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H. S. JOHNSON  
TRAFFIC LANE MARKER

2,065,314

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Fig. 1

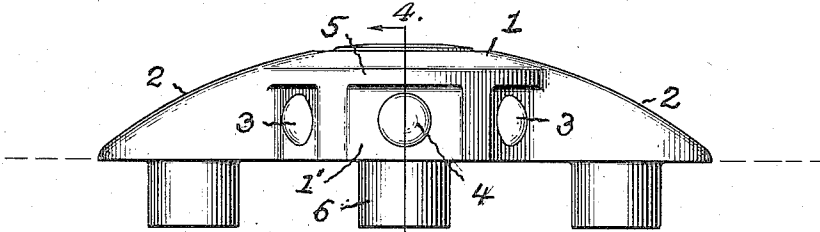


Fig. 2

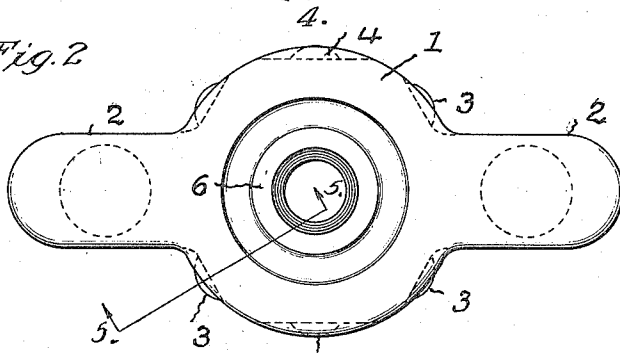


Fig. 3

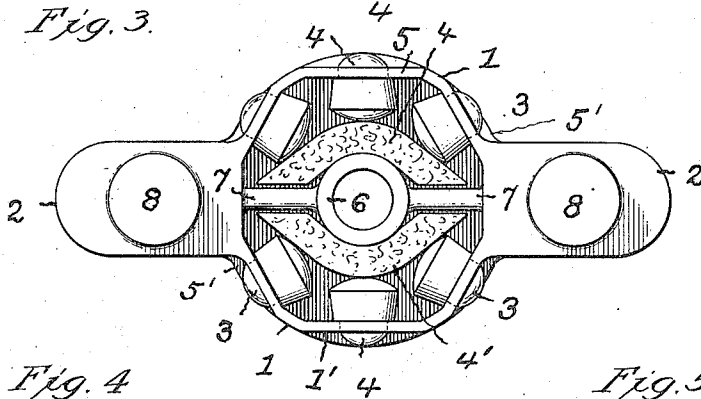


Fig. 4

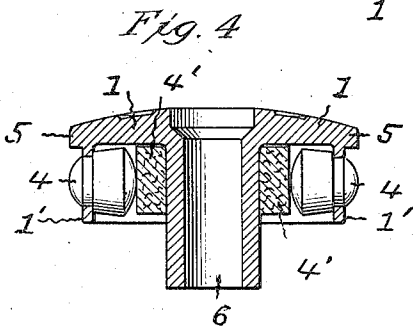
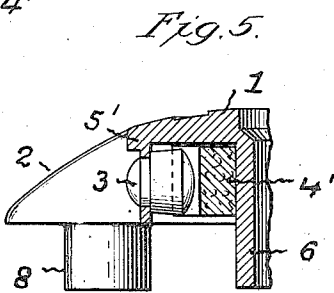


Fig. 5



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# UNITED STATES PATENT OFFICE

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## TRAFFIC LANE MARKER

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11 Claims. (Cl. 88-79)

This invention relates to the type of road or traffic markers designed to be fixedly attached or embedded along a central longitudinal line of a roadway in properly spaced relation to each other and carrying reflector units adapted to afford illumination by reflecting the rays of light from the headlights of passing vehicles. This invention has for one of its objects the provision of a structural formation and association of parts and features in a marker unit of the type above referred to, whereby the lenses of the plurality of reflector units carried in the body of the marker are protected against damage from the tires of a vehicle running over the marker, without interference with the full and broad functioning of said units as they come into the range of the light rays from the headlights of a passing vehicle.

Another object of the invention is to provide a formation and combination of parts in a traffic marker whereby a pair of transversely disposed reflector units in a marker body used in cross or intersecting roadways are provided with means to effectively prevent damage to the lenses of said reflector units by the tires of vehicles as said tires pass over or in close contact with the body of the marker unit, all as will hereinafter more fully appear.

In the accompanying drawing:

Fig. 1 is a side elevation illustrating the preferred form of the invention.

Fig. 2 is a plan view of the same.

Fig. 3 is a bottom view.

Fig. 4 is a central transverse section on line 4-4, Fig. 1.

Fig. 5 is a detail section on oblique line 5-5, Fig. 2.

Like reference numerals indicate like parts in the several views.

In the preferred form of the invention, the traffic lane marker comprises a main body 1 of an open bottom shell formation, and a pair of longitudinally aligned and oppositely extending wings or horns 2, 2, of a lesser width than the main body 1, the arrangement being such as to provide protecting pockets or recesses at the points of intersection of said wings and the main body, in which pockets, hereinafter described, reflector units are located in a manner to protect the outer lens members thereof from abrasive contact of a vehicle tire passing over the marker unit, and with a view to permit of a ready passage of the vehicle tires over the marker unit, the upper surfaces of the wings 2, and of the main body 1 have a continuous con-

vex form, with said convexity or curvature of the parts terminating at the outer ends of said wings in close proximity to the flat bottom faces of the wings 2, and the top surface of the roadway after the marker is applied thereto.

