Dec. 24, 1940. H. H. LYSONS ET AL 2,225,649

PARKING METER

Filed March 3, 1937 2 Sheets-Sheet 1

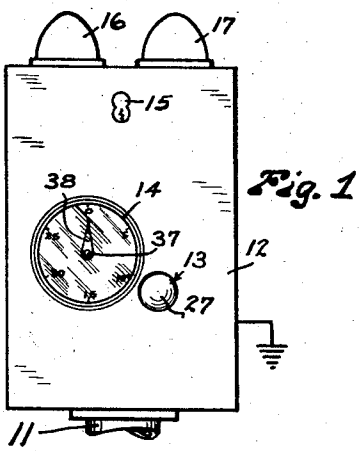


Fig. 1

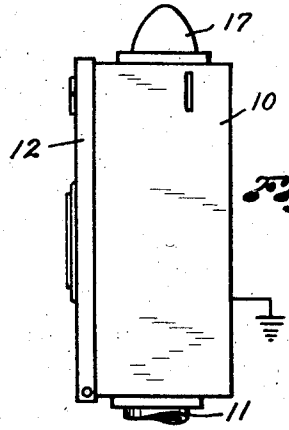
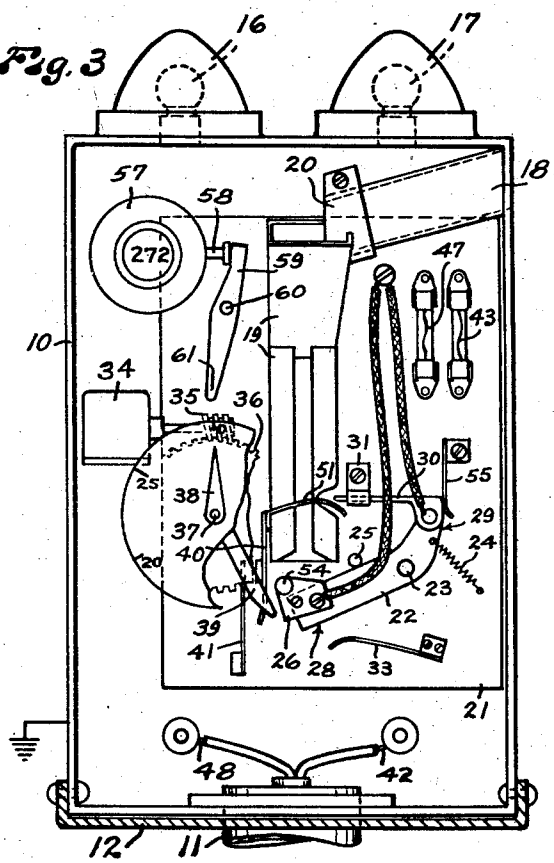


