

No. 690,476.

Patented Jan. 7, 1902.

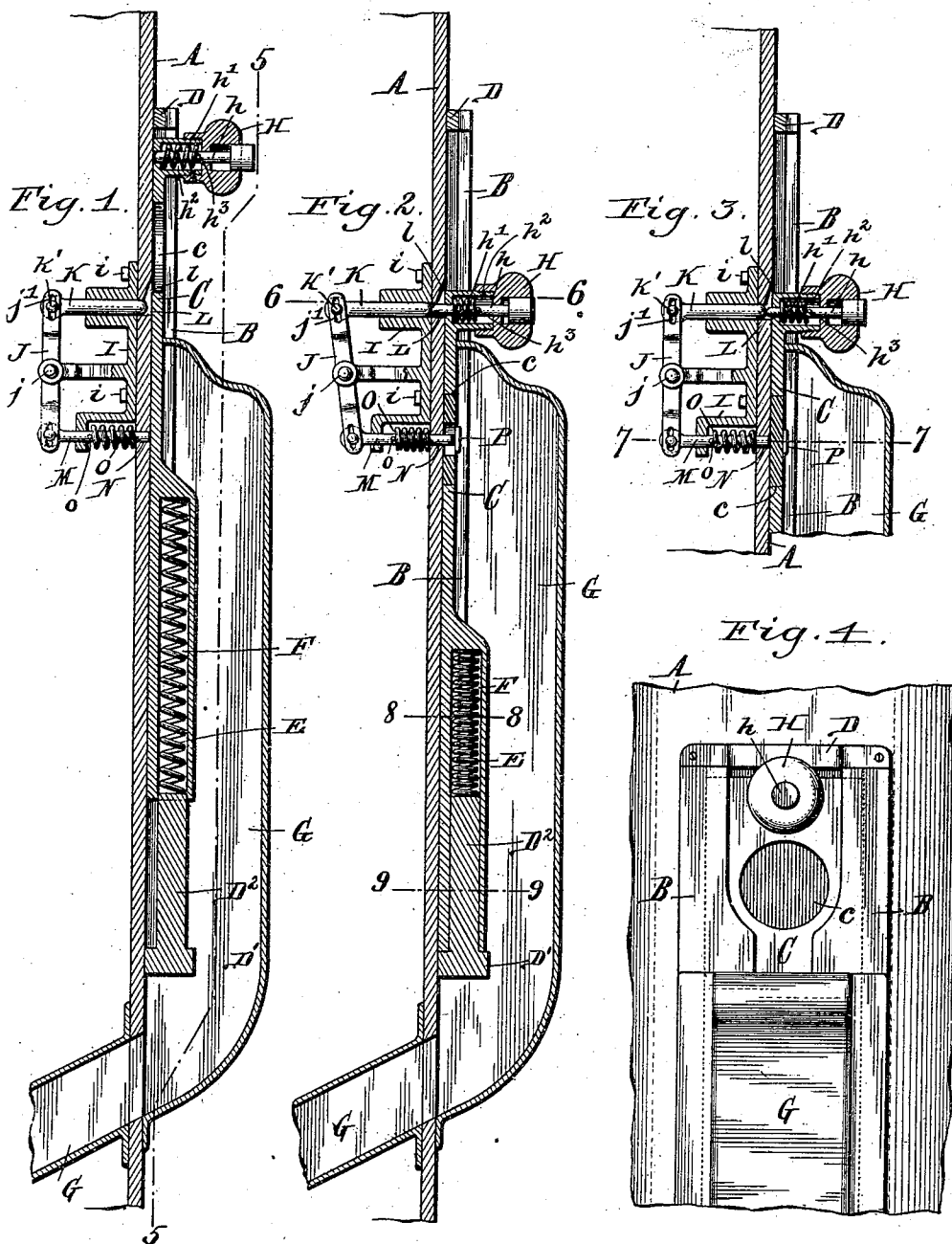
O. E. SORG.

FRAUD PREVENTING DEVICE FOR COIN CONTROLLED APPARATUS.

