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E. J. SWEETLAND
PARKING CONTROL MEANS

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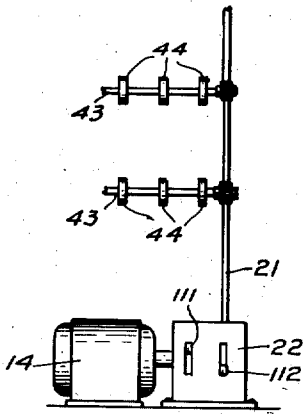


Fig. 9.

Fig. 4.

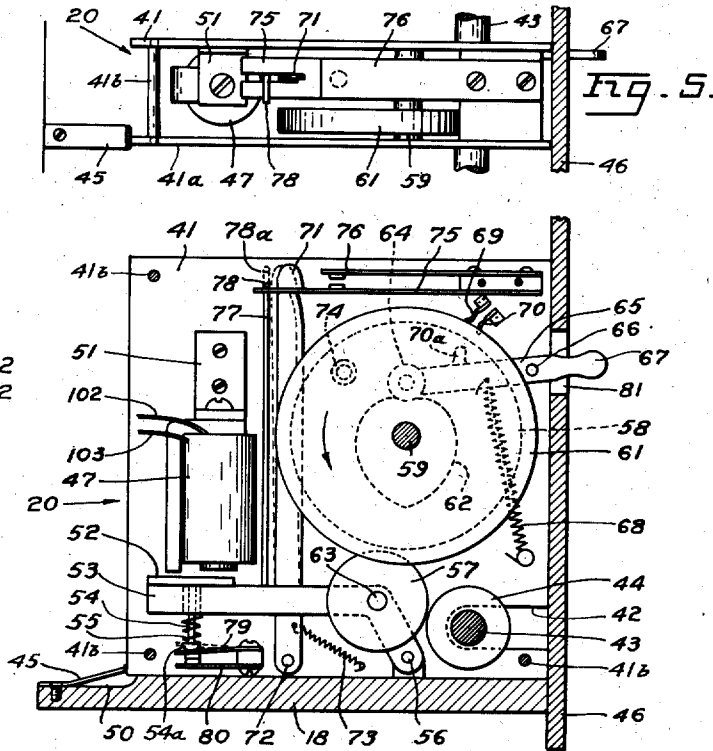


Fig. 5.

Fig. 8.

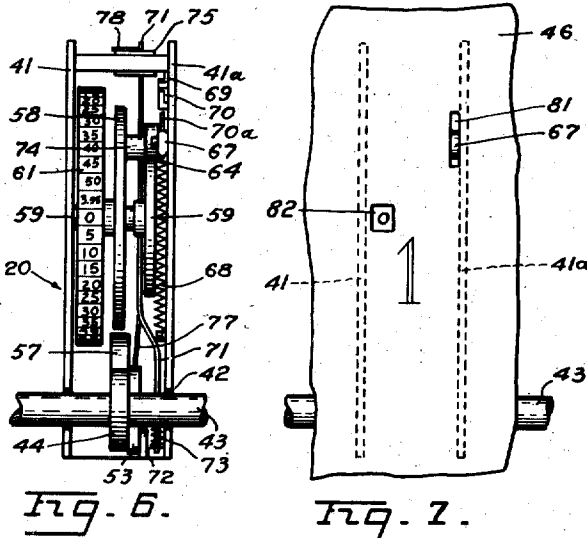
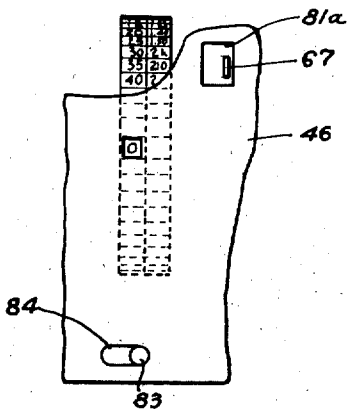


Fig. 6.

Fig. 7.

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PARKING CONTROL MEANS

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Application June 1, 1938, Serial No. 211,186

26 Claims. (Cl. 177—311)

This invention relates to parking control means and is a continuation-in-part of my application Serial No. 68,067 filed March 10, 1936, Patent Number 2,121,179.

- 5 The object of my invention is to provide control means for the parking of automotive vehicles in parking areas in city streets. A particular object of my invention is to provide parking control means which not only gives a signal at the end of the parking limit but which by means of a special control may, at the option of the officer in charge, produce a signal when a vehicle withdraws from the parking area.

- 10 Another object of my invention is to provide a parking control unit suitable for erection on a city street or in a parking area wherein an annunciator is mounted in an elevated position where it can be read from a considerable distance, while the control means for said annunciator is located at a lower level where the figures of the indices, which must necessarily be small, can be easily read, and wherein the timing mechanisms are easily accessible for operation of the means which controls the auxiliary signal.