Fig. 2

Fig. 3



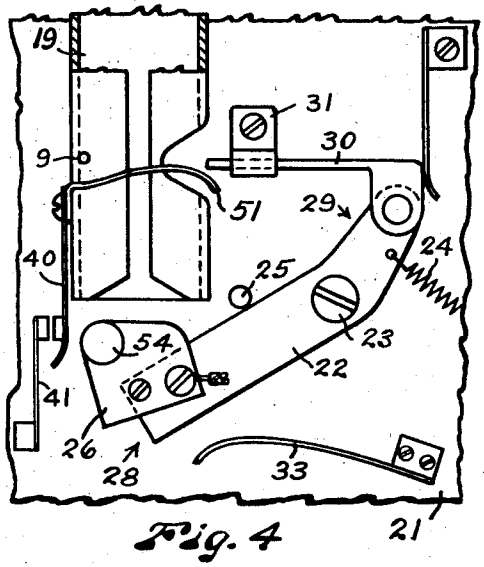


Fig. 4

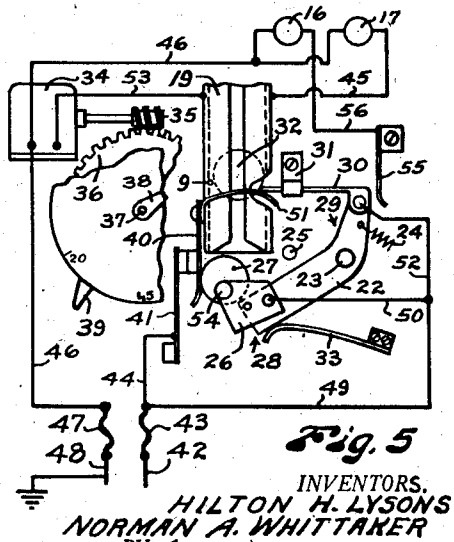


Fig. 5

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PARKING METER

Filed March 3, 1937 2 Sheets-Sheet 2

Fig. 6

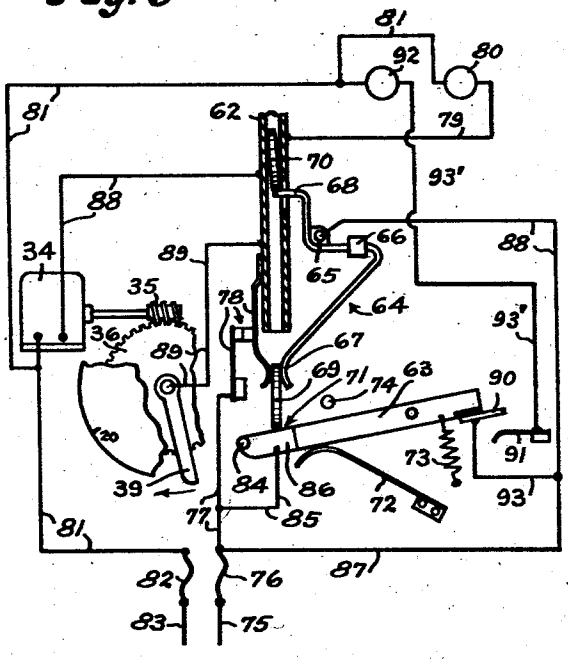
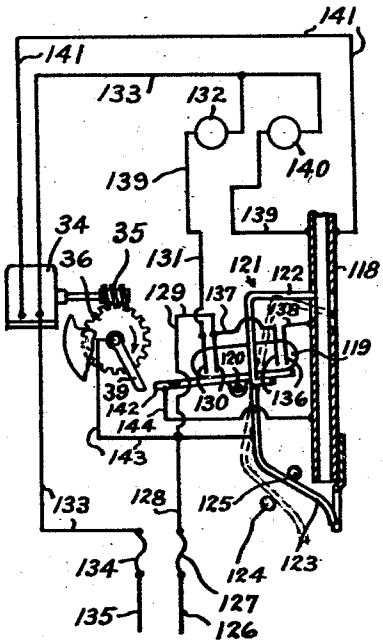


Fig. 8



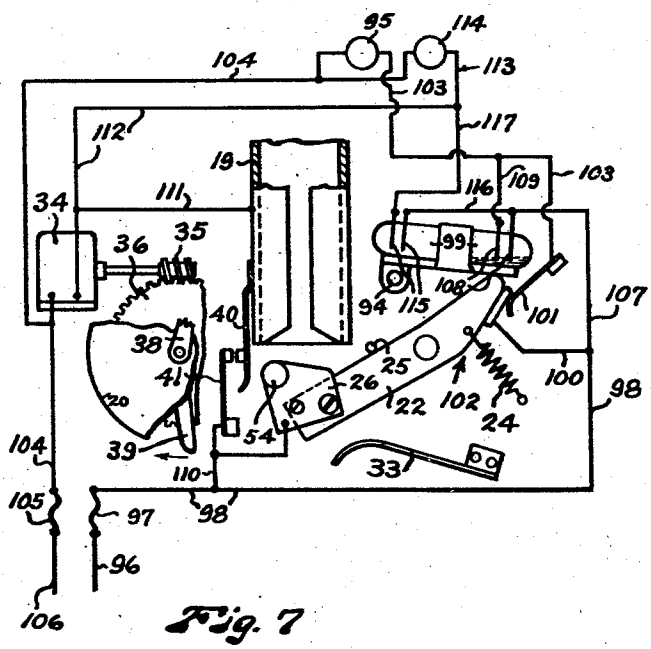


Fig. 7

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UNITED STATES PATENT OFFICE

2,225,649

PARKING METER

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Application March 3, 1937, Serial No. 128,796

8 Claims. (Cl. 194—6)

This invention relates to a meter for regulating parking of vehicles upon the public streets. Heretofore it has been found necessary to limit the parking period of vehicles upon public streets, and particularly in the areas where great portions of the traffic are carried. This has generally been done by providing parking privileges of various duration, depending upon the traffic encountered upon the particular street. After limiting the time period of parking at particular places, considerable policing has been required to discipline violators of the various traffic ordinances involving parking.

Lately it has been suggested that a solution of the parking problem of vehicles on the more congested streets may well be taken care of by charging a fee for the privilege of parking for a predetermined period. This invention relates particularly to a meter which may be used in regulating the parking of vehicles upon the public streets for a predetermined fee.

It is an object of the invention to provide a coin regulated meter which will visibly indicate whether a coin has been deposited in the meter, and also will visibly indicate whether or not the time period, for which a coin has been deposited, has elapsed.

It is a further object of this invention to provide a coin regulated meter wherein a coin of a predetermined value will operate electrical switch means which may be connected with electrically energized signal means.

It is a further object of this invention to provide a plurality of electric switch means arranged in parallel electric circuits to energize a signal means so as to eliminate possibilities of error by a switch mechanism.

It is a further object of the invention to provide an electrical switch means wherein a coin of a predetermined value may be used as a conductor in the electrical circuit to a signal means.