(Application filed Feb. 21, 1901.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses:

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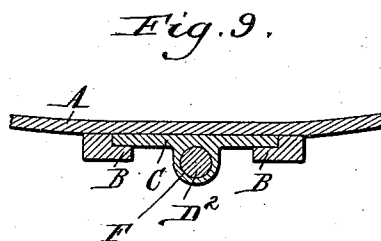
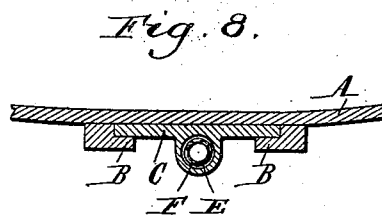
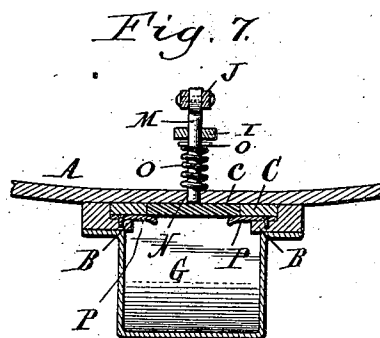
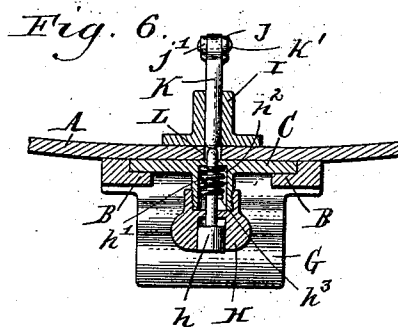
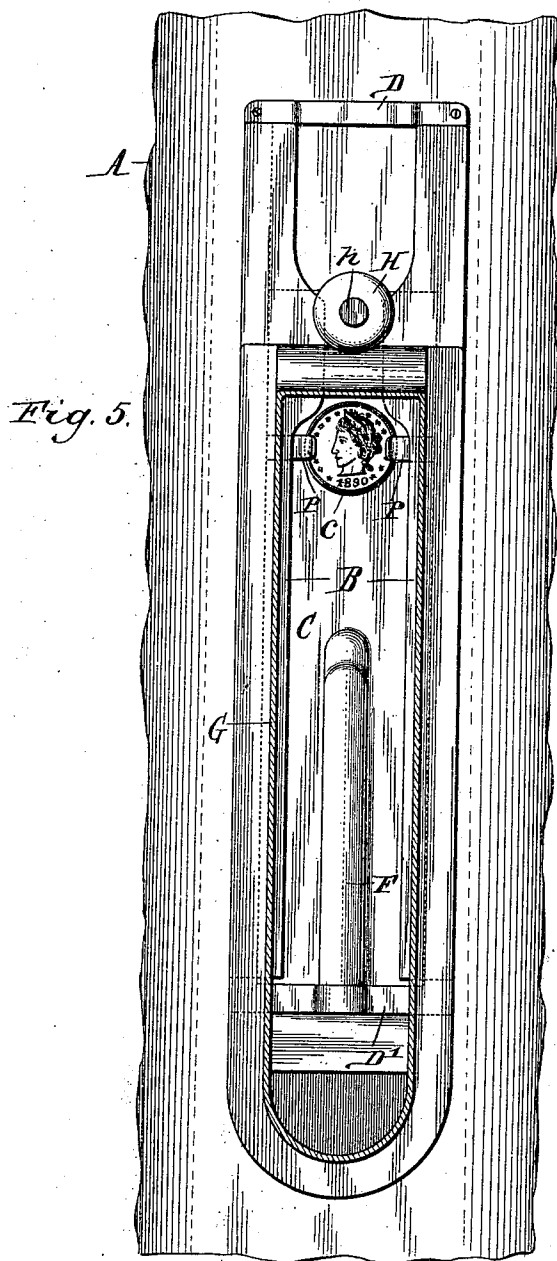
Attorneys.

FRAUD PREVENTING DEVICE FOR COIN CONTROLLED APPARATUS.

(Application filed Feb. 21, 1901.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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FRAUD-PREVENTING DEVICE FOR COIN-CONTROLLED APPARATUS.

SPECIFICATION forming part of Letters Patent No. 690,476, dated January 7, 1902.

Application filed February 21, 1901. Serial No. 48,362. (No model.)

To all whom it may concern:

Be it known that I, OSCAR E. SORG, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Fraud-Preventing Devices for Coin-Controlled Vending-Machines, of which the following is a specification.

This invention relates to fraud-preventing devices used in conjunction with coin-chutes of automatic vending-machines; and it has for its object the production of a simple device of improved construction, great durability, easy of manipulation, comparatively inexpensive to manufacture, and positive in action, whereby the introduction of metallic washers into the coin-chute is prevented, the device being applicable to all descriptions of vending-machines where coin-controlled appliances are required.

