United States Patent

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[54] **PARKING FIELD SECURITY DEVICE**
6 Claims, 4 Drawing Figs.

[52] **U.S. Cl.** **49/35, 49/131, 49/49**
[51] **Int. Cl.** **E01f 13/00**
[50] **Field of Search** 49/35, 49, 131, 132, 133, 134

[56] **References Cited**

UNITED STATES PATENTS

1,086,315	2/1914	Davis	49/49
1,734,748	11/1929	Steinkamp	49/35 X
1,763,414	6/1930	Adams	49/131
2,015,607	9/1935	Shinn	49/35 X
3,161,275	12/1964	Sullivan	49/35 X
3,417,508	12/1968	Sprung	49/35

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ABSTRACT: A security device for selectively blocking a parking space to prevent unauthorized use of the space. A stationary vertical support post is set into the pavement or ground outside and adjacent to the parking space. A movable barrier portion is pivotally secured to the support post to be swingable from an upper, vertical position in which the space is free for use by a vehicle, to a lower, horizontal position in which the barrier portion extends across a substantial portion of the parking space and blocks use thereof. Locking means may be provided to lock the barrier in either the horizontal or vertical positions, or both, to prevent unauthorized moving thereof.

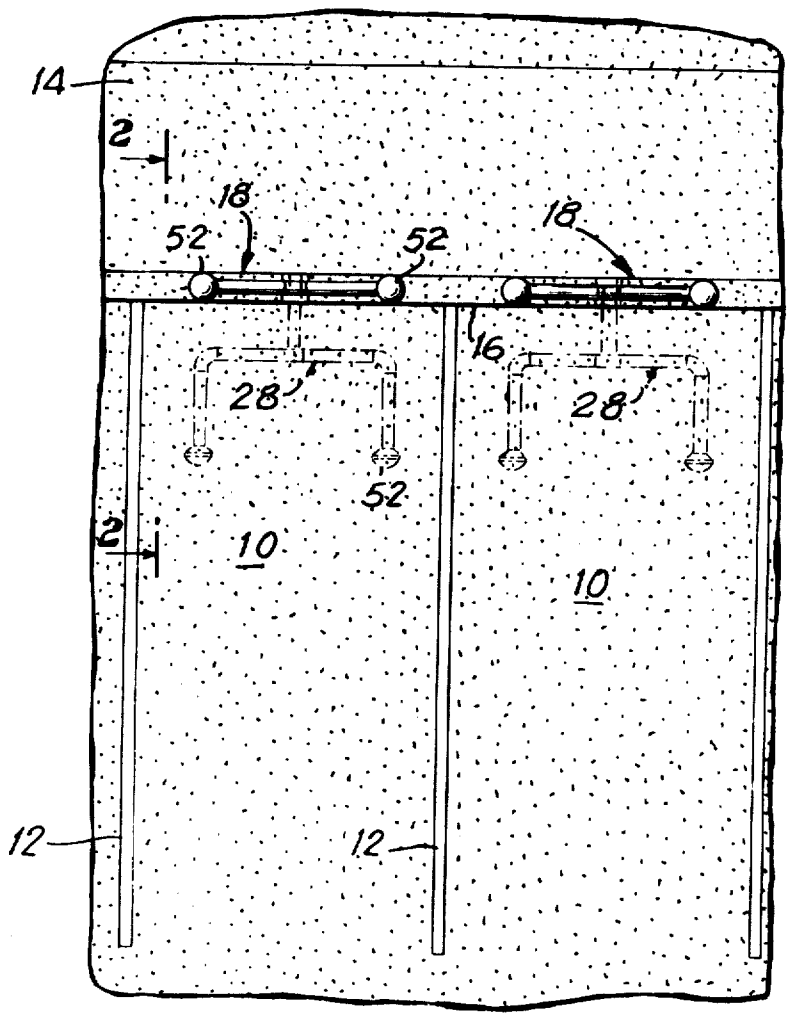
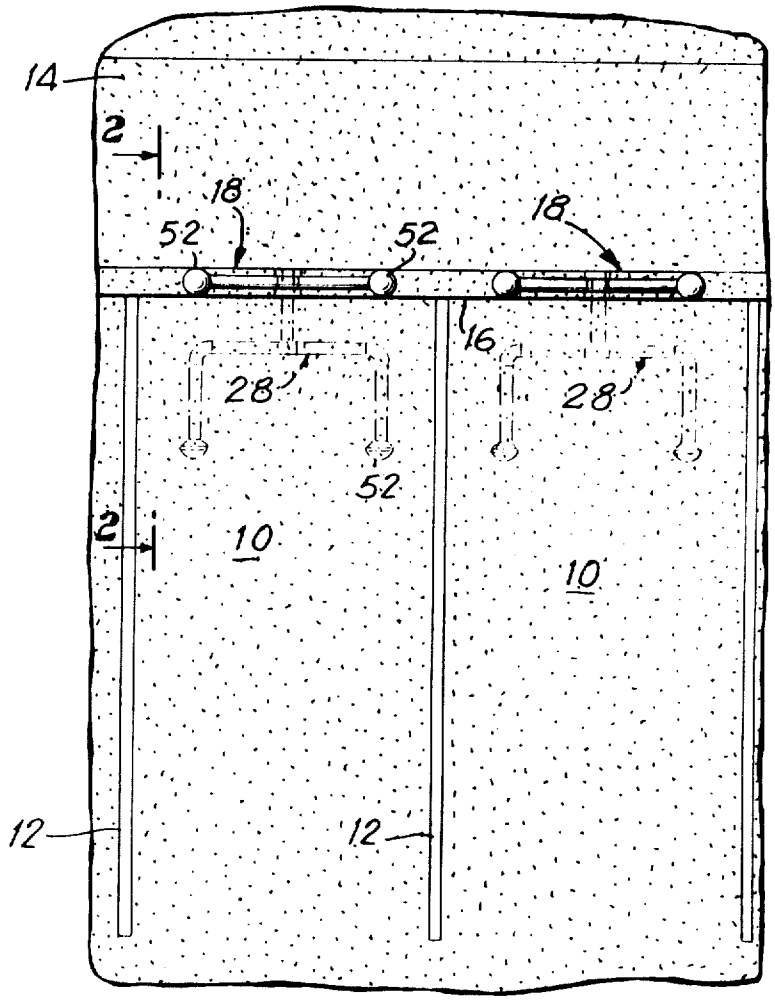


