June 4, 1940. F. R. BUTHERUS 2,202,897

COIN OPERATED DEVICE

Filed Sept. 26, 1935 5 Sheets-Sheet 1

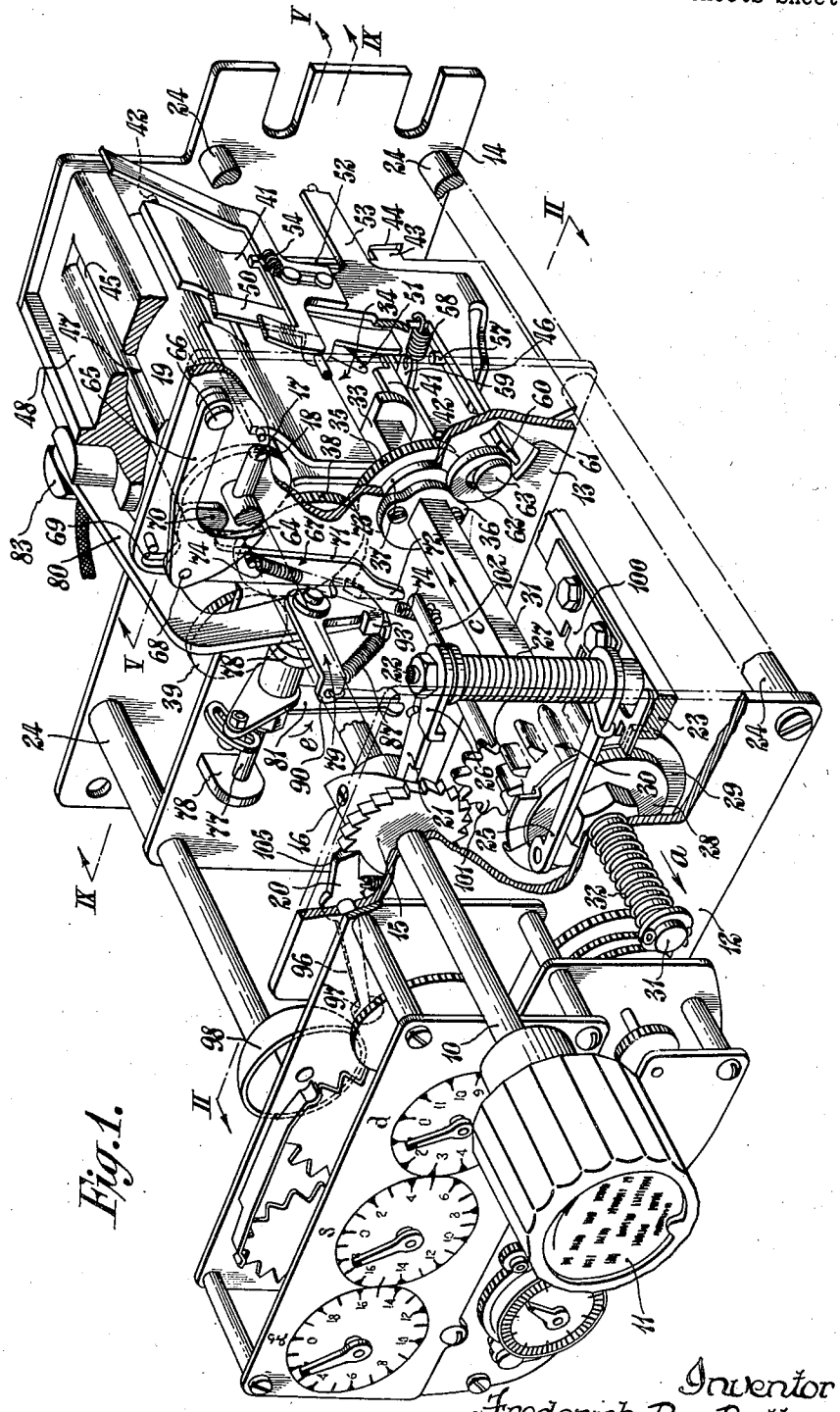


Fig. 1.

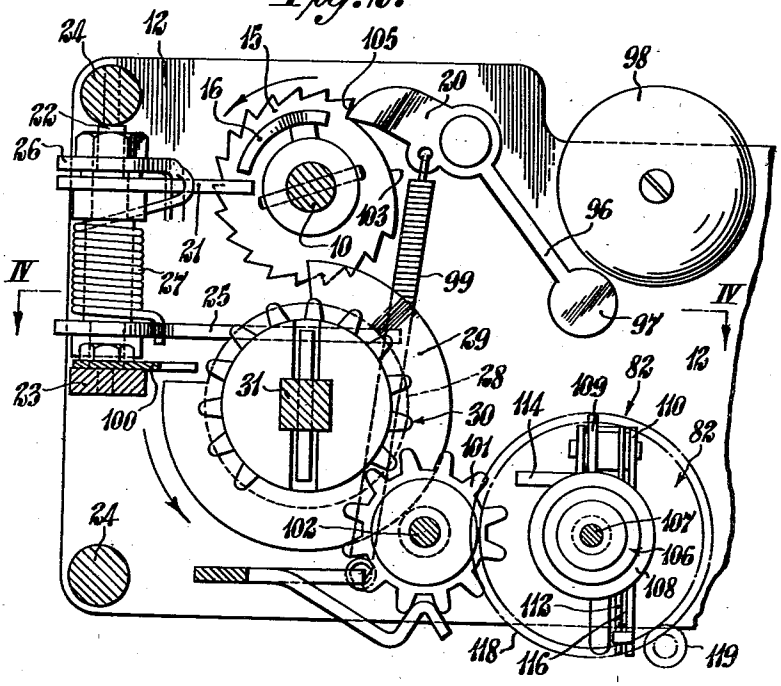
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COIN OPERATED DEVICE

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Fig. 2.



