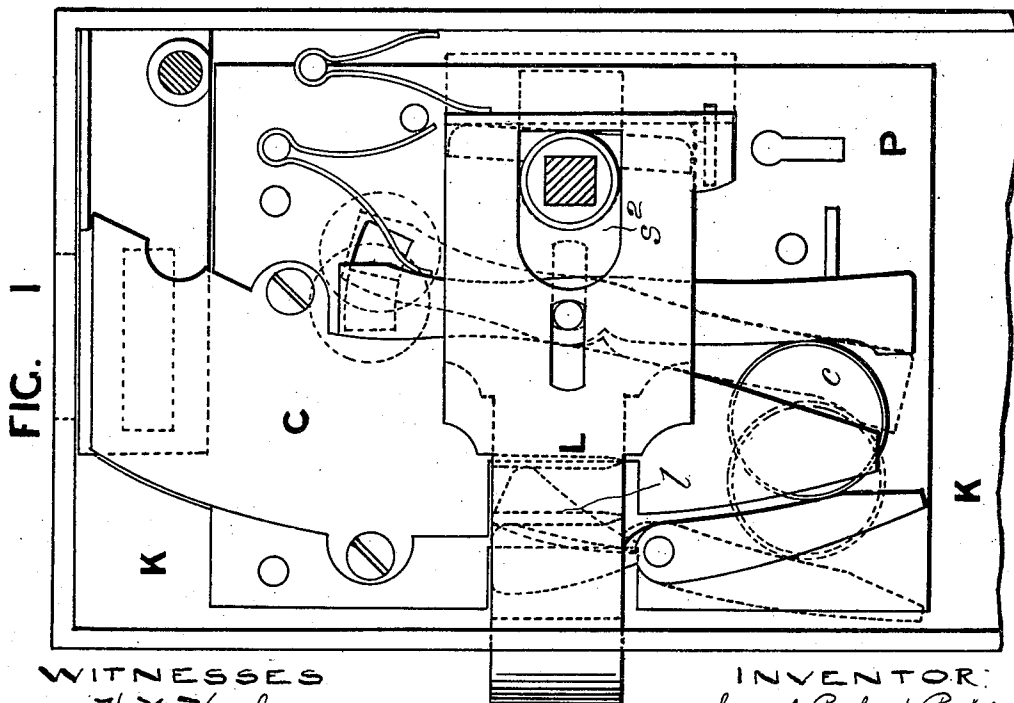
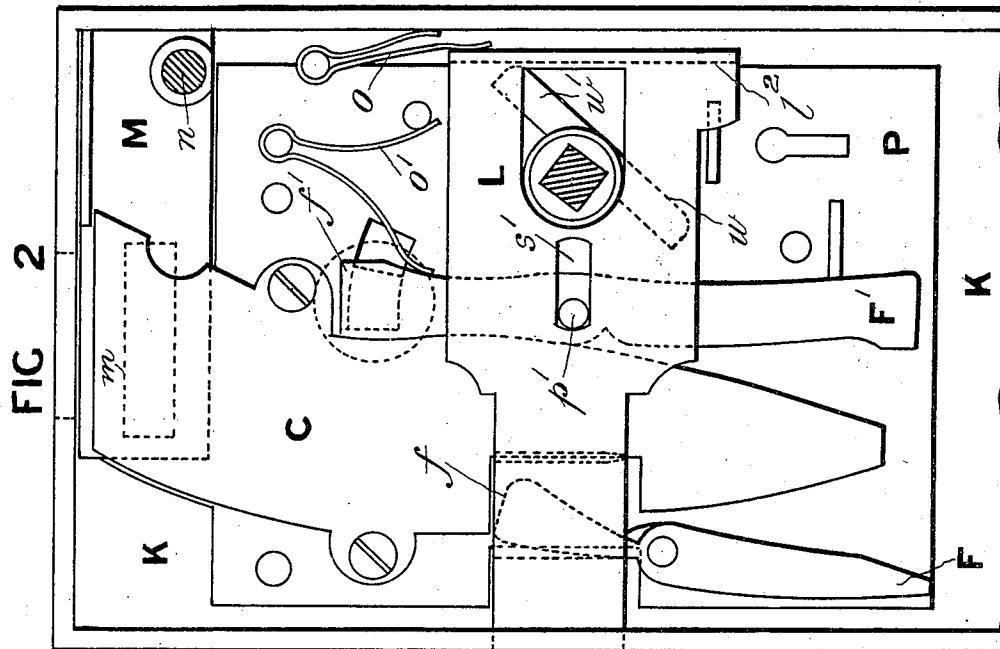


S. R. PARKES.
COIN OPERATED LOCK.
APPLICATION FILED JAN. 12, 1903.

NO MODEL.



WITNESSES

H. M. Kuehne
J. M. Downing

INVENTOR

Samuel Rowland Parkes
BY *Richardson*

ATTORNEYS

UNITED STATES PATENT OFFICE.

SAMUEL ROWLAND PARKES, OF WILLENHALL, ENGLAND.

COIN-OPERATED LOCK.

SPECIFICATION forming part of Letters Patent No. 730,691, dated June 9, 1903.

Application filed January 12, 1903. Serial No. 133,695. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL ROWLAND PARKES, a subject of the King of Great Britain, residing at New Road, Willenhall, in the county of Stafford, England, have invented certain new and useful Improvements in Coin-Operated Locks, of which the following is a specification.

