M. HOMMEL. COIN FREED MACHINE.

(Application filed Dec. 17, 1897.)

(No Model.) 2 Sheets—Sheet I. No. 612,729.

Patented Oct. 18, 1898.

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2 Sheets—Sheet 2.

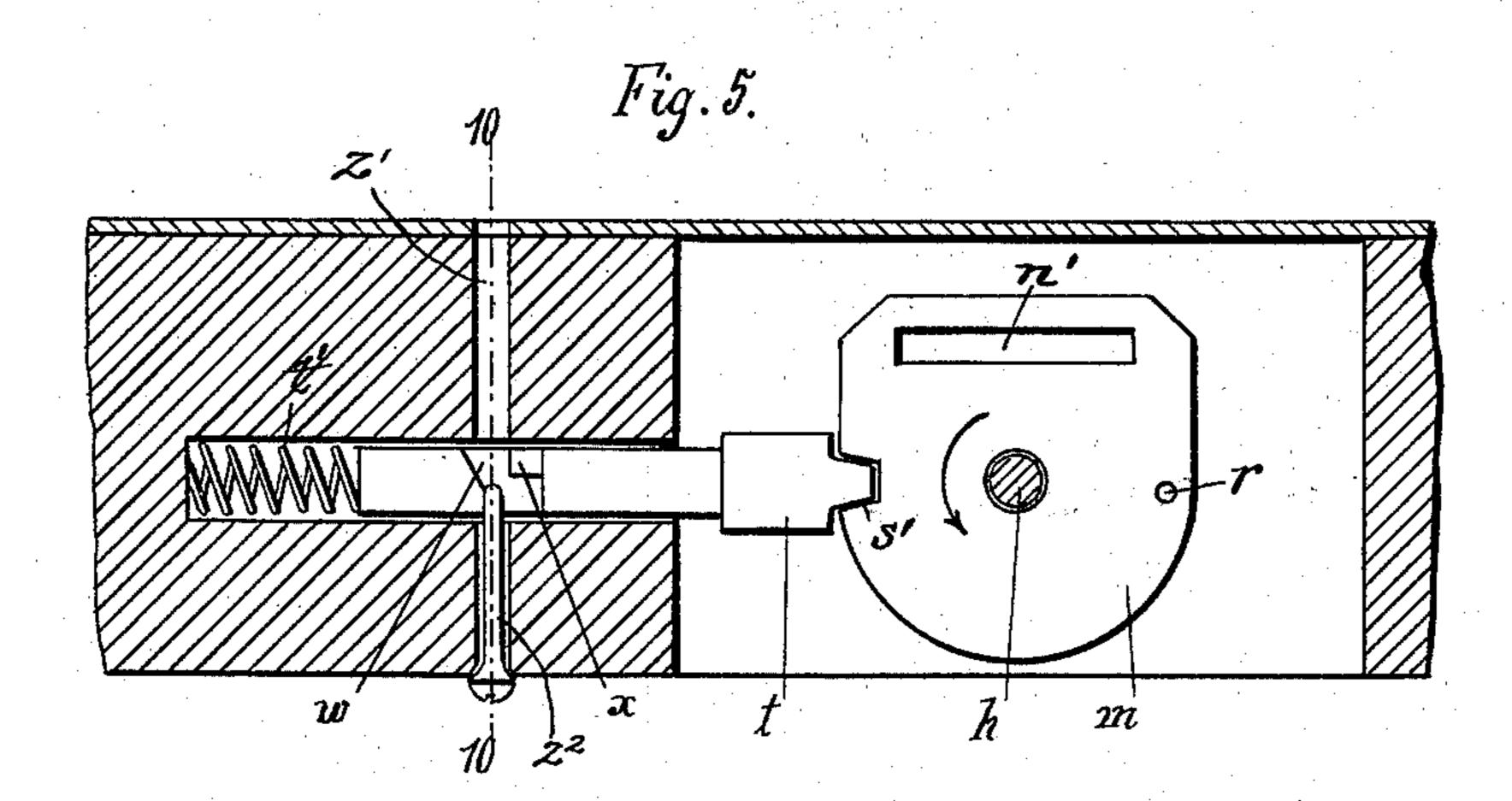


Fig. 10.