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Fig. 3.

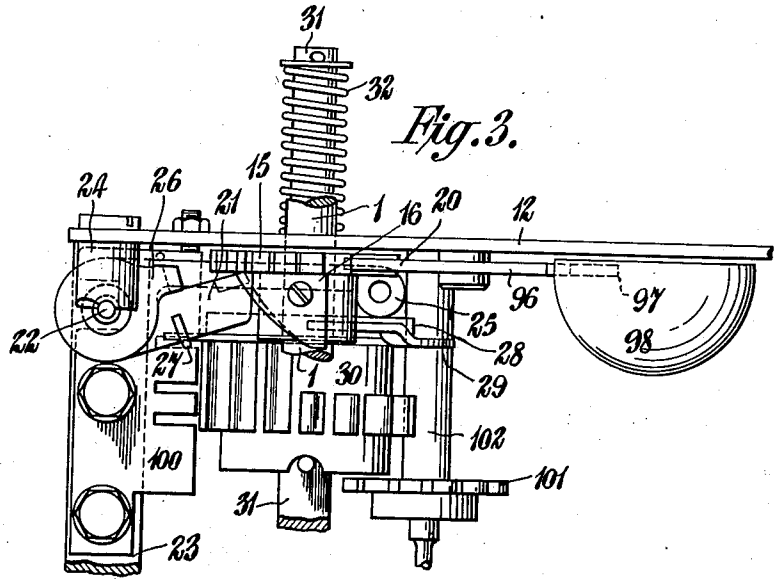


Fig. 5.

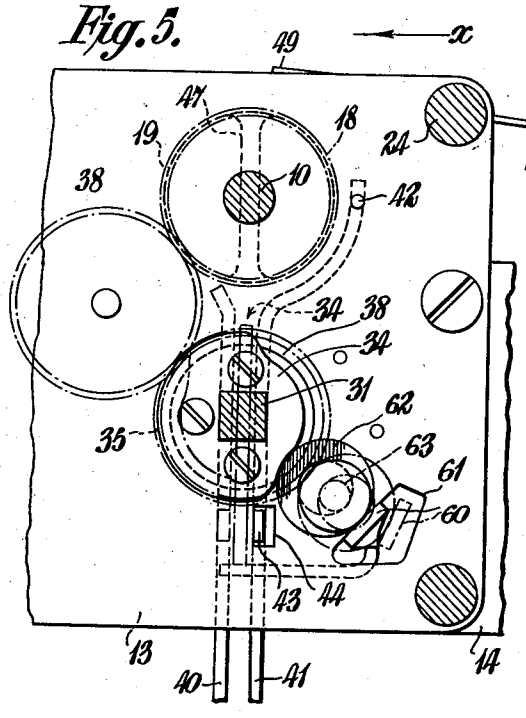
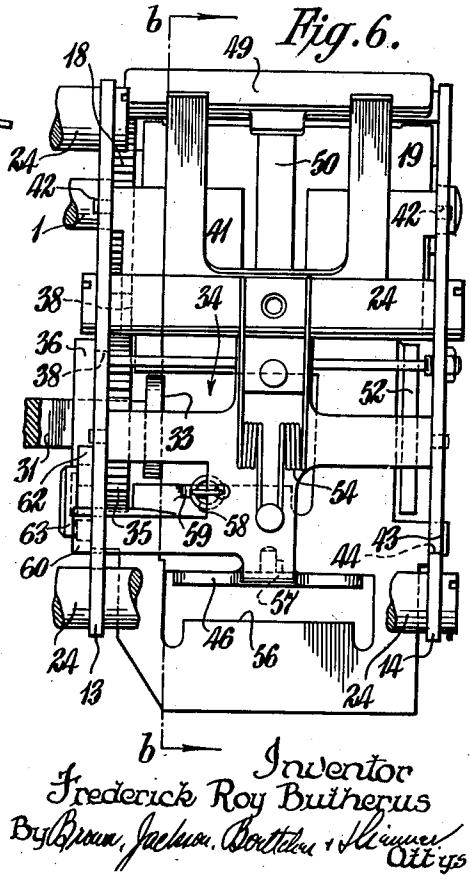


Fig. 6.



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Fig. 4.

