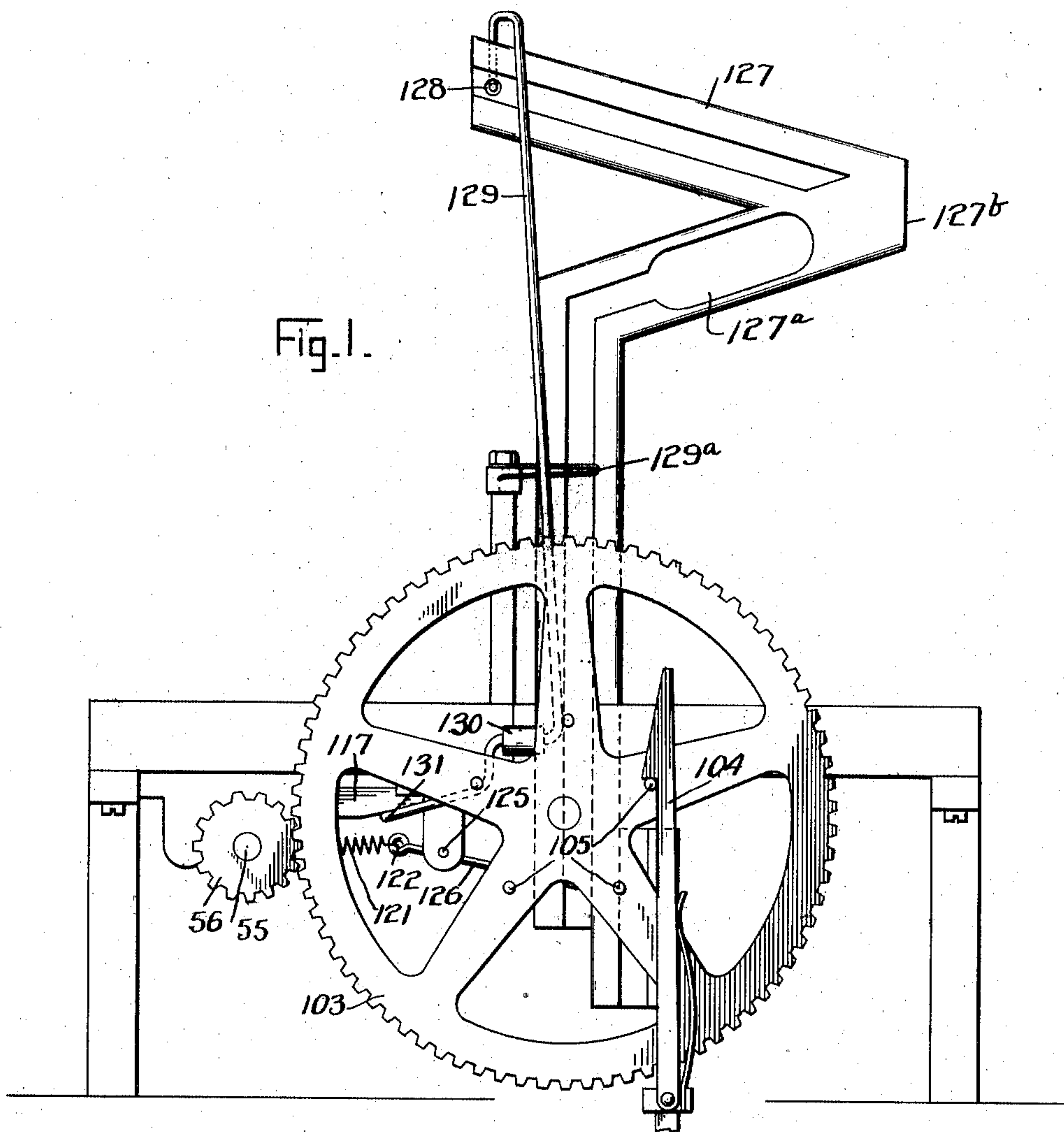


R. B. CRAIG & A. COFFMAN.
 COIN CONTROLLED MECHANISM.
 APPLICATION FILED APR. 12, 1909.

967,332.

