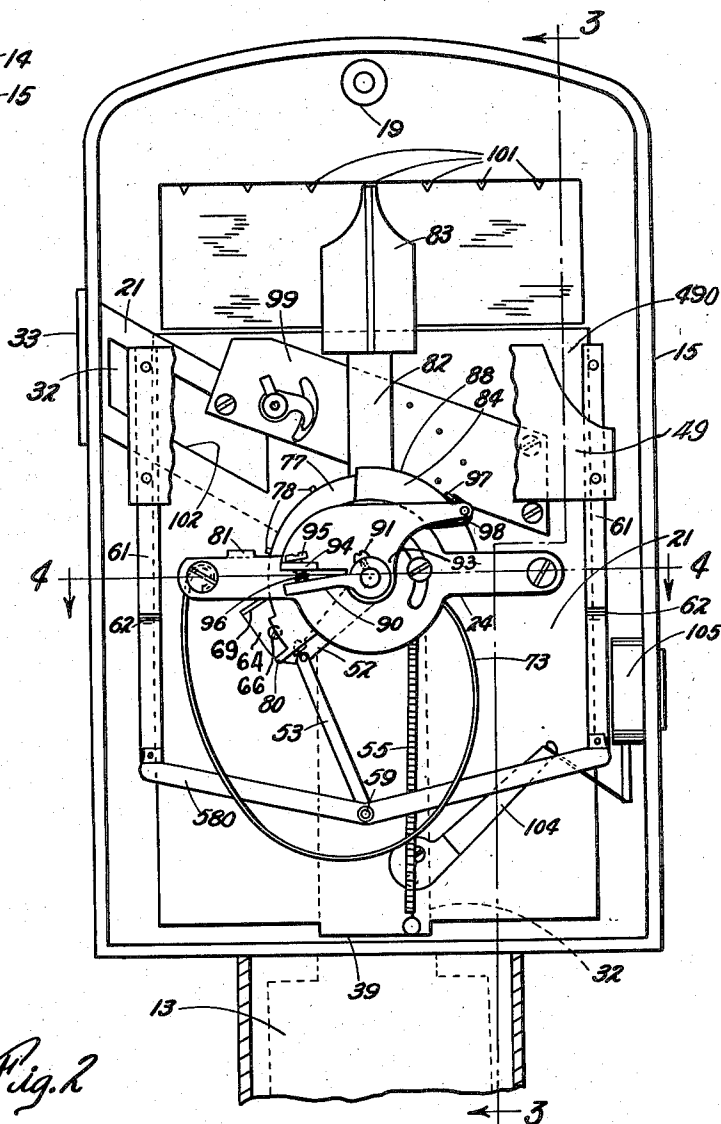


2,268,716

3 Sheets-Sheet 1



ATTORNEYS

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F. L. MICHAELS

2,268,716

PARKING METER

Filed May 12, 1936

3 Sheets-Sheet 3

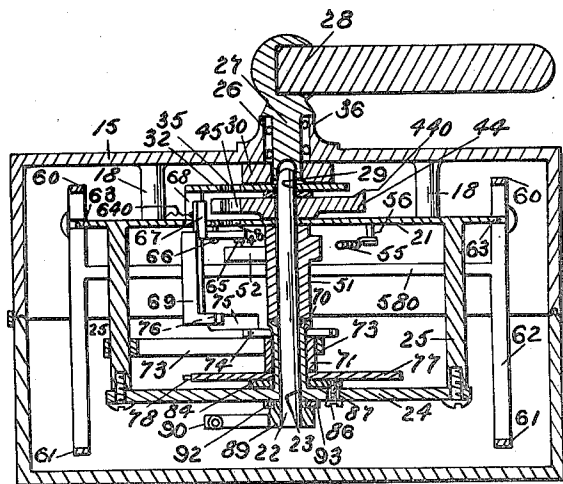
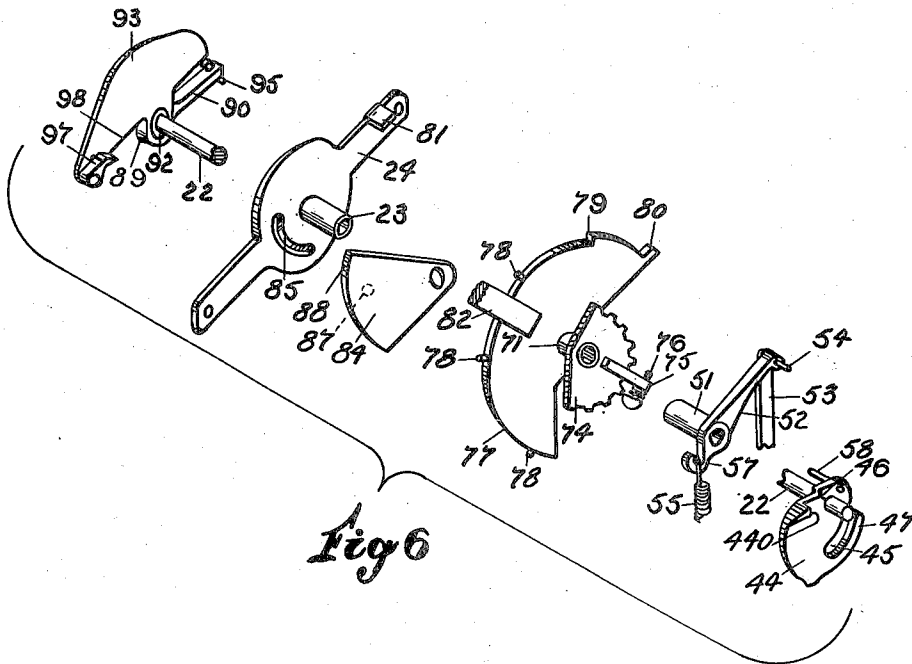


