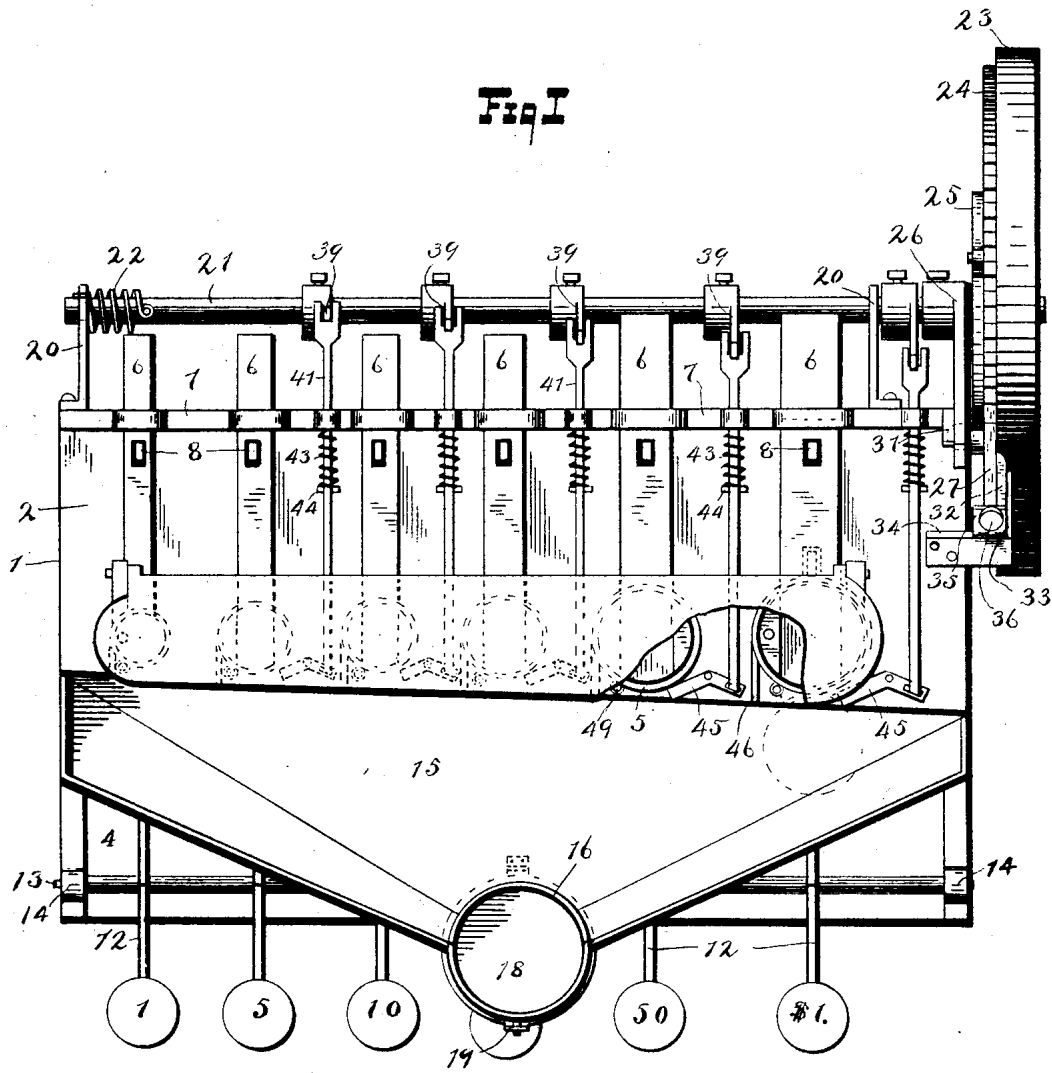


T. O'DONNELL.
COIN HOLDER AND REGISTER.

No. 587,599.

Patented Aug. 3, 1897.