FIG. 1



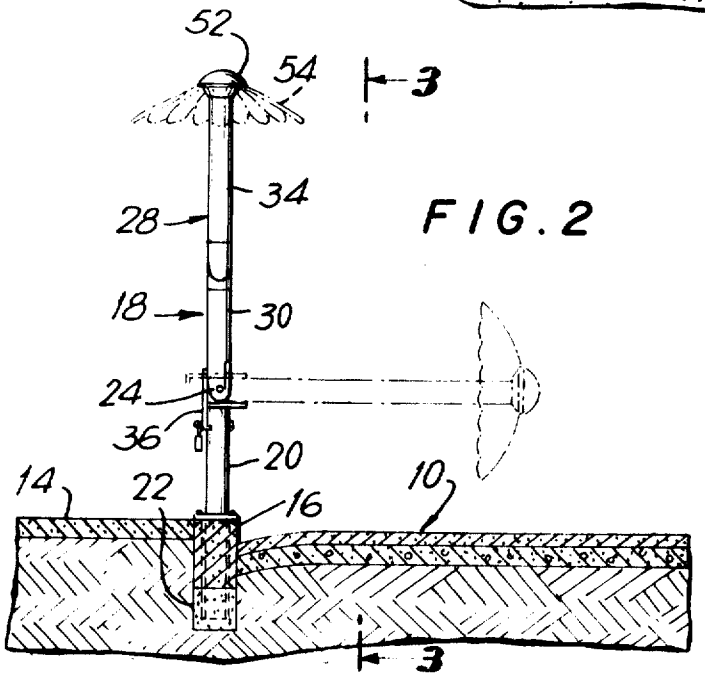
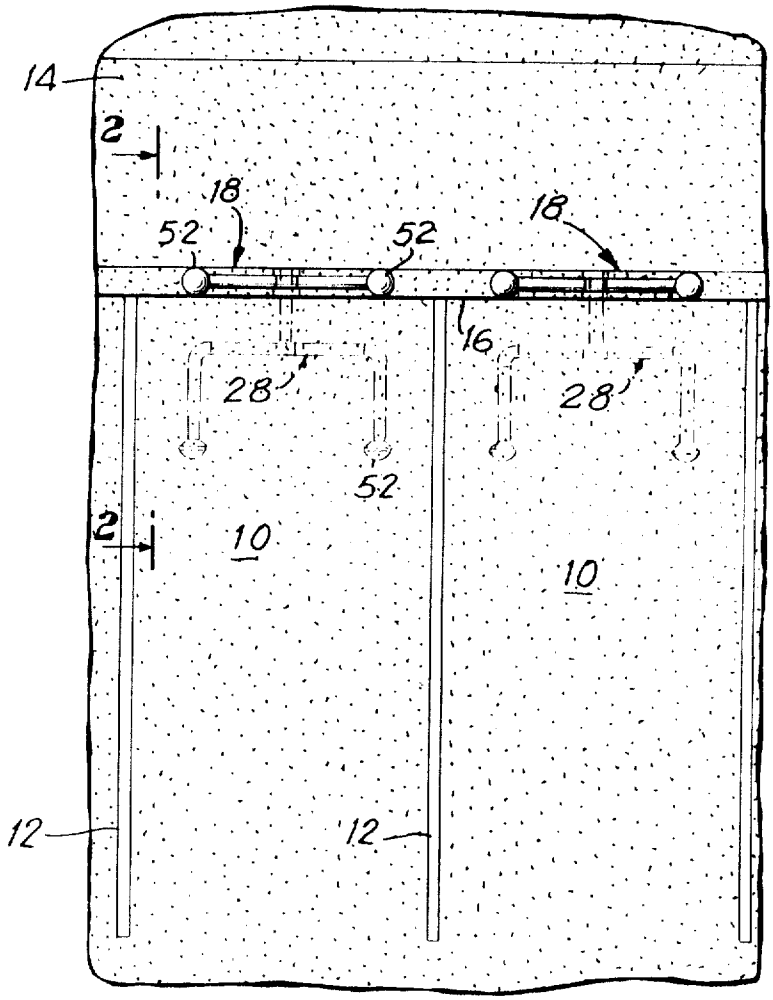


FIG. 2

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FIG. 1



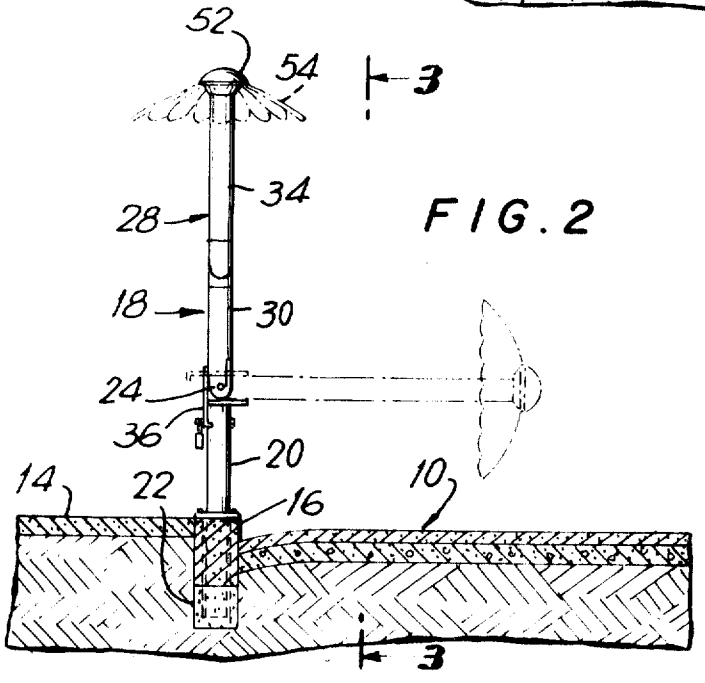


FIG. 2

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PARKING FIELD SECURITY DEVICE