Fig 1

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PARKING METER

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Application May 12, 1936, Serial No. 79,302

11 Claims. (Cl. 194—61)

The present invention relates to automobile parking meters and has for an object the provision of a metering and signalling device which is effective in materially assisting in the police regulation of parking in communities and places where such regulation is considered necessary or desirable.

Another object of the invention is to provide a device of this kind requiring prepayment of one or several coins or tokens as an initial necessary operation in conditioning the device to indicate legal and proper parking of an automobile in a designated parking berth located in a proper place, for example, at the side of a thoroughfare.

Another object of the invention is to provide a device of this type enabling the motorist to selectively prepay a short or extended parking period by the deposit of one or several coins or tokens, the device being further arranged with an indicator, visible after the proper insertion of a coin and actuation of the device, informing the motorist of the approximate amount of prepaid parking time remaining.

Another object of the invention is to provide a device of this kind having a simple means whereby the time period of operation of the parking meter is accumulated by the deposit of a second coin or token, and to furthermore provide a simple means whereby the extent of parking period for a given coin or coins deposited may be varied by an authorized person charged with the maintenance and regulation of the devices.

Another object of the invention is to provide in a device of this kind a key-controlled receptacle to facilitate collection of the deposits in the parking meter, said collection receptacle being inaccessible to the person charged with the maintenance of the operating mechanism and having access to said mechanism.

Another object of the invention is to provide a device of the class described having a window aperture in either or both sides through which the indicator is visible during the prepaid parking period and for a short time thereafter and an automatically operable violation flag or signal movable to a position of visibility through the window at the exact moment of expiration of the parking period but allowing the indicator to be seen for a predetermined time thereafter.

Another object of the invention is to provide a simplified parking meter wherein an indicator, to show the remaining legal parking period, is directly driven from a simple and suitable driving means, the indicator carrying parts being operatively associated with an escapement brake

controlling the return of the indicator to zero position.

Another object is to provide in the device just referred to, a simple but effective and fool-proof means whereby the driving means and associated indicator are conditioned by the motorist only after deposit of a proper coin, the extent of conditioning being in proportion to the number of coins or tokens deposited and in accordance with the predetermined adjustment of the mechanism.

A further object of the invention is to provide a device for the purposes stated employing a practical minimum of comparatively inexpensive parts in the construction thereof.

These and other objects are attained by the means described herein and disclosed in the accompanying drawings, in which:

Fig. 1 is a perspective rear view of a device of the invention in an inoperative condition.

Fig. 2 is an elevational view, parts being broken away, and showing the operating mechanism, the front casing member being broken away.

Fig. 3 is a view taken on line 3—3 of Fig. 2 with the front casing member in closed position.

Fig. 4 is a view taken on line 4—4 of Fig. 2.

Fig. 5 is a view taken on line 5—5 of Fig. 3.

Fig. 6 is a perspective view showing in separated relation a series of working parts forming details of the invention removed from the device, the shaft being broken away.

Fig. 7 is a perspective view of another part forming a detail of the device of the invention.

Parking meters of the present invention afford the motorist an opportunity to initially actuate the device to operate for a predetermined short parking period or for a predetermined extended parking period by the deposit of one or two coins and actuating the mechanism a corresponding number of times. The normal short and extended parking periods are established by city authorities in the usual manner and are understood to differ in duration according to conditions where the meters are installed. Authorized persons may adjust the time periods of operation of the device according to prescribed parking regulations and may readjust the meter to suit changing parking regulations or different parking zones. It is to be understood that the invention is not to be considered as limited to the exact structural details shown, nor is it to be considered as limited specifically to mechanism wherein two different parking periods may be selectively prepaid.

In the present embodiment, the device comprises a base portion adapted to be fixedly

mounted on a standard or post 11. The base 10 is hollow and has a key-controlled door 12 at the rearward or sidewalk side affording access to a removable coin receptacle 13. A pair of casing members 14 and 15 are disposed above base 10 and are arranged to enclose the operating mechanism with suitable provision for authorized access to the mechanism.

