June 26, 1962 R. S. GREGOIRE ET AL 3,040,636

TRAFFIC MARKER

Filed Oct. 19, 1959 2 Sheets-Sheet 1

FIG. 1

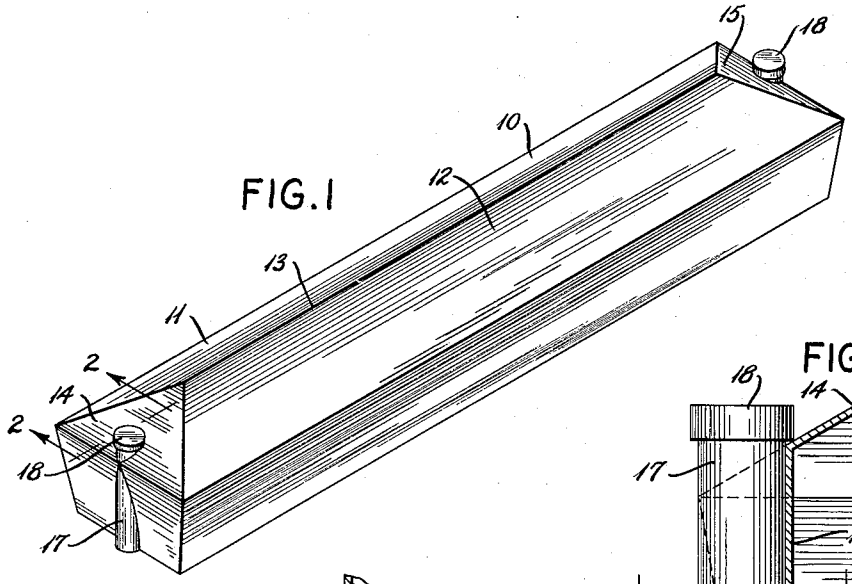
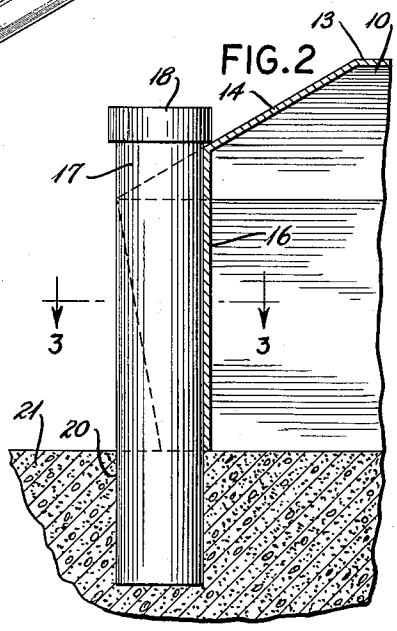