In the preferred construction of the marker unit, as shown, the top faces of the main body 1 and wings 2 have a transversely curved formation in order that the upper face of the marker unit as a whole will have a sphero-convex form adapted to afford easy riding of a vehicle tire over the marker unit.

In this improvement, the vertical wall of the shell shaped main body 1 is formed with receiving orifices adjacent to the points intersection or merging together of the respective sides of the wings 2 and the vertical wall of the main body 1 and at points approximately midway the height of said wall and with the longitudinal axis of each orifice in a substantially vertical plane oblique to the side face of an adjacent wing 2 of the marker unit. As so formed said orifices are adapted to receive and hold reflector units 3, of any usual and suitable construction, preferably of the type now in general use, comprising an outer convex lens and a rearward concave reflector arranged as a unit in a containing shell or casing. The described arrangement of the reflector units 3 at the above described points is adapted to provide for a full reflective functioning of said reflector units, while the same are fully protected from injury to their outer lenses by the tires of a vehicle riding over or against the marker unit.

The reflector units 3 are held in place in the aforesaid receiving orifices in the vertical wall of the main body 1 in any usual manner, such for instance as by means of elastic backings 4' of india rubber or the like, or by a backing or filling of a cement in the cavity of the main body 1, which is a usual holding provision in the present type of marker units.

In cases where the marker unit is intended for use at intersecting road crossings, the respective sides of the main body 1 are formed with flat outer faces 1' in which are formed receiving orifices, similar to the orifices heretofore described and in an axial line transverse to the main longitudinal line of traffic of the roadway.

The above described orifices are adapted to receive and hold individual reflector units 4 in a manner similar to that described in connection with the former plurality of reflector units 3, aforesaid, as illustrated in Figs. 1, 3, and 4.

With a view to protecting the outer lenses of

the aforesaid transversely arranged reflector units from injurious impacts of passing vehicle tires, in the riding of the same over or against the marker unit, the vertical wall of the main body 1 is formed with an overhanging flange or rib 5 at a point above an aforesaid opening in which a reflector unit is held.

A like overhanging flange or rib 5' will be provided above each of the other and heretofore described series of reflector units 3.

Centrally arranged within the interior of the main body 1, a depending tubular neck 6 is integrally formed on said main body, with its lower end a distance below the bottom face of said main body 1, to constitute an auxiliary anchoring means for the marker unit. The central bore of said neck is adapted to receive the screw bolt by which the marker unit is secured in place on the surface of the roadway, said screw bolt constituting a member of an expansion bolt device, the sleeve sections of which are expanded into holding contact with the walls of an orifice formed therefor in the roadway.

With a view to increasing the stability of the depending sleeve 6 the same is connected by longitudinally arranged connecting webs 7 with the wall of the main body 1 of the marker.

In the preferred construction shown, the wings 2, 2, aforesaid, are provided on their underfaces and adjacent to their outer ends with supplementary anchor lugs 8 adapted for engagement in holes formed therefor in the roadway with a view to prevent the marker from being turned or dislodged by lateral impacts.

Having thus fully described my invention what I claim as new, is:—

1. A traffic lane marker comprising a main body of an approximately circular shape, and a pair of integrally formed wings at opposite sides of the main body and extending longitudinally therefrom, said wings being of lesser width than the main body so that pockets are formed at the intersections of said wings with the main body, reflector units arranged in the wall of the main body in adjacent and oblique relation to the respective side faces of the aforesaid wings, the upper faces of the wings and main body having a convex formation terminating at the outer ends of the wings in a plane adjacent to the under face of the marker.

2. A traffic lane marker as specified in claim 1, wherein the reflector units are located approximately midway the height of the main body with said main body formed with overhanging protecting flanges above said reflector units.

3. A traffic lane marker as specified in claim 1, wherein the pair of oppositely extending wings

are provided on their underfaces with anchor lugs adjacent to the outer ends thereof.

4. A traffic lane marker as specified in claim 1, wherein the main body is of an open bottom shell formation having a central depending tubular sleeve adapted to receive an attaching bolt for securing the marker in place on the roadway.

5. A traffic lane marker as specified in claim 1, wherein the main body is of an open bottom shell formation having a central depending tubular sleeve adapted to receive an attaching bolt for securing the marker in place on the roadway, and a longitudinal web connecting said sleeve with the wall of the main body.

6. A traffic lane marker comprising a main body of an approximately circular shape and a pair of integrally formed wings at the opposite sides of the main body and extending longitudinally therefrom, said wings being of a width less than that of the main body so that pockets are formed at the intersections of said wings with the main body, reflector units arranged in the wall of the main body in adjacent relation to the respective side faces of the aforesaid wings, the sides of the main body in parallel relation to the longitudinally extending wings carrying a pair of reflector units, and provided with overhanging protecting flanges immediately above said reflector units.

7. A road marker comprising a main body having a top and depending walls, a pair of wings narrower in width than said main body extending horizontally from opposite sides thereof, said wings and said body forming angles at the points of intersection, reflector elements arranged in said depending walls adjacent said points of intersection, and means associated with said wings for anchoring said marker to the roadway.

8. A road marker in accordance with claim 7 in which the upper faces of the wings and main body have a convex formation terminating at the outer ends of the wings in a plane adjacent to the under face of the marker.

9. A road marker in accordance with claim 7 in which the main body has a central sleeve adapted to receive a bolt for screwing the marker in place on the roadway.

10. A road marker in accordance with claim 7 in which said body portion is formed with flanges protruding horizontally beyond the side walls, above said reflector units.

11. A road marker in accordance with claim 7 in which additional reflector elements are arranged in spaced relation around said depending walls.

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