Witnesses.
A. J. McDonald
Will Smith

Terence O'Donnell, Inventor,
House and Hadley
 By *By* His Attorneys.

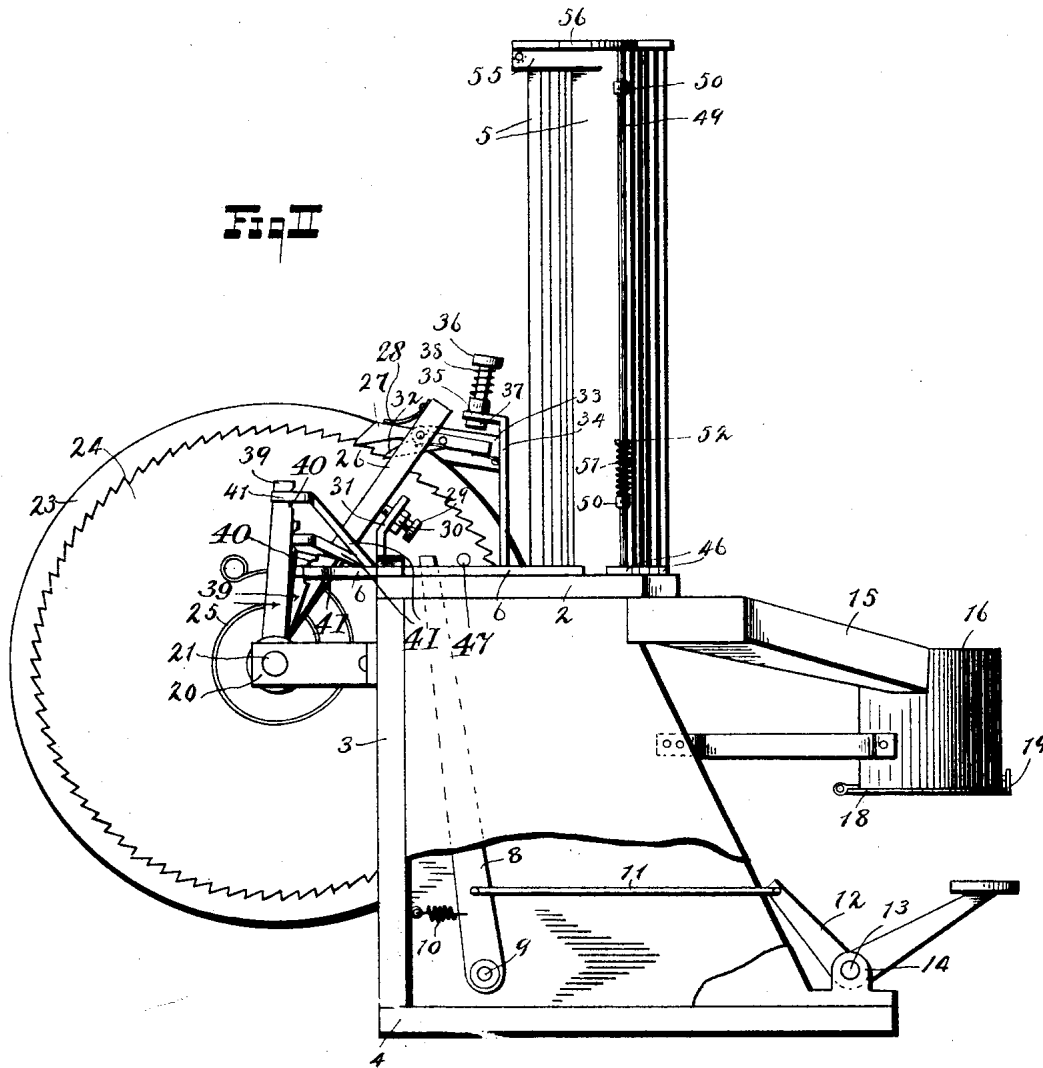
(No Model.)

