SIDEWALK PLUG-IN POLE FOR CAR HEATERS, WARMERS AND THE LIKE

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References Cited
UNITED STATES PATENTS
2,439,010 4/1948 Lange ........................................ 191/12 R
2,778,890 1/1957 Storsand .................................. 191/1 R

3,213,994 10/1965 Hohler ............................... 219/205

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ABSTRACT
A vertical standard is mounted on private property adjacent the sidewalk edge and an overhanging portion spans the sidewalk well above head level and terminates in a plug-in box or receptacle. The vertical standard is connectable to a source of electrical power by cable through the device extending between the receptacle and then underground to the source of electrical energy at the residence or the like. It enables cars parked at the curb to be plugged in, in winter, in order to operate the engine immersion heater and/or an interior car warmer and eliminates a loose cord crossing the sidewalk, poles at the curb which can interfere with snow ploughs and the like, and which also is out of reach of children, for safety purposes.

6 Claims, 4 Drawing Figures
SIDEWALK PLUG-IN POLE FOR CAR HEATERS, WARMERS AND THE LIKE

BACKGROUND OF THE INVENTION

In many Canadian and American town and villages, it is common practice for cars to be parked at the curb overnight because of the difficulty of obtaining access to the houses or grounds for various reasons. During the relatively cold winters experienced in many parts of Canada and the United States, it is essential that such cars be connected to a source of electrical energy particularly when they are left overnight, such source of electrical energy operating immersion heaters and/or interior car warmers and it is conventional, although in most instances illegal, to have a long extension cord extending from a convenient receptacle in the residence to the car where the immersion heater and/or interior warmer may be plugged in. This cord normally lies across the sidewalk and is a constant hazard to pedestrians who may well trip over the cord.

Furthermore, sidewalk ploughs cannot operate successfully to clear snow from sidewalks if a plurality of electrical cords span the sidewalk at intervals therealong. While it is possible, although expensive to provide vertical standards at the curb edge which may hold a receptacle, nevertheless these are not satisfactory because they interfere not only with snow ploughs on the sidewalks, but also road snow ploughs. When a road or sidewalk plough operates, it is quite normal for the snow to be piled at the curb or edge of the sidewalk and such poles at the curb would readily become covered with snow besides being readily accessible to children with the consequent dangers of live voltage being present particularly where there are snowy or slushy conditions.

SUMMARY OF THE INVENTION

The present invention overcomes all of the disadvantages mentioned heretofore by providing a vertical standard normally situated upon the edge of the owner’s property and having an over-spanning portion spanning the sidewalk well above the head level of pedestrians and being provided with a plug-in receptacle at the distal end thereof to which the motorist can readily attach an extension cord when it is desired to plug-in the car standing at the curb. Underground wiring or the like may extend from the base of the standard to the residence and may be connected to a source of electrical energy. This means that the entire sidewalk area is clear so that snow ploughs can operate either on the sidewalk or upon the roads and furthermore, pedestrians cannot trip over loose extension cords.

The principal object and essence of the invention is therefore to provide a device of the character herewithin described which provides a plug-in receptacle for electrical apparatus on cars parked at the curb by means of an over-spanning pole anchored by a vertical section on private property adjacent the inner edge of the sidewalk.

Another object of the invention is to provide a device of the character herewithin described which is out of reach of children so that accidents cannot occur.

Still another object of the invention is to provide a device of the character herewithin described which eliminates the conventional extension cords extending across sidewalks and the like from private property to cars parked at the curb edge.

A still further object of the invention is to provide a device of the character herewithin described which leaves a clear area on the sidewalks and roads for snow clearing purposes.

Still another object of the invention is to provide a device of the character herewithin described which is simple in construction, economical in manufacture and otherwise well suited to the purpose for which it is designed.

With the foregoing objects in view, and such other objects and advantages as will become apparent to those skilled in the art to which this invention relates as this specification proceeds, my invention consists essentially in the arrangement and construction of parts as hereinafter more particularly described, reference being had to the accompanying drawings in which:

DESCRIPTION OF THE DRAWINGS

FIG. 1 is a side elevation of the device showing a sidewalk in section.

FIG. 2 is a view of the receptacle taken at right angles to FIG. 1.

FIG. 3 is an enlarged fragmentary sectional view showing the connection between adjacent lengths of vertical standard.

FIG. 4 is an enlarged fragmentary top plan view of one form of anchoring system for vertical standard.

In the drawings like characters of reference indicate corresponding parts in the different figures.

DETAILED DESCRIPTION

Proceeding therefore to describe the invention in detail, reference character 10 shows the cross section of a sidewalk with 11 indicating the curb edge thereof adjacent the street area 12, and 13 indicating the inner edge of the sidewalk which normally is adjacent private property belonging to residences bordering the sidewalk.

The device collectively designated 14 consists of a vertical standard 15 of hollow pipe or tubing which extends upwardly from the ground adjacent to but spaced from the inner edge 13 of the sidewalk.

The upper end curves at right angles to the vertical as indicated by reference character 16 and an adaptor 16 connects an over-spanning portion 18 to this curved portion 16. This over-spanning portion spans the sidewalk 10, but is spaced thereabove and terminates in a down-turned portion 19 formed on the distal end of the over-spanning portion 18.

