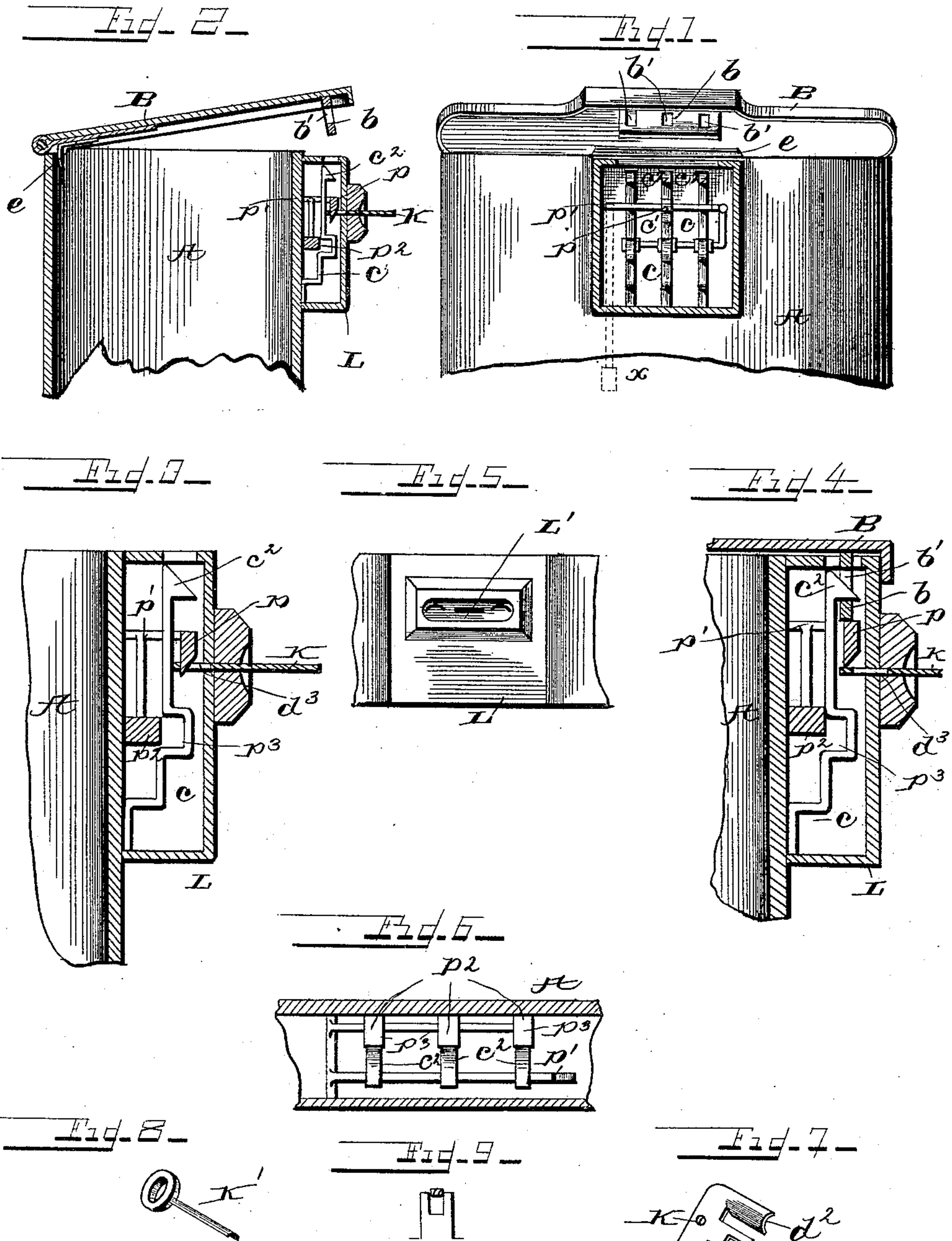


(No Model.)