Witnesses. Julius-Luz C. E. Holoke Townson.

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By Morneys.

UNITED STATES PATENT OFFICE.

MARTIN HOMMEL, OF GEISLINGEN, GERMANY.

COIN-FREED MACHINE.

SPECIFICATION forming part of Letters Patent No. 612,729, dated October 18, 1898.

Application filed December 17, 1897. Serial No. 662,353. (No model.) Patented in England October 9, 1897, No. 23,235.

To all whom it may concern:

Be it known that I, Martin Hommel, engineer, of Geislingen, (Staige,) Würtemberg, in the Empire of Germany, have invented Improvements in Coin-Freed Machines, (for which I have obtained a patent in Great Britain, No. 23,235, bearing date October 9,1897,) of which the following is a specification.

This invention relates to that class of apparatus in which the insertion of a coin releases a train of mechanism; and its object is to provide cloak-rooms and similar places with devices so that, while accessible to the user, safe custody of the articles deposited is guaranteed against mistakes or theft, and the services of the special attendant usual in such places obviated.

This invention consists of a holder so arranged that hats, cloaks, sticks, or the like can, after the insertion of a coin, be securely fastened by means of a key which at the same time is automatically delivered to the user, and the key when used again to unlock the holder is automatically held in position, so that it cannot be taken away while the holder is released.

One method of carrying this invention into effect is illustrated in the accompanying sheet of drawings, as follows:

Figure 1 is a front elevation of the holder in a closed or locked position. Fig. 2 is a side elevation of Fig. 1. Fig. 3 is a back elevation of Fig. 1. Fig. 4 is a front elevation of the mechanism with the holder in a released or open condition. Fig. 5 is a detail view of part of the mechanism for locking the holder in position, the said view showing one of the slotted locking-plates and the locking-bolt. Fig. 6 is a detail view of a slotted locking-plate adapted to coöperate with the plate shown in Fig. 5. Figs. 7 and 8 are detail views of the locking-bolt. Fig. 9 is a side view of the key, and Fig. 10 is a section on line 10 10 of Fig. 5.

On the wall-plate a, which is provided with a distinctive number, such as b, a hanging-up hook d is arranged, hinging in a vertical plane at c, and this hook holds securely when in its closed position any umbrella or stick in its closed position any umbrella or stick or introduced between the pegs e e, the forked ends f of the hook d engaging with the pegs e e, the forked ends f of the hook d engaging with the pegs e e when in the position shown in Figs. 1 and e drawal. For the introduction of the key e

2 to secure the umbrella or stick. To lock this swinging hook d, the curved metal rod g, attached to the vertical shaft h, is employed, its head or termination i springing over the knob or termination k of the hook d.

The vertical shaft h carries at its lower end a plate l, the said plate being rigidly attached to the shaft. Immediately underneath this 60 plate l is a somewhat similar plate m, which, although not attached directly to the shaft, can be carried by the motion of the shaft and its plate l in a manner to be hereinafter described. Both these plates l and m are pro- 65 vided with slots n n', which are superimposed one above the other and of such a dimension that a coin inserted will form a locking medium for the two plates. A spring p is wound round the vertical shaft h, attached at one 70 end to the base-plate and at the other to the shaft. Upon the plate m a pin r is placed, which comes into immediate contact with the notch q in the plate l, so that rotation in the direction opposite that shown by the arrow 75 (on Fig. 5 of the drawings) of the plate l will cause that plate to carry the plate m with it, while at the same time unless a coin is inserted the plate l is free to move in the direction of the arrow without carrying with it the 80 plate m.

Both the plates l and m are provided with coincident notches s s', which, if the plates are keyed together by the presence of a coin and turned together in direction of the ar- 85 row, Fig. 5, allow of a spring-bolt t springing into these notches and holding the plates in that position and therefore holding the metal. bar g in the locked position shown in Figs. 1 and 2 of the drawings. The coin itself in 90 the first instance falls down the channel o, superimposed over the slots n n', and a second channel v, after the rotation of the plates m l, becomes coincident with the slots n n'and allows the coin to fall out into a receiver. 95 The bolt t, which under the influence of a spring t' is pressed home into the notches s s' in the plates, is provided with grooves, which toward one side form an oblique surface w and upon the other side carry a small 100 notch or keeper x, which notch or keeper when the holder is open lies in the groove or space y of the key z and prevents its with-

on opening the holder a slot z' is provided, and on the reverse of the wall-plate a a spring z^2 is also provided, seated in the slot z' for the purpose of forcing out the key when the 5 bolt t is in the position for release.

