June 10, 1941. V. A. HAMILTON 2,245,336

HIGHWAY MARKING SYSTEM

Filed April 14, 1938

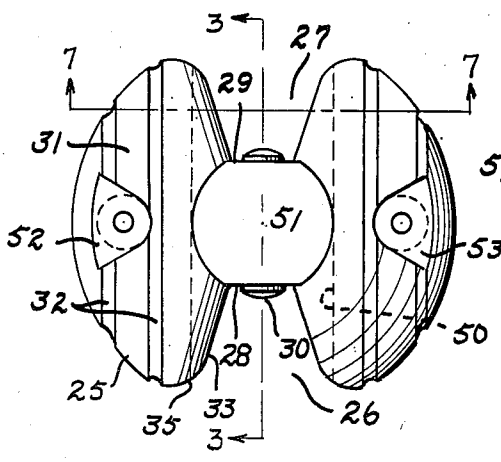


Fig. 1.

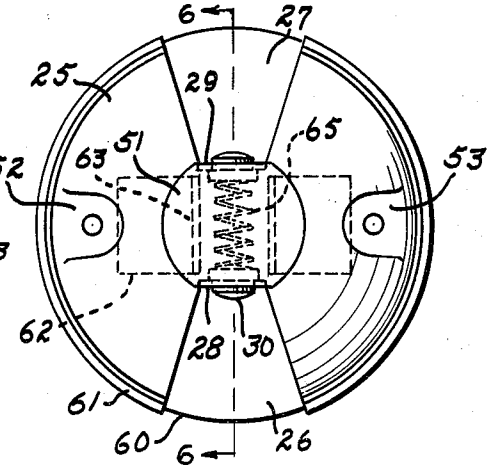


Fig. 4.

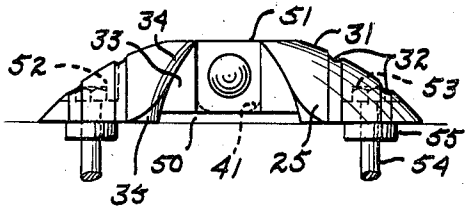


Fig. 2.

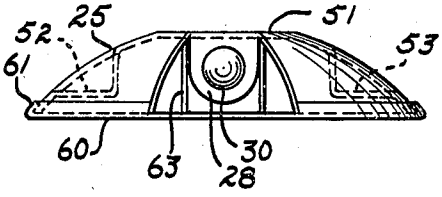


Fig. 5.

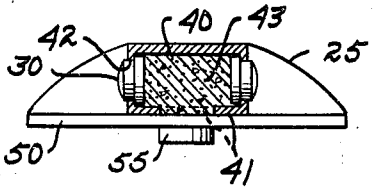


Fig. 3.

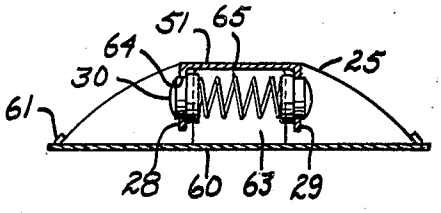


Fig. 6.

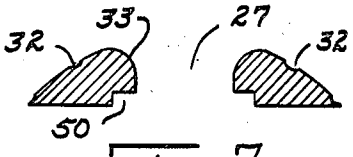


Fig. 7.

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HIGHWAY MARKING SYSTEM

Van Alvin Hamilton, Palestine, Tex.

Application April 14, 1938, Serial No. 201,928

1 Claim. (Cl. 88—79)

The invention relates to a highway marking system and a reflector type marker therefor.

An object of the invention is to provide a highway marking system for the reduction of danger on the highways.

An object is to provide a simple, inexpensive and durable marker of the above mentioned type.

It is also an object to provide a marker which is simple in design and which is so constructed that the tendency to obscure the reflector with soil or other material is minimized.

Another object is to provide a marker having an irregular surface to retain identifying coloring material after portions of such material have been worn away.

Still another object is to provide a marker having therein a reflector which may be contacted by a deformed pneumatic tire passing over the marker so that a clean reflecting surface is assured.

Still another object is to provide a marker which is so constructed that it will not be readily forced from the position upon the roadway when in normal use.

Another object is to provide a marker of such design that it may be inexpensively produced either by casting or from pressed metal.

Other and further objects and advantages of the invention will be apparent from the following description taken in connection with the drawing in which:

Fig. 1 is a plan view of one form of marker of the invention.

Fig. 2 is an elevation of the construction shown in Fig. 1.

Fig. 3 is a sectional view taken on line 3—3 of Fig. 1.