4 Sheets—Sheet 2.

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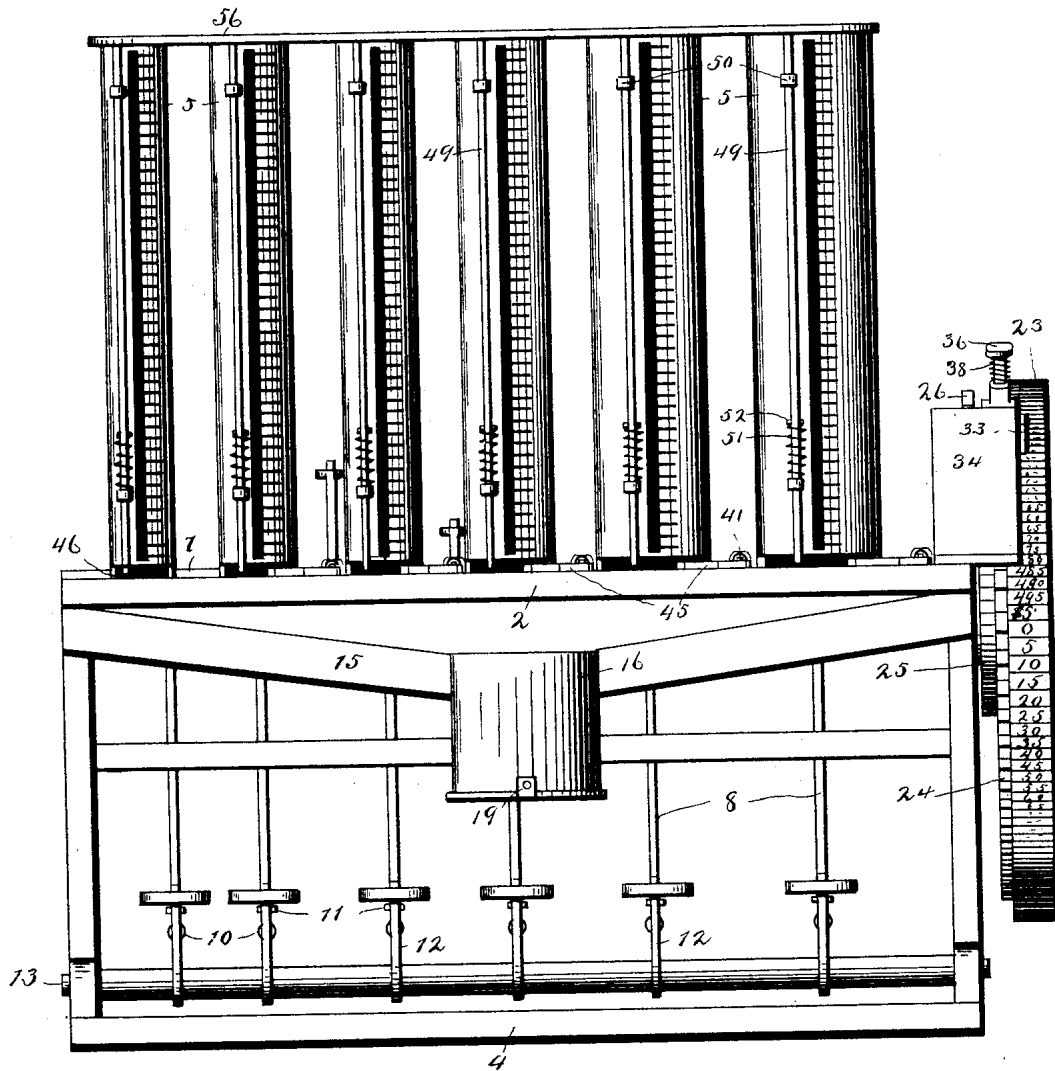
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Fig III



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(No Model.)