It is a further object of the invention to provide means to substantially eliminate fraudulent operation of the mechanism and require that a coin of a predetermined value be inserted in the mechanism for the operation thereof.

It is a further object of the invention to provide a tube containing mercury, which tube is centrally mounted so that the mercury may flow from one end to the other of the tube and while in each end of the tube, said mercury will serve as a stop means tending to maintain the tube and mechanism connected therewith in a predetermined position.

It is a further object of the invention to provide a mercury tube switch mechanism connected with an electrically operated parking meter.

It is a further object of the invention to provide a simple, efficient and substantially foolproof mechanism which may be economically built and which will operate with a minimum amount of servicing.

The above mentioned general objects of this invention, together with others inherent in the same, are attained by the mechanism illustrated in the following drawings, the same being preferred exemplary forms of embodiment of this invention, throughout which drawings like reference numerals indicate like parts:

Figure 1 is a view in elevation, with the supporting pedestal broken away, of the outside of a meter constructed in accordance with this invention;

Fig. 2 is a side elevation of the apparatus shown in Figure 1;

Fig. 3 is a view in front elevation of the device with the cover removed and showing parts in full lines and parts in dotted lines, parts being broken away;

Fig. 4 is a fragmentary enlarged view in front elevation of parts shown in Fig. 3;

Fig. 5 is a wiring diagram with parts diagrammatically illustrated and parts broken away;

Fig. 6 is a view in front elevation, with parts broken away, and parts indicated diagrammatically of a modified form of the invention;

Fig. 7 is a view in front elevation, witn parts broken away, and parts indicated diagrammatically of a still further modified form of the invention; and

Fig. 8 is a view in front elevation, with parts broken away, and parts indicated diagrammatically of a still further modified form of the invention.

A housing 10 provided with a suitable support 11 (broken away) serves to support the structure. A hingedly supported cover 12 is connected with the housing 10. The cover 12 is provided with a glass covered sight opening 13, through which the coin operating the mechanism may be visibly perceived. Another sight opening 14 is provided through which a dial for indicating the time period may be perceived (explained in more detail hereafter). A locking mechanism 15 for the cover is also preferably provided. Signal means for indicating the operating condition of the mechanism are provided, such as a red light 16, and a green light 17.

Referring more particularly to Fig. 3, which shows the internal structure of the meter, a coin

chute 18 is provided through which a coin of a predetermined size may enter the machine. This coin chute 18 is connected with another coin chute 19. The coin chute 19 is electrically insulated from the coin chute 18 by any suitable means, such as by insulating material 20. A frame member 21, formed of insulating material, is connected with the housing 10 and serves to support the various internal parts of the mechanism. The coin chute 19 (formed of electrical conductive material) is supported by such frame member 21.

Operatively positioned below the coin chute 19 is a pivotally supported pawl 22, which is formed of insulating material. Pivot means 23 supports the pawl 22. A spring 24 serves to yieldingly urge the pawl 22 in one direction toward the stop 25. The plate 26 formed of electrical conductive material is connected with a movable portion of the pawl 22 and serves in connection with the pawl 22 and frame member 21 as a coin receiving means. A coin 27 is shown in the coin receiving mechanism in Fig. 5 of the drawings.

The pawl 22 is preferably pivotally supported intermediate its length to provide the movable portion 28 supporting the coin receiving plate 26 and another movable portion 29. A link 30 (formed of electrical conductive material) is pivotally connected with the portion 29 of the pawl 22 and is slidably mounted in a support 31. The link 30 serves as a coin blocking member for a second coin 32 (see Fig. 5) in the coin chute 19. When a coin 27 depresses the movable portion 28 of the pawl 22, the outer end portion of the link 30 moves into coin blocking position relative to a second coin 32 in the coin chute 19. Also when the spring 24 lowers the portion 29 and raises the portion 28 of the pawl 22, the outer end portion of the link 30 is moved out of coin blocking position relative to a second coin 32 in the coin chute 19. A resiliently supported stop member 33 stops the downward motion of the movable portion 28 of the pawl 22, as shown in Fig. 5. In this position the coin 27 is held in the coin receiving means 26 and the link 30 serves to block a second coin 32 in the coin chute 19 and engages the coin 32 below the center thereof, as shown in Fig. 5.

An electrically energized clock motor mechanism 34 is preferably used to predetermine a time interval. This clock motor 34 is mechanically connected by worm 35 and worm wheel 36 with a shaft 37 on which is mounted a time indicating hand 38. By providing suitable ratio between the worm 35 and the worm wheel 36, one revolution of the hand 38 may indicate a suitable period of elapsed time, such as 30 minutes. A pawl 39 is connected with the worm wheel 36. The position of the hand 38 is readily visible through the sight opening 14. Also the coin 27, when in the position shown in Fig. 5, is visible through the sight opening 13.

