

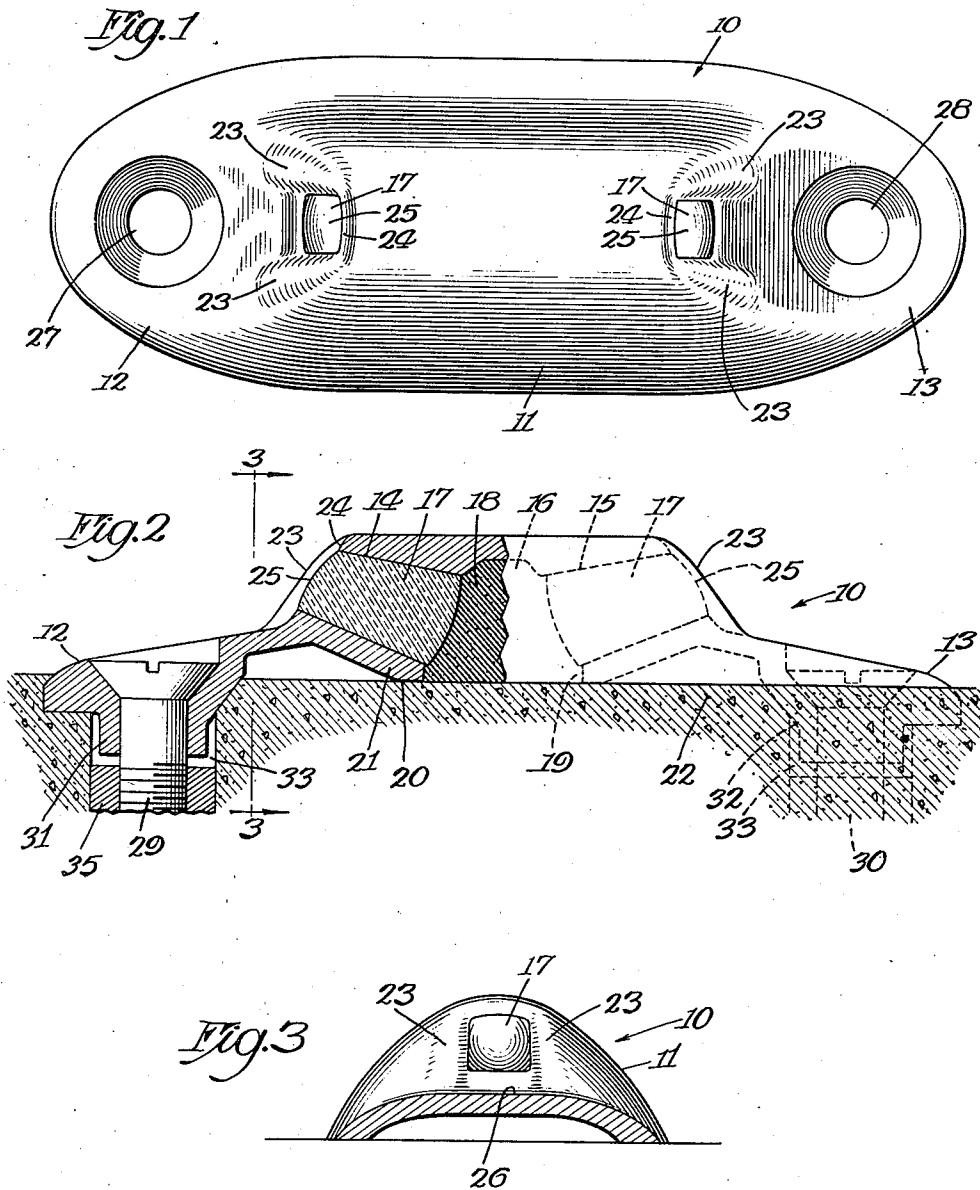
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HIGHWAY MARKER

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HIGHWAY MARKER

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5 Claims. (Cl. 88—79)

This invention relates to street or highway markers and more particularly to the type of marker located on the surface of the highway to indicate curves in the highway and the like.

5 The principal object of the invention is the provision of a new and improved street or highway marker of the type that is adapted to reflect light from an approaching headlight to the eyes of the driver as a traffic signal for indicating stops, curves, and the like in the streets or highways.

10 Another object of the invention is the provision of a new and improved traffic signal marker that is so constructed that the wind and rain will tend to maintain the lens clear and visible and to prevent the accumulation of dirt, dust and the like in front of the lens.

15 A further object of the invention is the provision of a new and improved road marker having novel means for insuring the cleaning of the face of the lens while the same is in use on the street or highway.

20 Another object of the invention is the provision of a new and improved highway marker, having novel means for protecting the face of the lens employed therein and that will not cause accumulation of dirt, dust and other foreign matter that would obscure the lens.

