Sept. 19, 1933. D. E. ROSS 1,927,756

TRAFFIC LANE MARKER

Filed Jan. 22, 1932

Fig. 1.

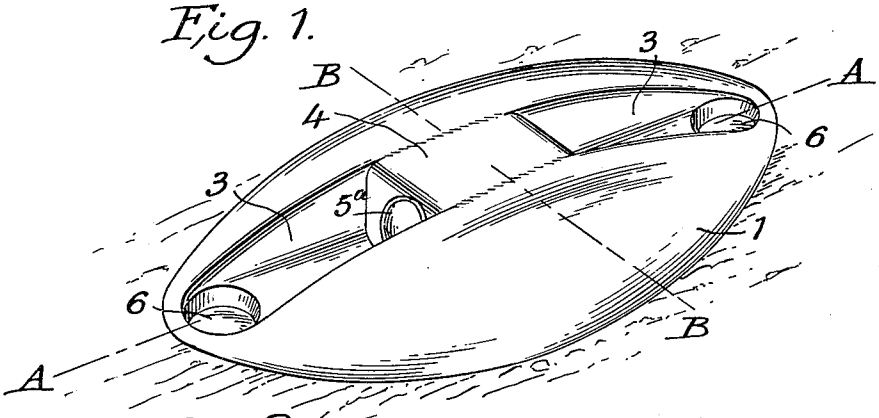


Fig. 2.

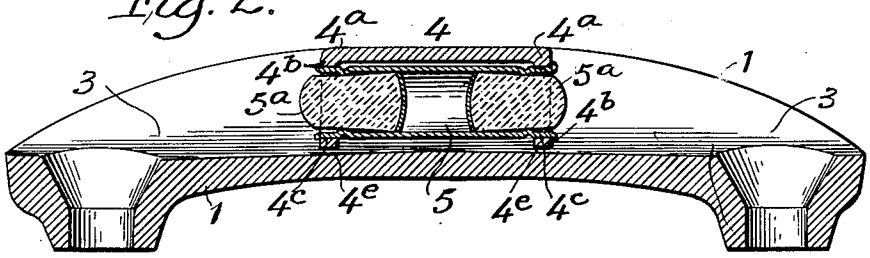


Fig. 3.

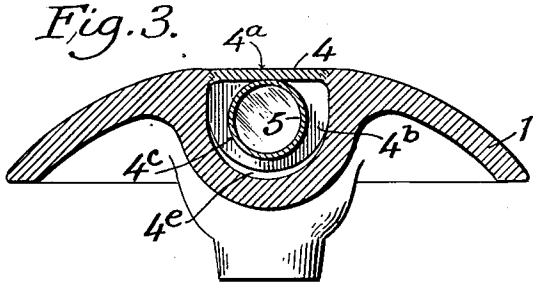
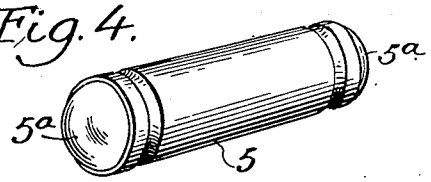


Fig. 4.



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TRAFFIC LANE MARKER

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Application January 22, 1932. Serial No. 588,203

9 Claims. (Cl. 88—1)

This invention is a novel improvement in traffic lane markers of the type shown and for the purpose set forth in my companion application Serial No. 507,725, filed January 9, 1931.

The improved traffic lane marker is adapted to be located in or along a road or highway in such manner that rays of light from the headlights of an approaching automobile will "pick up" the marker and be reflected backward thereby in such manner that the driver can readily distinguish the center of the road, and safely pass vehicles coming in the opposite direction.

The marker is adapted to be embedded in and form part of the surface of a roadway without obstructing vehicular traffic, and without liability to be injured by the scrapers, or other devices used to clear the surface of the roadways. The markers are of such character that those for the right hand side of the road will not be "picked up" by the lights of automobiles approaching from the left, while those for the left hand side of the road will not be picked up by the lights of automobiles approaching from the right, and the operators of such vehicles will not be confused by reflected lights from markers "picked up" by an approaching automobile.

The accompanying drawing illustrates my novel traffic lane marker, and I will describe the same with reference thereto, and summarize in the appended claims the novel features thereof for which protection is desired.

In said drawing:

Fig. 1 is a perspective view of the traffic lane marker as embedded in a roadway.

Fig. 2 is a longitudinal section on the line A—A Fig. 1.

Fig. 3 is a transverse section on the line B—B Fig. 1.

Fig. 4 is a perspective view of the cartridge in which the reflecting lenses are placed.

The marker shown is designed to be placed in the center line of a roadway, or between parallel traffic lanes in a roadway, and therefore has duplicate oppositely facing light reflecting devices. The marker comprises an elongated oval shaped metal body 1 having a hole 6 in each end for the passage of lagscrews or bolts (not shown) or other suitable means for fastening the marker in position in a roadway. The upper surface of the body 1 is approximately parti-spherical, its central portion being slightly higher than its ends and the upper surface thereof preferably tapers downwardly from its central portion toward each end and side thereof, as indicated. The body 1 of the marker is preferably made of a very hard metal, capable of resisting steel tires, tractor wheels, road scrapers and the like and the tapered or inclined top surface thereof enables road scrapers, snow plows and the like to pass over the marker without injuring it.

In the upper side of the body 1 is an open longitudinal groove 3 the bottom of which is preferably in about the plane of the roadway, when the marker is properly located therein, and the center of this groove may be slightly higher than its ends so that water will readily drain out of the groove.

