June 20, 1933. N. J. SAAD 1,914,983

COIN OPERATING LOCK

Filed June 20, 1932

Fig. 1

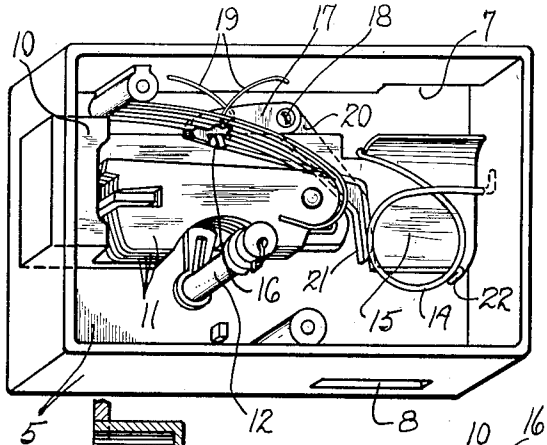


Fig. 2

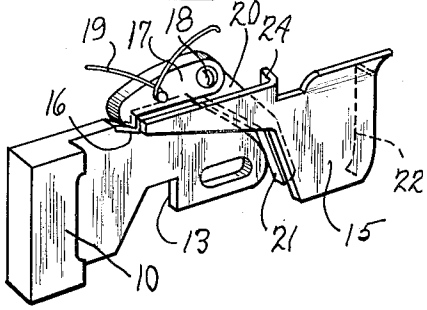


Fig. 3

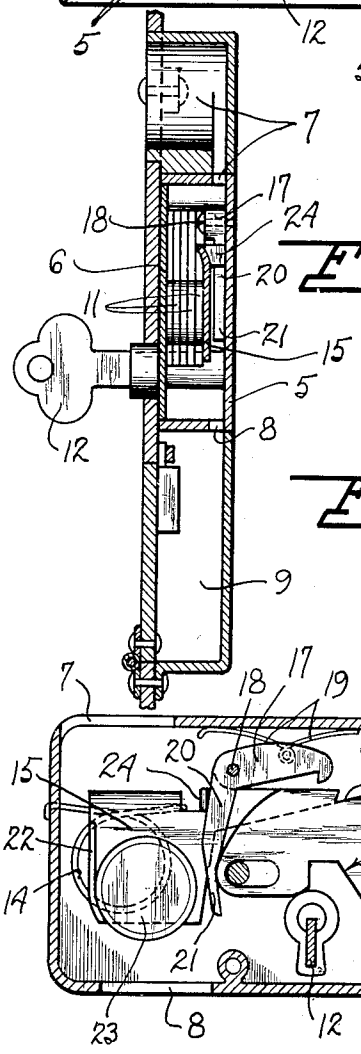


Fig. 4

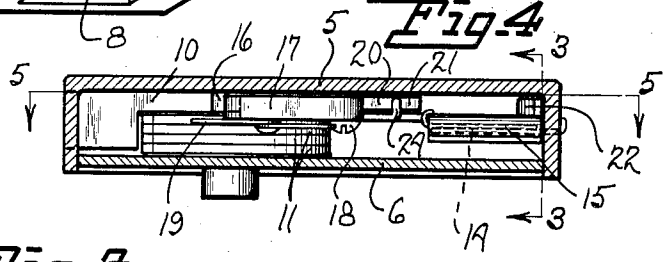


Fig. 5

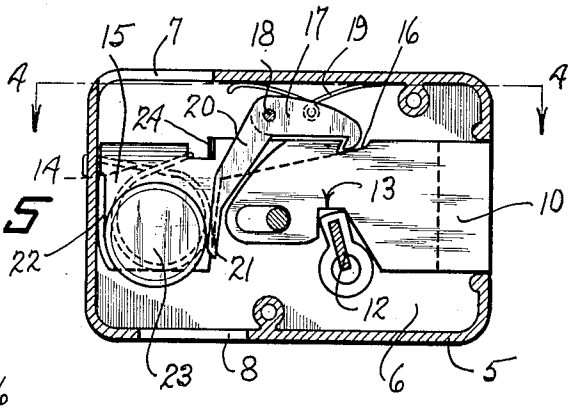


Fig. 6

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UNITED STATES PATENT OFFICE

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COIN OPERATING LOCK

Application filed June 20, 1932. Serial No. 618,166.

My invention relates to coin operating locks and the principal objects of the invention are to provide a lock adapted for use on lockers and the like and embodying means whereby the lockers cannot be locked without the introduction of a coin into the lock. Further objects are to provide novel means for releasing a coin after it has served its purpose as an agency in locking the device, novel means for retaining the lock in the retracted or unlocked position, and other novel features of construction and arrangement as hereinafter described.

In the drawing; Figure 1 is a view in perspective of the lock with its cover plate removed; Fig. 2 is a detail view in perspective of the bolt and associated parts; Fig. 3 is a view in transverse vertical section of the lock taken on a broken line 3—3 of Fig. 4; Fig. 4 is a view in horizontal section taken on a broken line 4—4 of Fig. 5; Fig. 5 is a view in longitudinal vertical section taken on a broken line 5—5 of Fig. 4 with the bolt in the retracted or unlocked position; and Fig. 6 is a corresponding view showing the bolt in the outwardly projecting or locked position.