A plug-in receptacle box 20 is secured to the distal end 21 on the down-turned portion 19 which extends through the upper side 22 of the receptacle and is secured by means of nuts 23 upon either side of the underside 22 as clearly shown in FIG. 2.

The over-spanning portion 18 and the down-turned portion 19 are also made of hollow pipe or tubing and form a continuous channel from the receptacle 20 downwardly to the base 24 of the vertical standard 15.

This base is normally anchored below ground level and preferably includes stabilizing means taking the form of a pipe tee 25 with the lower end 24 of the vertical standard being screwed within the upper aperture 26 of the pipe tee.
Relatively short lengths of pipe 27 are screw threadably secured to the sides of the pipe tee and are extended upwardly at right angles therefrom in a horizontal plane thus acting as a stabilizing anchor and may be embedded in concrete if desired.

A further pipe 28 is screw threadably secured to the rear side 29 of the pipe tee and may extend underground to a source of electrical energy in the nearby residence in the usual way.

Electrical conductors 30 extend through pipe 28 to the tee and then upwardly through the standard 15, through the over-spanning portion 18 and terminate in the receptacle box 20 to which they are connected in the conventional manner, thus supplying a source of electrical energy to the receptacle 32 within the box 20.

It is sometimes desirable to remove the device during the summer months under which circumstances, the vertical standard and over-spanning portion may be removed either at a hedge level indicated by dotted line 33 or at ground level or adjacent thereto indicated by reference character 34.

In either case, one form of such connection is shown in FIG. 3.

The vertical standard includes a lower portion 35 and an upper portion 36 connected together by means of a threaded adaptor 37 screw threadably engaging over the screw threaded ends of the portions 35 and 36 thus connecting together in adjacent relationship one with the other.

An electrical connector consisting of upper portion 38 and a lower portion 39 is secured within the adjacent ends of the sections or portions 36 and 35 respectively and the electrical conductors are connected to the portions of this connector in the usual way.

When it is desired to connect or disconnect at point 33 or 34, the adaptor is rotated so that it clears the lower section 35 thus enabling the connector sections to be pulled apart.

To re-install, the connectors are plugged in one with the other and the adaptor rotated in the opposite direction thus causing same to screw threadably engage the upper end of the lower portion 35 thus connecting the portions 35 and 36 together.

In operation, a conventional extension cord 40 may be plugged into the receptacle 32 whereupon it hangs vertically downward as clearly shown in FIG. 1. It may then be connected to the conventional connector normally provided at the front of the car which is standing at the curb edge 11 so that the extension cord does not interfere with pedestrians and/or snow ploughs being used.

The vertical standard being on private property is also clear of the sidewalk and of course it will be appreciated that the height of the over-spanning portion 18 should be at least 6 feet above the sidewalk level in order to not interfere with pedestrians passing therebelow.

Since various modifications can be made in my invention as hereinabove described, and many apparently widely different embodiments of same made within the spirit and scope of the claims without departing from such spirit and scope, it is intended that all matter contained in the accompanying specification shall be interpreted as illustrative only and not in a limiting sense.

What I claim as my invention is:

1. A plug-in device for supplying a source of electrical energy for car heaters and the like of cars parked at the curb at the edge of a sidewalk; comprising in combination a vertical standard adjacent the inner edge of the sidewalk, but spaced therefrom, an over-spanning portion extending from the upper end of said vertical standard, an electric plug receptacle on the distal end of said over-spanning portion, connectable to a source of electrical energy via said over-spanning portion and said vertical standard, said over-spanning portion being spaced above said sidewalk by at least six feet, and means to anchor said vertical standard within the ground, said means including a pipe tee secured at the base of said vertical standard, and relatively short lengths of pipe extending outwardly at right angles from each side of said tee in a substantially horizontal plane, to stabilize said vertical standard.

2. The device according to claim 1 in which said over-spanning portion terminates a relatively short down-turned portion at the distal end thereof, said receptacle being at the lower end of said down-turned portion.

3. A plug-in device for supplying a source of electrical energy for car heaters and the like of cars parked at the curb at the edge of a sidewalk; comprising in combination a vertical standard adjacent the inner edge of the sidewalk, but spaced therefrom, an over-spanning portion extending from the upper end of said vertical standard, an electric plug receptacle on the distal end of said over-spanning portion, connectable to a source of electrical energy via said over-spanning portion and said vertical standard, said over-spanning portion being spaced above said sidewalk by at least 6 feet, said vertical standard including an upper portion and a lower portion, adaptor means screw-threadably connecting said portions together in end to end relationship, and a detachable electrical plug connector at the junction of said portions electrically connectable on one side thereof to said source of electrical energy, and on the other side thereof to said receptacle.

4. The device according to claim 3 which includes means to anchor said vertical standard within the ground, said means including a pipe tee secured at the base of said vertical standard, and relatively short lengths of pipe extending outwardly at right angles from each side of said tee in a substantially horizontal plane, to stabilize said vertical standard.

5. The device according to claim 4 in which said over-spanning portion terminates a relatively short down-turned portion at the distal end thereof, said receptacle being at the lower end of said down-turned portion.

6. The device according to claim 3 in which said over-spanning portion terminates a relatively short down-turned portion at the distal end thereof, said receptacle being at the lower end of said down-turned portion.  

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