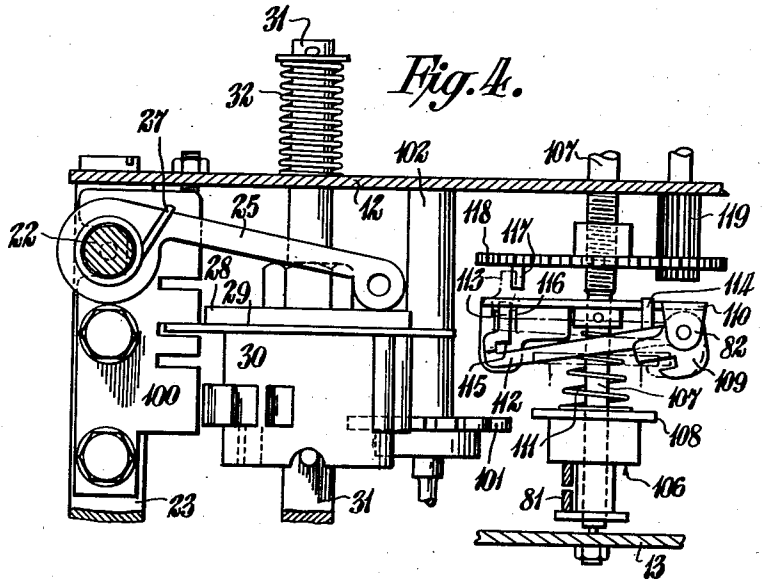


Fig. 7.

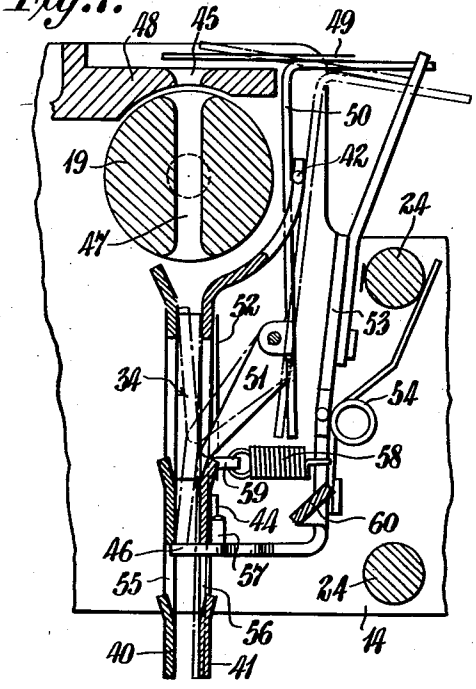
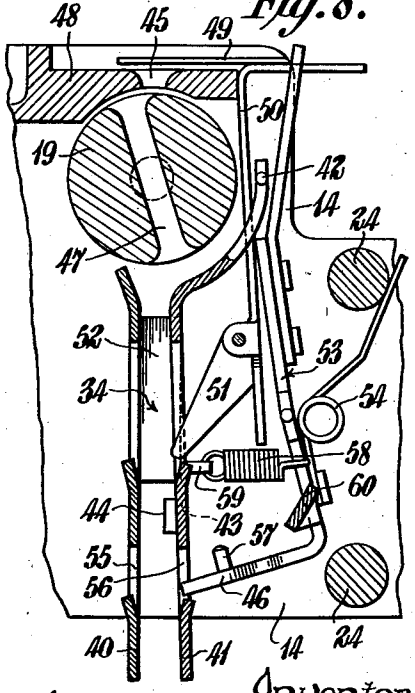


Fig. 8.



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Fig. 9.

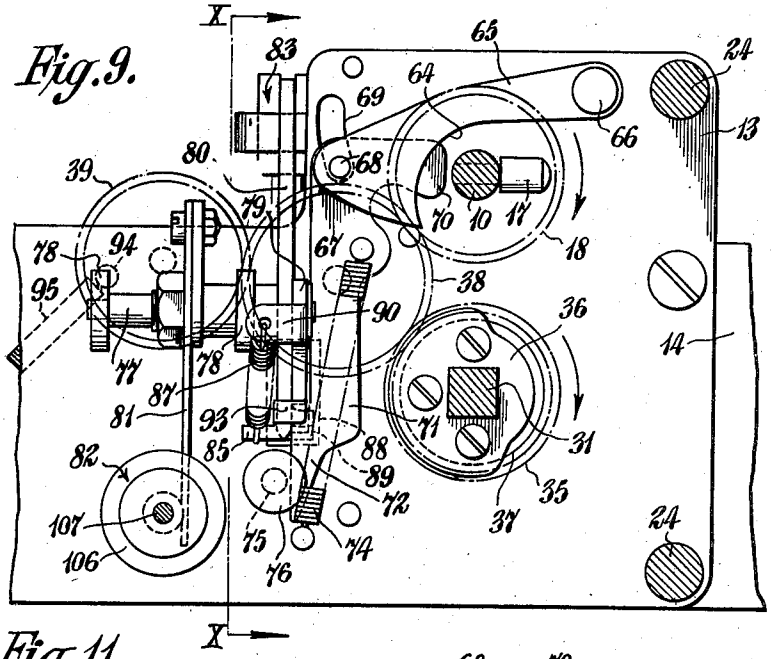


Fig. 11.

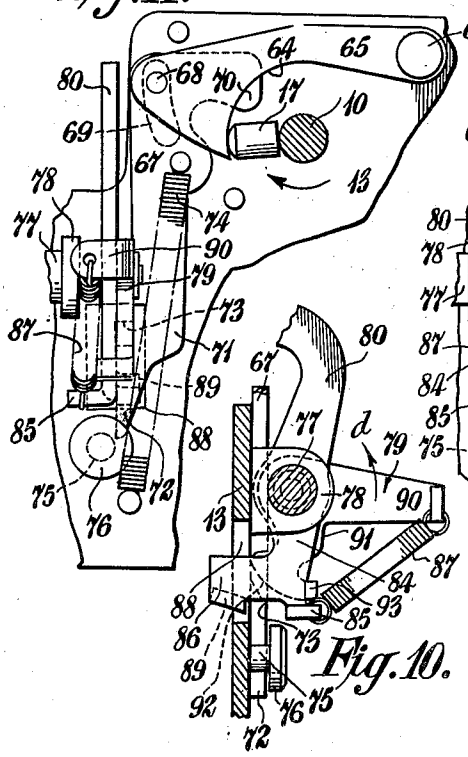


Fig. 10.