- 25 A further object is to provide a parking control unit which has a time lapse indicator to indicate the length of time a vehicle has been in a parked position. This unit is provided with a reset mechanism which normally returns the indicator to zero when a parked vehicle withdraws; but by a novel control mechanism the reset mechanism may be rendered inoperative when desired. This feature is normally operated in conjunction with an auxiliary signal mechanism so that if a vehicle parks longer than allowed by law the officer in charge may be apprised by a special signal when the car is leaving the parking area. Since the auxiliary signal means automatically operates when the reset mechanism is in inoperative position, it is possible for the officer not only to be notified of the departure of the vehicle but to have before him an exact reading to indicate the length of time the vehicle was overparked.

- 45 A further object of my invention is to provide a plurality of time measuring units that are all actuated by a single motor which avoids the necessity of having a separate clock mechanism for each timing unit.

- 50 A further object is to provide a parking control mechanism wherein a plurality of timing units may be varied in speed to accommodate different legal parking limits by simply shifting a lever, and wherein different indices are provided for the measurement of time, so that when the speed of

the timing units is changed the index which gives the time reading may be changed accordingly.

The invention possesses other advantageous features, some of which with the foregoing, will be set forth in the following description where that form of the invention which has been selected for illustration in the drawings accompanying and forming a part of the present specification is outlined in full. In said drawings, one form of the invention is shown, but it is to be understood that it is not limited to such form, since the invention is capable of many modifications which are limited only by the scope of the appended claims.

Referring to the drawings:

Figure 1 represents a portion of a city street equipped with my invention and shows the wiring between the street contact switches and the annunciator station.

Figure 2 is a front elevation of an annunciator structure for indicating duration of parking and for providing a signal at the end of the parking limit.

Figure 3 is a partial sectional elevation to show the interior construction of the mechanism shown in Figure 2.

Figure 4 is a side elevation of a timing mechanism with the front cover plate removed to show the inner construction.

Figure 5 is a plan view of the mechanism shown in Figure 4.

Figure 6 shows a front elevation of the timing mechanism shown in Figures 4 and 5.

Figure 7 shows a fragmentary view of the cover plate over the timing units and shows the aperture through which the elapsed time may be read and the lever for shifting reset mechanism in or out of operative position.

Figure 8 shows a modified form of the time index wheel constructed with a plurality of indices. A particular use of this modification is for cases where it is desired to have a parking limit say of 30 minutes during a certain time of the day which may be changed to 60 minutes during other hours.

Figure 9 is a front elevation showing transmission means whereby a single motor may be connected with a large number of timing units and this also shows the gear shifting mechanism by means of which the speed of all of the timing units may be varied.

Figure 10 is a wiring diagram showing the method of wiring the timing unit shown in Figures 4 and 5.

Referring particularly to Figure 1, 1 represents

the curb of a city street, and 2 represents the annunciator column as a whole that is shown in further detail in Figures 2 and 3. Along the edge of the street are disposed a plurality of contact plates 3, 3a, 3b and 3c. These may be steel plates held down to the ground by bolts 4 to prevent them from shifting. Underneath each plate is a switch mechanism which is diagrammatically represented by the numerals 5, 5a, 5b and 5c. This switch mechanism may be similar in design to that illustrated in my patent, supra, or it may be a switch mechanism of any suitable character, but preferably the switches 5, 5a, etc. are so constructed that the pressure of a vehicle upon or against any portion of a switch plate such as 3, 3a etc. will actuate the switch underneath the plate and cause the parking control mechanism to function. 6 represents a portion of a parked automobile with one of the wheels resting upon the plate 3 causing the switch 5 to close and place the timing mechanism in circuit therewith in operation. The line 7 represents a cable carrying a multiplicity of individual insulated wires each one of which is connected with a different one of the switch mechanisms 5, 5a, etc., and the line 8 represents a common return or ground wire which completes the circuit through the plate 3, which is grounded to one side of the switches 5, 5a, etc. 9 represents a source of electrical energy for actuating the clutches of the timing mechanisms.