25 A further object of the invention is the provision of a new and improved road or street marker that is simple in construction, readily assembled, inexpensive to manufacture and install on the highway and that is effective in use and is not likely to be displaced or seriously injured by the use of snow-plows and the like in clearing the highways.

30 Other and further objects and advantages of the invention will appear from the following description taken in connection with the accompanying drawing, in which:—

Fig. 1 is a plan view of the device;

Fig. 2 is a side elevation thereof with parts broken away and parts in section and showing the device in position on the highway; and

45 Fig. 3 is a section on the line 3—3 of Fig. 2.

It has been proposed to indicate curves in highways and the like by appropriate street markers which are clearly visible at night in that the light shining on the same from the headlights of an oncoming vehicle will be reflected back to the eyes of the driver of the vehicle at such a distance as will warn him in time to properly control the vehicle on curves and the like. Such devices are extremely useful in driving at night in order to properly indicate the highway. These

markers are usually on the surface of the highway and it is desirable that they should be of such form and shape that dust and dirt will not collect upon the same and that they would be clearly visible to the driver of an approaching vehicle.

The present invention seeks to provide a street marker that is so mounted on the street that snow-plows and the like will not dislodge the same, and one in which the wind and rain and even the passage of inflated rubber tires over the same will tend to maintain the lenses in clean condition.

Referring now to the drawing, the reference character 10 designates generally the road or street marker which is oval in plan and comprises a central portion 11 having its upper surface transversely curved as shown more particularly in Fig. 3 and has tapered end portions 12 and 13 which also have their upper surfaces curved transversely. The central portion 11 is somewhat elongated, has a cavity 16 opening downwardly, and has at each end thereof, openings 14 and 15 extending downwardly and inwardly to the hollow or cavity 16. These openings are tapered toward their outer ends and have mounted therein lenses 17 which are correspondingly tapered.

When the lenses are in position as shown in Fig. 2, the cavity 16 is filled by a filler 18 of some suitable adhesive or cement, which holds the lenses 17 in position in the body portion. The tapers of the lenses will prevent the latter from moving outwardly and the filler material will prevent their inward movement.

The lower surface of the body portion 11 is provided with an opening 19 through which the filler material is inserted. The marginal walls 21 of the opening 19 are adapted to rest on the surface of the highway 22 and may be beveled off as at 20 for engaging this surface when the marker is in operative position thereon.

Suitable means are provided for preventing the metal tires of wagons, tractors and the like from contacting the faces of the lenses and injuring the same when the wheels pass over the markers and which will also deflect snow-plows over the lenses when snow is being removed from the streets or highways. Such means are so constructed as not to form pockets or recesses in which dust or dirt may collect or be deposited.

In the form of construction shown, which is by way of example only, the end walls of the body portion through which the lenses extend, are inclined downwardly and outwardly more or less

abruptly to conform to the shape of the faces of the lenses as shown more particularly in Fig. 2 and have shallow recesses or channels therein, that is, the material of the body portion at each side of the lenses extends outwardly as at 23 slightly beyond the faces of the lenses at each side thereof just sufficient to protect the lenses.

The upper marginal portions 24 of the openings 14 and 15 for the lenses are curved inwardly and upwardly immediately above the lenses to form substantially a continuation of the front faces 25 of the lenses which also curve upwardly and inwardly as clearly shown in Fig. 2 of the drawing. In other words, the lenses form the bottom walls of the depressions.

The upper surfaces of the end portions 12 and 13 are curved in cross section as shown at 26 in Fig. 3 and are tapered downwardly and outwardly from the lenses and preferably terminate beneath or adjacent to the surface of the highway when the marker is in position thereon. These end portions are provided adjacent to their outer extremities with openings 27 and 28 through which attaching bolts or screws 29 and 30 are adapted to extend for attaching the marker in position on the highway. The end portions 12 and 13 are provided with depending bosses 31 and 32 through which the attaching screws or bolts 29 and 30 extend.

The lenses are preferably of the type in which the outer surface is inclined as shown in Fig. 2. The inclination of the ends of the central portion of the marker is substantially that of the outer faces of these lenses. In the construction shown, the outer faces of the lenses are substantially flush with the marginal end walls of this central portion, both above and below the lenses, whereby no pockets or recesses are provided in which dust or dirt may collect. The walls 23 defining the depressions extend upwardly beyond the faces of the lenses for protecting the same. This is considered an important feature of the invention. The lenses are secured in the body or central portion of the marker at such an angle that the rays from the headlights of an approaching vehicle will be reflected to the eyes of the driver at a sufficient distance to properly warn the driver of the road condition.

