United States Patent

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[54] **RESERVED PARKING INDICATOR**
6 Claims, 2 Drawing Figs.

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[51] **Int. Cl.** **G09f 9/00**
[50] **Field of Search** ..... 116/114, 135, 28; 40/28.7, 125, 333, 65; 49/374, 384, 375; 292/266, 270; 70/(Consulted); 246/(Consulted); 194/(Consulted)

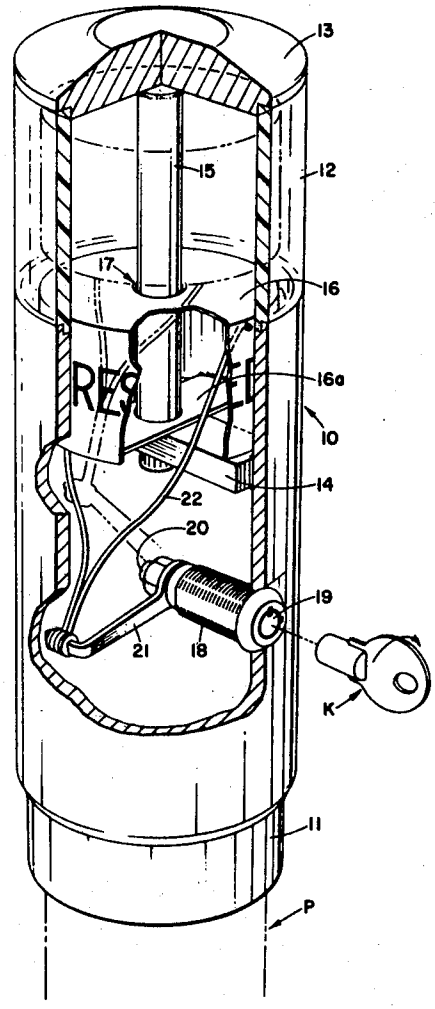
[56] **References Cited**

UNITED STATES PATENTS

481,960	9/1892	Lindstrom	40/28.7
1,034,685	8/1912	Bubeck	116/132
1,414,521	5/1922	Michalski	40/65
1,422,404	7/1922	Zepka	40/2.2
1,549,434	8/1925	Bennett	116/114
2,208,009	7/1940	Rosenboom et al.	116/120X

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ABSTRACT: A reserved parking indicator device having an indicator member or flag movable between two positions, and locked in both positions by means of a lock and key and a locking linkage, so that the person who is authorized to use the particular reserved parking space may park his car and then use the key to move the indicator device or flag from one position to the other, and in this way the parking attendant may immediately check on cars which appear to be parked without authorization since in those cases the car owners will be unable to operate the indicator device or flag.