Referring in detail to Figures 2 and 3, 11 represents an upright column provided with base 12 to be secured to the sidewalk or other desired location. 13 is a door to render the motor 14 and its associated parts accessible. 15 is a door which is provided with a transparent window 16, and 17 is a rear door. Between these doors are a plurality of shelves such as 18 upon which the timing mechanisms shown in detail in Figures 4 and 5 and which as a whole are designated by the character 20, are mounted. A vertical shaft 21 transmits power through the gear box 22 to the timing mechanisms 20 in the manner shown and described in connection with Figure 9. The upper portion of the structure of Figures 2 and 3 is provided with the hinged door 23 which is provided with window 24, back of which is a metal plate 25 which is provided with a plurality of window openings 26 each one of which is surrounded by a shield 27. In back of each shield is an electric light globe 28 and each one of these globes is in circuit with a switch in one of the timing mechanisms 20. These are wired through the multiple wire cable 29. The front of the window 24 is marked with numerals such as the figures 1, 2 and 3 of Figure 2 and the whole is assembled in such a manner that one of the electric globes 28 is in registry with one of the numbered openings 1, 2, 3 etc. This, in effect, forms an annunciator panel containing a large number of numbered annunciator units with an electric light globe back of each unit and each globe is sufficiently surrounded by the opaque shield 27 so that the light from each globe is visible only through the annunciator window unit to which it belongs. The entire assembly is housed within the casing 31 the upper portion of which has space for a sign indicating the legal parking limit as shown at 32. The unit 2 therefore comprises a housing the upper portion of which is an annunciator which may be seen and read from a considerable distance while within the standard or column upon which this is supported there are mounted a plurality of

timing mechanisms each one of which is in circuit with one of the annunciator lights above for the purposes herein set forth, and which will be clearly understood by the following detailed description of the timing units 20 and their associated parts.

Referring to Figures 4, 5 and 6, 41 and 41a indicate side plates between which the timing mechanism is mounted, it being assumed that the plate 41a is removed in Figure 4 to more clearly show the working parts. Posts 41b hold the plates in proper spaced relation. One of the objects of the invention is to make it convenient to operate a larger number of timing units by a single motor, and it is desirable to have these timing units as easy to install and service as possible. With that end in view, the plates 41 and 41a are provided with slots as shown at 42 which are for the purpose of receiving the drive shaft 43 when the units are in operative position. The shelves 18 upon which the timing units are supported are provided with a recessed portion 50 to receive a plurality of spring clips 45 each of which serves to hold a timing unit in position. If it is desired to remove a timing unit it is only necessary to depress the spring clip 45 and the timing unit may be removed in the manner of withdrawing a book from a bookcase. Since the timing units are built without anything protruding beyond the outlines of the plates 41 and 41a, they can be installed in a very small space and without any fastening other than the clip 45 which holds the unit against the plate 46 which forms the front of the timing unit housing. This assembly arrangement automatically locates the timing unit so that the shaft 43 and the friction wheels 44 mounted upon it are always in correct position for operation.

The electro-magnet 47 connects with the switch means at the parking area by means of the wires 102 and 103. This magnet is secured in position in the housing by means of the bracket 51 and is so arranged that when the electro-magnet is energized by the closing of a switch at the parking area, it exerts a magnetic pull on the armature 52 which connects with the lever 53 by means of a pin 54 and spring 55 the latter of which bears against the under-side of the lever 53. Lever 53 is pivotally mounted between the plates by the pin 56 and is so adjusted that when the electro-magnet 47 exerts an upward pull on the lever 53 the wheel 57 bears against the surface of the wheel 44 and also against the surface of the wheel 58 which rotates the central shaft 59 to which the index wheel 61 and the heart cam 62 are fixedly mounted. The wheel 57 which is free to rotate on the shaft 63 may be made of fiber or rubber composition or any material that engages the wheels 44 and 58 with sufficient friction to communicate rotary movement from the driving shaft 43 to the wheel 58 and attendant parts. The surface of the heart cam 62 is engaged by the roller 64 which turns freely about its axis on the end of the lever 65 which is pivoted at 66 and which terminates in the handle 67. Tension spring 68 holds the roller 64 against the heart cam 62. The latch 71 is pivotally mounted at 72 and is constantly urged forward by the slight tension of spring 73. A roller 74 is rotatably mounted upon the side of the wheel 58. The function of roller 74 is to push the latch 71 outwardly when the wheels 58 and 61 rotate to a certain pre-determined extent; and when this occurs the leaf 75 of an

electric switch is released and caused to make contact with the upper leaf 76 of the same switch. The upright rod or wire 77 is bent at right angles at the top to form the hook 78 and the lower end of this wire 77 is fixed to the lever 53. A switch which is formed by the switch leaves 79 and 80 is actuated by the weight of the lever 53 and its attendant parts and is held in closed position by the weight of same as long as lever 53 is in the position shown in Figure 4 but when the magnet 47 lifts the lever the switch leaf 79, being resilient, lifts and the switch points are separated. 69 and 70 represent the switch points of a circuit in connection with the auxiliary or secondary signaling means and this switch is closed when the member 70a is forced between the points by pressing down on the handle 67. The spring tension in the points 69 and 70 is sufficient to hold the lever 65 against the tension of spring 68 so that when the handle 67 is pressed downwardly the roller 64 is taken out of engagement with the heart cam, thus rendering it inoperative and at the same time the switch formed by the points 69 and 70 is closed.

The front plate 46 is provided with openings 81 to accommodate the handles 67 of the various units, and opposite each unit is another hole 82 through which the figures on the index wheel 61 may be read. These are shown in elevation in Figure 7.