Referring to the wiring diagram shown in Fig. 5, when a coin 27 is in the position shown, resiliently supported switch blade 40 will be urged towards the left and the contact points of such switch blade 40 and the contact points of the switch blade 41 will be electrically engaged. This will establish an electric circuit which may be traced as follows: Commencing with a suitable source of electrical energy (not shown) energy is connected with conductor 42, preferably through suitable fuse means 43, along conductor 44, along switch blade 41, along switch blade 40, which is connected with the coin chute 19 (formed of electrical conductive material), thence along coin chute 19, along conductor 45, through green lamp 17, along conductor 46, through fuse 47 and thence to the other source of electrical energy 48, thus illuminating green lamp 17 and indicating the presence of a coin in the coin receiving member 26. At the same time electrical energy will flow from source 42 through fuse 43, along conductors 49 and 50, through coin receiving member 26 (formed of electrical conductive material), through the coin 27, through switch blade 40, to coin chute 19. From coin chute 19 the circuit will be the same as just described through the green lamp 17. Thus, two parallel circuits are provided illuminating lamp 17.

The forward motion of the link 30 into coin blocking position relative to a second coin 32 in the coin chute 19 will serve to energize further electrical switches. The forward portion of the link 30 not only contacts the second coin 32, in the coin chute, but also contacts switch blade 51, which is connected with the coin chute 19. This energizes two further electrical circuits as follows: Commencing with source 42, through fuse 43, along conductors 49 and 52, along link 30 (formed of electrical conductive material), along switch blade 51, to the coin chute 19. Also energy along link 30 passes through coin 32 and thence to coin chute 19. From coin chute 19 the circuit through the green lamp 17 has been previously described.

Thus, the presence of a coin in the coin receiving member 26 will energize two parallel circuits, and at the same time will project the link 30 forward, which in turn will energize another parallel circuit through link 30 and switch blade 51. If a second coin is present in the coin chute, a fourth parallel circuit will be energized through the second coin 32. It is further important to note that as long as the pawl 22 is in the position shown in Fig. 5 of the drawings, a circuit will be energized through the link 30 and switch blade 51, regardless of whether or not a coin 27 is in the coin receiving means 26. It is, of course, understood that the switch blade 51 is alongside of the coin chute 19 and does not block the movement of coins in said coin chute. Whenever the coin chute 19 is energized, as previously explained, from the source 42, the green lamp 17 will be illuminated. At the same time the energy which reaches coin chute 19 from source 42 will pass along conductor 53 to clock motor 34. As motor 34 and green lamp 17 are in parallel circuit relation between conductor 46 and coin chute 19, energizing of coin chute 19 will simultaneously energize lamp 17 and motor 34.

Upon energizing of the clock motor 34, the worm wheel 36 will commence to rotate and the pawl 39 (formed of electrical conductive material for purposes discussed in connection with Figs. 6 and 8) will rotate in a clockwise direction. When the pawl 39 has made almost one revolution, the pawl 39 will engage with pin 54, which is connected with the pawl 22. Upon engagement of the pawl 39 with the pin 54, the movable portion 28 of the pawl 22 will be moved downwardly, compressing resilient stop 33 and releasing the coin 27. At the same time the movement of the link 30 inwardly against the second coin 32 is possible because the forward end portion of the link 30 engages the second coin 32 below the center thereof, thus causing the second coin 32 to rise in the coin chute 19. Also the second coin may rise in case of expansion due to variations in temperature. Preferably a pin 9 is posi-

tioned in the coin chute 19 to engage a coin below the center thereof. The second coin 32 is thus supported by said pin 9 and the forward portion of link 30. Such pin 9 facilitates upward motion of the second coin as the forward portion of link 30 moves inwardly, or in case of expansion. The downward movement of the movable portion 28 of the link 22 permits the coin 27 to be released. This, of course, will interrupt the electrical circuit between the switch blades 40 and 41 and the circuit between coin receiving member 26 and the switch blade 40. However, at this time the circuit to the green light 17 and the clock motor 34 is maintained through the link 30 and switch blade 51 until the pawl 39 passes beyond the pin 54.

After the pawl 39 passes beyond the pin 54, the spring 24 serves to return the movable portion 29 of the link 30 to the position shown in Fig. 3 of the drawings. Upon reaching this position the link 30 electrically disengages from switch blade 51 and engages with switch blade 55. Engagement of the rearward portion of the link 30 with the switch blade 55 energizes an electric circuit to the red light 16. This circuit may be traced as follows: Commencing with source 42 through fuse 43, along conductors 49 and 52, along switch blade 55, along conductor 56, through red lamp 16, along conductor 46, through fuse 47 to the other source 48, thus illuminating red lamp 16.

Thus, whenever a coin is present in the coin receiving member 26, the green lamp 17 will be illuminated, serving as a signal means indicating a coin in said coin receiving means. On the other hand, when no coin is present in the coin receiving means and the pawl 22 has been returned to its normal position by spring 24, the red lamp 16 will be illuminated, serving as a signal means indicating the absence of a coin in the coin receiving means.