The front casing member 14 is rigidly secured to or made integral with base 10, while rear casing member 15 is hinged or otherwise movably secured at 16 to said base. The operating mechanism is secured by screws 17 passing therethrough, and into tapped bosses 18 on the inner face of casing member 15.

Thus, when access to the operating mechanism becomes necessary, a key operated holding nut 19 of any suitable kind mounted on member 15 is rotated to unscrew it from threaded stud 20 fixed inside of member 14 and the member 15 is swung downwardly about hinged mounting 16 carrying the operating mechanism into fully exposed and readily accessible position.

The operating mechanism comprises a supporting plate 21 which is mounted in substantial parallelism with the inner face of casing member 15 by the screws 17 passing therethrough and holding it upon bosses 18 and a series of operating parts mounted coaxially on a transverse shaft 22 which passes through a bore in said plate 21. The opposite end of shaft 22 is journaled in a tubular hub 23 of a cross member 24 which is rigidly connected in spaced relation to plate 21 by fixing it to the ends of posts 25 which may be integral with or attached to the plate 21. The casing member 15 has a drilled boss 26 concentric with the axis of shaft 22 within which is disposed the stem 27 of an actuating handle 28. Stem 27 has an axial bore 29 in which the end of shaft 22 is journaled, while the end of the stem surrounding this bore is angularly formed or squared off to fit into a corresponding aperture in a hub 30 which is provided with an arcuate flange section 31 (see Figs. 3 and 4). A coin guide member indicated generally as 32 (see Figs. 3 and 5) is secured on the face of plate 21 and it, together with plate 21, forms a coin chute member which extends to and interiorly communicates with a coin slot 33 in the outer wall of member 15. As can be best seen in Fig. 5, the member 32 has an arcuate slot 34 concentric with the axis of shaft 22 and which is adapted to permit the arcuate flange 31 to traverse the angular way 35 in member 32 which is closed by the face of plate 21 when operating handle 28 is rotated. A coil spring 36 has one end 37 thereof anchored in stem 27 and has its opposite end 38 anchored interiorly of perforate boss 26 in the casing member 15 so that the stem and handle and the associated hub and flange 30—31 are constantly urged in a counterclockwise direction to a limit shown in Fig. 5 wherein the flange 31 is without the coin receiving way 35.

From the foregoing, it will be apparent that clockwise rotation of operating handle 28 will not move the shaft 22 which is journaled for free and independent rotation in the stem 27 as aforesaid, so long as there is no coin in the way 35.

As can be fully seen from an inspection of Figs. 2 and 5, the way 35 for the passage of coins extends from the coin slot 33 at the side of casing member 15 to the bottom of plate 21 which is struck outwardly at 39 at the discharge end of the way where the member 32 also terminates. Member 32 (see Fig. 5) is cut out as at 40 leaving

guide shoulders 41 on each side of the way and between these the coins are visible through a tell-tale sight opening 42 surrounded by a boss 43 on member 15. This opening has a glass in it to exclude dust and moisture. The coins that are retained exposed to view cannot be extracted from the way even though the glass be removed. At least two coins are visible in this opening so that the use of slugs can be detected and associated with the last party using the device.

Disposed between members 21 and 32 and partly in the coin way 35 is drive segment 44 which is fixed on shaft 22. As can be best seen in Fig. 5, the segment 44 has an arcuate slot 45 which lies parallel with slot 34 in member 32 and allows the arcuate flange 31 to clear the segment and to move in its normal path without imparting any movement to said segment when handle 28 is turned. The segment 44 has a shoulder 46 and a finger 47 which are squarely within the path of a coin that enters the way 35 and the deposited coin stops with its periphery resting on the end of finger 47 and the arcuate shoulder 46 so that the coin now blocks the free movement of flange 31 through arcuate slots 34 and 45. Plate 21 also has an arcuate slot 48 paralleling slots 34 and 45 into which flange 31 extends. Referring now to Fig. 5, a coin C (shown in dotted lines) inside the way 35 is at rest on said finger 47 and shoulder 46 so that the end of arcuate flange 31 may be turned to abut the coin and cause the coin in turn to impart rotary movement to segment 44 and the shaft 22 to which the latter is fixed.

The device further comprises a violation signal means including a pair of flags 49 that are vertically reciprocable as a unit within the casing to assume a raised position immediately behind windows 50 in the casing through which windows a suitable legend such as "Violation," on the outer faces of the flags, can be seen. The flags 49 are preferably so colored that, when raised, they can be seen from a distance by persons in the street or on the sidewalk. Flags 49 are arcuately cut away at 490 for reasons hereafter explained. Means are provided for lowering the flags upon deposit of a proper coin and manual operation of handle 28. The flags are adapted to be held in lowered position until the termination of the properly prepaid parking time and then are raised to visible position. Means are also provided to avoid any possible skillful but improper manipulation of the meter by arranging that the signal flags are released to raised position at the beginning of each coin controlled operation if the device is reset before expiration of a previous parking period, and are again lowered during the following proper manual operation of handle 28. This prevents a user from prepaying a first parking period and then trying to manipulate the machine with a second deposited coin in an effort to illegally prolong the period before the "Violation" signal rises.