Figure 8 shows a modified form of index wheel which is provided with two indices and when this modified form is used the plate 46 is mounted to provide a small amount of horizontal sliding movement, the travel of plate 46 is limited by the pin 83 which protrudes through the slotted opening 84. When the plate 46 is slidably mounted the opening which accommodates the handle 67 is made wide enough to accommodate the latter regardless of which position the plate is in as is shown at 81a in Figure 8.

The wiring diagram in Figure 10 applies to the mechanism shown in Figures 4, 5 and 6 and as numerals corresponding with those used in Figure 4 are used in this diagram, the circuits and their respective functions will be readily understood. The switch designated by the numeral 5 in Figure 10 corresponds with the switches diagrammatically shown in Figure 1 and marked 5, 5a, 5b etc. This is the switch which controls communication between the parking area and the timing unit. It is preferable to have this switch of a character that is vehicle-actuated so that it is caused to function automatically by the placing of a vehicle in the parking area and by the removal of the vehicle therefrom. However, certain functions of my apparatus could be carried out by the use of a manual- or coin-operated switch. 101 represents a source of electrical energy and the electro-magnet 47 is in circuit with switch 5 through the wires 102 and 103. The electric light globe 28 is in circuit with the switch elements 75 and 76 and with a source of electrical energy through wires 104 and 105, said wires being included in the cable 29 shown in Figure 3. The switch elements 79 and 80 connect with the secondary signal means 106 (which may be a bell, a light, or other form of signal) and with a source of electrical energy through wires 107 and 108 when the gap between the switch elements 69 and 70 is closed by the element 70a shown in Figure 4. In this wiring diagram I have shown a different source of electrical energy for each circuit but any alternative wiring arrangements that will carry out the purposes of the invention could be

used. I may provide a single signal means 106 for each individual timing unit, and these may be grouped together in annunciator form, and numbered to correspond to the numbers on the curb, if desired. Thereby the location of a vehicle which produces a secondary signal may be indicated. (Annunciator grouping for secondary signals not shown.) An alternate method is to let one secondary signal be connected to a plurality of timing units.

The modus operandi is as follows: The vehicle 6 drives into a parking position thereby causing the switch 5 to close and thus complete the circuit through the coil of electro-magnet 47. This lifts the lever 53 which causes the friction wheel 57 simultaneously to engage the surfaces of the drive wheel 44 and the driven wheel 58. The lifting of lever 53 also lifts the weight from the switch element 79 causing the points between 79 and 80 to separate thus opening the circuit connected by wires 107 and 108. (See Fig. 10.) The shaft 43 and drive wheels 44 are constantly driven at a slow rate of rotation by the motor 14. For example, let us say that the normal rate of rotation of the wheel 44 is such as to cause the wheel 58 to rotate at the rate of one revolution in four hours when the latter is engaged by the wheel 57. It is assumed that the motor 14 is of the synchronous type and therefore the speed of rotation is constant thus making the index wheel 61 an accurate time indicating device which is graduated in minutes. The wheel 58 continues to rotate as long as the vehicle remains in place and the switch 5 remains closed and therefore the index wheel 61 marks time in minutes which can be read through window 82 (Fig. 7) which gives a true indication of the length of time a vehicle has been parked. If we assume that the apparatus is designed and set for a legal parking limit of 30 minutes the adjustment is such that at the end of the 30 minute period the roller 74 pushes the latch 71 outwardly in such manner that the latch disengages the resilient switch leaf 75 causing it to connect with the leaf 76 thus closing the circuit through wires 104 and 105 causing the electric lamp 28 to which this particular unit is connected to light. This lamp would preferably be red in color and thereby a red signal is displayed back of one of the annunciator numbers in the panel on column 2 indicating that a vehicle is violating a parking ordinance. Since each individual timing unit is marked with a designating numeral corresponding with the annunciator signal light to which it is connected, any interested person not only is apprised of the fact that a vehicle is violating the parking rules, but he may look through the window 82 of the timing unit corresponding in number with the number of the annunciator signal, and there he may read the time in minutes which the vehicle has been parked. As the curb opposite the switch mechanisms is marked with numerals corresponding with the numerals in the annunciator panel with which the switch mechanisms are associated, it is a simple matter for an officer or other person to locate an over-parked car and to determine the length of time the offending vehicle has remained.

The roller 64 which is normally held against the heart cam 62 returns the index wheel to zero the instant switch 5 is opened by the removal of the car 6, and electro-magnet 47 releases the lever 53, and obviously, if this occurs by withdrawal of the parked vehicle before the 30 minute limit has elapsed, the index wheel 61 returns to 75

zero without any signal having been given and the unit remains inoperative until another vehicle parks and again closes the switch.

