

L. WILLIAMS.
 COIN CONTROLLED LOCKING HOOK.
 APPLICATION FILED NOV. 28, 1911.

1,039,872.

Patented Oct. 1, 1912.
 2 SHEETS-SHEET 1.

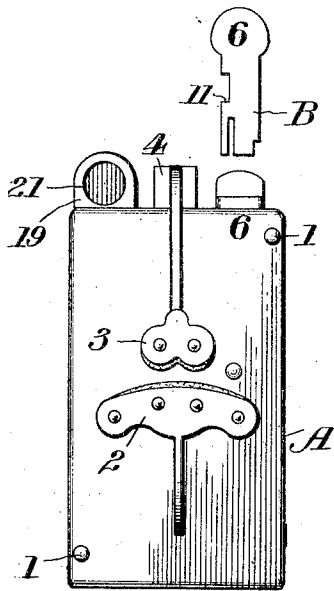


Fig. 1.

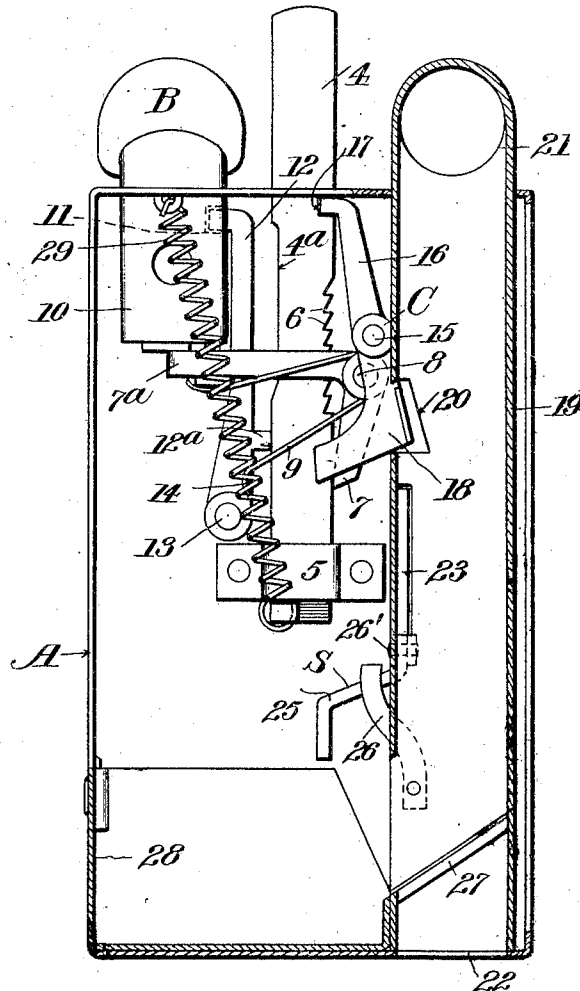


Fig. 2.

WITNESSES

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Fig. 3.