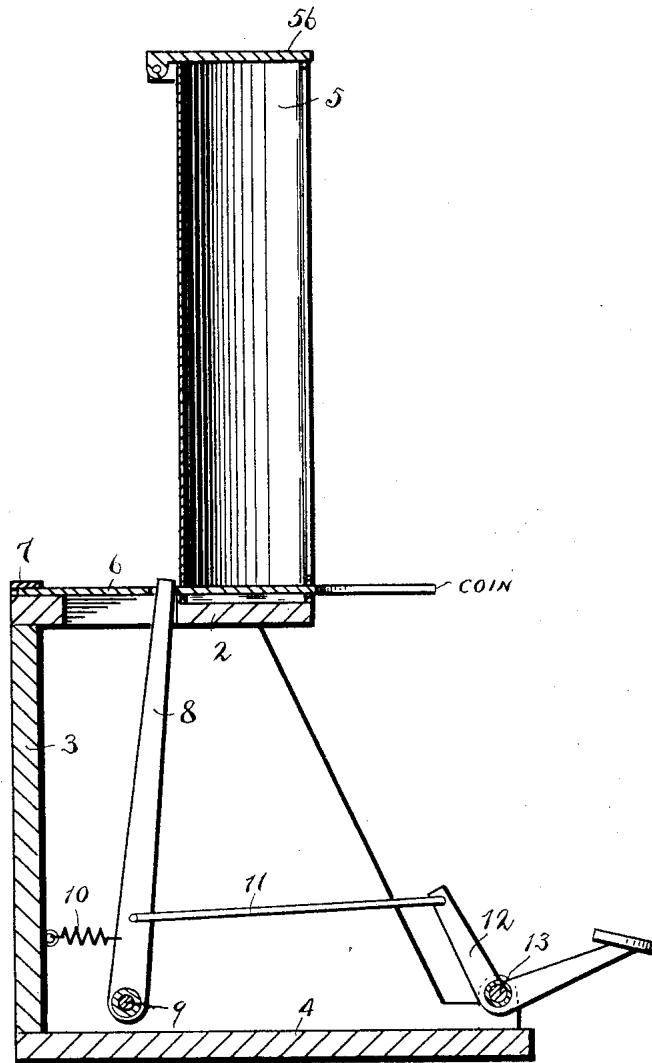
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Fig IV



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UNITED STATES PATENT OFFICE.

TERENCE O'DONNELL, OF KANSAS CITY, MISSOURI.

COIN HOLDER AND REGISTER.

SPECIFICATION forming part of Letters Patent No. 587,599, dated August 3, 1897.

Application filed December 9, 1895. Serial No. 571,483. (No model.)

To all whom it may concern:

Be it known that I, TERENCE O'DONNELL, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Coin Holders and Registers, of which the following is a specification, reference being had therein to the accompanying drawings.

10 My invention relates to improvements in coin holding and registering machines.

The object of my invention is to provide an apparatus having a series of holders for coins of different valuation combined with means 15 for ejecting a coin from any of the holders, and an indicating mechanism adapted to show the value of the coin that has been ejected.

My invention consists in certain novel features of construction and arrangement of 20 parts, as hereinafter fully described, and set forth in the claims.

In the accompanying drawings, illustrative of my invention, Figure 1 represents a plan view with a portion of the cover broken away. 25 Fig. 2 represents a left side elevation with a portion of the side of the frame broken away. Fig. 3 represents a front elevation view. Fig. 4 represents a transverse vertical sectional view of one of the coin-holders and the supporting-frame with some of the parts removed. 30

1 indicates a framework provided with a top plate 2, back plate 3, base-plate 4, and two ends. Upon the top plate 2, near the front edge thereof, are mounted a series of vertical 35 tubular coin-holders adapted to hold the coins of various denominations, such as cents, nickels, dimes, quarters, halves, and dollars.