An important feature of the timing unit is the mechanism which resets the switch element 75 to open position when a vehicle is removed from parking position. This is accomplished as follows: The hook 78 rises to the dotted position 78a whenever the lever 53 to which it is attached is lifted by the magnet 47, so that when the latch 71 is pushed back to the dotted position, the resiliency of the leaf 75 naturally brings its contact point in connection with the similar point on leaf 76 to close the switch. There is nothing to interfere with the rising of the leaf 75 while the hook 78 is in the dotted position 78a, but as soon as the lever 53 drops due to a car deparking, the hook 78 engages the end of the leaf 75 and resets it to open position, the weight of lever 53 being sufficient to cause the latch 71 to retract against the tension of the spring 73 so that the leaf 75 is held by the latch in open position until a car is again parked and remains beyond the legal time limit.

One of the objects of the invention is to provide an auxiliary signal which is sounded or displayed when a vehicle is deparked. This may be used only for special occasions particularly when a car has been long over-parked and the officer in charge of the district desires to be apprised of the removal of the car. However, the auxiliary or departure signal is arranged so that it may be rendered effective by the deparking of a vehicle irrespective of the time that the vehicle has remained parked. In the latter instance, a parking attendant, or other person, may be apprised that a given vehicle is leaving a parking space. When it is desired to use the auxiliary signal the handle 67 is pressed downwardly until the member 70a is engaged between the switch terminals 69 and 70 where it is held until manually removed; thus the reset mechanism which depends upon the action of roller 64 against the heart cam 62 is rendered inoperative and at the same time the gap in the circuit between the points 69 and 70 is closed. By reference to Figure 10 it will be seen that the circuit which controls the signal 106 is inoperative except when the gap between 69 and 70 is closed, but when this is closed as just described, and the switch elements 79 and 80 make contact, the auxiliary signal 106 is caused to operate because the removal of a vehicle from the switch 5 allows the lever 53 to drop and the knob 54a at the lower end of the pin 54 to bear down on leaf 79 completing the circuit to the signal 106, which continues in operation until the officer stops it by pushing the handle 67 upwardly thus opening the circuit between 69 and 70. From the foregoing it will be understood that the secondary signal arrangement not only apprises the officer when the offending car is deparked but it enables the officer to read off of the index wheel 61 the total length of time the vehicle has remained in parked position. As soon as he has observed the reading on the index wheel he raises the handle 67, and spring 68 again brings the roller 64 in contact with the cam 62 and the index resets to zero and the mechanism is again in condition for normal operation.

If it is desired to construct the timing unit with a double index wheel as shown in Figure 8 the operation is the same as described. The cover plate 46 is set so that the scale can be read

that corresponds with the setting of the gear box 21.

No detailed description of gear box 22 is required as such arrangements are well known for varying the speed of different types of machinery. It merely comprises two sets of gears either of which can be placed in operation depending upon the position of levers 111 and 112. For instance if the lever 111 is up and lever 112 down, the apparatus is set for a 30 minute parking limit and the plate 46 (Fig. 8) is set so that the proper index may be read. When 60 minute parking limit is desired the levers 111 and 112 are reversed and the plate 46 shifted to display index which gives the proper reading to correspond with the reduced speed at which the unit is moving. The transmission which communicates movement to the shafts 43 and drive wheels 44 through shaft 21 is shown in Figure 9.

While I have shown the timing units and indices grouped in the standard which supports the annunciator unit, it is obvious that the timing units may, if preferred, be located at considerable distance from the annunciator unit. For instance, the timing units may be grouped at a central control station while the annunciator unit is located in public view on the street. If this arrangement is employed a duplicate annunciator may be located at the central station so that the officer in charge of the station is kept in intimate touch with the parking situation in an entire district without leaving the station.

I claim,

1. Parking control apparatus comprising a parking area; a vehicle-actuated switch in said parking area to be acted upon by a vehicle parked therein; a timing unit including a time indicator graduated in units of time; means providing a drive for said time indicator in circuit with said vehicle-actuated switch; said time indicator being arranged and constructed to start from a zero point and measure time continuously so long as said vehicle-actuated switch continues to be acted upon by a parked vehicle; bias means to return said time indicator to said zero point when said vehicle-actuated switch ceases to be acted upon by a parked vehicle; means to cause said time indicator to operate signal means when the legal parking time limit has been reached; means connectable in circuit with said vehicle-actuated switch to produce a secondary signal when said vehicle-actuated switch ceases to be acted upon by a parked vehicle; means for rendering said secondary signal means or said bias means inoperative, said means being constructed and arranged so that the secondary signal means can be rendered inoperative only when said bias means is operative and vice versa.