Patented Aug. 16, 1910.

2 SHEETS—SHEET 1.



Inventors

Robert B. Craig & Albert Coffman.

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Witnesses

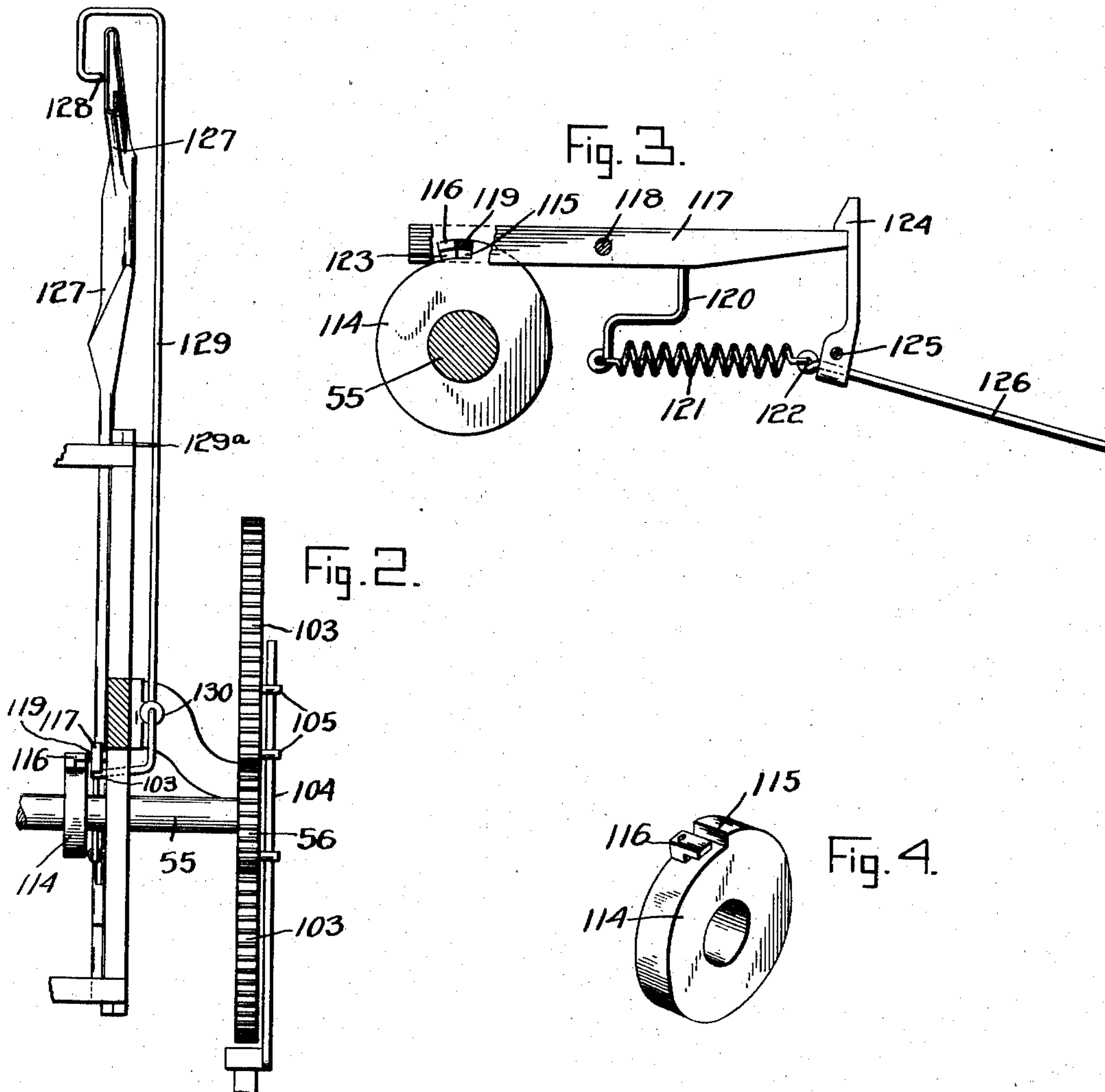
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UNITED STATES PATENT OFFICE.