The holders are indicated by the numeral 5. The lower edge of each of the tubes 5, at the rear and front, is provided with a groove 40 through which is adapted to slide a horizontal ejecting sliding plate 6, the forward end of which is guided by the rear groove and the rear end by a clip 7, secured to the upper side 45 of the top plate 2. Each of the plates 6 is provided with an opening in front of the clip 7, through which extends the upper end of a lever 8, the lower end of which is pivoted upon a rod 9, connecting the ends of the frame-work at a point above the base-plate 4. A 50 coiled spring 10 connects the said lever with the rear of the box, the tension of the spring

being such as to draw the lever toward the rear, thus withdrawing the plate 6 from underneath the coins in the tube after a coin 55 has been ejected. Each of the levers 8 is connected by means of a rod 11 to a bell-crank lever 12 at the end of its rear leg, the forward leg being provided with a button so as to serve for a key adapted to be pressed by the fingers. 60 The said bell-crank lever is vertically disposed and is pivoted at its angle upon a rod 13, parallel with the rod 9 and to the front thereof, and its ends being secured in supports 14, secured to the upper and front side of the base- 65 plate 4.

Secured to the forward edge of the top plate 2 is an apron 15, adapted to catch the coins as they are ejected from the holders. The said apron is forwardly and inwardly inclined 70 and is provided at its central portion with a downwardly-projecting tube 16, adapted to receive the coins as they slide or roll down the apron. The bottom of the said tube is provided with a plate 18, covering the lower 75 end of the tube and hinged at its rear edge thereto, its front edge being provided with a spring-catch 19, adapted to engage a pin upon the front side of the tube 16. At each end of the frame 1 and rearwardly extending from 80 the plate 3 are secured the brackets 20, which are provided with transverse openings in which is revolubly fitted a rock-shaft 21. At the left end of the said rock-shaft 21 and encircling it is a coiled spring 22, secured at one 85 end to the rock-shaft and at the other end to the adjacent bracket. The tension of the said spring is such as to rock the shaft 21 forward at its upper side. Revolubly secured upon the opposite end of the shaft 21 and out- 90 side of the bracket in which the shaft has a bearing at that end is an indicator-wheel 23, the periphery of which is longitudinally spaced, each space being provided with a numeral, one space being provided with a cipher, 95 the next space "5," the next "10," and so on, increasing by five until all of the spaces have been marked.

In the indicating-wheel I have shown there are one hundred and one spaces, thus per- 100 mitting the wheel to be so revolved as to indicate any amount differing by five from nothing to "500," inclusive. As ordinarily used, each space would have a value of five

cents additional to the value of the preceding space. Consequently the space designated by "500" would have the character "\$5.00." Secured to the inner side of the indicating-wheel 23 is a ratchet-wheel 24. Secured to the inner side of the ratchet-wheel 24 is a coiled spring 25, one end of which is secured to the ratchet-wheel and the other end to the shaft 21. The tension of the said spring is such as to tend to revolve the indicating-wheel 23 in a direction opposite to the movement of the hands of a clock as viewed from the right side of the wheel.

Rigidly secured at its lower end to the shaft 21, to the left of the ratchet-wheel, is an arm 26, the upper end of which has pivoted thereto a pawl 27, adapted to engage the teeth in the periphery of the ratchet-wheel 24. A spring 28, secured to the arm and bearing upon the said pawl, normally holds the pawl in engagement with the ratchet-teeth. The rearward movement of the arm 26, and consequently of the shaft 21, is limited by means of a screw 29, having mounted thereon a lock-nut 30, and provided with a screw-thread connection with a supporting-bracket 31, secured to the top plate 2 near its rear edge. After the indicating-wheel 23 has been partially revolved by means of the arm 26 and pawl 27, it is restrained from rearward movement due to the tension of the spring 25 by means of a pawl 32, pivotally connected with a rearwardly-extending arm at the upper end of a bracket 34, which is secured at its lower end to the upper side of the plate 2 of the frame.