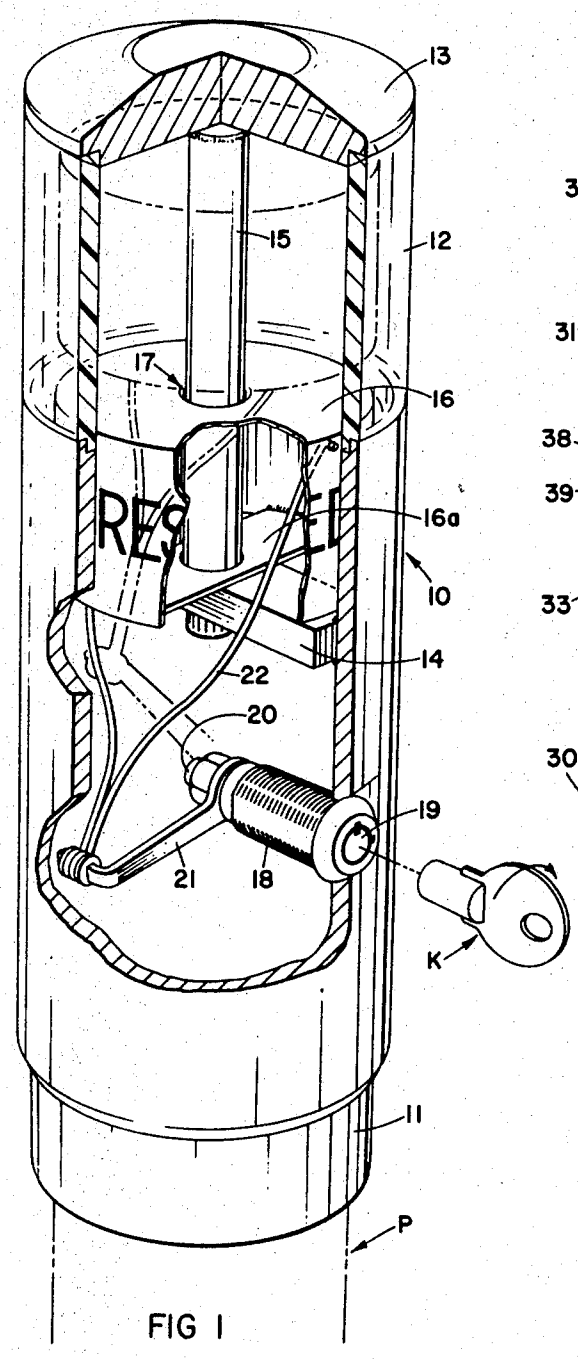


FIG 1

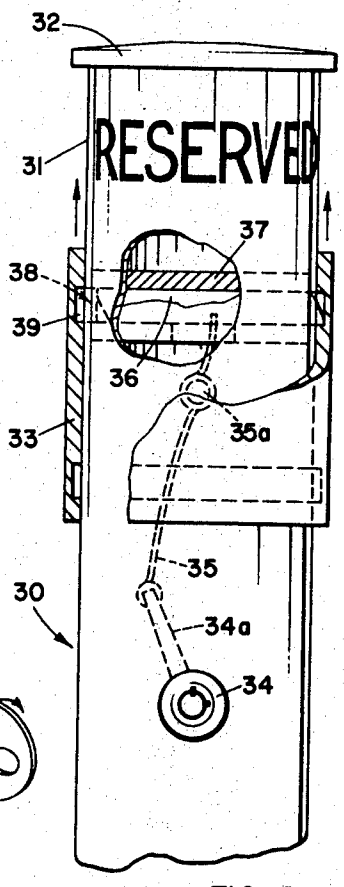


FIG 2

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RESERVED PARKING INDICATOR

The present invention relates to an indicator device for use in automobile parking lots in which the rightful user of the particular parking space is provided with a key, the key being used to operate a flag or indicator device each time the car is parked, thereby indicating to an attendant that the car in that space is legally parked.

The regulation of reserved parking spaces for automobiles at apartments, offices, governmental buildings, hospitals and the like frequently is difficult to control, and unauthorized persons parking vehicles in reserved parking spaced cause confusion and complications both for the parking attendant and others. Use of stickers or other labels applied to duly authorized vehicles is of some assistance, but it is not always suitable. Thus for example, reserved parking spaces may be leased out by the week or month for a set fee. If this is the case, it becomes necessary to change the stickers every week or month, on every authorized vehicle. In addition, it is frequently the practice to allot specific spaces to specific individuals, and the use of stickers and the like is completely ineffective for this purpose.

For these and other reasons, the present invention is generally directed to the problem of providing an indicator device having a flag or other visual indication means which can be operated between two positions, and a simple mechanism within the device operated by a key, by means of which the authorized individual can operate the indicator each time he parks and removes his car so as to indicate to the attendant that the car parked on that space is duly authorized. The indicator devices will be mounted on supports adjacent to each parking space in a similar manner to conventional street parking meters.

It is therefore a general objective of the present invention to provide a reserved parking indicator device adapted to be mounted adjacent to a reserved parking space, and operated by a key in the possession of the authorized user of that space.

More particularly, it is an objective of the present invention to provide an indicator device having the foregoing advantages which incorporates a flag operable between two positions, in one of which it is preferably concealed from view and in the other of which it is readily seen from a distance, and a linkage means operable by a lock and key to procure movement between the two positions.

More particularly, it is an objective of the present invention to provide a reserved parking indicator having the foregoing advantages in which the flag or indicator is operable between upper and lower positions, and in which the weight of such flag, when in its upper position, is supported entirely by the lock.

More particularly, it is a further and related objective of the invention to provide a reserved parking indicator having the foregoing advantages which is completely enclosed within a cylindrical outer housing having a transparent upper end, the mechanism being impervious to weather or tampering.

The foregoing and other objectives will become apparent from the following description of a preferred embodiment of the invention which is given here by way of example only with reference to the following drawings in which like reference devices refer to like parts thereof throughout the various views and diagrams and in which;

FIG. 1 is a perspective illustration of a reserved parking indicator according to the present invention, partially cut away to reveal its construction and showing details thereof in phantom form, and

FIG. 2 is a perspective illustration of an alternative embodiment.

Referring now to the embodiment of FIG. 1, it will be seen that this consists of a cylindrical body member **10** of metal pipe, preferably having at its lower end a reduced skirt portion **11**, internally threaded adapting it to be mounted on any suitable post such as the pipe P adjacent to a parking space. At the upper end of the body **10** there is provided the transparent plastic sleeve **12**, the lower end of which is shaped and

adapted to interfit with the upper end of the body **10**, and held in position by means of the disc shaped cap member **13**. Within body **10** there is provided the horizontal crossbar **14** welded in position to the interior side walls of the body **10**, and a central column or rod **15** is fixed between the centre of crossbar **14**, and the centre of cap **13** thereby holding cap **13** in position.

The flag device according to the invention, in this preferred embodiment, consists of the movable cylindrical block member **16** having a central opening **17** therethrough adapting it to slide upwardly and downwardly on column **15**. The block **16** may be of hollow cylindrical construction having a lower transverse guide bar thereacross provided with an opening fitting around column **15** as shown to guide the same. A lock **18** is provided in the lower side wall of body **10**, having a locking barrel **19** movable one-quarter turn, that is to say, through more or less 90° between lock and unlocked position. An operating shaft **20** extends from the inner side of barrel **19** and is provided with a crank member **21** mounted so that its lower angled position corresponds to the unlocked position of the barrel **19**. A connecting rod member **22** is connected between the lower end of crank **21**, and the interior of block **16**.