ROBERT B. CRAIG AND ALBERT COFFMAN, OF KANSAS CITY, MISSOURI, ASSIGNORS TO
AUTOMATIC VENDING MACHINES COMPANY, OF KANSAS CITY, MISSOURI, A COR-
PORATION OF THE TERRITORY OF NEW MEXICO.

COIN-CONTROLLED MECHANISM.

967,332.

Specification of Letters Patent.

Patented Aug. 16, 1910.

Original application filed November 30, 1908, Serial No. 465,182. Divided and this application filed April 12, 1909. Serial No. 489,458.

To all whom it may concern:

Be it known that we, ROBERT B. CRAIG and ALBERT COFFMAN, both citizens of the United States, and residents of Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Coin-Controlled Mechanism, of which the following is a specification.

10 The present invention relates to coin controlled mechanism for machines wherein a deposited coin actuates means for releasing a normally inactive mechanism and permits the same to be operated by an impelling
15 force momentarily applied or by a motor having connection therewith.

The purpose of the invention is to provide a means of such character adapted to normally hold the motor or other actuating
20 mechanism in positively locked position, to automatically release the holding means and permit operation of the mechanism for a predetermined period, and to automatically check said operation and bring the several
25 controlling elements into their normal position.

A further purpose of the invention is to provide a means associated with and controlled by the coin controlled mechanism
30 whereby a coin cannot be inserted into the coin receptacle until the machine has performed one complete operation; and wherein no coin can be inserted should the machine become inoperative through any cause.

35 The invention is particularly adapted to coin controlled machines of the automatic vending type, such as disclosed in our co-pending application, Serial No. 465,182, dated November 30, 1908, and of which ap-
40 plication the present case forms a division.

The structural details and mode of operation of the invention are set forth in the following specification and its points of novelty set forth in the claims.

45 In the accompanying drawings which disclose the mechanism in its preferred embodiment, Figure 1 is a side elevation of the mechanism in its entirety, and showing one manner of operating the same, Fig. 2 is a front elevation of the same showing the parts segregated, Fig. 3 is a side elevation
50 of the coin released detent or controlling

means, and, Fig. 4 is a view in perspective of the cam shown in Fig. 3.

Referring more particularly to the several 55 figures wherein like numerals of reference indicate corresponding parts in the different views shown, 127 is a coin receptacle or chute adapted to receive the deposited coins and deliver them to the machine controlling 60 mechanism which has means projecting into the path of said chute. The coin chute comprises for its greater part a substantially upright or vertical portion and two lengths or legs connected therewith, and within the 65 same plane. The lower of said lengths is disposed at an incline and provided on one side with an opening 127^a of such dimension that any coin inserted in the chute whose size is smaller than that of the coin pre- 70 scribed will, by its own gravity, fall through the opening and into a receptacle provided for the purpose. In order that such a coin may not be started in its path through the chute by any impelling force in an endeavor 75 to defeat the purpose of the inclined leg with its opening, the first length of the chute or that part which adjoins the inclined leg, is abruptly terminated as at 127^b. It will therefore be seen that should a coin be in- 80 serted in the chute and caused to be accelerated in its passage, such movement will be arrested by the stop 127^b, whence the coin will continue in its travel only in that movement that it would otherwise have. 85

The coin controlled means comprises a shaft 55 which has direct connection with the mechanism that is designed to be released for actuation by the depositing of a coin in the chute. Said shaft 55 carries a cam disk 90 114 provided with a shoulder 115 and a co-operating stop 116. A lever 117 fulcrumed at 118, carries a pin 119 that normally lies between shoulder 115 and stop 116. An arm 120 on lever 117 is connected by spring 121 95 to an anchorage 122, so that lever 117 tends to swing in a direction to depress its pin 119. Stop 116 is recessed at 123 so that when pin 119 is depressed, it may pass through the recess 123 and permit cam disk 100 114, and therefore, the shaft 55, to rotate. The opposite end of lever 117 is engaged by a detent 124 pivoted at 125. An arm 126 extending from the detent 124 on the oppo-