A transverse projection 35 at the upper end of the bracket 34 is provided with an opening in which is movably fitted a push-rod 36, provided with a transverse plate 37 at its lower end and encircled by a coiled spring 38, located between the plate 35 and the head of the push-rod. The transverse plate 37 is located above the rear ends of the pawls 27 and 32, and is adapted when the push-rod 36 is forced downward and in opposition to the tension of the spring 38 to rock the pawls out of engagement with the ratchet-teeth simultaneously, thus allowing the indicating-wheel 23 to be retracted by the spring 25.

Rigidly secured upon the shaft 21 are the upwardly-extending arms 39, the forward edge of each of which near the upper end is provided with a notch 40, adapted to receive the bifurcated rear end of a horizontal forwardly-extending rod 41, which is held longitudinally movable upon the upper side of the plate 2. Upon the rod 41 is a coiled spring 43, the rear end of which bears against the rear clip 42 and a pin 44, secured in a transverse opening through the rod 41. The forward end of the rod 41 is pivotally connected to one arm of the bell-crank lever 45, horizontally disposed and pivoted to the upper side of the plate 2. The free end of the said bell-crank lever 45 is located in front of the ejecting-opening in the bottom of the coin-holder, so that when a coin is ejected from the holder

the free end of the bell-crank lever 45 is forced forward by the coin and the rod 41 forced rearwardly, thus rocking the arm 39 rearwardly, together with the rock-shaft 21 and the arm 26, carrying the pawl 27. Upon the opposite side of the coin-exit opening from the bell-crank lever 45 is a guide 46 upon the upper side of the plate 2. The said guide serves to prevent any sidewise movement of the coin while it is operating the bell-crank lever 45. Each of the tubular holders is provided in its front side with a longitudinal slot extending its full length, through which may be seen the pile of coins held therein. To one side of the said slot is a numbered scale by which can be read the value of the whole number of coins held at any time within the holder.

To the front of each of the holders is secured a longitudinally-movable rod 49, mounted in bearings 50. Encircling the rod 49 is a coiled spring 51, the lower end of which rests against the bearing 50 and the upper end against a transverse pin 52, secured to the rod 49. Hinged to a rearwardly-extending projection 55 at the upper end of each of the outer coin-holders is a cover 56, which when closed covers all of the coin-holders and depresses each of the rods 49, so as to obstruct the ejecting-orifice at the bottom of each holder, thus preventing the removal of any coins when the cover is closed. The cover may be held locked in any well-known manner.

The length of the arm 39, together with the location of the engaging groove 40 therein as well as the distance from the pivotal point of the bell-crank lever to the point of its engagement with the forward end of the rod 41, varies and is made to suit the size of the coin by which it is operated. For instance, the parts just described when used in connection with the holder containing the nickels must be such that when the nickel is ejected the rock-shaft 21 will be so rocked as to rotate the indicating-wheel 23 forward one space, the teeth and the ratchet-wheel corresponding in number to the number of spaces on the indicating-wheel or being multiples thereof. A dime in being ejected from its holder will rotate the indicating-wheel 23 forward two spaces. A quarter in being ejected will rotate the indicating-wheel forward five spaces. The half-dollar will rotate the said wheel ten spaces, and the dollar will rotate it twenty spaces.

My invention is operated as follows: The push-rod 36 is first depressed, so as to raise the pawls 27 and 32 out of engagement with the teeth of the ratchet-wheel 24, thus permitting the spring 25 to retract the said wheel and indicating-wheel 23 until the pin 47 upon the next side of the ratchet-wheel strikes against the upper side of a pin secured to the framework. At this time the zero-space will be opposite the point at which the observations are to be taken. This may be provided