The device thus provides a plurality of circuits which are established by the coin, so that sufficient electrical energy may be carried for the energizing of a lamp and a clock motor. It is true that the amount of energy thus required is very low, as most clock motors on the standard 120 volt circuit operate at substantially 2 watts, and the light globe which may be used for the signal lamp 17 may be a light globe consuming 7½ watts on said circuit. Still, it has been found in practice that it is necessary to provide a plurality of parallel circuits to insure against inoperative periods. Furthermore, contact problems are generally considered the most serious problems involved in switch mechanisms where the small weight of a coin is involved as a switch operating force. It has been found that this plurality of parallel circuits permits direct operation of the switch mechanism by a coin and a device which will operate for long periods of time without requiring servicing.

In a meter which is designed particularly for metering parking privileges, it must be remembered that the only purpose of operating the device is to leave a car at a designated place. In view of the universal practice of car license numbers, this means that the operator of the machine in effect leaves his name and address behind when he operates the device. This in itself eliminates considerable problems usually encountered in coin operating machines, such as the deposit of "slugs," etc. Of course, any coin or token deposited may be visibly perceived through the sight opening 13. However, to prevent unlawful tampering and the attempted use of wires down the coin chute, we have provided an energized coin chute 19. In connecting the wires to the coin chute 19, it is preferable that the source 42 be the ungrounded source of electrical energy and the source 48 be the grounded source. Also the housing 10 is grounded. Thus, if a wire is inserted in the coin chute 18, if the wire is projected into the coin chute 19, the fuse 43 will be immediately "blown out" and the red light 16 will be extinguished. Thus, the officer or party policing the apparatus on the streets will note that neither light of the device is illuminated and the person attempting such illegal practice may be apprehended.

Preferably a recorder 57 is provided to count the number of revolutions of the worm wheel 36. In the drawings we have indicated #272 to indicate 272 revolutions. This recorder may be of any standard construction and provided with a rod 58, the reciprocation of which will operate the recorder. A pivoted lever 59 supported on pivot means 60 provides an end portion 61 which is operatively positioned in the path of movement of the pawl 39. This serves as a check to determine the quantity of coins which should be collected from the apparatus.

Referring to Fig. 6 of the drawings, a modification of the pawl 22 of Figs. 1 to 5 is shown and also a modification of the coin block member 30 and coin chute 19 are shown. In view of the fact that only portions of the structure of Figs. 1 to 5 are modified, only pertinent portions of the modified structure and wiring diagram are illustrated, and the rest are broken away. The coin chute 62 (formed of electrical conductive material) supplants the coin chute 19 of Figs. 1 to 5. This coin chute 62 is shown at right angles to the coin chute 19 of Figure 1. The pivotally mounted pawl 22 of Figs. 1 to 5 is supplanted by the pivotally mounted pawl 63 of Fig. 6. The coin blocking link 30 of Figs. 1 to 5, inclusive is supplanted by the pivotally mounted coin blocking member 64 (formed of electrical conductive material).

The coin blocking member 64 is pivotally supported on pivot means 65 and is provided with a counterbalance weight 66 so that the end portion 67 of the blocking member 64 is normally urged across the coin chute 62. When a coin 69 is inserted in the coin chute 62, the same will therefore pass by the coin blocking portion 68 of the member 64 and urge the end portion 67 to the right as respects the showing in Fig. 6, and urge the coin blocking portion 68 into coin blocking position relative to a second coin 70 which may be inserted in the coin chute. The first coin 69 will urge the coin receiving portion 71 of the pawl 63 downwardly against resiliently supported stop 72. The resiliently supported stop 72 functions similarly to the resilient supported stop 33 of Figs. 1 to 5, inclusive. A spring 73 urges the pawl 63 against the stop 74, similar to the action of spring 24, urging the pawl 22 against the stop 25 in Figs. 1 to 5, inclusive. When a coin 69 is in the position shown in Fig. 6 of the drawings, the following circuits will be established. Energy from source 75 will pass through fuse 76, along conductor 77, through switch blades 78 (similar to switch blades 40, 41, Figs. 1 to 5) along coin chute 62 (formed of electrical conductive material), along conductor 79, through green signal lamp 80 (similar to lamp 17, Figs. 1 to 5) along conductor 81, through fuse 82 to the other source 83, thus completing the circuit illuminating signal lamp 80. At the same time a parallel

circuit is energized from source 75, through fuse 76, along conductor 77, along conductor 85, through plate 86 (formed of electrical conductive material), through coin 69, through one blade of switch blade 78 to coin chute 62, and thence through green signal lamp 80 to the other source 83, as previously explained.

At the same time, if a second coin 70 is in the coin chute 62, another parallel circuit will be energized as follows: Commencing with source 75, through fuse 76, along conductors 87 and 88 to the pivot means 65 supporting the coin blocking member 64, thence through the coin blocking member 64 (formed of electrical conductive material), through coin 70 to coin chute 62, and thence through green signal lamp 80, as previously described.