Referring in detail to the drawing, the numeral 5 designates the lock casing having a cover plate 6 secured thereto. Said casing has a slot 7 in its upper rear corner for the insertion of a coin, and a slot 8 in its lower rear portion for the passage of the coin into a receptacle 9 shown in Fig. 3. The usual bolt 10 with sliding levers 11 is mounted within the casing in the regular manner. A key 12 is arranged to be passed into a keyhole and into engagement with a notch 13 in said bolt for moving the bolt outwardly to the locked position and inwardly to the unlocked position as is understood. A loop spring 14 having one of its ends fixed to the casing and its other end fixed to the bolt may be used to assist the key in returning the bolt to the retracted or unlocked position. The foregoing elements may be of varied design and arrangement and form no part of my invention except as they may enter into combination therewith.

My invention essentially comprises a thin tail or rearwardly extending member 15 fixed to or integral with the rear end of the bolt 10. A notch 16 is provided in the upper edge of the bolt or the tail member where same joins the bolt. A pawl or dog 17 has one of its ends pivoted to the casing 5 at 18 and its other, or hooked end, is normally retained in engagement with the notch 16 by a small spring 19 bearing against the upper flange of the casing and thus retaining the bolt 10 in the retracted or unlocked position. A depending arm 20 is fixed to the pivoted end of said pawl or dog and its lower flanged end 21 projects down into the casing and in a position where it is engaged by the edge of a coin that is dropped therein through the slot 7.

The rear end of the tail member 15 is bent outwardly to form a flange 22. Said flange together with the lower flanged end portion 21 of the pawl arm 20 form a pocket and guides for a coin 23 dropped through the slot 7 as most clearly shown in Fig. 5 of the drawings. The opposite edges of the coin engaging the flange 22 and the lower end 21 of the arm 20 provide connecting means between the tail member 15 and the dog or pawl 17 so that when the key 12 is turned a little to the right said dog is lifted free of the notch 16. The upper edge of said tail portion 15 is provided with a projecting finger 24 which engages the depending arm 20 of the dog when the bolt 10 is almost at the limit of its outward movement thus moving said depending arm forward and releasing the coin 23 which drops through the slot 8 into the receptacle 9.

It will now be apparent that a locker provided with my device can only be used through the agency of a coin dropped therein and forming a connecting means whereby the locker is locked. The locker is unlocked in the regular manner by turning the key to the left. Upon rear or retracted movement of the bolt 10 and its rear extended or tail portion 15 the dog 17 is pivotally compressed into the slot or notch 16 by the spring 19 thus retaining the bolt in the unlocked or retracted position and in readiness for use by the next person upon the insertion of a coin. Thus it will be seen that I have provided a simple, positive and effective means whereby a locker

equipped with my device cannot be used for locking articles for safe keeping therein without inserting a coin into the device at each time of such usage.

Having now described my invention, it being understood that the accompanying drawing and description are intended to show one means of reducing the principles of the invention to practice and that such changes may be resorted to therein as do not constitute a departure from the spirit and scope of the invention, what I claim and desire to secure by Letters Patent of the United States is:—

1. In a coin operating lock having a bolt adapted to be slidably moved back and forth by a key, the combination of a rear tail extension connected to the bolt and having an end flange, said bolt having a notch, a pivotally mounted pawl arranged to engage said notch whereby the bolt is retained in a retracted position, said pawl having a depending arm with a flanged lower end portion adapted to temporarily retain a coin in conjunction with the end flange of the rear tail extension whereby a coin serves as a connecting means between the pawl and the bolt and whereby the pawl is pivotally raised out of engagement with the notch in the bolt when the bolt is moved outward.

2. The combination with a lock having a bolt adapted to be moved back and forth by a key, of coin operating means comprising a pivotally mounted pawl having a depending arm, said bolt having a notch, a spring adapted to retain the pawl in engagement with said notch when the bolt is disposed in the retracted position, the bolt and the depending arm respectively having flanges spaced apart and adapted to temporarily retain a coin whereby the coin serves as an operative connecting means between the pawl and the bolt and whereby the pawl is pivotally raised out of engagement with the notch in the bolt when said bolt is moved outward.

3. The combination with a lock having a bolt adapted to be moved back and forth by a key, of coin operating means comprising a pivotally mounted pawl having a depending arm, said bolt having a notch, a spring adapted to retain the pawl in engagement with said notch when the bolt is disposed in the retracted position, the bolt and the depending arm respectively having flanges spaced apart and adapted to temporarily retain a coin whereby the coin serves as a connecting means between the pawl and the bolt and whereby the pawl is pivotally raised out of engagement with the notch in the bolt when said bolt is moved forward, and a finger on the bolt adapted to engage and pivotally move the depending arm whereby a coin is released from retention by the flanges on the bolt and depending arm.

In testimony whereof I affix my signature.

NAJEEB J. SAAD.