site side of its fulcrum 125 projects into the path of a coin in the coin chute 127 (see Fig. 1). When a purchaser stands upon a depressible platform and a portion of his weight is transmitted through the hook 104 to the wheel 103, the latter tends to rotate under the load, but is restrained by wheel 56 whose shaft 55 is locked by the pin 119 on the lever 117. But upon inserting the coin in the chute 127, and striking the arm 126, detent 124 is rocked upon its fulcrum 125 to release the lever 117 whose rear end then drops under the influence of spring 121 to bring pin 119 opposite recess 123 so that cam disk 114 and the shaft 55 may rotate under the driving load imposed upon it. In rotating, cam disk 114 gradually raises pin 119 and through it the lever 117, in opposition to spring 121 until the forward end of said lever passes below the shoulder on detent 124 and permits the latter to return to engaging position. As pin 119 passes the salient point of the cam, it drops into the space between shoulder 115 and stop 116, where it is held by the engagement of the lever with the detent 124 and the machine is then inoperative until another coin is inserted in the coin chute.

The coin guard or chute closure comprises a barrier 128 carried by a staff 129 which is fulcrumed at 130 and extends thence transversely to the plane of its fulcrum to provide a lever end 131. This lever end projects beneath lever 117, so that when said lever 117 is in normal position, barrier 128 is held out of the path of the coin in the chute 127; but when detent 124 is released by a coin and forward end of lever 117 rises, barrier 128 is projected across the path of the coin by the spring 128^a and no further coin can be introduced until the machine has completed its operation and been restored to operative condition. Inasmuch as the introduction of a coin necessarily releases the lever 117 regardless of subsequent operation of the machine, it follows that if the machine should become inoperative from any cause, only a single coin will be received.

Having thus described the invention, what we claim as new therein, and desire to secure by Letters Patent, is:—

1. In a coin controlled mechanism, the combination of a driven shaft provided with a cam having a shoulder, an arresting lever adapted to engage said shoulder and hold the shaft against movement, an arm normally holding the arresting lever in operative position, a coin chute directing a coin against said arm, and means normally tending to move the arresting lever from engagement with the cam of the driven shaft.

2. In a coin controlled mechanism, the combination of a driven shaft, an arresting lever for said shaft, an arm normally holding the arresting lever in operative position, a coin chute directing a coin against said arm, and a coin guard engaging with and controlled by said arresting lever and adapted to prevent insertion of a coin in the chute until the driven shaft has completed its operation.

3. In a detent for coin controlled machines, the combination of a rotary cam having a shoulder and a stop, an arresting lever provided with a projection adapted to enter between the shoulder and stop, means normally tending to move the lever out of arresting position, a detent resisting such movement, an arm controlling said detent, and a coin chute directing a coin against said arm.

4. In a detent for coin controlled machines, the combination of the cam disk having a shoulder, the arresting lever having a stop engaging said shoulder and adapted to be engaged by and ride upon the cam surface until it drops in front of the shoulder, the detent for the stop lever engaging the lever when it is raised by the cam, and coin actuated releasing means for the detent.

5. In an arresting means for coin controlled machines, the combination of a cam having a shoulder adjacent to its salient point, and a stop adjacent to said shoulder but spaced above the cam surface, an arresting lever carrying a projection adapted to enter between the shoulder and the stop and also adapted to pass beneath the stop when depressed toward the cam surface, a spring normally tending to rock the lever in a direction to release its projection from the cam stop, and a detent holding said lever against such movement and having means whereby the detent is released by a coin.

6. In a guard for coin controlled machines, a barrier adapted to prevent introduction of a coin until the machine is reset, consisting of a lever having an end adapted to project across the path of the coin and a controlling end, and a stop lever adapted to arrest the machine in operative position, said lever directly engaging the controlling end of the barrier lever, substantially as set forth.

The foregoing specification signed at Kansas City, Mo., this 3rd day of March, 1909.

ROBERT B. CRAIG.
ALBERT COFFMAN.

In presence of two witnesses:

V. HUNDLEY,
O. BURKE.