J. PUSEY.
LOCK.

No. 429,795.

Patented June 10, 1890.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSHUA PUSEY, OF LIMA, PENNSYLVANIA.

LOCK.

SPECIFICATION forming part of Letters Patent No. 429,795, dated June 10, 1890.

Application filed February 28, 1889. Serial No. 301,513. (No model.)

To all whom it may concern:

Be it known that I, JOSHUA PUSEY, a citizen of the United States, residing at Lima, in the county of Delaware and State of Pennsylvania, have invented certain new and useful Improvements in Locks for Boxes and other Articles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings.

My invention relates to locks for boxes or other receptacles or articles; and it consists in certain improved constructions of locking and key-trapping mechanism whereby the key used in the act of unlocking will be trapped and held until released by other mechanism operated by suitable means.

My improved lock is particularly adapted to be used in connection with boxes permanently secured in suitable places in theaters, concert-halls, or other places of amusement for the purpose of forming a secure receptacle for articles intended to be hired or sold—such as opera-glasses, fans, bonbons, &c.—it being designed that the keys should be hired by persons desiring to use the contents of the boxes, thus enabling one attendant to control any number of boxes.

In order that my invention may be clearly understood, I have illustrated it in the accompanying drawings and will describe it in the specification following, and point it out more particularly in the claims at the end thereof.

In the drawings, Figure 1 is a partial front view of a box provided with my improved lock, the covering-plate being removed. Fig. 2 is a sectional side view of the same. Figs. 3 and 4 are enlarged sectional views of the lock. Fig. 5 is a front view of the escutcheon-plate. Fig. 6 is an enlarged front view of the interior of the lock. Figs. 7 and 8 represent keys, the former to unlock the box and the latter to release the key. Fig. 9 is a modification of the middle limb of the key shown in Fig. 7.

Similar letters of reference indicate identical parts throughout.

A represents a box or other receptacle, which may be permanently secured in place or not, as desired, for holding opera-glasses or other articles. A spring-lid B is pivotally secured

to the box and is preferably provided with three slots or openings *b*.

L represents my improved lock firmly secured in a suitable place to the box. This lock is provided with an opening *c* for the reception of the hasp *b*, and also with one or more spring-catches *c'*, having tongues *c²*, beveled or rounded on one side to engage the opening *b'* of the hasp when the lid is closed. These spring-catches I prefer to make of the form and number shown in the drawings; but their number and shape may be varied as desired. It will be seen that when the lid is closed the hasp coming in contact with the beveled tongues *c²* will force them back until they reach a point opposite the opening *b'*, when they will spring forward and lock the box, as shown in Fig. 4.

In order to open the box, I provide a key of a form substantially as shown in Fig. 7, having, by preference, three limbs *d d' d²*, and I provide the limb *d'* with a slot or opening *d³*. A key-hole *L'* is provided of suitable shape, as shown in Fig. 5, which may be modified to conform to the key used. When the key is inserted in the lock, the ends of the limbs bear against the spring-catches, and by exerting enough pressure the tongue *c²* will be retracted until the hasp is released, when the lid will rise by virtue of the force exerted by the spring *e*. The simplicity of this construction, however, is such as to render duplication of the keys very easy, and to avoid this I provide a device which serves to retain the key in the lock after the process of unlocking. To this end I provide a gravity or spring pawl operating and located in front of the catches *c* and preferably attached to a pivoted rod *P'*. The forward end of this pawl may be beveled or rounded, as desired, and is adapted to enter and engage the opening *d³* in the limb *d'* of the key *K* when the box is unlocked. Thus when the key is inserted in the lock the pawl will be forced upward until the opening *d³* is reached, when the said pawl will drop into the opening by force of gravity or a spring and prevent the key from being withdrawn. With this construction, however, it will be seen that a key would operate equally as well in unlocking the box if there were no opening, as at *d³*, provided, as the pawl would be