The clock motor 34, worm 35, worm wheel 36 and pawl 39 are similar to the parts shown in Figs. 1 to 5, inclusive, and are therefore similarly numbered. The clock motor 34 is energized whenever the coin chute 62 is energized. Energy from the coin chute 62 will pass along conductor 88 to said clock motor 34, through said clock motor and thence along conductor 81, through fuse 82 to the other source 83.

The coin 69 will thus energize the green signal lamp 80 and the clock motor 34, thus causing the pawl 39 to rotate. When the pawl 39 rotates in a clockwise direction, and just about completes one cycle, it will engage the pin 84 connected with the plate 86. The resiliently supported stop 72 will be compressed, permitting the coin 69 to be released. As long as the pawl 39 (formed of electrical conductive material) engages with the pin 84, an additional circuit is energized which may be traced as follows: Commencing with source 75, through fuse 76, along conductors 77 and 85, along plate 86 to pin 84, along pawl 39 (formed of electrical conductive material), along conductor 89 to coin chute 62, and thence through green signal lamp 80 and clock motor 34, as previously explained to the other source 83. This circuit will be maintained as long as the pawl 39 is in engagement with the pin 84, irrespective of the fact that the coin 69 is released from the coin chute and the switch 78 electrically opened.

After the coin 69 is released from the coin receiving means formed in part by the plate 86 on the pawl 63, the pawl 63 will be returned by the spring 73, against the stop 74. This will cause switch blade 90 to engage with switch blade 91. This will energize a circuit to red signal lamp 92 as follows: Commencing with source 75, through fuse 76, along conductors 87 and 93, to switch blade 90, along switch blade 91, along conductor 93', through red signal lamp 92, along conductor 81, through fuse 82, to the other source 83, thus illuminating red signal lamp 92 in the absence of a coin in the coin receiving means and after the pawl 39 has passed the pin 88.

Referring to the still further modified form of the invention shown in Fig. 7, again portions are broken away in the interest of brevity, in view of the fact that such portions may be similar to the construction shown in Figs. 1 to 5, inclusive, of the drawings. Here the coin chute is similar to the coin chute 19 of Figs. 1 to 5, inclusive, and is therefore similarly numbered. Also, for the same purpose clock motor 34, worm 35, worm wheel 36, pawl 39, pawl 22, plate 26, switch blades 41 and 40, resiliently supported stop 33, spring 24, and stop 25, are similarly numbered to the similar parts of Figs. 1 to 5, inclusive.

A mercury tube type switch 99 is pivotally supported on pivot means 94 positioned at one end of the mercury tube switch. In the position shown in Fig. 7 of the drawings, where a coin is not present in the chute 19, the pawl 22 is resiliently urged against stop 25 by the spring 24. In this position the following circuit is established through red lamp signal means 95: Commencing with source 96, through fuse 97, along conductor 98, along conductor 100, through switch 101, which is closed because of the position of the portion 102 of the pawl 22, along conductor 103, through red lamp signal means 95, along conductor 104, through fuse 105 to the other source 106, thus completing the circuit and illuminating red lamp signal means 95.

Another parallel circuit through the red lamp signal means 95 is also established through the mercury tube switch 99. Energy passes from source 96, through fuse 97, along conductor 98, along conductor 107, between the mercury in the mercury tube switch connecting electrodes 108, along conductor 109, along conductor 103, through red lamp signal means 95 and thence to the other source 106, as previously explained, thus providing two parallel circuits maintaining red lamp 95 illuminated, indicating the absence of a coin in the coin receiving means.

When a coin is inserted in the coin chute 19, the weight of the coin will pivot the pawl 22 similar to the pivoting of said pawl in Figs. 1 to 5, inclusive. The coin will close the contacts between switch blades 40 and 41, completing a circuit which may be traced as follows: Commencing with source 96, through fuse 97, along conductor 98, along conductor 110, through switch blades 41 and 40, along the coin chute 19, along conductor 111, along conductor 112, along conductor 113, through green signal lamp means 114, along conductor 104, through fuse 105 to the other source of energy 106. This circuit will energize both the green lamp 114 and the clock motor 34.

At the same time the coin in the coin chute will raise the end portion 102 of the pawl 22, opening switch 101 and tilting the mercury switch 93 so that the mercury will flow to the other end of the mercury tube switch 93 and establish contact between electrodes 115. This will establish the following circuit: Commencing with source 96, through fuse 97, along conductors 98 and 107, along conductor 116, between electrodes 115, along conductor 117, along conductor 113, through green signal lamp 114, and thence to the other source 106, as previously explained. In the structure thus illustrated in Fig. 7, there has been shown two parallel circuits through the green signal lamp means 114 when a coin is present in the coin receiving means, and two parallel circuits through the red lamp signal means 95 when no coin is there present. The coin will be released from the coin receiving means similar to the mode of operation explained in connection with Figs. 1 to 5, inclusive, and the circuit will be maintained until the pawl 39 releases the pin 54, as the mercury will maintain contact between electrodes 115 until the pawl 39 releases pin 54 permitting the pawl 22 and mercury switch 99 to assume the position shown in Fig. 7.