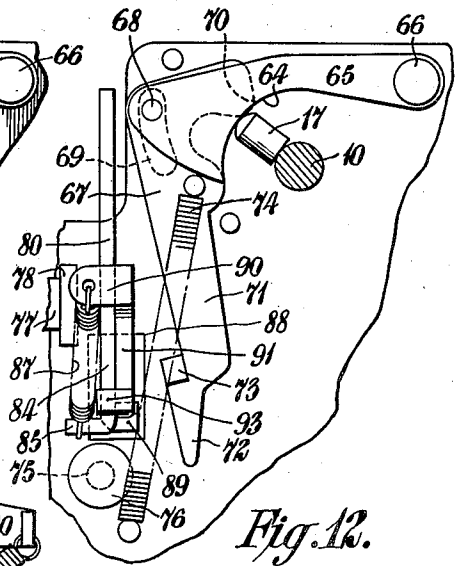


Fig. 12.

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Patented June 4, 1940 2,202,897

UNITED STATES PATENT OFFICE

2,202,897

COIN-OPERATED DEVICE

Frederick Roy Butherus, Enfield, England

Application September 26, 1935, Serial No. 42,231
In Great Britain October 6, 1934

6 Claims. (Cl. 194—3)

The present invention relates to improvements in and relating to coin-operated devices and while of particular application to coin-operated prepayment mechanisms adapted for use with coins of different values, it is capable of being applied to coin-operated mechanisms suitable for a single coin.

One feature of the present invention is the simplification of the operation which has to be performed by the user of the mechanism and broadly speaking is characterized by arranging that the user has only to perform a single movement after a coin has been inserted.

Another feature of the invention is that the inserted coin is callipered and the subsequent operation of the mechanism in dependence upon the value of the inserted coin is effected by the movement of a manually controlled member in a single direction.

A further feature of the present invention is the provision of a manually controlled member which is adapted to be rotated a complete revolution for each coin inserted during which rotation all the operations incidental to the recording of a coin are effected such as the callipering of the coin, the operation of the indexing mechanism, the control supply of a commodity and the collection of the coin.

A further feature of the invention is to provide for the satisfactory operation of the mechanism by coins which are of the correct size but which would normally be unusable by reason of being bent or deformed, thereby avoiding the customary jamming and consequent failure of the device.

A still further feature of the present invention is the provision of means whereby the coin if capable of being inserted even by force through the ordinary coin slot will be held during a preliminary operation and subsequently released after the required function has been performed by the coin by separating the boundary walls of the coin chamber.

Yet another feature of the present invention is the provision of a signalling device adapted to be operated only at the instant that a certain predetermined stage, e. g., the final stage, of the setting of the mechanism after the insertion of a coin, has been reached.

In order that these and other features of the invention may be more clearly understood one constructional embodiment thereof will now be described with reference to the accompanying drawings wherein.

Fig. 1 shows a perspective view of a coin-operated prepayment mechanism embodying the invention with part removed to show more clearly certain features thereof.

Fig. 2 is a sectional elevation, drawn to a larger scale than Fig. 1, taken substantially upon the line II—II of Fig. 1.

Fig. 3 is a plan view of the parts shown in Fig. 2 while

Fig. 4 is a sectional plan view taken along the line IV—IV of Fig. 2;

Fig. 5 is a sectional elevation taken substantially upon the line V—V of Fig. 1 and illustrating the path of a coin through the coin chamber of the apparatus;

Fig. 6 is a side elevation of Fig. 5 looking in the direction of the arrow X.

Figs. 7 and 8 are sectional views taken along the line *b*—*b* of Fig. 6 showing different operative positions of the coin chamber mechanism.

Fig. 9 is a sectional elevation of the switch operating mechanism and taken substantially along the line IX—IX of Fig. 1;

Fig. 10 is a vertical section taken along the line X—X of Fig. 9 while

Figs. 11 and 12 are detail views showing different operative positions of the switch mechanism.

The invention shown generally in Fig. 1 is applied to a prepayment mechanism for an electricity meter and adapted for operation by coins of different denominations. Referring more particularly to Figs. 1, 2, 3 and 4 the device comprises an operating shaft 10 rotatably mounted in frameplates 12, 13 and 14 held spaced apart by means of spacing members 24 and forming the main frame of the mechanism. The shaft 10 is provided with an operating knob 11, a ratchet disc 15 carrying a cam member 16, a switch operating lug 17, a gearwheel 18 and a coin barrel 19. The ratchet disc 15 co-operating with a pawl 20 which is pivotally mounted upon the frameplate 12, ensures the unidirectional rotation of the shaft 10 thereby preventing backward movement during the operation of the mechanism.