It will thus be seen that a marker is provided in which all channels and recesses are eliminated beneath the lenses within which dirt, dust and the like may collect and obscure the lenses, and one in which snow-plows will be deflected over the same by the inclination of the exposed surfaces of the marker and one in which the faces of the lenses will be protected from the iron tires of wagons and the like, while at the same time, rubber tires of vehicles passing lengthwise over the marker will yield sufficiently so that they have a tendency to wipe the faces of the lenses, thereby keeping the same clean and polished.

In applying the device to the highway, it is only necessary to provide a pair of openings 33 for the reception of plugs or other friction devices 35 in which the bolt or screws 29 and 30 are secured in the usual manner.

It is thought from the foregoing taken in connection with the accompanying drawing that the construction and operation of my device will be apparent to those skilled in the art and that changes in size, shape, proportion and details of construction may be made without departing from the spirit and scope of the appended claims.

I claim as my invention:—

1. A highway marker comprising a body having an elongated central portion and tapered end portions, said portions having their upper surfaces convex in transverse cross section, said central portion having a cavity in its under side opening downwardly, the ends of said central portion being inclined outwardly and downwardly sufficiently to permit scrapers and snow plows to ride thereover and merging with said end portions, said central portion having openings extending outwardly and upwardly from said cavity and opening through the end faces of said central portion, lenses mounted in the said openings, the outer faces of said lenses being also inclined downwardly and outwardly, the surfaces of said end faces of said central portion being substantially in the planes of the outer faces of the adjacent lenses above and below the lens faces and extending slightly beyond said lens faces at the sides thereof for protecting the lenses, and means for retaining said lenses in said openings, said end portions being formed for engagement of means for fastening the marker to the highway.

2. A street marker comprising a body having central and end portions convexly curved on their upper surfaces in transverse cross section, the end faces of said central portion being inclined downwardly and outwardly and merging with the said end portions; said central portion having a cavity in its under side opening downwardly and having openings extending upwardly and outwardly from said cavity at each end of the central portion and opening through the end faces of the central portion, the angle between the axes of the openings being an obtuse angle, lenses secured in said openings, the outer faces of said lenses being also inclined downwardly and outwardly; the upper surfaces of said end portions being inclined downwardly and outwardly from the said lenses, the bottom marginal edges of said openings at the outer ends thereof being adjacent the outer faces of the said lenses, and the sides of said openings extending outwardly slightly beyond the faces of the lenses to protect the same, said end portions being formed for engagement of means for fastening the marker to the highway.

3. A highway marker comprising a body having an elongated central portion and tapered end portions, said portions having their upper surfaces convex in transverse cross section, said central portion having a cavity in its underside opening downwardly, the ends of said central portion extending outwardly and downwardly sufficiently to permit scrapers and snow plows to ride thereover and merging with said end portions, said central portion having openings extending outwardly and upwardly from said cavity to and through the end faces of said central portion, lenses in the said openings, means for retaining said lenses in said openings, said end portions having their upper surfaces inclined downwardly and outwardly from the ends of said central portion and their outer extremities terminating below the lower horizontal plane of the central portion, the outer faces of said lenses being inclined downwardly and outwardly, the surfaces of said end faces of the central portion being substantially in the planes of the outer faces of the lenses above and below the lens faces and extending slightly beyond said lens faces at the sides thereof for protecting the lenses.

4. A road marker, comprising a body oval in plan and having central and end portions, said

central portion having its end walls inclined outwardly and downwardly and merging with the end portions, the end walls of said central portion having depressions extending downwardly and outwardly and terminating at the junction of said central and end portions, said central portion having openings extending upwardly and outwardly to points between the upper surfaces of said end and central portions, lenses secured in the openings in said central portion and having their outer faces extending outwardly into said depressions between the ends thereof and said faces inclined and substantially flush with the upper and lower surfaces of said end walls, said end portions having their upper surfaces inclined downwardly and outwardly from the ends of said central portion, and their outer extremities terminating below the lower horizontal plane of the central portion, said end portions being formed for engagement of means for fastening the marker to the highway.

5. A road marker comprising central and end

portions having their upper surfaces curved in transverse cross section, the upper surfaces of said end portions being inclined downwardly and outwardly from said central portion, said central portion having its end faces adjacent said end portions extending upwardly and inwardly therefrom, said central portion having openings extending upwardly and outwardly to and opening through the inclined end surfaces of said central portion, lenses within said openings having their outer faces approximately square and inclined downwardly and outwardly, the surfaces of said marker below and adjacent said lenses curving downwardly and outwardly and merging with the upper surfaces of said end portions, the surfaces of said end faces of the central portion being substantially in the planes of the outer faces of the lenses above and below the lens faces and extending slightly beyond said lens faces at the sides thereof to protect the lenses and facilitate cleaning thereof.

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