An indicator mechanism, which is visible through windows 50 when the flags 49 are lowered, shows the amount of prepaid parking time remaining at all times prior to the rise of flags 49. The cut-out portions 490 on the flags also allows the indicator to be read for a short time, e. g. 10 minutes after the parking time has been expired and the flags are raised.

The indicator and the violation signal means will now be described.

The parts are but few in number and they are shown separated and in perspective. Reference

to Fig. 6 in conjunction with Figs. 3 and 4 will show the actual simplicity of construction and operation.

On the shaft 22 next to plate 21 an elongated spacer hub 51 is mounted for free movement and it carries an arm 52 to which link 53 is pivoted. The pivot is extended through and beyond the arm to provide a latch pin 54. A light spring 55 is secured at one end to a pin 56 on plate 21 and to a hook 57 on the hub 51 and serves to urge arm 52 to clockwise movement on shaft 22 (Fig. 2) and to lift link 53 which has the cross bar 580 pivoted thereto at 59. The flags 49 are held in spaced relation on uprights 60 and 61 which straddle the working parts and mounting plate of the device. The pairs of members 60 and 61 have the lower portions turned horizontally and joined together forming members 62 and then down turned and connected to member 580. Members 62 are notched at 63 to guide on the opposite vertical edges of plate 21.

From the foregoing it will be seen that spring 55 will normally move arm 52 about its pivot and thus lift the flags 49 and their supporting structure by means of the link 53.

The means for lowering the signal flags comprises the pin or lug 58 on drive segment 44 which lug extends through arcuate slot 48 in plate 21. When segment 44 is turned by arcuate flange 31 and the interposed coin C, the lug 58 presses arm 52 downward against the resistance of spring 55 and carries the flags 49 down below window 50. Latch member 64 (shown in perspective in Fig. 7) is also shown in phantom lines in Fig. 5. As shown in Fig. 7 the latch member 64 has a latch lug 65 which is engaged by pin 54 to hold the arm 52 in a depressed position against the resistance of spring 55 and the signal flags and associated supporting structure are thus normally kept in a lowered position until the latch is tripped by the return of a time indicator hand to zero position in the manner hereinafter explained. Latch member 64 is pivoted to plate 21, the pivotal center 66 being disposed at the side of the bend in coin way 35 and so arranged as to allow the member 64 to swing gravitationally and with the assistance of a light spring 640 to a position wherein the lug 65 is in the path of pin 54. On the face opposite lug 65 is a finger 67 that extends through an aperture in plate 21 and is adapted to normally hang in the coin way 35 and to be momentarily pushed out of said way into a slot 68 in the adjacent side wall of member 32 whenever a coin C is forced through way 35 by arcuate flange 31. This constitutes the aforementioned means which momentarily releases the signal flag 49, if still lowered by reason of unexpired operation under previous setting, when a coin is inserted. The movement of latch member 64 on its pivot moves the latch lug 65 out of holding contact with pin 54. The resetting operation which follows thereafter will again depress arm 52, lower the flag structure, and engage pin 54 on lug 65 of latch 64 which shifted to latching position immediately after the coin had passed the said finger 67. The latch member 64 also has an extended L shaped arm 69 which is moved at the expiration of any prepaid parking period by means hereinafter described to push latch lug 65 from holding position with relation to pin 54. Thus the violation flags 49 are automatically moved to visible position upon expiration of the prepaid parking period.

In Fig. 4 it will be noted that the end of spacer hub 51 is disposed for free rotation against the

end 70 of the tubular hub 23 on cross member 24. Mounted for free rotation on tubular hub 23 is a sleeve 71 which has suitably fixed thereto a pin 72 over which the perforate end of an elongated flat spring 73 is hooked, the other end of spring 73 being looped about one of the posts 25 upon which cross member 24 is supported, thereby yieldably resisting turning of the sleeve on the hub in one direction. When the sleeve is turned spring 73 becomes loaded and subsequently drives the sleeve in a reverse direction. Fixed on one end of sleeve 71 is a gear segment 74 which has attached thereto or integral therewith a lug 75 in which is threadedly mounted an adjustable trip member which is a screw 76. The screw 76 may be adjusted so that when the sleeve 71 and its associated parts are returned to an initial position by spring 73 the L shaped extending arm 69 on latch member 64 will be contacted and rocked thereby releasing the violation signal flag holding means, this release of said flag being independent of the previously described momentary release of the flags on the initial actuation of the device upon insertion of a coin.