The cam member 16 carried by the ratchet disc 15 is arranged to engage an arm 21 loosely mounted upon a vertically disposed rod 22 which in turn is pivotally mounted between a plate 23 and one of the spacing members 24 extending between the frame plates 12 and 13. A lever 25 is rigidly secured to the rod 22 near its lower end while an abutment lever 26 arranged to engage the arm 21 is rigidly secured to the rod 22 near its upper end, a helical spring 27 embracing the rod 22 and connected at its upper and lower ends to the arm 21 and lever 25 respectively serving to urge the loosely mounted arm 21 into con-

tact with the abutment lever 26. The whole assembly of arm 21, abutment lever 25, spring 27 and lever 25 mounted upon the vertical rod 22 thus forms a resiliently linked two armed lever. The lever arm 25 engages a bearing plate 28 which is secured, together with a slotted disc 29 and a multiple gear unit 30 to a square shaft 31. The shaft 31 is mounted so as to slide axially as well as to rotate in the frameplates 12 and 13 and is normally urged outwardly in the direction of the arrow *a* by a spring 32 carried by a circular forward extension of the shaft 31.

The shaft 31 carries at its inner end a coin engaging flange 33 which works within a coin receiving and callipering chamber 34. This inner end of the shaft 31 is slidably carried in a square hole formed in a gearwheel 35 and a cam disc 36 which are disposed on opposite sides of the frameplate 13 but rigidly connected together by a bearing collar 37 which forms means for rotatably mounting the parts 35 and 36 upon the frameplate 13. The gearwheel 35 is driven from the gearwheel 18 fixed to the operating shaft 10 by an intermediate gear 38 which also engages a further gearwheel 39 for a purpose hereinafter described. The gearwheels 18, 35 and 39 are of equal size and therefore rotate together to an equal extent.

Referring now more particularly to Figs. 5–8 the coin-receiving and callipering chamber 34 comprises two separated plates 40 and 41 arranged to extend between the frame members 13 and 14, the plate 40 being held in fixed relation to the frame members 13 and 14 while the plate 41 is arranged to be rocked bodily about pivot pins 42 at the upper extremity thereof. The movement of this plate 41 takes place about an axis parallel to the plane of the fixed plate 40 and is limited in either direction by lugs 43 integral with the plate 41 working in slots 44 formed in the frame members 13 and 14. The slots 44 are so arranged that when the plate 41 is situated in its nearest position to the fixed plate 40, the two plates are separated to an extent sufficient to enable a coin inserted through the coin aperture 45 to reach the closing plate 46 situated at the bottom of the cam slot, without permitting such coin to take up a position whereby its diameter will be measured incorrectly. On the other hand when the plate 41 is situated in its further position to the fixed plate 40, the distance between the plates is such as to permit of coins which are bent to a considerable extent falling freely into the coin box when the closing plate 46 is removed so as to open the bottom of the coin slot.

Arranged immediately above the flared upper ends of the plates 40 and 41 is the coin barrel 19 carried by the operating shaft 10. The barrel 19 is provided with a diametrically disposed slot 47 arranged to form a connecting channel between the coin insertion slot 45 which is formed in a fixed cover plate 48 and the coin receiving and callipering chamber 34 when the operating shaft 10 is in its normal or initial position. A masking plate 49 attached to the upper end of an arm 50 which is pivotally mounted between the frame members 13 and 14 serves to cover the coin insertion slot 45 immediately after the insertion of a coin by reason of the engagement of the inserted coin with a finger 51 formed on the arm 50 and projecting into the coin chamber 34. The masking plate 49 is also held to cover the slot 45 during the subsequent operation of the mechanism by the contact of upwardly extending arms of a member 53 with the edge of the masking plate 49.

The sides of the coin-receiving and callipering chamber 34 other than the plates 40 and 41 are formed in one case by a turned over lug 52 on the fixed plate 40 and constituting the fixed surface against which the inserted coins are urged during the callipering operation by the other or movable side composed by the flange 33 of the axially movable shaft 31. The bottom of the coin-chamber 34 is constituted by a removable plate 46 forming part of a member 53 pivotally mounted between the frame members 13 and 14 and normally urged into the coin-chamber closing position shown in Fig. 7 by means of the spring 54. When in the coin-chamber closing position the plate 46 passes through the slots 55 and 56 in the plates 40 and 41 respectively and is provided with a stop pin 57 normally in contact with the movable plate 41 thereby serving also to maintain this plate in its position nearest to the opposing plate 40. A spring 58 is linked between an outwardly bent lug 59 on the plate 41 and the coin-chamber closing member 53 and serves to resiliently connect the two members for a purpose hereinafter described. The member 53 is also provided with upwardly extending arms adapted to engage the outer edge of the masking plate 49 and is additionally provided with an operating lug 60 extending substantially parallel to its pivotal axis and projecting through a slot 61 in the frame member 13 so as to present its extremity adjacent the periphery of a floating annular disc 62 which is secured upon the frame member 13 by the head of a pin 63. The floating disc 62 serves to enable the cam 36 which is rotatably mounted in the frame member 13 and is connected to the gear 35 by the bearing collar 37 to effect the movement of the lug 60. The cam 36 is shaped so as normally to allow the member 53 and plate 46 to close the bottom of the coin-chamber 34 but after a suitable amount of rotation from the normal or initial position has taken place the cam 36 causes the disc 62 to move the lug 60 and member 53 into the position shown in Fig. 8 and thereby effect the opening of the bottom of the coin-chamber 34 and also to expand the sides 40 and 41 apart in a manner hereinafter described.