2. A parking control apparatus comprising a parking area; a plurality of vehicle-actuated switch mechanisms disposed within said parking area, each switch mechanism being adapted to be actuated by a vehicle while parked in said area; circuit means extending from each of said vehicle-actuated switches to a panel displaying a plurality of timing mechanisms each bearing a designating character corresponding to a similar character associated with the switch mechanism to which it is connected; each timing mechanism including movable means to measure and indicate the passage of time; motor means for actuating said time measuring and indicating means; an electrically operated clutch member for transmitting motion from said motor means to said time measuring and indicating means;

said electrically operated clutch member being in circuit with a vehicle-actuated switch in said parking area; said indicating means having graduations in units of time starting from a zero position; bias means to urge said time measuring and indicating means back to the zero position when said clutch is disengaged by the actuation of said vehicle-actuated switch by removal of a parked vehicle from said area; said time measuring and indicating means being operatively connected to switch means in circuit with a visual signal caused by said timing means to operate at the end of a pre-determined period of time to indicate the termination of the legal parking limit; a secondary signal for attracting attention to the departure of a vehicle from said parking area; said secondary signal being caused to function by the release of said clutch by the action of a departing vehicle on said vehicle-actuated switch.

3. Parking control means comprising a parking area; a plurality of vehicle-actuated switches in said parking area; a housing in connection with said parking area to house a plurality of parking timer units; said housing containing a motor and a drive shaft; means in said housing to support a plurality of individual timer units in juxtaposed relation with said shaft but without fixed connection therewith; each timing unit including a frame with a rotatable graduated timing dial carried by said frame; an electrically operated clutch in each timing unit to communicate power from said shaft to said dial; an electrical circuit connecting each clutch with a vehicle-actuated switch; means for automatically returning said dial to a starting position when said clutch is disengaged; an electrical switch in each timing unit; means actuated in unison with the movement of said dial to cause said switch to operate a signal at the end of a pre-determined parking time limit as registered by said dial; supporting means to hold said timing units in parallel relation with each other and in proximity with said drive shaft; a rotating contact surface on said drive shaft opposite each of said units and in operative relation with each electrically operated clutch; means to secure each unit in fixed position with relation to said shaft; said electrically operated clutches being constructed and arranged to engage said dial mechanisms with said contact surface to cause said dials to rotate and mark time when said vehicle-actuated switches and clutches are caused to function by the parking of a vehicle; each timing unit being independent and separable from said shaft without structural connection with the remaining units.

4. A parking control mechanism comprising a parking area; a post to be installed on a city street adjacent thereto; a plurality of signal lights on said post bearing designating characters to correspond with similar characters along the parking area of said city street; a panel in said post containing a plurality of timing units individually separable from said panel; each timing unit including a graduated dial for indicating the lapse of time; and having a designating character corresponding with that of a signal light; a switch on each timing mechanism to actuate said signal lights; a continuously operating motor to drive said timing units; a variable speed transmission having drive means to communicate power from said motor to said timing units; shift means to change the speed of said variable speed transmission to correspond with

different parking time limits; said graduated dials having a plurality of indices varying in their graduations to correspond with various speeds communicable by said variable speed transmission; means to display the various indices in accordance with the rate at which said dials are rotated by said variable speed transmission; a vehicle-actuated switch in said area for each timing unit; and means in each timing unit in circuit with a vehicle-actuated switch for establishing a driving connection for a dial from said drive means.

5. A parking timer mechanism comprising a graduated timing dial; motor means to drive said dial; electrically controlled clutch means to communicate motion from said motor to said dial; a vehicle-actuated switch in a parking area; circuit means connecting said clutch and said vehicle-actuated switch; a departure signal to indicate departure of a vehicle from said parking area; a switch to control said departure signal; and means operatively connected with said clutch to actuate said departure signal switch when said clutch releases said dial.

6. A parking timer mechanism comprising a motor; timing means driven by said motor; dial means including a plurality of scales, graduated in minutes of time, displayed by said timing means; electrically operated clutch means to engage said dial and motor; switch means in a parking area in circuit with said clutch; variable speed transmission means between said motor and said dial means; the speed of said variable transmission means varying in definite steps to correspond with various legal parking limits; said graduations on said dial being in mathematical relationship with the various steps of said transmission whereby the true time of parking may be read from said dial regardless of which step in said variable speed transmission is in use; and means for indicating the scale to be read for a given transmission speed.

7. A parking control apparatus comprising a plurality of timing units arranged side by side; common power means providing a drive for said timing units; a displayed, graduated time-lapse indicator on each timing unit; a vehicle-actuable switch for each of said timing units; drive-connecting means in each of said timing units controlled by one of said vehicle-actuable switches for establishing a drive between said common drive means and the respective time-lapse indicators; bias means to optionally return said time-lapse indicators to a starting position upon deactuation of said drive-connecting means; a departure signal controlled by each of said vehicle-actuable switches; and manually controlled means for each of said timing units to disable said bias means at will and render said departure signal operable only when said vehicle-actuable switch is opened by the departing of a vehicle.