Located at about the center of said groove is a partition 4 which is preferably formed of a piece of metal of inverted U-shape in longitudinal cross section. The end portions 4*b* of this partition substantially correspond in contour to a cross section of the groove 3, and its top portion 4*a* is flush with the top of the body and is permanently attached thereto preferably by welding the longitudinal edges thereof to the body as indicated in Figs. 1 and 3 so that the partition becomes practically an integral part of the body.

In the ends of the partition are inserted reflecting lenses indicated at 5*a* whereby the light of an approaching automobile will be deflected back in such manner as to be clearly visible to the driver of the automobile. Preferably the end portions 4*b* of the partition are provided with openings 4*c* for the reception of the ends of a cylindric metallic cartridge 5 which extends through the partition as shown in Fig. 2 and in the ends of the cartridge are secured the reflecting lenses 5*a*. The construction is such that the lenses 5*a* are protected on all sides. The reflecting lenses can be securely fastened in the cartridge 5 or partition by any suitable means. The reflecting lenses will give a very intense reflection of the headlights of an approaching automobile; but the particular construction of such lenses is not a feature of the present application.

Preferably small spaces 4*e* are left between the lower ends 4*b* of the partition and the bottom of the groove so that water entering the groove can readily escape or pass beneath the partition.

The marker is set in the roadway as indicated in Fig. 1 so that the outer edges of its top surfaces are flush with the surface of the roadway while the central portion projects slightly above it. The parti-spherical upper surface of the body is of low pitch and the body is hard enough to resist the disrupting effects of contact with

metal wheels or other metal parts of vehicles passing thereover and enable the blades of road scrapers etc. to ride over the marker without injury thereto.

The marker shown provides a non-breakable armored housing for the reflecting lens therein. Each is adapted to be placed in hard surfaced roadways to identify traffic lanes. I have shown only one reflecting lens in each end of the partition, but obviously if desired a plurality of reflecting lenses could be used at each end.

In the day time the line of markers can be used in lieu of paint or other markers to divide traffic. At night the markers will successfully reflect back rays from the headlights of approaching automobiles.

If desired the outside lines of the roadway could be indicated by using only one half of the marker or only one lens therein, as it is not desirable for the side road markers to reflect lights approaching from both directions. Markers corresponding to the right hand half of the marker shown could be used for the right hand side of the road; while markers corresponding to the left hand half of the marker shown could be used for the left hand side of the road.

I claim:—

1. A traffic lane marker; comprising an elongated oval shaped body adapted to be secured in a roadway and having an approximately parti-spherical upper surface adapted to project slightly above the surface of the roadway, said body having a longitudinal open groove in its top portion; a partition secured to the body at the center of the groove, and a reflecting lens in said partition adapted to reflect the light of an approaching automobile.

2. A traffic lane marker; comprising an oval shaped body adapted to be partly embedded in the surface of a roadway and having an approximately parti-spherical upper portion adapted to project slightly above the surface of the roadway and a longitudinal open groove in said portion extending from end to end thereof; a partition secured in the body at the center of and within the groove, and a reflecting lens in the said partition adapted to reflect the light of an approaching automobile.

3. A traffic lane marker; comprising an elongated oval shaped body adapted to be embedded in the surface of a road and having an approximately parti-spherical portion adapted to project slightly above the surface of the roadway and an open groove in said projecting portion extending longitudinally of the body; a partition so secured in said groove that water may pass under it, and a reflecting lens in such partition.

4. A traffic lane marker; comprising an oval shaped body adapted to be partly embedded in the surface of a road and having an approximately parti-spherical portion adapted to project slightly above the surface of the roadway and an open groove in said projecting portion extending longitudinally of the body; a tubular metal cartridge secured in said groove and extending longitudinally thereof, and a reflecting lens in the end of such cartridge.

5. A traffic lane marker; comprising an oval shaped body adapted to be partly embedded in the surface of a roadway and having an approximately parti-spherical portion adapted to project slightly above the surface of the roadway and an open groove in said portion extending longitudinally of the body; an inverted U-shaped partition secured to the body within and at the center of the groove and extending longitudinally thereof, and a reflecting lens in such partition.

6. A traffic lane marker; comprising an oval shaped body adapted to be partly embedded in the surface of a roadway and having an approximately parti-spherical portion adapted to project slightly above the surface of the roadway and an open groove in said portion extending longitudinally of the body; an inverted U-shaped partition secured within and at the center of the groove and extending longitudinally thereof; a metal cartridge secured in said partition and attached to the ends thereof, and a reflecting lens in such cartridge.

7. A traffic lane marker; comprising an oval shaped body adapted to be partly embedded in the surface of a road to define a line between opposite lanes of traffic; said body having an approximately parti-spherical portion adapted to project slightly above the surface of the roadway and an open groove extending longitudinally of the body; a partition secured to the body at the center of and within the groove; a metal cartridge secured in said partition and extending longitudinally thereof, and reflecting lenses in such cartridge.

8. A traffic lane marker; comprising an oval shaped body adapted to be partly embedded in the surface of a road to define a line between opposite lanes of traffic; said body having an approximately parti-spherical portion adapted to project slightly above the surface of the roadway and an open groove extending longitudinally of the body; an inverted U-shaped partition secured to the body at the center of and within the groove; a metal cartridge within said partition and attached to the ends thereof, and reflecting lenses secured in the ends of such cartridge,

9. A traffic lane marker; comprising an approximately oval shaped body adapted to be secured upon the surface of a road to define a line between opposite lanes of traffic; said body having an elongate approximately parti-spherical portion adapted to project slightly above the surface of the roadway and an open groove extending longitudinally of the body at each end thereof, a partition at the center of the body between the grooves, and reflecting lenses secured in the ends of said partition adapted to reflect rays of light entering the groove.

DAVID E. ROSS.