As shown in Fig. 5, the oblique surface w of the bolt t is in line with the slot z' when the bolt is in the locked position, so that if the key is inserted in the slot and pressed 10 inward its front margin will strike against this oblique surface and move the bolt to disengage it from the notches in the plates.

The operation of the herein before-described cloak-room holder is as follows: After the 15 articles are hung or placed upon the hooks, of which there may be any number in duplicate, a coin is inserted in the slot or groove o, which falls down into the slots n n' of the plates m l. The user then grasping the bar 20 g rotates it until it comes into the position shown in Fig. 1, and this rotation, by means of the vertical rod h acting upon the two plates m l, carries them around until the notches ss' come opposite the bolt t, when 25 this bolt springs into position, and thus locks the bar g, while simultaneous with the locking the slots n n' come in line with the bottom channel v and allow the coin to drop down that channel into the receiver. On the 30 springing in of the bolt in the spaces s s' the keeper x, forming part of that bolt, rides clear of the space y in the key z and simultaneous with this the spring z^2 presses that key out, and it can be taken away by the user 35 till required. If now the articles are to be removed or to be released from the holder, the key z is introduced into the slot z' and pressed inward. The inner end of it acts upon the oblique slot on one side of the bolt t and forces it 40 backward, removing the engaging end from the notches s s', thus allowing the spring pupon the vertical rod h to come into action, it having been previously coiled up by the swinging of the bar g into the locked posi-45 tion. Thus this spring rotates the shaft h to the open position, the notch q upon the plate l acting upon the pin r upon the plate mand carrying that plate with it into the open position. The backward movement of the 50 bolt t brings the keeper x again into the space y of the key z and prevents the removal of that key until the operation is repeated by means of the insertion of a coin and the rotation of the bar g, all in the manner herein-55 before described.

It is evident that the key z and the locking-slots in the bolt t can be varied in many ways without departing from the subjectmatter of this invention, while it is also pos-60 sible to apply signal arrangements on each holder indicating that the same is in use, while further controlling arrangements and registering apparatus can be applied to recording the number of persons using each de-65 vice.

Having now particularly described and ascertained the nature of my said invention and 1

in what manner the same is to be performed, I declare that what I claim is—

1. In a coin-freed machine, the combina- 70 tion with a hook, of a bar or rod mounted to swing and adapted to engage said hook, a shaft mounted to turn and connected with the said bar or rod, a coin-controlled lock for the shaft having a key-operated latch, means 75 whereby the key is automatically held in place when the bar or rod is in the open position, and means whereby the key is automatically released when the bar or rod is in the closed or locked position, substantially as 80 described.

2. In a coin-freed machine, the combination with a support, of a vertical shaft-spring controlled and mounted to turn in said support, a fixed and a loose plate carried by said 85 shaft and provided with registering slots, whereby a coin inserted in said slots will lock the plates to turn together with the shaft, and a latch coacting with the said plates to lock the shaft, substantially as specified.

3. The combination with a support, of a hook, a rod mounted to swing toward and from the hook, to cover the same, a springcontrolled shaft in connection with the rod, plates carried by the shaft and capable of be- 95 ing fixed together by a coin, and a key-controlled latch coacting with the said plates, and adapted to lock the shaft when the rod is in the closed position, substantially as described.

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4. In a coin-freed machine, the combination with a support, of a hook mounted to swing thereon and provided with a forked portion, pegs carried by the support and adapted to be engaged by the members of 105 said forked portion, a bar or rod movable toward and from the hook, and adapted to engage the hook to hold the same rigid, a shaft arranged to turn and on which said rod or bar is mounted, slotted plates carried by said 110 shaft and constructed to engage and move together when the shaft is turned in one direction, the said plates being capable of being fixed together by a coin engaging the said slots, and a spring-pressed bolt adapted to en- 115 gage notches in the said plates to lock the bar or rod in the closed position, substantially as set forth.