In order to effect selective setting of the meter and a corresponding winding of the power spring 73 there is fixed to the opposite end of sleeve 71 an indicator setting segment 77 which is provided at frequent intervals along its periphery with threaded perforations which selectively receive threaded members such as screws 78. The member 77 has a shoulder 79 near one end, and this serves as a non-adjustable abutment or tooth for a drive pawl mechanism hereinafter described, while said screws 78 serve as adjustable abutments for the same pawl. A projecting lug 80 on an extreme end of segment 77 is provided to contact a stop 81 which may be integral with cross bar 24 for limiting movement of segment 77 under the power of spring 73. Brazed or otherwise secured to one face of segment 77 is an arm 82 which supports a pair of spaced indicator hands 83 connected by a transverse member 84.

From the foregoing, it will be seen that when sleeve 71 is turned in one direction the spring 73 will be tensioned or loaded and will turn said sleeve and the indicator hands 83 supported thereby until lug 80 meets the stop 81.

An adjustable plate 84 is mounted on hub 23 and adapted to be adjustably fixed to the member 24 within the limits defined by arcuate slot 85 in member 24 through which a binding screw 86 passes and engages in a threaded bore 87 in plate 84. The arcuate edge 88 of plate 84 is higher than the tops of screws 78 so that the pawl 97 of the drive pawl mechanism may be held out of the path of these screws until after the segment 77 has been moved rotatably on hub 23 sufficiently to bring the screws 78 beyond the end of plate 84. The drive pawl mechanism which will now be described derives its movement from shaft 22 and is furthermore arranged to be subjected to limited adjustment about the shaft without necessitating removal of the part from shaft 22. This is accomplished by fixing the hub portion 89 of a finger 90 onto shaft 22 by means of a set screw 91. This hub has a reduced outside diameter at the end 92 thereof forming a seat over which pawl arm 93 fits and on which it is adapted for limited rotational adjustment. Pawl arm 93 has a flange 94 extending above finger 90 (see Fig. 2) and a screw 95 passing loosely through the bore in member 94 and threadedly engaging in the finger 90 serves to effect a limited rotational adjustment of these

members. A small coil spring interposed between finger 90 and flange 94 and surrounding the screw 95 serves to hold these parts in adjusted relation. It will now be apparent that whenever shaft 22 is turned manually in counterclockwise direction (Fig. 2), the finger 90 which is fixed to said shaft will also be moved and will turn the pawl arm 93 and push the pivotally attached overhanging pawl 97 along the arcuate face 88 of plate 84 until the pawl reaches the end of said arcuate face whereupon the pawl 97 dips downwardly under the influence of a constantly urging actuated spring 98 whereupon it is free to contact either the shoulder 79 or one of the selectively positioned screws 78 which is beyond the end of arcuate periphery 88 of plate 84. The further rotational movement of the shaft now causes pawl 97 to drive segment 77 counterclockwise (see Fig. 2) and with it the sleeve 71, gear segment 74 and the arm 82 carrying the indicator hands. It may here be noted that by this arrangement the indicator hands 82-83 are moved or set a predetermined distance away from a zero position to a selected setting point. The lug 75 is also carried a corresponding distance away from contact with arm 69 on the latch member which controls the signal flag. Furthermore, the resetting movement tensions spring 73 which tends to urge the sleeve 71 and associated parts back to the zero or initial starting position. The speed of return movement of segment 77, indicator hands 83 and the trip lug 75 under the influence of spring 73 is retarded by an escapement brake mechanism indicated generally at 99 of the general construction commonly found in spring driven clocks and which includes a pinion 100 meshing with the gear segment 74. This is shown in operative position in phantom lines in Fig. 3 in the interest of clarity of disclosure in the drawings. The movement of the indicator hands 83 thus retarded or braked serves to give a correct reading of the unexpired parking time as the points of the indicator hands pass beneath suitably marked indicia 101 which, in the present embodiment, are formed on the casing members along the top edges of the window openings.

The operation of the device and the adjustment thereof will now be described. The parking meters are adapted to be installed conveniently adjacent properly marked parking spaces so that a motorist desiring to legally park in such parking space or berth may prepay a selected short or extended parking period before leaving the vicinity of his automobile parked in the said parking space. The prepayment of a short parking period (e. g. 15 minutes) is effected by inserting the proper coin (for example one nickel) in the coin opening 33 at the side of the casing. The coin drops through the way 35 and comes to rest upon the shoulder 46 and finger 47 of drive segment 44. The handle 28 can then be turned clockwise (Fig. 1) to impart rotation to shaft 22. If no coin is inserted or if an improper article such as a small slug is inserted and drops through the aperture 102 in the side of the coin way, no movement will be imparted to shaft 22 when the operating handle 28 is manipulated because the flange 31 will merely ride through the arcuate slots 35, 45 and 48 respectively. With the proper coin in position as aforesaid, clockwise movement of handle 28 will bring the end of arcuate flange 31 against the periphery of the coin C and cause it to push the segment 44 about its axis thereby rotating shaft