BACKGROUND OF THE INVENTION

This invention relates to a device for preventing unauthorized use of a parking space, and particularly to such a device which will block the parking space and which may be moved out of blocking position by a person authorized to use such space.

Frequently, particularly with regard to industrial plants or other large businesses, it is desirable and customary to provide reserved parking space for certain members of the staff or other employees. Such spaces are generally marked as "reserved;" however, unless a guard or parking attendant is present, there is customarily no way to prevent an unauthorized person from using such reserved parking spaces.

In an attempt to prevent unauthorized use of such reserved spaces, it has previously been proposed to provide barrier devices which normally block such reserved parking spaces, and which can be selectively moved to a nonblocking position only by a person authorized to do so. Such known devices conventionally are set into the pavement or ground within the area of the parking space, generally near the rear thereof, and include a swingable portion which may be pivoted from a substantially vertical position, in which it blocks entry or exit of a vehicle from the space, and a substantially horizontal position adjacent the ground in which the vehicle can pass over the barrier and enter into or exit from the parking space.

A primary disadvantage of such known parking space barrier devices has been that, due to their location within the parking space itself, the vehicle must pass over same to enter into or exit from the parking space. Inasmuch as these devices generally protrude a considerable distance above the pavement or ground level, even when in their horizontal, nonblocking position, considerable damage may be done to the vehicle if it is not precisely aligned with regard to the parking space and the barrier device. Additionally, in winter months, when it is necessary to plow parking lots or other parking areas to clear same of accumulated snow, such known parking space barriers present a considerable hazard and obstacle to the operators of snowplows, due to the aforementioned protrusions above ground level even when in horizontal, nonblocking position.

SUMMARY OF THE INVENTION

With the above background in mind, it is therefore a primary object of the present invention to provide a device for preventing unauthorized use of a parking space which avoids the above-mentioned drawbacks of known prior art devices.

Specifically, it is an object of this invention to provide such a parking space barrier device which is set into the pavement or ground level outside the parking space and which will prevent unauthorized entry of a vehicle into the space.

It is a further object of the invention to provide such a parking space barrier device which may be readily swung between a blocking and nonblocking position by any person authorized to do so, and which may be locked against such swinging motion by a nonauthorized person.

These, as well as other objects which will become apparent as the description of the invention proceeds, are implemented by the inventive parking space barrier device characterized by a stationary vertical support post set into the ground outside and adjacent to the parking space, and a movable barrier portion pivotably secured to the support post and adapted to be swingable from a vertical position in which the space is free for use by a vehicle, to a horizontal position in which the barrier portion extends across a substantial portion of the parking space and blocks unauthorized use thereof.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention itself will be better understood, and additional features and advantages thereof will become apparent,

from the following detailed description of a preferred inventive embodiment of the invention, taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a top plan view, partially in section, showing two parking spaces each provided with the inventive barrier device;

FIG. 2 is a side elevational view, looking along line 2—2 of FIGURE 1, showing the inventive barrier device;

FIG. 3 is a front elevational view of the device of FIG. 2, partially in section, looking along line 3—3 of FIG. 2; and,

FIG. 4 is an enlarged view of a portion of FIG. 2 showing details of the pivoted joint of the device.

DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT OF THE INVENTION

Referring now to the drawings and initially to FIG. 1, there is shown a portion of a parking lot or other parking area provided with a plurality of security devices constructed according to the present invention, and having a plurality of parking spaces generally designated as **10** and separated by suitable divider means **12** of any suitable form, such as paint markings, physical barriers or the like. As shown, an elevated walkway **14** is provided at one end of the parking spaces **10**, and includes a curbing **16** at the edge thereof facing the parking spaces, as is customary.