FIG. 2



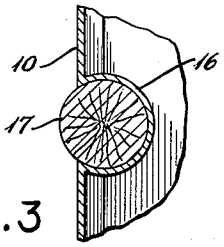


FIG. 3

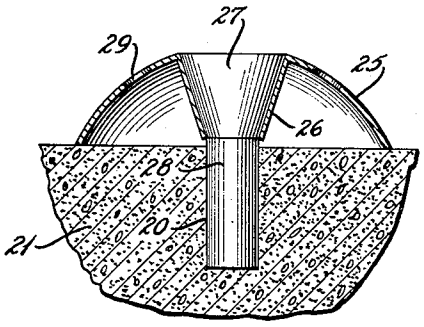


FIG. 5

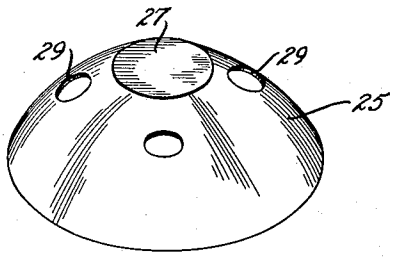


FIG. 4

INVENTORS
E. L. SIMM &
R. S. GREGOIRE

BY Agnes Dowell
ATTORNEY

June 26, 1962 R. S. GREGOIRE ET AL 3,040,636

TRAFFIC MARKER

Filed Oct. 19, 1959 2 Sheets-Sheet 2

FIG. 6

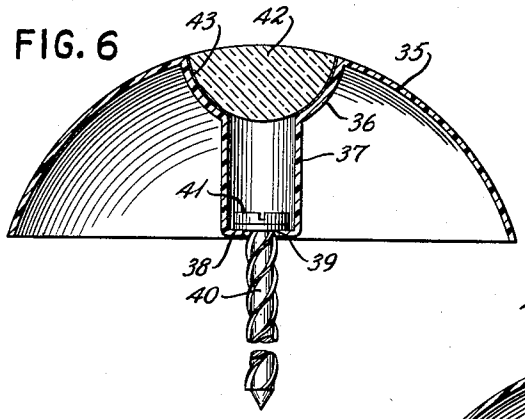


FIG. 7

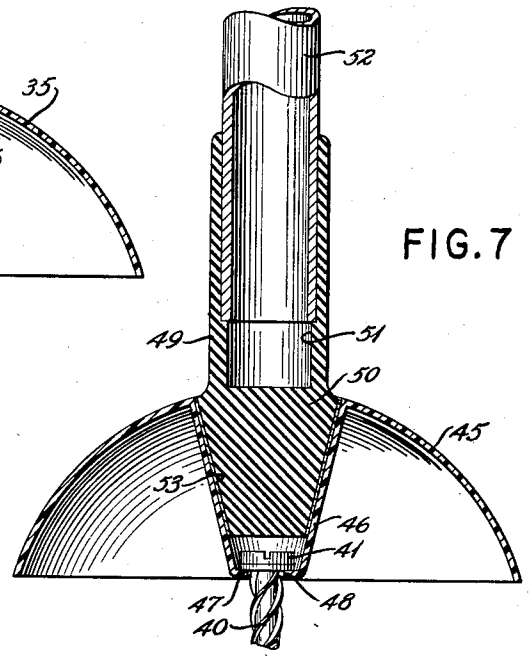
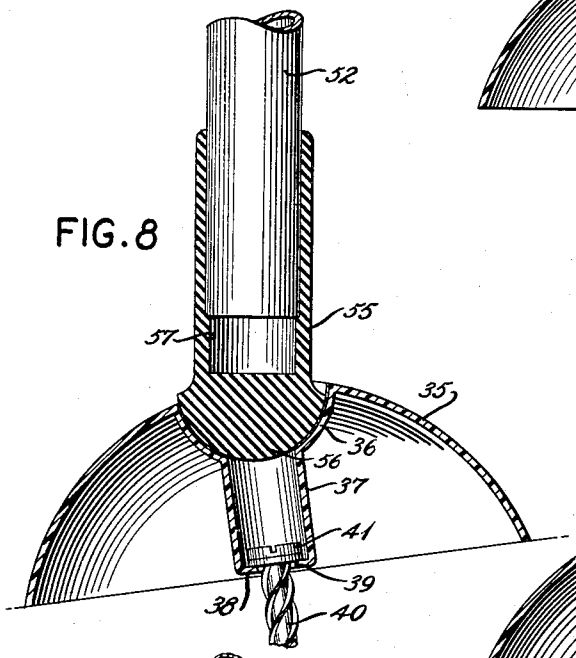


FIG. 8



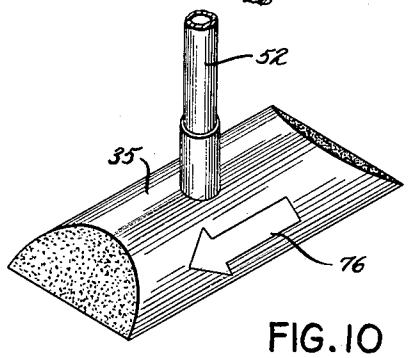


FIG. 10

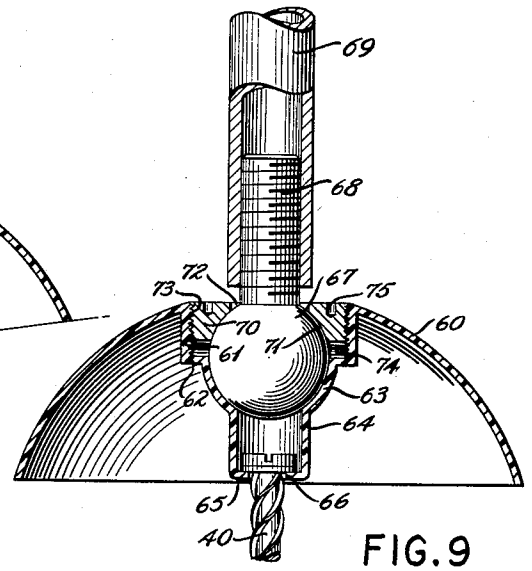


FIG. 9

INVENTORS
E.L.SIMM &
R.S.GREGOIRE

BY

ATTORNEY

United States Patent Office 3,040,636 Patented June 26, 1962

3,040,636

TRAFFIC MARKER

Resta S. Gregoire, Philippi, W. Va., and Eugene L. Simm, Harrisburg, Pa., assignors to Future Products, Inc., Washington, D.C., a corporation of Delaware

Filed Oct. 19, 1959, Ser. No. 847,130
1 Claim. (Cl. 94—1.5)

This invention relates to structures of various kinds including those employed in the direction, regulation and control of traffic and for marking curbs, islands, dividers and other types of devices.

