Dec. 3, 1957 R. G. FITZPATRICK ET AL 2,815,108

PARKING METER

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FIG. 1.

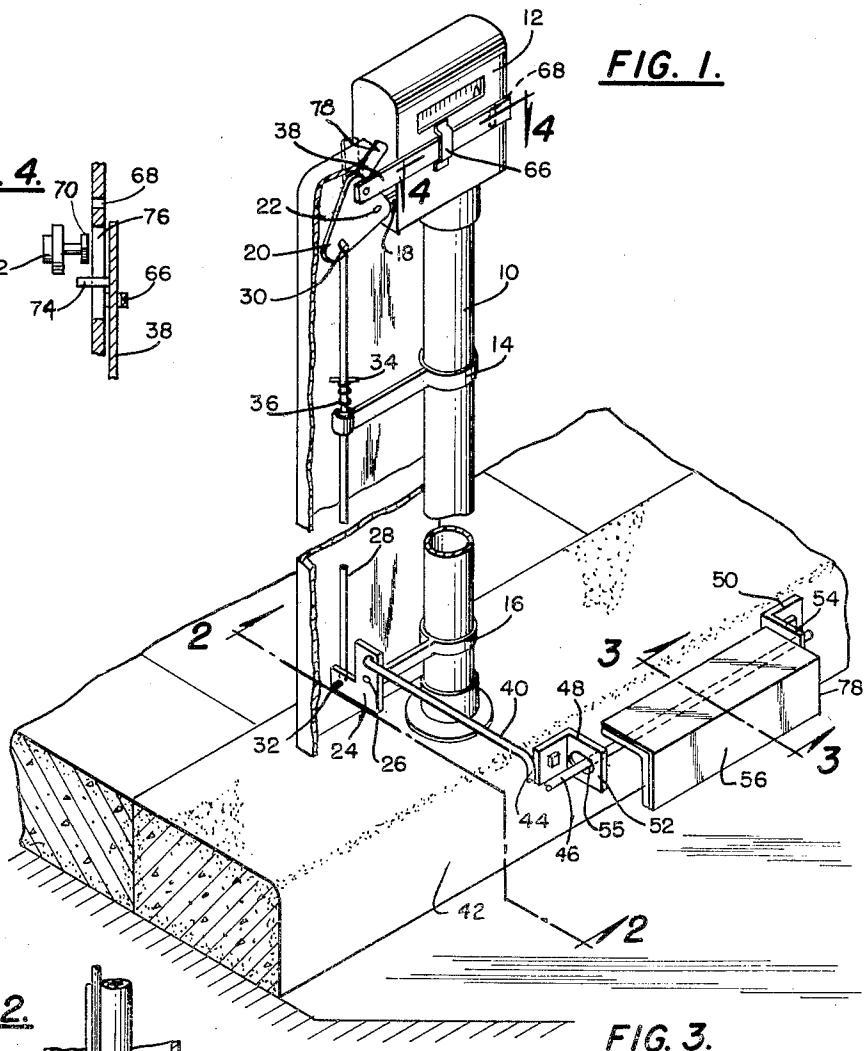


FIG. 4.

FIG. 2.

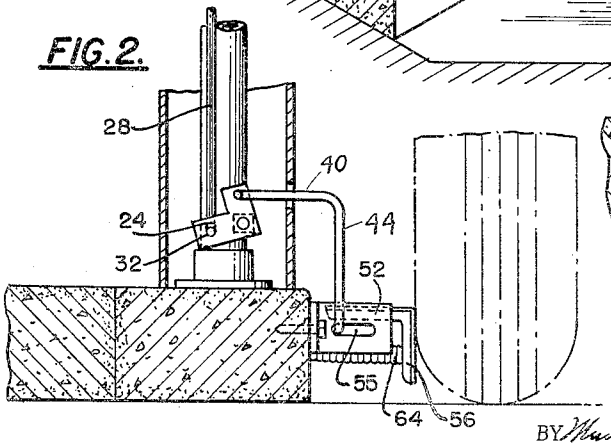
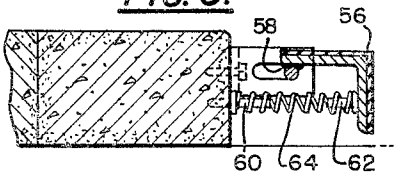


FIG. 3.



