the means shown in Figs. 1 and 3 may be adopted. The upper part of the box, in addition to the usual end plate *m* through which a key-hole of the shape shown at *k* in Fig. 4 is made, has an inner or false end plate *n*, through which is formed an inverted reproduction of the same key-hole as shown in dotted lines in Fig. 4. The key *G'* is shown in Fig. 5. It has a zig-zag wing *l* constructed to enter the zig-zag key-hole *k* and of such width as to be capable of turning in the space between the plates *m* and *n*. The key is thrust through the outer key-hole and its wing *l* is turned half round within this space until it reaches the position shown in dotted lines in Fig. 4, or in coincidence with the inner key-hole *k'*. The key has a thickened boss *q*, which is now in coincidence with an upward extension *k<sup>2</sup>* of the key-hole *k*, and the key may now be thrust in axially, its wing *l* entering the inner key-hole *k'* and its outer portion encountering the plate *F* and pushing the latter before it until it is brought to its locked position. The key is now in the position shown in dotted lines in Fig. 1. It may then be withdrawn.

The key *G<sup>2</sup>* shown at the right in Fig. 1, is thrust downwardly through the plate shown in dotted lines at *k<sup>3</sup>* shown in Fig. 3, and is then turned a half revolution until it stands in the position shown in Fig. 1, its wing *l* acting against a projection *l'* on the plate *F* and thrusting it toward the right.

Fig. 7 shows a box provided with a construction of coin released lock invented by me being of substantially the same construc-

tion shown in my application for patent filed September 28, 1889, Serial No. 325,421. The coin on being dropped into the conduit *f* falls in front of the plunger *D'* which is normally held back by its spring *i*. On pressing in this plunger the coin is thrust between two projecting tumblers *p p*, and presses them apart, escaping from between them and falling into the usual money box or receptacle beneath. The bolt *F* is constructed as a sliding frame having teeth *d'* which are pressed toward the tumblers by springs *e'*. The tumblers normally restrain this frame from moving to the right, but upon being thrust apart notches *f'* formed in the tumblers are moved into coincidence with the teeth or projections *d'* and the frame *F* is permitted to move toward the right under the impulse of its springs *e'*. In so moving it carries its locking bolt *d* out of the eye or hasp *e* on the lid and the latter falls. The bolt or frame *F* remains in its unlocked position until restored or relocked by inserting a key *G*<sup>3</sup> through a key-hole *k* shown in dotted lines and turning this key so that its wing shall act against the portion *r* of the frame *F* and thrust it toward the left. The teeth *d'* are thus moved out of the notches *f'* and the tumblers *p* being thus freed are pressed by their springs *p'* back into their normal positions, ready for the next operation.

Figs. 8 and 9 (which are also shown in my application filed March 15, 1889, Serial No. 303,465 for improvements in attachments for theater chairs) show a box having a coin released lock which operates by the weight or momentum of a coin dropped into it. The hinged lid *B* is provided with a fastening projection or hasp *e''* which is locked by being engaged by a fastening hook *d''* on a catch lever *F''*. When a coin is dropped into the conduit *f* it falls therethrough and strikes the end of a lever *s* which it tilts to the position shown in dotted lines and escapes beneath it. The tilting motion is communicated from the lever *s* through a link *s'* to the lever *F''* which it displaces sufficiently to carry the tooth *d''* out of engagement with the hasp *e''*, whereupon the cover flies open to the position shown in Fig. 9. If an attempt be made to close the cover the latter will not remain closed because the displaced lever *F''* will not engage the hasp *e''*. Even if the lever *F''* should by chance have resumed its original position it could not re-engage the hasp because the squared bottom of the latter would strike the square top of the lever and prevent the cover being kept closed. When the attendant has inspected the glasses

he will close down the cover and by inserting a key *G*<sup>4</sup> through a key-hole in the front of the box and into engagement with a socket *k*<sup>4</sup> in the pivot of the lever *F''* he will tilt this lever to the position in which it engages and holds the hasp on the cover.

Rental boxes of the character to which my invention relates are usually fastened to the backs of the theater chairs in order that they may be directly in front of and within convenient reach of the persons seated in the chairs next behind them. They may, however, be otherwise mounted or located as circumstances or preference may dictate.

I claim as my invention the following-defined novel features, substantially as hereinbefore specified, namely:

1. A rental box having a lid tending always to open, combined with a coin-released lock by which the lid is normally fastened in its closed position, constructed when unlocked to remain so and be inoperative to reengage or fasten the lid until relocked by a special manipulation, and constructed to be normally inaccessible within its casing and rendered accessible for such manipulation only by the use of a special key, whereby when a box has been opened by the insertion of a coin it remains open and its interior remains visible, until relocked by a person provided with the special key.

2. The combination, with a rental box having a lid tending to open, of a coin-released lock for normally fastening said lid closed, having a bolt or catch engaging said lid which bolt or catch is inclosed in the lock casing and inaccessible from the exterior except through the medium of an inserted coin, by which it may be displaced to unlock the lid, and by the insertion through a key-hole in the casing of a special key by which it may be displaced to relock the lid.

3. The combination with a rental box having a lid tending to open, of a coin-released lock for normally fastening said lid closed, said lock having a casing formed with a key-hole and coin conduit, and comprising a bolt or catch inclosed in said casing and adapted to be displaced to unlock the lid by the insertion of a coin, and a special key constructed to be inserted through said key-hole to displace the bolt or catch to its locked position.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JAMES WILLIAM PATTERSON.

Witnesses:

GEORGE H. FRASER,

CHARLES K. FRASER.