in an opening through a casing (not shown) covering the indicating-wheel or in any other suitable manner. The reading of the wheel, however, should be always taken from the same stationary point, and the numbering upon the periphery of the wheel should be such as to have the zero-mark always in front of the point of observation when the indicating-wheel and the ratchet-wheel are retracted so that the pin 47 rests against the pin 48. When a coin is ejected by depressing the key in front of its holder, it forces the bell-crank lever forward at its free end, as hereinbefore described, and through the intermediacy of the rod 41 and the arm 39 the rock-shaft 21 is rocked, together with the arm 26 and the pawl 27, which in turn rotates the ratchet-wheel, thus moving the indicating-wheel, so that the denomination of the coin ejected is shown upon the indicating-wheel in front of the point where the character is to be read. The rock-shaft 21 is then retracted by means of the spring 22 until the arm 26 strikes against the stop-screw 29, the pawl 27 passing freely over the ratchet-wheel. If it is desired to now withdraw another coin of the same or of different denomination and have the total amount indicated, the appropriate ejecting-key is depressed, the coin ejected, and thus, as already described, causes the shaft 21 and the arm 26 to be rocked and the ratchet-wheel and indicating-wheel moved forward a distance corresponding to the value of the coin ejected. The full amount of the value of the coin withdrawn may be now seen by observing the character in the space on the indicating-wheel in front of the proper place of observation. If it is desired to withdraw, for instance, ninety cents from the holders, the ejecting-keys in front of the half-dollar, quarter, dime, and nickel holders are depressed consecutively, the ejection of each coin rotating the indicating-wheel 23 a distance equivalent in value to the denomination of the coin and causing the amount "90" to appear at the reading-place. If the proper amount has been withdrawn, the wheel 23 will so indicate it, but if by mistake the value of the coins withdrawn is more or less than the amount of change desired the indicating-wheel will show the exact amount that has been withdrawn, thus allowing an immediate correction in case a mistake has been made in operating the ejecting-keys. If the amount desired to be withdrawn is shown on the indicating-wheel, the push-rod 36 is depressed and the indicating-wheel is retracted to zero. The coins which have been ejected fall upon apron 15 and thence into the tube 16, from which they are removed by releasing the

spring-catch 19 and opening the bottom end of the tube.

Numerous departures from the construction herein shown may be made without departing from the spirit of my invention. 65

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a coin holder and register, the combination with a coin-receptacle, of means for ejecting the coin from the receptacle, a rock-shaft, a registering-wheel revoluble thereon, a spring for retracting the registering-wheel, means connected with the rock-shaft for operating the registering-wheel, and means operated by the ejected coin for operating the rock-shaft, substantially as described. 70 75

2. In a coin holder and register, the combination with a coin-receptacle, of means for ejecting the coin from the receptacle, a rock-shaft, a registering-wheel revoluble thereon, means for revolving the registering-wheel when the rock-shaft is rocked in the proper direction, and means operated by the ejected coin for operating the rock-shaft, substantially as described. 80 85

3. In a coin holder and register, the combination with a coin-receptacle, of means for ejecting the coin from the receptacle, a rock-shaft, a revoluble registering-wheel, means for retracting the rock-shaft and the registering-wheel, means for operating the registering-wheel when the rock-shaft is rocked, and means operated by the ejected coin for operating the rock-shaft, substantially as described. 90 95

4. In a coin holder and register, the combination with a coin-receptacle, of means for ejecting the coin from the receptacle, a rock-shaft a spring-retracted registering-wheel revoluble upon the rock-shaft and operated thereby, and means operated by the ejected coin for rocking the rock-shaft, substantially as described. 100

5. In a coin holder and register, the combination with a coin-receptacle, of means for ejecting the coin from the receptacle, a rock-shaft provided with a crank-arm, a bell-crank lever operated by the ejected coin, a spring-retracted rod connected to the bell-crank lever, and adapted to engage the crank-arm of the rock-shaft, and a registering device operated by the rock-shaft, substantially as described. 105 110

In testimony whereof I have affixed my signature in presence of two witnesses. 115

TERENCE O'DONNELL.

Witnesses:

WARREN D. HOUSE,
J. F. HADLEY.