Referring now more particularly to Figs. 1, 9, 10, 11 and 12, the switch operating lug 17 carried by the operating shaft 10 is arranged to engage, during the rotary movement of said shaft, with the cam surface 64 of a lifting lever 65 which is pivoted to the frameplate 13 at 66. The lifting lever 65 has a two armed member 67 pivotally secured to its free extremity by means of a pin 68 which also engages in an arcuate slot 69 formed in the frameplate 13 so as to guide the movement of the various parts. One arm 70 of the member 67 projects towards the shaft 10 so as to be engaged by the lug 17 during part of the rotary movement of said shaft while the other arm 71 of the member 67 projects in a downward direction and is provided with a tail piece 72 at the upper edge of which is formed a chamfered face 73 (see Figs. 10 and 12). The tail 72 of the member 67 is normally urged by a spring 74 to abut against the body of a stop pin 75 secured to the frameplate 13, the tail 72 of the member 67 in this position passing between an enlarged head 76 formed on the pin 75 and the frame plate 13.

A horizontal shaft 77, rotatably mounted in lugs 78 projecting from the frameplate 13, has a

bell crank lever 79 rigidly secured thereto together with a loosely mounted switch operating arm 80 positioned adjacent the bell crank 79, while an adjustable lever 81 also rigidly secured to the shaft 77 engages catch mechanism 82 which operates in a manner hereinafter described to maintain the switch 83 in the closed position and to release the switch at the appropriate instant under the control of the electricity supply meter and the indexing mechanism. The switch operating arm 80 is provided with an extension 84 (Fig. 10) terminating in two lugs 85, 86, the lug 85 forming an anchorage for one end of a spring 87 while the other lug 86 projects through a hole 88 in the frameplate 13 and is bent over to form an abutment 89 lying immediately behind the tail 72 of the member 67. The bell crank lever 79 has its outwardly extending arm 90 connected to the other end of the spring 87, while the other arm 91 projects downwardly and is formed with a cammed nose piece 92 and a lug 93. The nose 92 is positioned immediately above and in alignment with the champered face 73 of the member 67, while the lug 93 is bent over so as to engage with the lower extension 84 of the adjacently mounted switch operating arm 80. The spring 87 is slightly tensioned so as to urge the lug 93 into contact with the arm 80. The shaft 77 together with the bell crank 79 and switch operating arm 80 carried thereby are normally urged into the switch opening position (shown in Figs. 1 and 10) by pressure of the spring 111 associated with the catch mechanism 82 and operating through the lever 81 in the direction of the arrow *e* (Fig. 1).

The gearwheel 39 meshed with the gearwheel 38 is provided with an eccentric pin 94 to which is connected one end of a tension spring 95, the other end of which is anchored to the frameplate 13. The pin 94 is so arranged that in the normal or initial position of the mechanism, the spring 95 tends to turn the operating shaft 10, through the gears 39, 38 and 18, in an anticlockwise direction (when looked at from the front of the mechanism) so that the pawl 20 is held in engagement behind the last tooth of the ratchet disc 15 and so maintains the shaft 10 in the correct initial position with the slot 47 of the coin barrel 19 in alignment with the coin insertion slot 45.

Referring again more particularly to Fig. 2, the one-way rotation (in this instance clockwise, when viewed from the front of the mechanism and anticlockwise in the view shown in Fig. 2) of the operating shaft 10, is ensured by the provision of a ratchet wheel 15 secured to the shaft 10 and co-operating with the pawl 20 which is pivotally mounted upon the frameplate 12 of the mechanism. The pawl 20 is provided with a tail 96 carrying a striker 97 at its extremity capable of engaging a gong 98 secured to the frameplate 12 of the mechanism. A spring 99 connected to the pawl 20 serves to maintain it in contact with the ratchet wheel 15.

The catch mechanism 82 consists of a grooved sleeve 106 slidably mounted upon a shaft 107 and having a flange 108 which is adapted to be engaged by a fork member 109 which is pivotally mounted upon a trip carrying member 110 rigidly secured to the shaft 107. The groove of the sleeve 106 is engaged by the lower end of the adjustable lever 81 of the horizontal shaft 77 so that movement of said shaft causes the sliding of the sleeve 106 along the shaft 107 against the action of a spring 111 mounted concentrically with said shaft and abutting at its other end against the trip carrying member 110. The fork member 109 is connected to an extending arm 112 having a tongue 113 which is arranged to project on the opposite side of the trip carrying member 110 to that of the fork 109, when the latter is engaging and holding the flange 108. The tongue, when in this position is held against the action of the spring 111 and a further return spring 114 by the engagement of a shoulder 115 of the tongue 113 under a projecting edge 116 of the trip carrying member 110. A pin 117 carried by a gear wheel 118 is arranged to engage the tongue 113 and dislodge the shoulder 115 from the edge 116 and so cause the release of the sleeve 106 from the fork 109 and the consequent movement of the shaft 77 to move the switch to its open position. The gear wheel 118 is screwed upon the shaft 107 so that relative rotation between the two parts causes the movement of the gear 118 in an axial direction as well as the normal rotary movement. The gear 118 is driven by a pinion 119 from the electricity meter mechanism and is rotated in a direction so as to bring the pin 117 carried thereby towards and into engagement with the tongue 113 while the shaft 107 is rotated through the indexing mechanism by the shaft 102 carrying the gear 101 which is rotated by one or other of the sections of the multiple gear unit 30 during the operation of the prepayment mechanism. The rotation of the shaft 107 by means of the gear 101 is in such a direction as to cause the movement of the gearwheel 118 and pin 117 away from engagement with the tongue 113.