In the still further modified form of the invention shown in Fig. 8, the only parts which are changed over Figs. 1 to 5, inclusive, are shown somewhat diagrammatically and parts are broken away in the interest of brevity. Here the clock motor 34, the worm 35, worm wheel 36 and the pawl 39 are similarly numbered to the similar parts shown in Figs. 1 to 5, inclusive.

The coin chute 118 is similar to the coin chute 62 of Fig. 6. A mercury tube 119 is pivotally supported on pivot means 120 substantially intermediate the length of said mercury tube. A coin engaging and coin blocking member 121 is connected with said mercury tube 119. The coin engaging and coin blocking member 121 is composed of a coin blocking portion 122, which is movable into and out of an opening in the coin chute 118. The coin engaging and coin blocking member 121 is also provided with a coin engaging portion 123 which is movable into and out of coin engaging position relative to a coin in the coin chute 118. Stops 124 and 125 serve to limit the positions of the coin engaging portion 123 and parts connected therewith.

When the parts are in the position shown in Fig. 8 of the drawings, an electrical circuit will be established as follows: Commencing with source 126, through fuse 127, along conductor 128, along conductor 129, between electrodes 130, which are electrically connected by the mercury in the tube 119, along conductor 131, through red lamp signal means 132, along conductor 133, through fuse 134 to the other source 135.

When a coin is deposited in the coin chute 118, the coin will engage with the coin engaging portion 123 and move the same from the full line position shown in Fig. 8 to the dotted line position shown in Fig. 8. This will tip the mercury tube switch 119 and the mercury will flow to the other end of the mercury tube switch and tend to urge and hold the mercury tube switch in this position. Also the mercury will establish electrical communication between electrodes 136. This will establish the following circuit: Commencing with source 126, through fuse 127, along conductors 128 and 129, along conductor 137, between electrodes 136, along conductor 138 to the coin chute 118. From the coin chute 118 energy will pass along conductor 139 through green lamp signal means 140, thence along conductor 133, through fuse 134 to the other source 135. Energy flowing along the coin chute 118 will also pass along conductor 141 to the clock motor 34, thus completing a circuit both to the green lamp 140 and the clock motor 34.

The mercury in the tube 119 will tend to hold the mercury switch in either of the two positions which it may assume. The coin will engage the coin engaging member 123 and pass directly thereby into any suitable means. When the coin engaging portion 123 is positioned in coin engaging position relative to the coin chute 118, the coin blocking member 122 is out of coin blocking position. After a coin has engaged the coin engaging member 123 and moved the same to the dotted line position shown in Fig. 8, the coin blocking portion 122 will move to the dotted line position shown in Fig. 8, which is the coin blocking position relative to a second coin in the coin chute 118.

After the crcuit has been established to the clock motor 34, the worm 35, worm wheel 36 and pawl 39 will move until the pawl 39 (formed of electrical conductive material) engages the portion 142 connected with the supporting means for the mercury switch 119. As soon as a pawl 39 engages the portion 142, an additional circuit will be established as follows: Commencing with source 126, through fuse 127, along conductor 128, along conductor 143, along pawl 39 (formed of electrical conductive material), along portion 142, along conductor 144, to the coin chute 118, and thence through the green signal lamp 140 and clock motor 34, as previously described. This circuit will be established until the pawl 39 passes the portion 142.

In this form of the invention the mercury tube switch is used to energize the red signal means 132 and the green signal means 140, as well as the clock motor 34. An additional circuit is provided through the pawl 39 when the same engages the portion 142, thus maintaining the circuit until the commencement of the new cycle.

Obviously, changes may be made in the forms, dimensions and arrangement of the parts of this invention, without departing from the principle thereof, the above setting forth only preferred forms of embodiment.

We claim:

1. In a device of the class described, a coin chute; a pivotally mounted pawl; a coin receiving means connected and movable with said pivotally mounted pawl, said coin receiving means being operatively positioned relative to said chute and movable and maintained by the weight of a coin out of a first position to a second position; means returning said coin receiving means and pawl to the first position in the absence of a coin in said coin receiving means; and a reciprocably mounted coin blocking member connected with said pawl and movable therewith into the coin chute into coin blocking position relative to a second coin in said coin chute when the pawl is in said second position and movable out of the coin chute and out of coin blocking position when the pawl is in the first position.

2. In a device of the class described, a coin chute; a coin receiving means operatively positioned relative to said coin chute and movable by the weight of a coin to one position; an electrical switch means operatively positioned relative to said coin receiving means so its contact members are moved into electrically engaged position when said coin receiving means are in said one position; a second electrical switch means wherein a coin in said receiving means functions as a conductor in establishing electrical communication across said second switch means; an electrically energized signal means for indicating the presence of a coin in said coin receiving means; and means establishing electrical communication with said signal means including therein two parallel paths established by said electrical switch means and said second electrical switch means.