A parking space barrier device, generally designated as **18**, is provided for each of the parking spaces **10** which is desired to be reserved. As best seen from FIGS. **2** and **3**, each of the barrier or security devices **18** includes a lower, substantially vertical stationary support post member **20**, which is rigidly set into the ground by any suitable means, as for example, by being secured within a hollow sleeve member **22** anchored within the curbing **16**. The support post **20** may be constructed of any suitable material which is strong, durable, and generally weather-resistant and may preferably, for example, comprise a suitable length of aluminum pipe.

Pivotally secured to the upper end of the support post **20** by any suitable pivoting means, as for example, a pivot pin or hinge member **24** extending through an upward extension **26** of the support portion **20**, is a barrier member generally designated as **28**, which is adapted to be swingable between a first or substantially vertical position shown in solid lines in FIGS. **1**, **2** and **4** wherein the parking space **10** is free for use by a vehicle, and a second, generally horizontal position shown in phantom lines in these FIGURES, in which the barrier member **28** extends across a substantial portion of the parking space and prevents use thereof by a vehicle. As best seen in FIG. **3**, the barrier member **28** comprises an upstanding base portion **30**, the lower end of which is pivoted to the support post **20** by means of the pivot pin **24**, and which in its vertical position forms essentially an upward extension of the support post **20**, a generally horizontal, transversely extending bar member **32** secured to the top of the base portion **30** and extending to either side thereof generally parallel to the edge of the parking space (i.e., parallel to the curbing **16**), and a pair of generally parallel upstanding arm members **34** respectively secured to the opposite ends of the transverse bar member **32**. The height of the pivoting means **24** between the support post **20** and the barrier member **28** is preferably chosen so that the barrier member **28**, when lowered to its blocking position as shown in phantom lines, is at a suitable height to effectively prevent a vehicle from using the parking space **10**; accordingly, for example, a suitable height for the pivot would be approximately 2 to 3 feet above the pavement or ground level of the parking space **10** in order to correspond generally with the main body portion of an average vehicle. The blocking member **28**, in the same manner as the support portion **20**, may be constructed of aluminum pipe, and may have the various arms thereof secured to each other, as shown, by standard plumbing connectors.

Locking means are provided for selectively locking the swingable barrier member **28** in either its upper or non-

blocking position, or its lower or blocking position. Such locking means, as best seen in FIG. 4, may preferably comprise a locking arm member **36** secured to the rear side of the base portion **30** of the blocking member **28**, adjacent the lower end thereof and extending downwardly therefrom, and having an aperture **38** extending therethrough of sufficient dimensions to freely receive a locking pin member **40** which extends through the base portion **20** adjacent its upper end and which protrudes from the rear side thereof, as shown. A suitable hole may be drilled or otherwise provided through the locking pin **40**, adjacent the rear end thereof, to receive the hasp of a conventional padlock **42** or the like. Thus, it will be seen that when the barrier member **28** is in its vertical or nonblocking position, with the aperture **38** of the locking bar **36** fitting over the end of the locking pin **40**, as shown in FIG. 4, and retained thereupon by the padlock **42**, the barrier member **28** will thus be prevented from pivoting forwardly and downwardly. Additionally, a locking plate **44** having an aperture **46** therein is secured to the opposite side of the base portion **30**, and is so located that the aperture **46** will align with a similar aperture **48** of a locking plate **50** secured to the upper end of the support portion **20** and extending generally horizontally therefrom, when the barrier member **28** is lowered to its horizontal, blocking position shown in phantom lines. By passing the hasp of the padlock **42** through the thus aligned apertures **46** and **48** of locking plates **44** and **50**, the barrier member **28** may thus be locked in this horizontal position.