8. A parking control apparatus comprising a parking area; a vehicle-actuable switch appropriated to said parking area; a timing unit having a publicly displayed graduated time-indicating means; drive means for said time-indicating means; means to actuate said drive means in circuit with said vehicle-actuable switch; a reset mechanism arranged to optionally return said time-indicating means to a starting position when said switch is opened by the departure of a vehicle from said parking area and the driving of said time-indicating means is discontinued, said reset mechanism including a movable means for

rendering said reset mechanism operative or inoperative at will; and a departure signal controlled by the vehicle-actuated switch and operable upon departure of a vehicle from said parking area, said movable means being arranged so that said departure signal is rendered operable only when said reset mechanism has been rendered inoperative.

9. A parking control apparatus as defined in claim 7, in which a time signal is controlled by each timing unit to produce a signal at the end of a predetermined period of time after a vehicle-actuable switch has been closed by the parking of a vehicle.

10. A parking control apparatus as defined in claim 8, in which a time signal is arranged to be operated by said timing unit to produce a signal at the end of a predetermined period after the closing of said vehicle-actuable switch by the parking of a car.

11. A parking control apparatus comprising a parking area; a vehicle-actuable switch appropriated to said parking area; a timing unit having a publicly displayed graduated time-lapse indicator; means providing a drive for said time-lapse indicator in circuit with said vehicle-actuable switch; and a reset mechanism arranged to optionally return said time-lapse indicator to a starting position when said switch is opened by the departure of a vehicle from said parking area and the driving of said time-lapse indicator is discontinued, whereby said time-lapse indicator may be allowed to remain in time-indicating position if desired.

12. A parking control mechanism comprising a parking area; a vehicle-actuable switch appropriated to said parking area; a timing unit having a publicly displayed graduated time-lapse indicator; means providing a drive for said time-lapse indicator in circuit with said vehicle-actuable switch; and a reset mechanism arranged to optionally return said time-lapse indicator to a starting position when said switch is actuated by the departure of a vehicle from said parking area and the driving of said time-lapse indicator is discontinued, said reset mechanism including a generally heart-shaped element connected with said time-lapse indicator, a lever, a roller carried by said lever, and means associated with said lever for holding said roller in contact with said element, said lever being positionable to render said reset mechanism operative or inoperative at will.

13. A parking control apparatus comprising a rotatable drive member; a time-lapse indicator having a driven member connected therewith; means for drivingly connecting said drive member with said driven member; and means operable by the parking of a vehicle arranged to actuate said drive-connecting means, whereby to cause said time-lapse indicator to move and to thereby start measuring a time interval.

14. A parking control apparatus comprising a rotatable drive member; a time-lapse indicator having a driven member connected therewith; means for drivingly connecting said drive member with said driven member; means operable by the parking of a vehicle arranged to actuate said drive-connecting means, whereby to cause said time-lapse indicator to move and to thereby start measuring a time interval; and a reset mechanism operatively associated with said time-lapse indicator for returning said time-lapse indicator to its starting position upon the

departing of said vehicle and the consequent deactuation of said drive-connecting means.

15. A parking control apparatus comprising a timing unit having a graduated time-lapse indicator; means for driving said timing unit to cause said time-lapse indicator to start measuring a time interval; a vehicle actuable switch for rendering the drive of said time-lapse indicator effective upon the actuation of said switch by the parking of a vehicle; a departure signal; and means in circuit with said vehicle-actuable switch arranged and constructed to cause said departure signal to function when said vehicle-actuable switch is actuated by the departure of a vehicle.

16. A parking control apparatus comprising a rotatable drive member; a time-lapse indicator having a driven member connected therewith; means for drivingly connecting said drive member with said driven member; electrically-responsive means for actuating said drive connecting means; and a vehicle-actuable switch in circuit with said electrically-responsive means for actuating said last-mentioned means upon closing of said switch by the parking of a vehicle, whereby said time-lapse indicator is caused to rotate and to thereby start measuring a time interval.

17. A parking control apparatus comprising a rotatable drive member; a time-lapse indicator having a driven member associated therewith; means for drivingly connecting said drive member with said driven member; electrically-responsive means for actuating said drive connecting means; a vehicle-actuable switch in circuit with said electrically-responsive means for actuating said last-mentioned means upon closing of said switch by the parking of a vehicle, whereby said time-lapse indicator is caused to move and to thereby start measuring a time interval; a time signal; and means operatively associated with said time-lapse indicator for operating said time-signal at the end of a predetermined period after said vehicle-actuable switch has been closed.

18. A parking control apparatus comprising a rotatable drive member; a time-lapse indicator having a driven member connected therewith; means for drivingly connecting said drive member with said driven member; electrically-responsive means for actuating said drive connecting means; a vehicle-actuable switch in circuit with said electrically-responsive means for actuating said last mentioned means upon actuation of said switch by the parking of a vehicle, whereby said time-lapse indicating device is caused to rotate and to start measuring a time interval; and a departure signal actuable by said electrically-responsive means upon opening of said switch by the departing of said vehicle.