22 to which the segment is fixed. The initial movement of the inserted coin C dislodges the lug 67 from its position in the coin way 35 thereby rocking the member 64 about its axis so that if the violation signal flags 49 have been in a depressed condition, they will be released to the raising influence of spring 55. Continued movement of segment 44 allows the coin C to be carried around until it is in a position to drop into the apertured portion of the coin way 35 below the shaft 22 where the coin comes to rest upon a lug 103 of a counter-actuating arm 104. When the machine is initially put into service the counter-actuating arm permits two coins to be deposited and visibly retained in the machine before any movement is imparted thereto. In this description of the operation, it is assumed that the necessary two coins are on deposit. When the coin C drops into the way below the shaft 22, it comes to rest upon the previously deposited and visibly retained coins. The clockwise movement of segment 44 thus placed the deposited coin C beyond control and rotated shaft 22 and likewise actuated the signal flag holding means by rocking the holding lug 65 laterally. The movement of shaft 22 likewise imparted movement to finger 90 which pulled the pawl arm 93 and the pawl 97 thereon along the top arcuate face 88 of plate 84 until the pawl 97 turned downwardly into contact with the arcuate face of segment 77 and rode thereover into abutment with an exposed abutment screw 78. The further movement of the shaft then imparted bodily movement to the segment 77 and its associated sleeve 71 and gear segment 74 against the resistance of spring 73 which is engaged on the pin 72. While the spring was being loaded, the pin 58 on segment 44 engaged arm 52 and depressed it, thereby pushing downwardly on link 53. When pin 54 passed the sloping face of holding lug 65 the latch member 64 was pushed aside and against resistance of its holding spring 640 was then returned by said spring whereupon the tendency of arm 52 to lift the link 53 and the signal flag with it was overcome by lug 54 abutting the latch lug 65. Thus the signal flags are held in a depressed position and the indicator hand has been moved counterclockwise. When the user releases actuating handle 28 this handle together with the disk carrying arcuate flange 31 are spring returned by spring 36. The return movement of flange 31 causes the end 310 thereof to push against lug 440, thus serving to reversely drive segment 44, the return movement of which segment causes the projection 106 thereon to engage the coin which was just deposited and to press downwardly thereon with sufficient pressure to cause the lowermost visible coin to push lug 103 on the counter actuating arm 104. The escapement brake mechanism 99 now delays the movement of sleeve 71 so that in 15 minutes the indicator hand 83 will have traveled to zero position and the screw 76 will have contacted the extending arm 69 and tripped the latch member 64 to release finger 54 from lug 65 allowing the violation signal flags 49 to rise but not entirely conceal the indicator hands. These flags indicate that the prepaid parking time has expired and that the motorist has illegally left the automobile in the parking space. The presence of the automobile when the signal flags are in raised position indicates violation of the parking ordinance, and the first 10 minutes of overparking may be read from the indicator hands 83 which are still

visible beyond the cut away corner 490 of the signal flags.

The police officer assigned to the enforcement of parking regulations is enabled to note either from the roadway side or the sidewalk side of the parking device whether an automobile is being illegally parked either by failure to pay for a parking term or by remaining beyond the pre-paid parking time, the violation signal flags 49 being particularly conspicuous when in raised position. He may rely on the indicator hand to verify the statement of the motorist who pleads that the flag has just raised.

Inasmuch as the last coin or token deposited in the machine is visible through the tell-tale aperture, the traffic officer is enabled with little difficulty to apprehend the user of improper objects or slugs for the purpose of actuating the parking meter.

If a motorist is desirous of extending the parking period at any time after initially actuating the machine and prior to the release of the violation signal at the end of a parking period he may do this by inserting another coin and manipulating the machine as aforesaid. As the sleeve 71 slowly returns under the influence of spring 73 and under the control of escapement brake 99 the segment 77 which carries the indicator hands 83 is moved with it and the one or several screws or abutments 78 on the periphery of segment 77 are slowly returned to a position where they are shielded by the adjustable segment 84. If a motorist desires to initially prepay an extended parking period he may simultaneously or successively insert two coins and actuate operating handle 28 through two complete cycles. The first of these cycles will carry one coin through way 35 and the device will perform the functions just described for the prepayment of a short parking period. The movement of segment 77 under the influence of the first operating cycle has now brought a second one of the screws or abutment lugs 78 beyond the shielding influence of adjustable segment 84 so that as pawl arm 93 moves the pawl over and beyond the periphery of segment 84 the pawl 97 may engage the second of these screws 78 and thereafter further move the segment 77 and the indicator hands carried thereby. This movement carried the indicator hands and the gear segment 74 further around so that it will take a longer predetermined time e. g. 1/2 hour for the parts to return to zero position where the violation signal flags are tripped to raised position. It is to be here noted that upon deposit of the second coin before the signal flag had been released through the usual actuation of extended arm 69, a momentary release and raising of the flange was effected by the displacement of lug 67 from the way by said last deposited coin. However, the finger 58 will again engage the arm 52 if the movement of the operating handle 28 is continued sufficiently to move the coin far enough to drop into the lower portion of the coin way and beyond further actuating control by the drive segment 44.