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PARKING METER

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4 Claims. (Cl. 194—1)

This invention relates to parking meters and in particular to a parking meter attachment for moving the hands of a parking meter to a zero position whenever a vehicle leaves the parking meter location. The invention further relates to an attachment for parking meters which will insure the parking of vehicles in the proper location with respect to the meter. One of the objects of parking meters is to obtain revenue for the governments. The laws of the various cities usually require that each person who drives his car up to a meter must put a nickel in. However, as a practice, it is often found that there is time left on the meter by the previous user, and in many cases this time is sufficient for the purposes of the next one to arrive on the scene. Thus this latter person receives his parking free, while the one before him had to pay a nickel or dime, as the case may be. An object of this invention is to provide an attachment which will make it necessary for each person to deposit a coin. If a user of the meter drives his vehicle away prior to using the full time he has purchased, the meter is returned to zero, so that it is necessary for the next person to put additional money in.

Although parking meters have had a desirable effect in causing operators to more or less park in properly spaced order at the curb, it is obvious that there is room for improvement; in other words, there is the possibility of improving the parking habits of the motoring public so that each driver will occupy his proper space at the curb. A further object of this invention is to provide a device which will insure that each automobile is properly parked at the curb.

Yet another object of this invention is to provide an attachment for parking meters which is simple, can be easily constructed, and which will be relatively inexpensive. Further objects are to provide a meter attachment which can be easily serviced, which can be ruggedly constructed and which will have a long service life.

These and other objects and advantages will become apparent from the following description and the accompanying drawings, in which:

Figure 1 is a perspective view showing a parking meter and attachment constructed in accordance with the invention.

Figure 2 is a fragmentary sectional elevational view taken along line 2—2 of Figure 1, showing the elements in slightly different relationship.

Figure 3 is a fragmentary sectional elevational view taken along line 3—3 of Figure 1.

Figure 4 is a fragmentary sectional view taken along line 4—4 of Figure 1.

Similar reference characters represent similar parts in the several figures.

Referring now in particular to the drawing, 10 indicates a post such as is usually provided for the parking meter 12; brackets 14 and 16 are fastened on the post in vertically spaced relationship; a third bracket 18 is affixed to the parking meter. Toggle plate 20 is pivotally connected to bracket 18 as indicated at 22. Crank 24 is pivotally

connected to bracket 16 at 26. A rod 28 is pivotally connected to one arm of the crank 24 and to the toggle plate. The pivotal connection can be had by simply bending over the ends of the rod as at 30 and 32.

Pin 34 can be force-fitted in a suitable hole in rod 28. Spring 36 urges the rod upwardly as viewed in Figure 1. Slide 38 is pivotally connected to the toggle plate.

The second rod 40 extends outwardly from the other arm of crank 24 and is pivotally connected thereto in a manner similar to that in which rod 28 is connected to crank 24. The rod extends outwardly from the crank beyond the edge of the curbstone 42, and then the rod has a portion 44 which extends downwardly to a horizontal portion 46.

A pair of longitudinally spaced brackets 48 and 50 are fixedly mounted on the curbstone so as to have parallel arms 52 and 54. Portion 46 of the rod rests in slots 55 and can slide longitudinally therein. Kick plate or rub plate 56 which may be formed in the form of an angle member is fixedly attached to the rod 46 by welding 58. Studs 60 and 62 can be connected to the curbstone and the rub plate respectively. A spring 64 can be supported on opposed pairs of studs. The latter spring cooperates with spring 36 to urge rod 28 upwardly and to urge rub plate 56 outwardly.

The slide 38 is supported by bracket 66 so that it will move substantially horizontally across the face of the meter. Coin slot 68 is in vertical alignment with the path of movement of slide 38. The time indicating hand 70 operates inside the meter casing and sweeps in a vertical plane as is common. Upon deposit of a coin the hand is moved to the left and then driven back to the right by a clockwork mechanism. The driving connection between the hand and the clock meter can include a friction coupling indicated at 72. Any suitable means can be used for forcing the hand to a timing position from which it is driven by an escapement to its zero position. Such mechanisms are well known and of many different forms. As seen in Figure 4, slide 38 has a pin 74 which projects inwardly through a longitudinal slot 76. This pin is out of the path of movement of the hand 70 when the slide is positioned as shown in Figure 4. When the slide is moved to the right, however, the pin will abut the time indicating hand and force it to the zero position if the hand should be off that position at the time of movement of the slide to the right.