19. A parking control apparatus comprising a rotatable drive member; a time-lapse indicator having a driven member connected therewith; means for drivingly connecting said drive member with said driven member; electrically-responsive means for actuating said drive-connecting means; a vehicle-actuable switch in circuit with said electrically-responsive means for actuating said last-mentioned means upon closing of said switch by the parking of a vehicle, whereby said time-lapse indicator is caused to rotate and to thereby start measuring a time interval; a time signal associated with said time-lapse indicator and operable at the end of a predetermined period after said switch has been

closed; and a departure signal actuable by said electrically-responsive means upon the actuating of said switch by the deparking of said vehicle.

20. A parking control apparatus comprising a 5
 10 rotatable drive member; a time-lapse indicator having a driven member connected therewith; means for drivingly connecting said drive member with said driven member; electrically-responsive means for actuating said driven connecting means; a vehicle-actuable switch in circuit with said electrically-responsive means for actuating said last-mentioned means upon actuation of said switch by the parking of a vehicle, whereby said time-lapse indicating device 15
 20 is caused to rotate and to thereby start measuring a time interval; and a reset mechanism for returning said time-lapse indicator to its starting position upon deparking of said vehicle and consequent deactuation of said drive connecting means.

21. A parking control apparatus comprising a rotatable shaft having a drive member thereon; a time-indicating means; a driven member operatively connected with said time indicating means; means for drivingly connecting said 25
 30 drive member with said driven member including a freely rotatable member adapted to engage said drive member and impart rotation to said driven member; an electromagnet for actuating said drive-connecting means to bring said freely rotatable member into engagement with said drive member; and a vehicle-actuable switch in circuit with said electromagnet for energizing the same upon the actuation of said switch by the parking of a vehicle, whereby said time-indicating means is caused to move and to thereby start measuring a time interval.

22. A parking control apparatus comprising a rotatable shaft having a drive member thereon; a time-indicating means; a driven member operatively connected with said time-indicating means; means for drivingly connecting said drive member with said driven member including a freely rotatable member adapted to engage said 35
 40 driven member and impart rotation to said driven member; an electromagnet for actuating said drive-connecting means to bring said freely rotatable member into engagement with said drive member; a vehicle-actuable switch in circuit with said electromagnet for energizing the same upon the actuation of said switch by the parking of a vehicle, whereby said time-indicating means is caused to move and to thereby start measuring a time interval; and a departure 45
 50 signal associated with said electromagnet and arranged so that the same is operable by said electromagnet upon deenergization thereof by the deparking of said vehicle.

23. Parking timer means comprising a plurality of timing units; a continuously rotating drive means for imparting drive to said plurality of timing units; electrically operated means asso-

ciated with each of said timing units for effecting a driving connection between said respective units and said drive means; a vehicle-actuable switch in circuit with each of said drive-connecting means; a time signal associated with each 5
 10 of said timing units arranged to be operated by said timing unit at the termination of a given legal parking limit; and means for varying the speed of said drive means to change the time-lapse between the actuation of a switch and the actuation of its associated signal, whereby said timing units may be operated so as to accommodate different legal parking limits.

24. Parking timer means comprising a timing unit having a time-indicating means provided 15
 20 with a plurality of scales, each scale being graduated in accordance with a given legal parking limit, variable speed drive means for said time-indicating means; means associated with said time-indicating means for drivingly connecting the same with said drive means; vehicle-actuable means for actuating said drive-connecting means to cause said time-indicating means to rotate and thereby start measuring a time interval upon actuation of said means by the parking of a vehicle; means for varying the speed 25
 30 of said drive means to change the speed of rotation of said time-indicating means; and means for indicating the scale of said time-indicating means which is to be read for the prevailing speed of said transmission.

25. Parking timer means comprising a timing unit having a dial provided with a plurality of scales, each scale being graduated in accordance with a given legal parking limit; drive means for 35
 40 said dial including a variable speed transmission and electrically-operated means associated with said dial for drivingly connecting the same with said drive means; a vehicle-actuable switch in circuit with said electrically-operated means to cause said dial to start measuring a time interval upon actuation of said switch by a vehicle; means for varying the speed of said transmission to change the speed of rotation of said dial; and means for indicating the scale of said 45
 50 dial which is to be read for the prevailing speed of said transmission.

26. A parking control apparatus comprising a rotatable drive member; a time-lapse indicator having a driven member connected therewith; 50
 55 means for drivingly connecting said drive member with said driven member; electrically responsive means for actuating said drive-connecting means to effect the drive between said drive and driven members; and means in circuit with said electrically responsive means and through which the circuit to said electrically responsive means may be completed, whereby said time-lapse indicator will be caused to move and start measuring a time interval when said circuit is completed. 60

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