The device consists of a coin-chute, a slidable coin-receiver, a thrust-rod carried thereon, and mechanism operated by said thrust-rod whereby the coin is forced from the coin-receiver into the coin-chute.

My improvements lie in the novel construction and combination of elements hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a central vertical section of my device, the coin-receiver being in its elevated or normal position. Fig. 2 is a section similar to Fig. 1, a washer being shown in the coin-receiver and the coin-releasing mechanism operated by the thrust-rod. Fig. 3 is a similar view of the upper portion of the device, the coin-receiver being in its lowered position with a coin held therein and the thrust-rod about to operate the coin-releasing mechanism. Fig. 4 is a front view of the upper portion of the device, the coin-receiver being in the position represented in Fig. 1. Fig. 5 is a vertical section on line 5 5, Fig. 1, a coin being held in the coin-receiver. Fig. 6 is a horizontal section on line 6 6, Fig. 2. Fig. 7 is a horizontal section on line 7 7, Fig. 3. Fig. 8 is a horizontal section taken on line 8 8, Fig. 2. Fig. 9 is a similar section taken on line 9 9, Fig. 2.

Referring now to the drawings in detail,

like letters of reference refer to like parts in the several figures.

A represents a portion of the casing wherein the article to be vended is placed, and B represents vertically-disposed guides secured to said casing in any approved manner. In these guides a vertically-slidable coin-receiver C is held, which has an opening *c* of a size to receive a coin of a certain value adapted to operate the mechanism of an automatic vending-machine. At the upper and lower ends of the guides cross-bars or stops *D D'* are secured to limit the movement of the coin-receiver. The lower cross-bar or stop *D'* is formed with an upwardly-disposed abutment *D²*, against which one end of a spring *E* bears, while the other end thereof bears against the inner end of a pocket *F*, arranged on the coin-receiver.

G designates the coin-chute, which incloses the lower portion of the coin-receiver, its direction depending on the location of the coin-controlled mechanism. To the upper end of the coin-receiver a handle *H* is secured, and therein a thrust-rod *h* is slidably held, which is surrounded by a spring *h'*, bearing with one end against the rear of a pocket *h²* and with its other end against a pin *h³*, passing through said rod and extending from opposite sides thereof, the office of this spring being to keep said thrust-rod in its projected position.

The coin releasing or discharging mechanism is located inside of the casing and supported on a casting *I*, secured by bolts *i* or otherwise to said casing. This mechanism consists of a lever *J*, which is pivotally held midway between its ends to said casting, as at *j*.

K designates the follower-rod, which is operated by the thrust-rod *h* when the coin-receiver is in its lowered position. This rod is guided in the casting *I* and has one end extending through an opening *L*, arranged in the casing, its other end being pivotally secured to one end of the lever *J*, which is bifurcated and slotted, as at *j'*. A pivot-pin passes through the follower-rod and the slots of the lever *J*, thus allowing the latter to swing and the follower-rod to slide without causing binding of the parts. To the oppo-

site end of the lever J the coin-releasing rod M is secured, its connection thereto being the same as that of the follower-rod. This coin-releasing rod extends into an opening N, arranged in the casing, and has a spring O surrounding the same, which bears with one end against the inner side of the casing and with its other end against a pin o, passing through said coin-releasing rod and extending from opposite sides thereof. The purpose of this spring is to keep the end of the coin-releasing rod from projecting through the casing and also to keep the follower-rod in proper position in the opening L. The inward movement of the coin-releasing rod caused by the spring O is limited by the pin o striking the casting I, in which said rod is guided. The meeting ends of the thrust-rod h and the follower-rod are rounded, and the opening L is flared upwardly, as shown at L.

Secured to the guides B at a point where the coin is discharged from the coin-receiver are the coin-retaining springs P, which extend inwardly, so that when the coin-receiver is lowered the edge of the coin placed therein will be held by the free ends thereof and prevent the depositing of the coin until released by the coin-releasing mechanism. These springs are particularly devised for use in connection with the releasing-rod M, so as to prevent the introduction of washers into the coin-chute, which incloses the lower portion of the coin-receiver and extends from a point above the coin-retaining springs P to the coin-controlled mechanism, which latter may be located at any desirable point in the casing. In placing a washer in the coin-receiver C and lowering the same said washer is held in the coin-receiver by the coin-retaining springs, and the coin-releasing rod M, when operated through the medium of the lever J, follower-rod K, and thrust-rod h, enters the hole in the washer, as shown in Fig. 2, thus preventing it being released from the coin-receiver and compelling its removal from the same before a coin can be placed therein.