raised and the catches operated in the same manner and there would be no danger of trapping the key in the lock, thus enabling any one having a key without the opening d^3 to
 5 open the box and retain the key in their possession. To remedy this objection I attach to the bar P' one or more depending lugs P^2 , located in the rear of the spring-catches c , and which rise and fall with the pawl P . The
 10 spring-catches are provided with a recess P^3 , which is normally opposite the lug P^2 . When, therefore, the pawl P is forced upward by the key, the lug P^2 rises also, Fig. 4, and prevents the further backward movement of the
 15 catches and the consequent unlocking of the box. As soon, however, as the pawl P drops into the opening d^3 the lug also drops into its normal position, as indicated in Fig. 3, permitting the further retraction of the catches
 20 and the unlocking of the box. By this construction it will be seen that should a key be used without the slot or opening d^3 the box could not be opened. Moreover, should a key be used having the form shown in Fig. 9
 25 it would fail to engage its catch, and consequently would fail to unlock the box.

To release the key K , I provide the lock with an opening or key-hole, as at x , to receive a key K' , which is so constructed as to
 30 reach the movable bar P' and raise it until the pawl P is retracted from the opening d^3 , when the key K may be withdrawn.

It is evident that the form of keys and the details of the construction above described
 35 may be very considerably modified. Thus I may use a key capable of rotating in the lock for retracting the catches, or I may use equivalents for the pivoted bar or any number or form of catches, pawls, lugs, &c., all of which
 40 I have shown in my preferred form, but which I may vary without in any way departing from the spirit of my invention.

What I claim, and desire to secure by Letters Patent, is—

45 1. A lock provided with one or more spring-catches, a key for retracting said catches and provided with an opening, and a pawl adapted to engage said opening, thereby retaining the key in the lock, substantially as
 50 described.

2. A lock provided with one or more spring-catches, a key moving in the direction of its length for retracting said catches, and a pawl for engaging said key, substantially as de-
 55 scribed.

3. A lock provided with one or more spring-catches, a key provided with limbs equal in

number to said catches, and a pawl for engaging one of the limbs of said key, substantially as described. 60

4. A lock provided with a series of spring-catches, each acting independently of the others, a key provided with limbs for retracting said catches, one of said limbs being provided with an opening, and a pawl for en- 65 gaging said opening, substantially as described.

5. A lock provided with a series of spring-catches, each acting independently of the other, a key for retracting said catches, and a 70 pawl attached to a pivoted rod for engaging said key, substantially as described.

6. A lock provided with one or more spring-catches, a pivoted bar, a pawl and lugs attached to said bar, the said pawl being in 75 front and the lugs in rear of said catches, and a key adapted to raise and lower said pawl and lugs and to retract the spring-catches, substantially as described.

7. A lock provided with one or more spring- 80 catches, a movable bar, a pawl and lugs attached to said bar, and a key adapted to raise and lower said pawl and lugs and to retract the spring-catches, the said catches being provided with recesses normally opposite said 85 lugs, substantially as described.

8. A lock provided with one or more spring-catches, a key for retracting said catches, and provided with an opening, a pawl for en- 90 gaging said opening and retracting the key in the lock, and a releasing-key, substantially as described.

9. A lock provided with one or more spring-catches, a key for retracting said catches and provided with an opening, a pawl for en- 95 gaging said opening and retaining the key in the lock, and a key for raising said pawl out of said opening and releasing said key, substantially as described.

10. The combination of the retaining-box, 100 its lid having the hasp, the spring-catches, the key-holes, consisting of two or more independent openings, the key provided with two or more limbs, the key-locking pawl, and the opening leading to the pawl and adapted to re- 105 ceive a suitable key for releasing said pawl, substantially as described.

In testimony whereof I have hereunto affixed my signature this 27th day of February, A. D. 1889.

JOSHUA PUSEY.

Witnesses:

JOHN NOLAN,
 FRANCIS S. BROWN.