Fig. 4 is a plan view of a modified form of marker.

Fig. 5 is an elevation of the construction shown in Fig. 4.

Fig. 6 is a sectional view taken on line 6—6 of Fig. 4.

Fig. 7 is a sectional view taken on line 7—7 of Fig. 1 as viewed in the direction of the arrows.

A marker embodying the invention is illustrated in Figs. 1 to 7. The embodiment illustrated in Figs. 1, 2, 3 and 7 is a type formed by casting and comprises an oval shaped body 25 having recesses 26 and 27 therein, forming outwardly facing walls 28 and 29 in which are mounted reflector buttons 30 which serve to reflect light of a predetermined color from the headlights of an approaching vehicle. It is intended that the upper surface 31 of the marker will be colored so that the visible portion from any direction will correspond to that of the reflector also visible from that direction. A plurality of longitudinal grooves 32 are provided in the surface 31 so that the desired color will be visibly presented even though the coloring material be worn from the surrounding surface.

A chamber 40 (Fig. 3) is provided in the marker intermediate the walls 28 and 29. This chamber is preferably formed by using a core when casting the marker and in this manner inwardly extending flanges 41 are formed as shown in Figs. 2 and 3. These flanges serve a purpose which will be made apparent.

Openings 42 are provided in the walls 28 and 29 to receive reflectors 30 which are of the rear insert type, that is, such reflectors are inserted into the openings 42 from within the chamber 40. These reflectors extend through the walls 28 and 29 and are secured in place by means of a suitable cementitious material 43 which adheres to the walls of the chamber 40 and which are additionally secured by virtue of the inwardly extending flanges 41.

The bottom face of the body 25 is transversely grooved at 50 to provide a passage between the body and the surface of the roadway. This feature is of importance as it provides a passage whereby water or air currents are instrumental in removing obscuring material from within the recesses 26 and 27.

In order to distribute stresses applied to the marker, especially those incident to a force applied directly above the groove 50, the upper portion of the body 25 is flattened at 51 so that a force will be applied over a relatively large area and the tendency of the marker to crush under the force is minimized.

As a further protection to keep the reflectors 30 clean, the side walls 33 of the recesses 26 and 27 are rounded upwardly at 34 and inwardly at 35 so that a deformed pneumatic tire passing over the marker may enter one of the recesses 26 or 27 sufficiently that the reflector will be contacted and wiped clean thereby.

Depressions 52 and 53 are provided in the body 25 at opposite sides thereof and are drilled to receive bolts 54 by means of which the marker is secured to the roadway.

As there is considerable shearing stress between the marker and the roadway when the marker is in normal use, bosses 55 are provided on the lower faces of the body, whereby such stresses are transmitted to these bosses so that the bolts 54 will not be sheared.

An alternative embodiment of the marker of the invention constructed of pressed metal is shown in Figs. 4, 5 and 6. This embodiment of the marker is produced by initially providing a punched disc having oppositely extending recesses within which there terminates metal ears for forming the walls 28 and 29. This disc is then deformed to provide the oval shaped body 25, having a flattened portion 51, as above described, and the metal ears in the recesses 26 and 27 are flanged downwardly, thus forming the walls 28 and 29. Depressions 52 and 53 are formed on opposite sides to receive bolts for securing the marker to the roadway.

The body formed in the manner just described is placed upon a disc 60 and the peripheral edge of this disc is flanged upwardly at 61 to rigidly hold the body 25 from deformation. The base 60 is slotted as indicated at 62 in Fig. 4 and the metal within these slots is flanged upwardly to form upstanding walls 63 which engage the nether surface of the body 25 and thereby increase its strength.

In this embodiment the opening 64 is provided in the walls 28 and 29 to receive reflectors 30, secured in place as by means of a spring 65. It is to be understood, however, that the reflectors 30 may be secured in place by means of a suitable cement as above indicated in connection with Figs. 1 to 3 and 7. It is also to be understood that while this embodiment is not shown as provided with surface grooves or irregularities, nor rounded edges on the body adjacent the recesses 26 and 27, such construction is contemplated to come within the scope of the invention so that the advantages previously pointed out in the description of such features will inhere in the marker.

What is claimed as new is:

A road marker comprising an oval shaped body adapted to be secured to the surface of a roadway, said body having peripheral recesses forming outwardly facing vertical walls, and a reflector mounted in each of said vertical walls, a groove on the nether side of the body forming with the roadway a passage between the reflectors so that the recesses will not become clogged with obscuring material, the side walls of said recesses being rounded outwardly and upwardly to admit a tire for wiping action with the reflectors.

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