My invention has for its object improvements in coin-operated locks of the class in which the latch is inoperative by the external knob, except through the medium of a coin lying between the ends of two fingers connected to the latch, which coin does not fall into the till until the inside or release knob spindle is operated for the purpose of releasing oneself.

In order to facilitate conception of my invention and enable the same to be carried into practical form, I have appended hereto a sheet of drawings upon which my improved coin-operated lock is illustrated.

Figure 1 shows the interior of my lock from the back, the back plate being removed. The coin is shown at the lower extremity of the chute held by the ends of the two fingers, the position of the parts when operated by the exterior knob being indicated in dotted lines. Fig. 2 shows the same view as Fig. 1. The latch has, however, just been withdrawn by turning the inside knob, thus tilting the upper end of the release-finger over and releasing the coin which has fallen into the till. (Not shown on the drawings.)

In making my improved coin-operated lock as suitable for use on water-closet and other room doors where admission is obtained through the medium of a coin *c*, I provide a chute *C* for the coin to slide down after being inserted through the usual slot *s* in the turnover part of the casing *K*. This chute is made by covering a certain portion of the motion frame-plate *P*, which is simply a flat plate which lies flat against the lock-casing and is provided for holding and supporting the mechanism in its correctly-assembled position and upon which the mechanism is fitted and arranged, thus saving the mechanic the necessity of handling the heavy case until the mechanism is ready for insertion already assembled on this motion frame-plate. The sides of the aforementioned chute are closed

by metal strips or blocks until near its lower extremity, where it is open and tapers so much that a portion of a suitable coin *c* dropped therein is exposed through the slot of the chute at the sides and bottom, the circumference of the coin being in contact with the lower ends of two fingers *F* and *F'*, which converge slightly and suspend the coin in this position, which is the operative position of the lock. Attached to the upper end *f* of the longer of these fingers, which is situated more to the rear with respect to the latch-nose and which I will term the "latch-operating" finger *F'*, is the latch-knob on the exterior of the lock-case, and about the middle of its length this finger is pivoted upon a pin *p'*, which also becomes its fulcrum when acting as a lever of the first order, as it does when the latch-knob is pulled back in its slot in the casing, the lower end of this finger bearing against the coin and transmitting the motion through the medium of the coin to the shorter front finger *F* aforesaid, which is also pivoted just below the latch-bolt, its upper end *f* being shouldered down for the sake of compactness and made to work against a feather *l* on the latch-bolt, by which the latter is drawn back and permits the door to be opened and closed again, the coin still remaining between the ends of the two fingers.

The latch-bolt *L* is formed of a flat piece of metal formed with projections on its under side—i. e., that adjacent to the fingers—and with two slots, one a small one, *s'*, which accommodates one end of the pin *p'*, which pivots the latch-operating finger, and one, *s''*, immediately to the rear thereof, which accommodates the inside latch-knob spindle-boss (which is, by the way, entirely independent of the outer latch-knob aforesaid) which is reduced at each end and turned around, so as to pivot in the motion frame-plate and the back plate of the lock-case. This boss has two wings *w* and *w'* cast upon it, which bear against the fore side of a projection or feather *l'* on the rear of the latch-bolt, against the back side of which a flat spring *o* bears and holds the latch-bolt normally in a shot position. A similar spring *o'* also holds the latch-operating finger in its normal position.

A simple slide-bolt, (not shown on the drawings,) to which is attached an angle-strip

of metal M by a stud *n*, is provided inside the top of casing, which is shot from the inside by hand. The vertical side of the angle contains the words "Vacant," "Engaged," and 5 the horizontal portion is arranged to close the coin-slot when the bolt is shot and the word "Engaged" appears through an opening *m* in the lock-casing.

Having described the operation of the lock 10 through the medium of the coin in opening the door and gaining admission, I will now describe the operation of opening the door from the inside to release oneself. The hand-bolt has first to be withdrawn. Then the inside-latch knob is turned in either direction, 15 which action forces one of the spindle-boss wings aforesaid against the rear projection *l*² on the latch, overcoming the tension of the spring behind the latch. The latch-bolt L 20 then slides backward, the undercut portion of its nose catching the upper extremity *f* of the little finger F, whose lower extremity is thereby drawn away from the coin, which falls by gravity into the receptacle below formed 25 in the same casing K. The latch-bolt then returns to its inoperative position by action of the aforesaid spring *o*.

It will be understood that the casing and other parts may be made of any metal, either

cast or stamped, and finished in any suitable 30 manner.

What I claim then is—

In a prepaid coin-operative lock (wherein the coin only falls into the till after the release mechanism is operated) in combination 35 with a coin-chute open at its lower tapered extremity, through which portions of a properly sized coin project, two pivoted lever-fingers whose lower converging ends retain the coin, 40 an external knob connected to the upper end of the rearward and longer finger, the motion being transmitted through the medium of the aforesaid coin through the forward pivoted finger to the latch-bolt by which action the 45 latter is withdrawn against the action of two springs, an inner knob independent of the outer, whose spindle-boss is rotatable between the lock-casing and the back plate, having 50 arms by the rotation of which against a projection on the rear of the latch-bolt the latter is withdrawn and the coin released substantially as described.

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

SAMUEL ROWLAND PARKES.

Witnesses:

HENRY BARKER LAKE,
HAROLD J. C. FORRESTER.