5. The combination with a support, of a hook, a rod capable of covering the hook, a 120 shaft whereon said rod is mounted, two plates carried on the shaft and capable of being fixed together by a coin, and a key-controlled latch coacting with said plates.

6. The combination with a support, of a 125 hook hinged thereto, a peg carried by the support and normally engaged by part of the hook, whereby to cover the peg, a rod movable toward and from the hook and capable of covering the same to prevent movement 130 thereof, a shaft whereon said rod is mounted, plates carried by said shaft and capable of being fixed together by a coin, and a keycontrolled latch coacting with said plates.

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7. The combination with a support, of a hook mounted to swing thereon and provided with a forked portion, two pegs carried by the support and engaged respectively by the arms of said forked portion, a rod movable toward and from the hook to hold the same rigid and to cover the hook, a shaft on which said rod is mounted, and a coin-controlled lock for said shaft having a key-operated to latch.

8. The combination of a shaft mounted to turn, two plates mounted thereon, one of the plates being fixed to the shaft, the said plates being provided with slots and each having a notch, and a latch adapted to engage the notches in the plates to lock the shaft, the plates being capable of being fixed together by the action of a coin engaging the slots.

9. The combination with a support, and a holder adapted to be carried to an open or a closed position, of a spring-controlled shaft mounted to turn and rigidly connected with the said holder, a coin-controlled lock for the shaft, having a spring-controlled and key-operated latch, the said latch and key having an interlocking engagement with each other when the latch is moved to the unlocked position, substantially as set forth.

10. The combination with a support, and a holder adapted to be carried to an open or a closed position, of a spring-controlled shaft mounted to turn and rigidly connected with the said holder, a coin-controlled lock for the shaft having a key-operated latch, the said latch when in the retracted or unlocked position engaging with the key to prevent withdrawal of the latter, and a spring for pressing the key outward, when the key is released by the latch moving to the locked position,

11. The combination with a support provided with channels for the insertion and delivery of a coin, of a holder arranged to be moved to an open or a closed position, a springto controlled shaft connected with the said holder and mounted to turn in the said support, a plate fixed to said shaft, a plate loosely carried by said shaft and adapted to be engaged by the fixed plate and to turn therewith when the shaft is rotated by its spring to carry the holder to the open position, the said plates being provided with registering slots, and the

said spring-controlled shaft normally holding said plates with their slots in line with the channel in which the coin is inserted, where- 55 by an inserted coin will engage the slots and lock the plates together, and a spring-pressed and key-operated bolt adapted to engage registering notches in the said plates when the shaftisturned against the tension of its spring 60 to carry the holder to the closed position, the slots in the said plates, when the holder is in the closed position, registering with the delivery-channel to allow the coin to pass down said channel to a receiver, the said bolt be- 65 ing constructed to interlock with the operating-key when the bolt is in the retracted position, substantially as set forth.

12. The combination with a support provided with a channel for the insertion of a 70 coin, of a holder arranged to be moved to an open or closed position, a lock for the said holder controlled by the inserted coin and having a key-operated latch, the said latch engaging the key to hold it in place when 75 the holder is in the open position, and means whereby the key is automatically released when the holder is in the closed or locked position, substantially as described.

13. The combination with a support and a 80 shaft mounted to turn in said support, of a holder connected with the said shaft and adapted to be carried to an open or closed position, a coin-controlled lock for the holder having a key-operated latch, means whereby 85 the key is automatically held in place when the holder is in the open position, and means whereby the key is automatically released when the holder is in the closed or locked position, substantially as described.

14. The combination with a support, of a holder arranged to be moved to an open or closed position, plates carried by said holder and constructed to be fixed together by a coin, and a key-controlled latch coacting with the 95 said plates and arranged to lock the holder in the closed position, substantially as described.

In witness whereof I have hereunto set my hand in presence of two witnesses.

MARTIN HOMMEL.

Witnesses:

CARL RUMPUS, CHN. BAUER.