As previously set forth, the periphery of segment 77 is drilled and tapped at intervals so that the same meter may be selectively arranged to provide various "short" periods of operation and various "long" periods of operation by the selective positioning of the screw 78 to secure operation in conformity with the parking regulations for any selected vicinity. This is quickly accomplished by a maintenance mechanic who

would have access to the interior of the casing. If the operating mechanism as assembled fails to operate at exactly the times required of it, the pawl arm 93 may be adjusted relative to the finger 90 which is fixed on shaft 22 by merely turning the screw 95 in the required direction to cause the pawl 97 to travel a slightly longer or slightly shorter distance in its movement of the segment 77.

The counter 105 registers the number of coins that pass by the lug 103 and fall into the coin receptacle 13. The coin receptacle is preferably, but not necessarily, of the type which require a separate key to open it for the removal of the coins so that a collecting employee may remove the coin boxes through access door 12 and take them to the proper department to be emptied and to have the contents recorded.

What is claimed is:

1. In a parking meter the combination of an indicator, yieldable means urging the indicator in one direction, a setting segment fixed to and movable with the indicator, abutment members adjustably positionable on said segment, a movable arm concentric with the setting segment and including a pawl overhanging the setting segment and adapted to engage said abutments for effecting movement of the segment and indicator against the resistance of the yielding means, an adjustable shield disposed intermediate the setting segment and said arm and having an arcuate edge positioned to selectively withhold the pawl on the arm from operative engagement with certain of said adjustable abutments upon one cycle of operation of the arm whereby the segment is moved to withdraw a previously shielded adjustable abutment beyond the shielded position for engagement by the arm in a subsequent cycle of operation, an operating handle, a coin conditioned control means operatively connecting the handle and arm for a cycle of arm operation and returnable for a subsequent cycle of operation upon conditioning with another coin, and an escapement mechanism retarding the return movement of the setting segment and indicator.

2. A parking meter adapted for the pre-payment of short and extended parking periods comprising a pivoted indicator, means yieldingly urging the indicator to zero position, an escapement brake mechanism retarding the return movement of the indicator by the yielding means, a setting segment connected to and movable with the indicator, adjustable abutments on the segment, a movable arm for engaging the abutments on the segment and moving the segment and indicator against the resistance of the yielding means, a shield member adjustably fixed adjacent the segment and serving to withhold the arm from operative engagement with abutments disposed between the limits of the shield, and coin conditioned manually operated means for effecting movement of the arm for a single cycle of operation for each coin received therein, whereby an initially shielded abutment is moved beyond the shield for engagement by the arm on an immediately succeeding operation of the properly conditioned manually operated means.

3. In a parking meter the combination of a windowed casing, an indicator unit rockably mounted for movement across the window, yieldable means directly operative on the indicator and urging the indicator unit to zero position, an escapement brake mechanism effecting timed retarder movement of the indicator unit to zero

position, means comprising a movable arm and adjustable abutments on the indicator unit for effecting predetermined movements of the indicator unit against the resistance of the yieldable means, a manually operable element, a complementary element connected with the arm, said elements adapted to receive a coin between them for effecting driving relation between the manually operable element and the complementary element, a violation signal, a spring urging the signal to a position of visibility through the window, means on the complementary element for removing the signal from the window upon each operation of said complementary element, latch means for retaining the violation signal free of the window and means on the indicator unit for releasing the latch when the indicator unit reaches zero position under the influence of the yielding means.

4. In a parking meter the combination of a windowed casing, violation signal means, a spring urging the signal means to visible position, means to move the violation signal means from visible position, latch means for holding the violation signal means out of visible position, an indicator unit, yieldable means urging the indicator unit to zero position, trip means on the indicator unit for releasing the latch means, a coin conditioned means, means operable by the coin conditioned means for moving the indicator unit against the resistance of the yielding means for a predetermined distance, escapement brake mechanism retarding the return movement of the indicator unit under the influence of the yieldable means, said coin conditioned means becoming inoperative after each cycle of operation and requiring re-conditioning with another coin for each subsequent operation, subsequent operations of the coin conditioned means effecting movement of the indicator unit to a predetermined distance from zero and means interconnected with the signal control means comprising a lug on the latch in the path of a deposited coin for initially tripping the signal latch means at the beginning of each operation of the coin conditioned means.