The outer ends of the parallel arm members **34** may advantageously be provided with means to enhance the visibility of same, so that the driver of a vehicle does not inadvertently collide with the arms under conditions of poor visibility. Thus, for example, the ends of the arms may be provided with suitable reflector means **52** secured to the ends thereof, which reflector means **52** will be clearly visible when the barrier member **28** is lowered to its horizontal blocking position. To further increase the visibility of these reflector members **52**, they may be painted or otherwise given a bright, easily visible color, and may additionally be reflectorized, so that they will be readily visible either by day or night. Further, if desired, the ends of the arm members **34** may be provided with suitable decorative means indicated as **54**, shown in dotted lines, secured to the arms **34** in such a manner that they do not obstruct the visibility of the reflector means **52**.

The operation and use of the device is believed apparent from the description of its construction above; however, this operation will be briefly reviewed hereunder for the sake of clarity. Firstly, assuming that the barrier member **28** is initially in its upright, nonblocking position and is locked in this position, if the person authorized to use such space desires to block the space against use by unauthorized vehicles, he may remove the padlock **42** from the locking pin **40** of the base portion **20**, thus freeing the locking arm **36** and permitting the barrier member **28** to be swung downwardly to its blocking position shown in phantom lines. In this position, the apertures **46** and **48** of the locking plates **44** and **50** secured to the barrier member **28** and the support portion **20**, respectively, will be aligned, and the barrier member **28** may be then locked in this position by passing the hasp of padlock **42** or any other suitable locking means through these aligned apertures. In the event that it is then desired to use this space, the above procedure is reversed; i.e., the padlock is removed from the apertures **46** and **48** in the locking plates **44** and **50**, the barrier member **28** is raised to its vertical, nonblocking position shown in solid lines, with the locking bar **36** of the barrier member fitting upon the locking pin **40** to lock the barrier member in its upright position.

The length of the base portion **30** and the arm members **34** of the barrier member **28** is preferably chosen such that when the barrier member **28** is lowered into its horizontal, blocking position, the arm members **34** will extend a substantial distance across the parking space **10** and will effectively prevent a vehicle from being moved into this space. By the use of aluminum piping or other lightweight, rigid materials, a length of the arms **34** may be utilized without unduly adding weight to the device, whereby the barrier member **28** may be readily swung to either position without undue effort.

It will be appreciated that, inasmuch as the support post member **20** is secured within the sleeve member **22** which is located outside and adjacent to the actual parking space, no portion of the device is located within the parking space at ground level. Accordingly, when the device is raised to its vertical, nonblocking position shown in solid lines in the drawings, the parking lot or other parking area may be readily plowed without the necessity for watching for obstructions in the pavement, as would be the case in prior known devices of this nature.

By providing a parking lot security device as described above, it is believed evident that all of the objects set forth at the outset of this specification have been successfully fulfilled.

What I claim is:

1. A parking lot security device for preventing unauthorized use of a parking space comprising, in combination, a generally upstanding support post member secured to the ground outside and adjacent to the parking space, and a barrier member pivotally secured to said support post for swinging movement between a first, generally vertical position providing access of a vehicle to the parking space, and a second, generally horizontal position preventing access of a vehicle to the parking space; said barrier member, when in said horizontal position, extends across and projects into a substantial portion of said parking space at a height generally corresponding to the body portion of a vehicle.

2. A security device as defined in claim **1** further comprising locking means for locking said barrier member in said vertical position.

3. A security device as defined in claim **2**, further comprising means for locking said barrier member in said horizontal position.

4. A security device as defined in claim **1**, wherein said barrier member comprises an upstanding base portion pivotally secured to said support post, a generally horizontal transverse bar member secured to the top of said base portion, and at least one generally upstanding arm member secured to an end of said transverse bar member, said arm member extending across the parking space when said barrier member is in said horizontal position.

5. A security device as defined in claim **4**, wherein two of said upstanding arm members are provided secured to opposite ends of said transverse bar member and extending generally parallel to each other.

6. A security device as defined in claim **5**, further comprising reflector means secured to the free ends of said upstanding arm members, whereby said arm members will be readily visible to the driver of a vehicle when said barrier member is in said horizontal position.