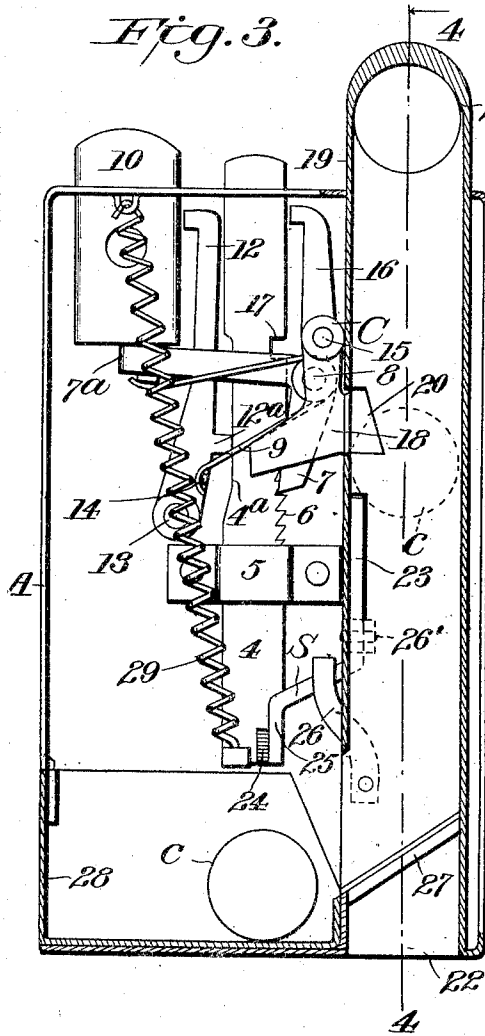
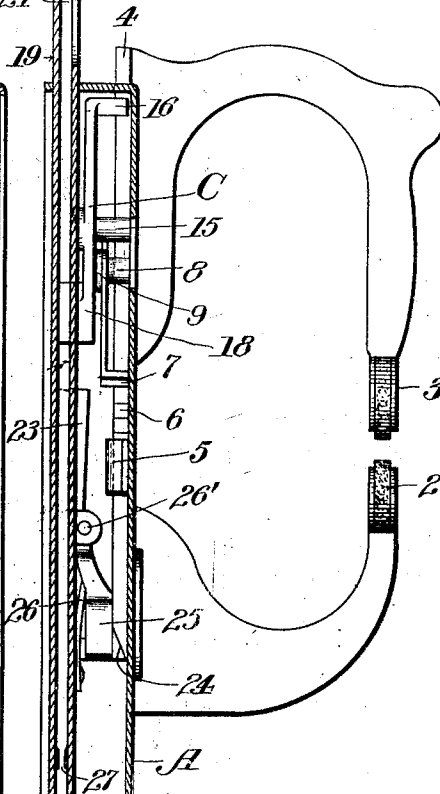


Fig. 4.



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UNITED STATES PATENT OFFICE.

LOUIS WILLIAMS, OF DENVER, COLORADO.

COIN-CONTROLLED LOCKING-HOOK.

1,039,872.

Specification of Letters Patent.

Patented Oct. 1, 1912.

Application filed November 28, 1911. Serial No. 662,870.

To all whom it may concern:

Be it known that I, LOUIS WILLIAMS, a citizen of the United States, residing at Denver, in the county of Denver and State of Colorado, have invented certain new and useful Improvements in Coin-Controlled Locking-Hooks, of which the following is a specification.

This invention comprises improvements in coin controlled locking hooks whereby simplicity of construction and reliability of operation are obtained and whereby the device cannot be used to lock an article thereto without the previous insertion of a coin or check of the proper denomination or size.

In the accompanying drawing, Figure 1 is a front view, on a small scale, of a coin controlled locking hook, embodying my invention, the hook being shown in closed position with the key removed; Fig. 2 is a rear elevation of the device, the coin chute being shown in vertical section and the parts in their normal positions; Fig. 3 is a similar view showing the hook slide in locked position, the key being removed; and, Fig. 4 is a vertical section on the line 4-4 of Fig. 3, the spring for operating the hook slide being omitted.

Referring to the drawings A indicates a casing, preferably rectangular in form, and made of sheet steel. The casing is adapted to be attached, by means of bolts 1, to a suitable support, which forms a back for the casing. A hook 2 is secured to the outer side of the casing and adapted to support a hat, coat, or other article of apparel and a movable hook 3 is adapted to grip the hat or clothing on the hook 2 when the hook 3 is in its closed or locked position. The hook 3 is mounted upon a slide 4 which projects through a suitable opening in the upper end of the casing and through a suitable guide 5 within the casing. The slide is provided with a series of teeth 6 along one edge and a pawl 7 mounted upon a pivot 8 is pressed against the edge of the slide by a spring 9 and adapted to engage the teeth 6 when the slide is moved downward. The pawl 7 has a tripping arm 7^a extending beneath a key sheath 10 which projects through the upper wall of the casing and is adapted to receive a key B. The arrangement is such that when the key is inserted and pressed downward to its full extent it will move the arm 7^a and cause the pawl 7 to move out of engagement with the edge of the rack. This

key is provided with a shoulder 11 and a pawl 12, pivoted at 13, normally extends through a suitable opening in the side of the key sheath and projects over the shoulder 11. One end of the spring 9 bears against a projection 14 on the pawl 12 and normally presses the pawl toward the slide so that a part 12^a on the pawl always bears against the adjacent edge of the slide. In the upper position of the slide, shown in Fig. 2, the pawl 12 projects into the key sheath and locks the key therein, but it will be seen from Fig. 3 that when the slide is depressed the bearing 12^a on the pawl rides into a recess or cut-away portion 4^a on the slide and permits the spring 9 to withdraw the pawl from the key sheath so that the key may be removed.