3. In a device of the class described, a coin chute; a pivotally mounted pawl; a coin receiving means connected and movable with said pivotally mounted pawl, said coin receiving means being operatively positioned relative to said chute and movable and maintained by the weight of a coin out of a first position to a second position; means returning said coin receiving means and pawl to the first position in the absence of a coin in said coin receiving means; a coin blocking member connected with said pawl and movable therewith into coin blocking position relative to a second coin in said coin chute when the pawl is in said second position and movable out of coin blocking position when the pawl is in the first position; an electrical switch means operatively positioned relative to said coin blocking member so that its contact members are moved into electrically engaged position when said coin blocking member is in coin blocking position; an electrically energized signal means for indicating the presence of

a coin in said coin receiving means; and means establishing electrical communication with said signal means including therein said electrical switch means.

4. In a device of the class described, a coin chute; a pivotally mounted pawl; a coin receiving means connected and movable with said pivotally mounted pawl, said coin receiving means being operatively positioned relative to said chute and movable and maintained by the weight of a coin out of a first position to a second position; means returning said coin receiving means and pawl to the first position in the absence of a coin in said coin receiving means; a coin blocking member connected with said pawl and movable therewith into coin blocking position relative to a second coin in said coin chute when the pawl is in the second position and movable out of coin blocking position when the pawl is in the first position; an electrical switch means operatively positioned relative to said coin blocking member so that its contact members are moved into electrically engaged position when said blocking member is in coin blocking position; a second electrical switch means wherein said second coin in said coin chute establishes electrical communication across said second electrical switch means; an electrically energized signal means for indicating the presence of a coin in said coin receiving means; and means establishing electrical communication with said signal means including therein two parallel paths established by said electrical switch means and said second electrical switch means.

5. In a device of the class described, a coin chute; a pivotally mounted pawl; a coin receiving means connected and movable with said pivotally mounted pawl, said coin receiving means being operatively positioned relative to said chute and movable and maintained by the weight of a coin out of a first position to a second position; means returning said coin receiving means and pawl to the first position in the absence of a coin in said coin receiving means; a coin blocking member connected with said pawl and movable therewith into coin blocking position relative to a second coin in said coin chute when the pawl is in the second position and movable out of coin blocking position when the pawl is in the first position; an electrical switch means operatively positioned relative to said coin receiving means so its contact members are moved into electrically engaged position when said coin receiving means are in said second position; a second electrical switch means wherein a coin in said coin receiving means establishes electrical communication across said second switch means; a third electrical switch means operatively positioned relative to said coin blocking member so that its contact members are moved into electrically engaged position when said blocking member is in coin blocking position; a fourth electrical switch means wherein said second coin in said coin chute establishes electrical communication across said fourth electrical switch means; an electrically energized signal means for indicating the presence of a coin in said coin receiving means; and means establishing electrical communication with said signal means including therein four parallel paths established by said first, second, third and fourth electrical switch means.

6. In a device of the class described, a casing member formed of electrical conductor material; means connecting said casing to one conductor from a source of electrical energy; a coin chute formed of electrical conductor material; means connecting said casing to another conductor from a source of electrical energy; a coin receiving means operatively positioned relative to said coin chute and movable and maintained by the weight of a coin to one position; an electrical switch means operatively positioned relative to said coin receiving means so its contact members are moved into electrically engaged position when said coin receiving means are in said one position; an electrically energized signal means for indicating the presence of a coin in said coin receiving means; and means establishing electrical communication with said signal means including therein said coin chute as an electrical conductor and also said switch means, whereby conductor materials, as wires, inserted in said coin chute and engaging said casing member will provide a short circuit and inoperative conditions.

7. In a device of the class described, a coin chute; a movably mounted coin receiving member operatively positioned relative to said coin chute; a resiliently supported stop means tending to stop said coin receiving member in one position; electrically controlled means urging said receiving member past said resiliently supported stop means into another position and permitting release of a coin from said coin receiving member; a first means establishing electrical communication to said electrically controlled means comprising circuit means established by a coin in said coin receiving member; and a second means establishing electrical communication to said electrically controlled means comprising circuit means established by engagement between the coin receiving member and the electrically controlled means.

8. In a device of the class described, a coin chute; a fixed coin blocking pin projecting into said coin chute; a reciprocating coin blocking member movable toward and away from said fixed coin blocking member and within said coin chute, said two coin blocking members adapted to engage the coin below the center thereof and block the same in the coin chute; and means moving said reciprocating coin blocking member when in coin blocking position toward said fixed coin blocking member, whereby said reciprocating coin blocking member will maintain contact with a coin blocked in said coin chute and the coin will rise in said coin chute.

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