Figure 2 illustrates what happens when a vehicle wheel touches the rub plate. The plate is forced inwardly, crank 24 is forced to the left, rod 28 is forced downwardly, and slide 38 is moved to the left as viewed in Figure 4. When the wheel is removed, however, the springs will force the rods to a position in which slide 38 is moved to the right. Slide 38 is adapted to cover and uncover the coin slot. When the slide is to the right, as viewed in Figure 1, the slot is covered; when the slide is to the left, however, the slot is uncovered, and a coin can be deposited. It is thus seen that a coin can be deposited only when the wear plate 56 is pressed inwardly by the vehicle. The wear plate can be designed so that the vehicle must be positioned at a certain spot in order to strike the plate and operate the slide. If the wheel is not so positioned, the motorist cannot insert a coin into the slot.

As the plate 56 moves inwardly and outwardly on arrival and departure of vehicles it is seen that pin 74 slides in slot 76. When the plate is pushed inwardly upon the arrival of the vehicle, the pin moves to the left when the meter is viewed as in Figure 1. It is at this time that the coin slot is uncovered. The driver can insert the coin, the time indicating hand will be moved to the left in accordance with the kind of coin inserted, and the clock escapement will operate to drive the hand

back to the right. Now, however, if the driver decides to leave before his time period is up, the rub plate will move outwardly and rod 28 will move upwardly forcing slide 38 across the face of the meter. At this time pin 74 will move hand 70 to the zero position, and the slide will cover the coin slot. Thus it is seen that two things are accomplished by my invention: (1) Proper parking of vehicles is assured, and (2) every user of the parking space must insert a coin.

Flag 78 can be attached to plate 20. When a parking vehicle operates rub plate 56 the flag will swing up with plate 20 and indicate to the motorist that he is in the proper location.

The kick plate 56 can have rounded ends 78 or otherwise be modified to facilitate proper action when a vehicle wheel strikes from the side. In fact, there are many modifications of the exact operating mechanism shown in the drawing which can be made within the scope of the invention. Brackets 48, for example, could be mounted on top of the curbstone, also for example, the operating rod 28 can be a chain or cable. The operating mechanism might obviously be enclosed in the post 10 instead of as shown.

The entire operating mechanism is mounted above the street away from ice, trash, etc.

While we have shown and described a preferred form of the invention it will be understood that variations in details of form may be made without departure from the invention as defined in the appended claims.

We claim:

1. A parking meter, a slide connected to said meter and movable with respect to said meter, said meter having an indicating hand movable from a zero to an indicating position, a means for moving said hand to an indicating position including a coin slot, said slide being movable over said slot to prevent the insertion of a coin into said meter, said slide also having means engaging said hand when in said indicating position and operable to move said hand to said zero position upon movement of said slide to cover said slot, means connected to said slide and projecting outwardly of said meter and engageable to move said slide, and a spring engaging the latter means and urging said slide to cover said slot.

2. In a parking meter, a casing having coin controlled timing mechanism therein including a movable hand, said casing having a slot therein for insertion of a coin to actuate said mechanism, a slide mounted on said casing adapted when projected to cover said slot and when retracted to expose the latter, a pin projecting from said slide for engagement with said hand, said pin being so positioned as to move the hand to its limit in one direction when the slide is projected and to withdraw beyond the path of movement of said hand when the slide is retracted, a movable plate, and means connecting said slide with said plate, whereby movements of the latter will be transmitted to said slide.

3. In a parking meter, a casing having a coin slot therein and containing coin controlled timing mechanism including a movable hand, a slide mounted on said casing adapted when moved a predetermined distance in one direction to cover said slot and when moved in the opposite direction to expose the latter, a pin projecting from said slide through said casing for engagement with said hand, said pin being so positioned as to move the hand to its limit when the slide is moved in one direction and to be withdrawn beyond the path of movement of said hand when moved in the opposite direction, a movable plate remote from said meter, a rod connected at one end to said slide to move the latter, and means connecting said rod with said plate whereby movements of the latter will be transmitted to the former.

4. In a parking meter, a post, a casing affixed to one end of said post and having coin controlled timing mechanism therein including a movable hand, said casing having a slot therein for insertion of a coin to actuate said mechanism, a slide mounted on the exterior of said casing and movable transversely thereof adapted when projected to cover said slot and when retracted to expose the latter, a pin projecting from said slide in the path of movement of said hand, said pin being so positioned as to move the hand to its limit in one direction when the slide is projected and to withdraw beyond the path of movement of said hand when the slide is retracted, a reciprocable rod parallel with said post connected at one end with said slide for moving the latter, a movable plate adjacent to said post, and means connecting the opposite end of said reciprocable rod with said plate whereby movements of the latter will be transmitted into reciprocable movements of said rod.

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