The slide is normally locked in its upper position by a balanced lever C, which is mounted upon a pivot 15. The upper arm 16 of this lever normally engages a notch 17 in one side of the slide 4 and the lower arm 18 of the lever projects into one side of a coin chute 19, through a suitable opening 20 in the chute. The sheet extends through the casing and projects above its upper end and is provided with a coin slot or opening 21 just large enough in diameter to admit a coin or check of the given denomination or size it is intended shall be used for operating the machine.

If it is intended that the machine shall be operated by five-cent pieces, dimes and pennies, which are of smaller diameter, and thinner, will pass through the opening, but these will fall out at the lower end 22 of the chute, without operating the machine. A five-cent piece, indicated at c, Fig. 3, placed in the opening 21, will strike against the arm 18 of the balanced lever and will swing the latter so as to move its upper arm 16 out of engagement with the notch 17 to release the slide. The five-cent piece will then rest in the coin chute upon a movable stop 23 as indicated in dotted lines in Fig. 3. The slide 4 and hook 3 may then be pressed downward until the hook impinges against the article of clothing upon the hook 2, and the pawl 7, engaging the teeth 6 will then lock the slide and hook in this position. As the slide moves downward a cam surface 24 on the lower end of the slide passes between the front wall of the casing and an arm 25 of a lever S which is pivoted at 26. The arm 23 of this lever constitutes the stop be-

fore mentioned, and the spring 26 bearing against the arm 25 of the lever normally holds the stop portion thereof in the path of the coin. When the cam surface on the slide engages the arm 25, the lever is rocked so as to carry stop arm 23 out of the coin chute, as shown in Fig. 4 and when this is done, the coin or check *c* drops downward through the chute, onto inclined rails 27 from which it passes into a money drawer 28, removably secured in the lower part of the casing. The rails are arranged so that coins of less thickness than a five-cent piece may drop between the rails and pass through the lower end of the chute while the five-cent piece, which is thicker, will roll upon the rails and pass into the coin receptacle. As the slide and attached hook are moved downward, the pawl 12, bearing against the edge of the slide is released from the key and the key may then be removed.

After the article has been secured in the manner above described, upon the hook, when it is desired to release the same the key is inserted in its sheath and pressed downward until it engages the trip arm 7^a and moves the pawl 7 out of engagement with the teeth on the slide. The latter with its attached hook is immediately moved upward by a spring 29 extending between the upper wall of the casing and the lower end of the slide. The article of clothing can then be removed from the lower hook. In moving upward, the cam surface of the slide passes from under the arm 25 of the stop lever S, and the spring 26 causes the upper arm 23 of said lever to again project into the coin chute to form a stop for the next coin of the proper size inserted in the machine. As the slide approaches its uppermost position, the lever 12 is forced thereby into its normal position over the shoulder 11 on the key and the balanced-coin lever C swings so that its upper end engages the notch 17 in the edge of the slide and locks the same against downward movement.

The parts are then reset for the next operation.

It will be seen from the foregoing that before the movable hook can be pressed downward to engage the clothing a coin or check of proper size must be inserted in the machine and also that until the slide is moved downward to lock the clothing the key cannot be removed from the machine. It will also be evident that in order to remove the hat or clothing the proper key must be inserted in the key sheath, and that as soon as the locking hook is released the key becomes locked in its sheath and cannot be taken out for any purpose except by the insertion of another coin or check of the proper size.

Where a number of locking hooks are employed, each casing is suitably numbered and the keys for the several casings are correspondingly numbered for identification, and as the keys are all of different design only the person holding the proper key can operate the device corresponding in number to that key.

What I claim is:—

The combination with a casing, of a coin chute and a slide within the casing, said slide having a shoulder, a spring normally holding the slide in an upper position, a coin-controlled pawl normally engaging said shoulder and projecting into the coin chute, a pivoted coin stop having a part normally projecting into the coin chute adjacent to said pawl and having a part projecting into the path of movement of the slide and adapted to be engaged thereby when the slide is depressed, means for locking said slide in engagement with said coin stop, and means for releasing said slide.

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

LOUIS WILLIAMS.

Witnesses:

P. H. KERSERLTON,
GEO. W. RICHARDS.