5. In a parking meter the combination of a casing having a window therein, indicia adjacent the window, an indicator unit rockably mounted in the casing and having a portion thereof operable along the indicia on the casing, violation signal means movable between said indicator unit and said window and so constructed as to expose the path of the indicator unit adjacent zero position thereof in all positions of said signal, yieldable means urging the signal means to a visible position before said window wherein the major portion of the path of movement of the indicator unit is concealed, means yieldably urging the indicator unit toward and beyond a zero position, means including a coin conditioned member, a setting means and cooperating adjustable abutments on the indicator unit adapted for rockable movement whereby a first rocking cycle sets the indicator unit at a predetermined distance from zero position and a subsequent rocking cycle sets the indicator unit at a predetermined further distance from zero, means operable by said coin conditioned member for moving said violation signal away from the window, a latch for holding the violation signal means in the last named position, means on the latch and disposed normally in the path of a deposited coin for tripping the latch upon initiation of the rocking cycle of said coin conditioned member, and means moving with

the indicator unit for tripping the latch when the indicator unit reaches zero position under the influence of its yielding means.

6. In a parking meter the combination of a casing having a window therein, indicia adjacent the window, an indicator unit rockably mounted in the casing and having a portion thereof operable along the indicia on the casing, violation signal means movable between said indicator unit and said window and so constructed as to expose the path of the indicator unit adjacent zero position thereof in all positions of said signal, means yieldably urging said signal means to a visible position wherein the major portion of the path of movement of the indicator unit is concealed, means yieldably urging the indicator unit toward and beyond a zero position, coin controlled means mounted in the casing for effecting successive increased total settings of the indicator unit against the resistance of the yieldably urging means by relatively rapid repeated operations of the coin controlled means and a latch for holding the violation signal means out of the path of the indicator unit and adapted to be tripped to release the violation signal means by the indicator unit as it moves to zero position.

7. In a parking meter the combination of a casing having a window therein, indicia adjacent the window, an indicator unit rockably mounted in the casing and having a portion thereof operable along the indicia on the casing, violation signal means movable between said indicator unit and said window and so constructed as to expose the path of the indicator unit adjacent zero position thereon in all positions of said signal, means yieldably urging said signal means to a visible position wherein the major portion of the path of movement of the indicator unit is concealed, means yieldably urging the indicator unit toward and beyond a zero position, coin controlled means mounted in the casing for setting the indicator unit at selected indicia, means for moving the violation signal means away from the window and a latch for holding the violation signal means in the last named position and adapted to be tripped by the indicator unit as said indicator unit reaches zero position.

8. In a setting mechanism for a parking meter the combination of a shaft, a setting segment rockable on the shaft, a fixed abutment on said segment, a setting arm fixed on the shaft, adjustable abutments on the setting segment for engagement by the setting arm, an adjustable shield for withholding the arm from certain of said abutments during a predetermined movement of the arm, and a coin conditioned member controlling movement of the shaft whereby forthwith successive operations of the shaft causes the arm to engage an unshielded abutment and move the setting segment to advance successive abutments beyond the shield to effect predetermined different settings of said segment.

9. A parking meter adapted for the prepayment of selective short and extended parking periods comprising a coin receiving guide member having a pair of opposed arcuate slots in the sidewalls thereof, a coin supporting element rockable in the guide member and having a slot therein corresponding to the slots in said sidewalls, a shaft fixed to said element, a second coin engaging element rockably mounted outside the guide member, an arcuate flange on said second element adapted to pass through the slots in

the sidewalls and the first mentioned coin supporting element and adapted, upon deposit of a coin in the guide member to abut the coin for moving the first mentioned element and shaft, an indicator setting disc rockably supported by the shaft and having spaced peripheral abutments, an arm fixed on the shaft, a pawl on the arm overhanging the setting disc and a shield member adjustably fixed relative to said arm and disc for withholding the pawl from certain of the abutments in certain positions of the setting disc whereby other abutments are first engaged by the pawl to move the indicator and setting disc to expose the said certain abutments for subsequent abutment by the pawl.

10. In a parking meter mechanism, a shaft, an indicator means freely rockable thereon, means

fixed on the shaft to successively move the indicator in one direction about the shaft upon successive movements of the shaft, means yieldably urging the indicator in the opposite direction, and coin controlled means for manually rocking the shaft.

11. In a timing apparatus, means for indicating the passage of time comprising a dial and a hand movable over said dial, means for setting said hand at a predetermined starting point with respect to said dial, and a signalling means connected to said first means and operable upon the expiration of a predetermined period of time following said setting operation, said signalling means including a shield adapted to move to a position between said hand and said dial.

FRANK L. MICHAELS.

CERTIFICATE OF CORRECTION.

Patent No. 2,268,716.

January 6, 1942.

FRANK L. MICHAELS.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 5, second column, line 75, claim 3, for "retarder" read --retarded--; page 6, second column, lines 62, 63 and 64, claim 8, strike out "to effect predetermined different settings of said segment"; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 3rd day of March, A. D. 1942.

(Seal)

Henry Van Arsdale,
Acting Commissioner of Patents.