This invention relates specifically to traffic markers both fixed and portable and in various shapes, sizes and materials and with or without reflecting portions, as well as those which are rigid or have flexible portions, and whether subjected to light or hard usage.

Heretofore difficulty has been experienced in the construction, maintenance and repair of traffic markers which were more or less custom made or produced on location and consequently required time to install or remove and were expensive and difficult to install subsequent to the completion of the structure in which they were to be applied. This resulted in delays in traffic with consequent hazards and also resulted in poor sanitation due to improper drainage and in damage to personal property as well as marred the beauty of the landscape. Also portable type devices were easily upset and became hazards to traffic and otherwise were unsatisfactory.

It is an object of the invention to overcome the difficulties indicated including increased visibility and other factors which promote safety, to improve the sanitary conditions and the general appearance of the area, and to provide a traffic marker of inexpensive construction and which can be readily installed and removed for application in another location with minimum damage to the foundation to which applied.

Another object of the invention is to provide traffic markers for installation as signs which when struck will return to the original position and containing reflective portions, as well as traffic markers or signs which can be applied on an inclined surface with the signs in upright position.

Other objects and advantages of the invention will be apparent from the following description taken in conjunction with the accompanying drawing, in which:

FIG. 1 is a perspective illustration of one embodiment of the invention;

FIG. 2, an enlarged detailed section on the line 2—2 of FIG. 1;

FIG. 3, a horizontal section on the line 3—3 of FIG. 2;

FIG. 4, a perspective of a dome type traffic marker;

FIG. 5, a vertical section through the marker of FIG. 4 and the foundation on which it is mounted;

FIGS. 6, 7, 8 and 9 are four additional modifications; and

FIG. 10, a perspective of an elongated sign, a cross-section of which is made corresponding to either of the signs of FIGS. 5–9, inclusive.

Briefly stated, the invention is an inexpensive relatively strong, lightweight, shock resistant traffic marker capable of being readily installed or removed including an existing foundation and which may have an elevated intermediate portion and either a flattened or curved portion extending therefrom and with or without reflective means and a removable portion and regardless of whether it is constructed for return to initial position when struck.

With continued reference to the drawings a portable traffic marker may be of any desired configuration as that disclosed in FIGS. 1, 2 and 3 and comprising a relatively long thin hollow body 10 preferably with top members 11 and 12 which angle upwardly to a peak or ridge 13. The ends 14 and 15 of the top members angle downwardly and may be coated with a reflective material.

The ends of the marker are provided with a socket 16 in which is received a generally cylindrical peg 17 having an enlarged head 18. The peg 17 is adapted to fit within a recess 20 in a street foundation 21 or other solid and to retain such marker in fixed position until the pegs are removed from the recess.

The marker is preferably made from lightweight shock resistant material such as fiberglass or plastic and colored yellow for increased visibility. Also the top surfaces may be covered with a reflective coating or may be used for directional signals or other indicia.

A marker of another shape may be used as illustrated in FIGS. 4 and 5 which is generally dome shaped with a body 25 of lightweight shock resistant material. This marker has a central inverted conical socket 26 in which is received a cooperating conical head 27 of a pin 28. The body 25 is provided with a plurality of openings 29 which may be used for lifting the device or for the receipt of reflectors, hereinafter illustrated and described with regard to FIG. 6.

The recess 20 in the pavement 21 normally is filled or plugged to exclude dirt and moisture and when it is desired to install one of the markers the plug is removed and the pin 28 is inserted in the opening.

With reference to the markers of FIGS. 6, 7, 8, 9 and 10 a portable traffic marker is provided having a body of any suitable configuration such as a hollow dome or an elongated semi-cylindrical portion with both ends closed. The body 35, as illustrated in FIG. 6, is provided centrally of the upper portion with a cup or socket 36 having a depending cylindrical portion 37 with a bottom 38. The bottom 38 is provided with an opening 39 in which is received a self-tapping fastener or screw 40 having a head 41. The cup 36 is adapted to receive a beaded reflector 42 maintained in position by adhesive 43. When this marker is used a self-tapping screw 40 is placed in the depending cylindrical portion 37 with the tip projecting through the opening 39. The device is placed on the pavement or foundation and screw 40 is driven in to hold the body in position after which the beaded reflector 42 can be fixed in position.