I will here remark that the coin-receiver and dependent mechanism can be placed vertically, horizontally, or at any angle without destroying the efficiency of the device.

The operation of the device is as follows: A coin is placed in the receiver C, which is lowered to bring the coin in front of the opening N, through which the coin-releasing rod M is forced, and in rear of the coin-retaining springs P, where it is held. This brings the thrust-rod h in line with the follower-rod K. On pushing the thrust-rod h in it forces the follower-rod in also, which in turn swings the lever J, whereby the coin-releasing rod M is forced against the rear face of the coin, sufficient pressure being exerted thereon to force the coin from the coin-retaining springs and drop the same into the coin-chute. On releasing the downward pressure on the coin-

receiver the spring E, which was compressed thereby, forces said receiver to assume its normal or elevated position, after which it is ready to receive another coin. During the initial portion of this upward movement the spring h', in addition to the flaring portion of the opening L, forces the thrust-rod h out, which allows the spring O, surrounding the coin-releasing-rod, to exert its force against the pin o and bring the said releasing-rod, the lever J, and the follower-rod K to their normal positions. If desired, however, the inward pressure on the thrust-rod h may be released before releasing the downward pressure on the coin-receiver. This will bring the parts of the coin-releasing mechanism to their normal positions before the spring E forces the coin-receiver to its normal position.

Having thus described my invention, what I claim is—

1. The combination with the coin-chute, of a slidable coin-receiver having an opening wherein the coin is placed, yielding coin-retaining means for holding the coin in said opening when the coin-receiver is inserted in the coin-chute, and mechanism for releasing said coin, only, when the coin-receiver is in said inserted position, substantially as set forth.

2. The combination with the coin-chute, of a slidable coin-receiver having an opening wherein the coin is placed, coin-retaining means positioned in said coin-chute at a point where the coin is discharged from the coin-receiver, and mechanism for releasing said coin-receiver when held by said coin-retaining means, substantially as set forth.

3. The combination with the coin-chute, of a slidable coin-receiver wherein the coin is placed, mechanism for discharging or releasing the coin from the coin-receiver, and a thrust-rod for operating said mechanism, substantially as set forth.

4. The combination with the coin-chute, of a slidable coin-receiver having an opening wherein the coin is placed, a spring for keeping said coin-receiver in its projected or normal position, coin-retaining means for holding the coin in the coin-receiver, a lever pivoted between its ends, a coin-releasing rod pivotally connected to one end of said lever and arranged in line with the coin when the coin-receiver is held in the coin-chute, a follower-rod pivotally connected to the other end of the said lever, and a thrust-rod adapted to operate the follower-rod, only, when the coin-receiver is held in the coin-chute, substantially as set forth.

5. The combination with the coin-chute, of a slidable coin-receiver wherein the coin is placed when in its projected or normal position, a spring for keeping said coin-receiver in said position, a spring-controlled thrust-rod secured to the outer end of said coin-receiver, a follower-rod adapted to be operated

by said thrust-rod, a lever pivoted between its ends and having one end pivotally secured to said follower-rod, a coin-releasing rod pivotally secured to the other end of said lever, a spring surrounding said coin-releasing rod for keeping it in its retracted position, and a coin-retaining spring or springs for holding the coin in the coin-receiver when slid into the coin-chute, the said coin-releas-

ing rod being operated by the said thrust-rod through the medium of the follower-rod and the said lever, substantially as set forth.

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

OSCAR E. SORG.

Witnesses.

EMIL NEUHART,

ANDREW J. VAUGHT.

It is hereby certified that in Letters Patent No. 690,476, granted January 7, 1902, upon the application of Oscar E. Sorg, of Buffalo, New York, for an improvement in "Fraud-Preventing Devices for Coin-Controlled Apparatus," an error appears in the printed specification requiring correction, as follows: In line 101, page 2, before the compound word "coin-receiver" the words *coin from the* should be inserted; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 11th day of February, A. D., 1902.

[SEAL.]

F. L. CAMPBELL,
Assistant Secretary of the Interior.

Countersigned:

F. I. ALLEN,
Commissioner of Patents.