The operation of the device is as follows: With the device in the normal or initial position a coin inserted in the slot 45 falls or if bent may be forced through the slot 47 in the coin barrel 19, into the coin-chamber 34. This chamber is normally arranged with the plate 41 in its position nearest the opposing plate 40 to correctly accommodate coins of normal thickness, but if the inserted coin is bent or deformed to a greater extent than can be accommodated by the normal spacing of the plates 40 and 41, the plate 41 will be rocked about its pivots 42 against the action of the spring 54, which spring due to the engagement of the stop pin 57 on the plate 40 of the member 53 with the said plate 41 normally urges the plate 41 towards the plate 40.

Rotation of the operating shaft 10 in a clockwise direction (when viewed from the front of the mechanism) by means of the knob 11 causes a corresponding rotation of the square shaft 31 by way of the gearwheels 18, 38 and 35 while at the same time the cam member 16 mounted upon the shaft 10 moves the arm 21, together with the lever 25 resiliently linked thereto, about the axis of the rod 22. This movement of the lever 25 operating against the bearing plate 23 moves the shaft 31 axially in the direction of the arrow *c* (Fig. 1) together with the slotted disc 29 and multiple gear unit 30. The shaft 31 continues to be moved axially against the pressure of the return spring 32 until the flange 33 engages the coin contained in the coin chamber 34 and callipers it against the fixed end wall 52. A satisfactory coin will cause the arrest of the axial movement of the shaft 31 at a position where the slotted disc 29 is aligned with one of the slots in a slotted plate 100 secured to the plate 23, any further movement imparted by the cam 16 to the arm 21 being absorbed by the resilient coupling between the arm 21 and lever 25 provided by the spring 27. The position of the shaft 31 in an

axial direction, thus determined, effects the alignment of the appropriate gear of the multiple gear unit 30 with the common engaging gear 101 fixed to the shaft 102 which is connected to and operates the indexing or crediting mechanism. Each gear of the gear unit 30 has a different number of teeth in accordance with the value of the coin causing its alignment with the gear 101 and in consequence an appropriate amount of movement is imparted to the shaft 102 in accordance with the value of the inserted coin, e. g., coins having relative values of 1, 6 and 12 will effect the alignment of gears whose teeth numbers are in the ratio of 1:6 and 12 respectively.

During the rotation of the shaft 31 in the above described callipering operation the gear unit 30 turns idly by reason of all the gears thereon being unprovided over part of their peripheries with teeth capable of engaging the gear 101. At the same time the pawl 20 rides up the face 103 of the ratchet disc 15. Immediately after the callipering stage of the operation has been completed, the pawl 20 engages the ratchet teeth to prevent any backward movement of the knob 11 and shaft 10, while the cam 16 passes out of engagement with the arm 21 and thereby removes the pressure of the lever 25 from the bearing plate 28. The shaft 31 however cannot be returned by the spring 32 to its normal position in an axial direction because of the entry of the slotted disc 29 within one or other of the slots of the plate 100. The continued unidirectional rotation of the shaft 10 therefore causes corresponding rotation of the shaft 31 to effect predetermined rotation of the gear 101 by the gear unit 30. During the course of this second stage of operation continued rotation of the operating shaft 10 and shaft 31 causes the cam 36 to move the floating annular disc 62 which in turn moves the lug 60 so as to rock the member 53 into the position shown in Fig. 8. This operation causes the removal of the plate 46 from the position closing the bottom of the coin-chamber 34, thereby allowing the coin therein to fall into the coin box or till. At the same time the movable plate 41 is also rocked about its pivots 42 to its fullest extent away from the opposing plate 40, due to the removal of the stop pin 57 from contact therewith, and the simultaneous tensioning of the linking spring 58 by the outward movement of the member 53. The coin-chamber 34 is thus opened and at the same time expanded so that the coin therein, even if bent or deformed and gripped between the plates 40 and 41 during the callipering operation, can fall unobstructed into the coin box or till.

The degree of enlargement of the coin chamber 34 to receive a deformed coin is dependent upon the amount of deformity of the coin itself and therefore the callipering operation can take place with the usual degree of accuracy and without the necessity of undue freedom of movement in the case of normal unbent coins, while after the callipering operation the coin-chamber 34 is opened to an extent greater than that necessary to accommodate any coin that could possibly be inserted or even forced through the coin-insertion slot 45. Jamming of coins is therefore avoided.