The marker of FIG. 7 is similar to that in FIG. 6 but instead of the cup and depending cylindrical portions a body 45 is provided with a central inverted depending frustoconical portion 46 having a bottom 47 with an opening 48 therein to receive the self-tapping screw 40. This type of device is used principally for attaching signs to the roadway and for this purpose a plug 49 of a flexible material is provided having a frusto-conical portion 50 at one end for cooperative engagement with the portion 46 of the body. The opposite end of the plug 49 is provided with an opening 51 in which is received a post 52 and to the upper end of such post, a sign or direction signal is attached. In the event that a motorist accidentally strikes the sign or the post 52 the flexible plug 49 will bend and when the striking force has passed, the plug 49 will return the post to its upright position. This traffic marker is placed in position on the street in a manner similar to that previously described in which the self-tapping screw 40 is first driven into the foundation and then the plug 49 is fixed to the base by adhesive 53.

If desired the conical portion 46 may be replaced by a cylindrical portion and such cylindrical portion may have threads for engagement with cooperating threads on the plug 49 to aid in the assembly and disassembly of the unit.

With reference to the marker of FIG. 8 the body 35 is identical to the body of FIG. 6 and is adapted to be

used on hills or inclines in such a manner that the post **52** will be substantially vertical. In order to do this a flexible plug **55** is provided having a hemispherical portion **56** on one end for cooperative engagement with the cup **36** of the body **35**. The opposite end of the plug **55** has a recess **57** in which is received the lower portion of the post **52**.

With reference to FIG. 9 a universal traffic marker is provided having a body **60** with a central depending cylindrical portion **61** with inturned lower flanges **62**. The inner edge of the flange **62** is bent downwardly to form a cup or socket **63** having a central depending cylindrical portion **64** with a bottom **65** and such bottom having an opening **66** in which is received the self-tapping screw **40**. A sphere or ball **67** of a size to cooperatively engage socket **63** is provided and such ball has a threaded projection **68** which is received within the lower portion of a post **69**. The ball **67** is maintained in position within the socket **63** by a nut **70** having a central and semi-spherical opening **71** in cooperative engagement with the ball **67** and an opening **72** to permit passage of the projection **68**. The nut **70** is provided with external threads **73** in engagement with internal threads **74** on the interior of the cylindrical recess **61**. Also the nut **70** is provided with a pair of blind openings **75** which may be engaged by a spanner wrench to lock the ball and the post carried thereon in any adjusted position.

The bodies **35**, **45** and **60** preferably are made of strong lightweight material and may have either a reflective coating or may have an appropriate color for better visibility. If desired the base may include traffic signals such as arrows **76**.

It will be obvious to one skilled in the art that various changes may be made in the invention without departing from the spirit and scope thereof and therefore the invention is not limited by that which is illustrated in the drawings and described in the specification but only as indicated in the accompanying claim.

What is claimed is:

A traffic marker comprising a body having arcuate side walls leading to a top portion, a socket member depending from said top portion, said socket member comprising an upper threaded neck portion and a lower spherical portion terminating in a cup with perforated bottom which perforated bottom is adapted to receive a fastener for securement of the marker to a foundation, the bottom of the cup being at a level substantially that of the lower ends of the arcuate side walls, a projection threaded at its upper end and provided with a ball at its lower end seated against the sherical portion of the socket member, a lock nut threaded into said threaded neck portion and engaging the ball to hold the ball in place, and a traffic marker post threaded onto said threaded projection.

References Cited in the file of this patent

UNITED STATES PATENTS

1,174,368	Walsh	Mar. 7, 1916
1,313,616	Walsh	Aug. 19, 1919
1,402,465	Wood	Jan. 3, 1922
1,526,742	Chapel	Feb. 17, 1925
1,599,986	Chapel	Sept. 14, 1926
1,726,817	Franklin	Sept. 3, 1929
1,746,312	Lee	Feb. 11, 1930
2,073,166	Moorman	Mar. 9, 1937
2,157,059	Rosener	May 2, 1939
2,666,373	Mattson	Jan. 19, 1954
2,699,982	Batterson	Jan. 18, 1955
2,851,935	Weeks	Sept. 16, 1958