Preferably, crossbar **14** is located sufficiently far down the body **10** so as to permit the block **16** to fall downwardly therein and when resting on crossbar **14**, being concealed from view, or at all events leaving the entire transparent plastic sleeve portion **12** empty. Similarly, the length of the crank arm **21** is such that when the locking barrel **19** and crank **21** are swung through 90° from the lower angled position to the upper position, as shown in phantom, the distance moved by the free end of the crank **21** is sufficient to cause the block **16** to move upwardly into the transparent sleeve **12** rendering the same visible from a considerable distance.

Although the design of and printing on the block or indicator member **16** may be varied, in this preferred embodiment the block **16** is coloured red, similar to a conventional parking meter, and the words "Reserved Parking", are printed thereon.

In operation, when the parking space is unoccupied the red indicator member or block **16** is in the up position indicating to any unauthorized user that the space is reserved.

When the authorized user of the parking space has parked his car he will operate the device by means of a key such as the key K so as to lower the block **16** downwardly from the transparent sleeve member **12** into the body **10** thereby making it obvious to an attendant from a considerable distance that the car in that space is the car authorized to use it. Obviously, if an attendant sees a car parked without the block having been lowered, then he can take whatever action is appropriate. It will be noted that when the block **16** is in its upper position, the entire weight of the block **16** is borne solely by the locking barrel **19**. The result is that as soon as the key is inserted into the locking barrel **19** the block **16** will drop downwardly. Thus no strain or wear is applied on the mechanism, the use of springs and the like return device is avoided, and tampering with the device is rendered virtually impossible.

Clearly many variations are possible in the basic concept, and it is apparent that the flag member can operate on a pivotal basis swinging between two positions, or in any other way adapted to provide a visual indication that the locking mechanism has been operated.

Thus for example, according to an alternative embodiment shown in FIG. 2, there may be provided a body portion **30** of cylindrical construction with a coloured top **31**, the top end of the body **30** being closed off by a cam **32**, and an outer slidable sleeve member **33** is provided fitting around body **30**, and adapted to be slid upwardly and downwardly by hand to either cover or expose the coloured portion **31**. A locking mechanism consisting of the lock **34** is provided in the body **30** having a crank arm **34*a*** and a spring blade member **35** pivoted at **35*a*** extending upwardly therefrom and adapted to be swung from side to side by operation of the lock **34**. A

locking bar 36 is slidably mounted on the guide track member 37 for sliding in and out of recesses 38 formed in opposite sides of the body 30. Locking grooves 39 are formed in the upper and lower end of the sleeve 33, for reception of one or other ends of locking bar 36. In operation, the lock 34 is operated in one direction, thereby releasing the locking bar from its engagement with the upper groove 39 and allowing the sleeve 33 to be raised manually by hand so as to cover the coloured portion 31 in which position the locking bar 36 will be urged by the spring blade 35 into the lower groove 39 thereby holding the sleeve in its upper portion. Operation of the lock in the opposite direction will allow the sleeve to be lowered once more.

The foregoing is a description of a preferred embodiment of the invention which is given here by way of example only.

I claim:

1. A reserved parking indicator device for use in automobile parking lots and the like and comprising:

a body portion adapted to be mounted on a post adjacent to a parking space;

a movable indicator member, movably mounted on said body member for movement between two positions, the indicator member when in one position giving an indication of unauthorized parking, and location of said indicator member in the other said position giving an indication of authorized parking;

a lock adapted to be operated by a key, mounted in said body portion; and

linkage means connected with said lock and operable in response to operation of said lock by said key to secure said indicator member in at least one of its two positions as aforesaid.

2. The apparatus as claimed in claim 1 wherein said body portion is a generally cylindrical tubular member, and including a transparent extension of the upper portion of said body member, and wherein said indicator member is movable within said body member, upwardly and downwardly in and out of said transparent extension.

3. The apparatus as claimed in claim 1 including a central column member supported within said body and extending upwardly therein, and wherein said indicator member is of generally cylindrical construction having an opening therethrough adapted to fit slidably on said column.

4. The apparatus as claimed in claim 1 including a transparent hollow cylindrical portion of synthetic plastic material attached on the upper end of said body, and a metal cap member attached over the upper end of said transparent cylindrical member.

5. The apparatus as claimed in claim 1 wherein said indicator member comprises a hollow cylindrical sleeve fitting around said body portion and being slidable upwardly and downwardly thereon, and including a slidable locking bar within said body portion and slidably movable outwardly therefrom into a locking position, and at least two spaced apart locking recesses formed in the interior of said indicator member for locking the same in two alternate positions.

6. The apparatus as claimed in claim 1 wherein said indicator member is slidably movable relative to said body between said two positions, and including a crank arm connected to said lock for angular movement in response to operation of said lock, and connecting rod means extending between said crank arm and said indicator member causing said indicator member to move between said two positions in response to operation of said lock.