During this stage of operation also, the switch operating lug 17 carried by the shaft 10 comes into contact with the cam surface 64 of the lifting lever 65 so as to raise the latter and the member 67 carried thereby to the position shown in Fig. 11. The upward movement of the member 67 causes the champered face 73 to move past the cammed nose 92 of the bell crank 79 so as to rock this bell crank together with the shaft 77 about its axis in the direction of the arrow *d* (Fig. 10) the catch mechanism cooperating with the arm 81 causing the locking of the shaft 77 in this position. This movement of the bell crank 79 causes the tensioning of the spring 87 so that a corresponding tendency to movement is imparted to the switch operating arm 80 which however is prevented from moving by reason of the lug 89 engaging behind the tail piece 72 of the member 67. Further rotation of the shaft 10 causes the engagement of the lug 17 with the arm 70 of the member 67 whereby this member is rocked bodily about its pivot 68 so that the tail piece 72 is removed from the path of the lug 89 of the lever 80 shown in Fig. 12. This lever 80 is now free to respond to the tension spring 87 and the switch is rapidly closed, the maintenance of this closure and the subsequent release being effected by the catch mechanism 82 operating through the arm 81. The final portion of the rotation of the shafts 10 and 31 to complete one revolution cause the various parts of the mechanism to assume their normal positions in readiness for the insertion of a fresh coin. During the rotation of the shaft 10 in the operation of the mechanism the pawl 20 engages the teeth of the ratchet 15 in succession to prevent any backward rotation, until at the completion of one complete revolution of the shaft 10, the pawl 20 drops behind the last tooth 105. This tooth is cut deeper as shown in Fig. 2, than any of the other ratchet teeth, and is dimensioned as to cause the striker 97 to strike the gong 98 and so give the operator audible advice that the whole operation has been properly completed. The ratchet teeth generally, with the exception of the last tooth 105, are dimensioned so that the striker 97 is normally positioned clear of the gong 98 and during the initial portion of the rotation of the shaft 10 the movement of the striker 97 by the teeth of the ratchet 15 is such as to be away from the gong 98 so that only when the last tooth 105 is reached is the movement imparted big enough to allow the striker to reach the gong and cause a sound to be emitted.

It should be noted that usually the knob 11 would be rotated slightly in excess of the complete revolution and the normal position of the various parts is assumed only by ultimately releasing the knob so that the spring 95 acts through the gears 39, 38 and 18 to rotate the shaft 10 backwards until the pawl 20 engages the last tooth 105 of the ratchet disc 15, as illustrated in Figs. 1 and 2.

While one form of carrying the invention into effect has been described with particular reference to a prepayment mechanism for an electricity meter it will be understood that considerable modifications will be made in the constructional details without departing from the spirit of the invention.

I claim:

1. In a coin controlled mechanism, in combination, a coin chamber formed by a pair of relatively movable side plates, resilient means disposed to bias said plates toward each other, a cover plate provided with an aperture aligned with said coin chamber through which a coin can be inserted, and a masking plate disposed to cover said aperture and operable by insertion of a coin

in said chamber to prevent insertion of a second coin as long as a coin remains in said chamber.

2. In a coin controlled mechanism, in combination, a coin chamber formed by a pair of relatively movable side plates, resilient means disposed to bias said plates toward each other, a movable bottom plate disposed to cooperate with said side plates to form a bottom for said chamber, and means for simultaneously moving said side plates away from each other and said bottom plate from cooperation therewith to permit a coin inserted in said chamber to fall out of it.

3. In a coin controlled mechanism, in combination, a coin chamber formed by a pair of relatively movable side plates, resilient means disposed to bias said plates toward each other, a cover plate provided with an aperture aligned with said coin chamber through which a coin can be inserted, a masking plate disposed to cover said aperture and operable by insertion of a coin in said chamber to prevent insertion of a second coin as long as a coin remains in said chamber, a movable bottom plate disposed to cooperate with said side plates to form a bottom for said chamber, and means for simultaneously moving said side plates away from each other and said bottom plate from cooperation therewith to permit a coin inserted in said chamber to fall out of it.

4. A prepayment mechanism comprising in combination a coin receiving device, a slidable member for calipering a coin in said coin receiving device, a rotatable cam by which said slidable member is moved toward the edge of the coin, mechanism for registering in accordance with the value of the coin inserted, a slidable and rotatable member linked to said slidable member so as to take up different positions in accordance with the diameter of an inserted coin as determined by said slidable member, variable gearing between said slidable and rotatable member and said registering mechanism for causing said registering mechanism to be operated by said slidable and rotatable member to an extent depending upon the position of said slidable member, a manually rotatable device to which said rotatable cam is connected, driving means controlled by said rotatable cam to effect the movement of the slidable member to caliper the coin and the longitudinal movement of said slidable and rotatable member, and further driving means controlled by said manually rotatable device by movement in the same direction to effect the rotation of said slidable and rotatable member and thereby operate the said registering mechanism through said variable gearing to an extent dependent upon the diameter of the coin inserted.

5. A coin controlled mechanism comprising a coin receiving chamber having a fixed wall and a movable wall supported in a yielding manner to accommodate coins of different thickness, a coin entry passage through which bent and deformed coins can be forced into said chamber, means for calipering a coin positioned in said coin receiving chamber, means for operating the mechanism in accordance with the diameter of the inserted coin as determined by said calipering means, and means controlled by said operating means for moving said movable wall away from said fixed wall to an extent greater than the thickness of any coin insertable through said coin entry passage to enable coins to be released into the coin collecting chamber.

6. A prepayment mechanism comprising, in combination, a member having movement in a longitudinal and a rotary direction, a coin receiving chamber, registering mechanism, a manually operated member having operative movement in one plane only, driving means controlled by said manually operated member and operatively connected to said two-directional member to move the same in a longitudinal direction into said chamber to caliper a coin between it and the opposite wall of said chamber, a second driving means also controlled by said manually operated member and operatively connected to said two-directional member to rotate the same, and variable gearing operatively interconnecting said registering mechanism and said two-directional member adjustable in accordance with the position taken up by the two-directional member when moved in a longitudinal direction.

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