Feb. 22, 1938. J. J. JOYCE 2,109,011

NIGHT ROAD MARKER

Filed March 2, 1936

FIG. 1.

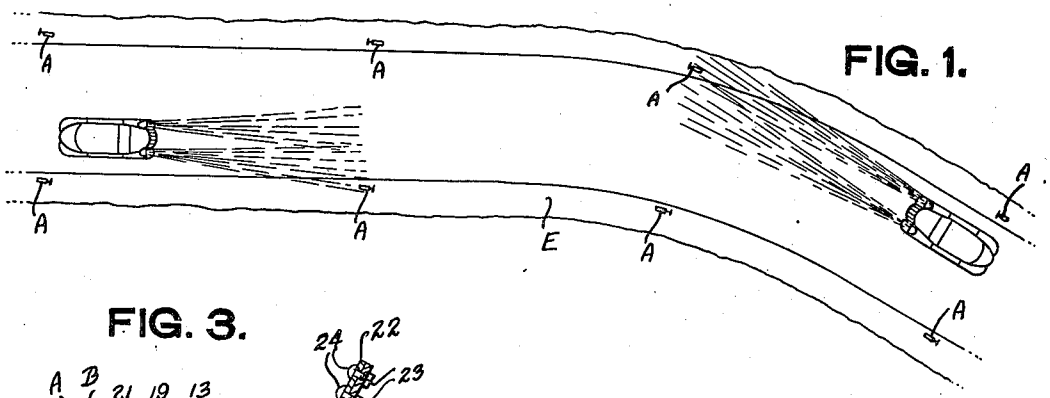


FIG. 3.

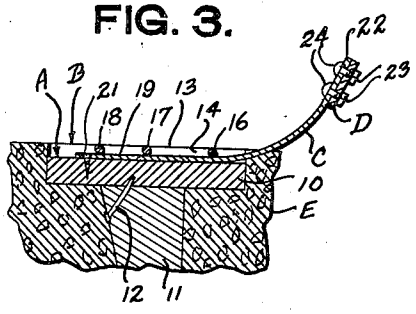


FIG. 2.

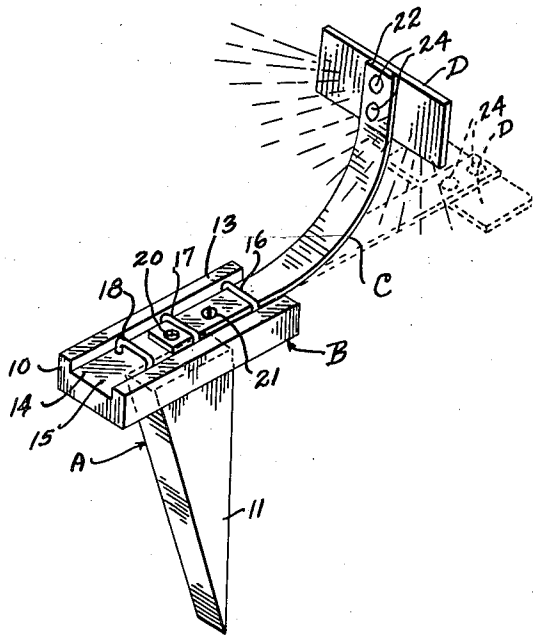


FIG. 4.

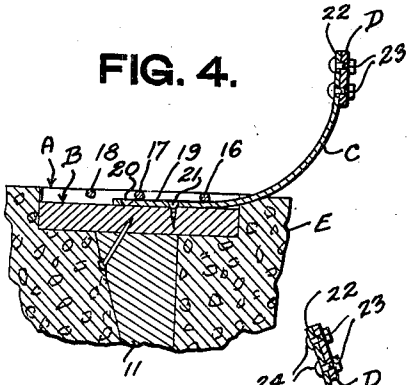


FIG. 5.

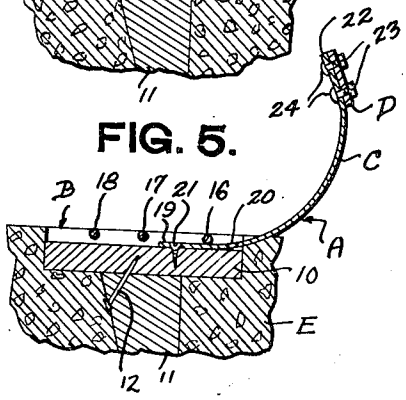
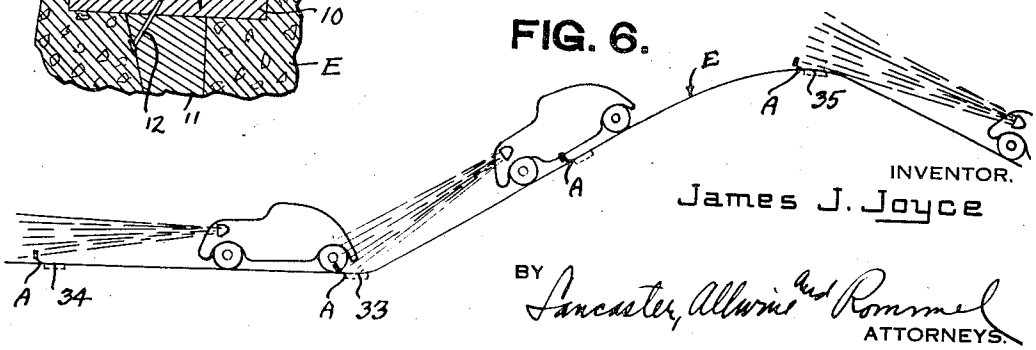


FIG. 6.



INVENTOR.

James J. Joyce

BY Lancaster, Allwine and Rommel

ATTORNEYS.

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NIGHT ROAD MARKER

James J. Joyce, Portsmouth, N. H.

Application March 2, 1936, Serial No. 66,764

4 Claims. (Cl. 88—79)

This invention relates to improvements in night road markers and an important object is to provide a marker adapted to be positioned along the sides of roads and highways and which will not interfere with the passage of vehicles thereover.

Another object of the invention is to provide a light-reflecting marker having adjustable and resilient supporting means.

A further object is to provide a marker adapted to be installed in the roadway and which will not be damaged by the passage thereover of heavy vehicles, scrapers, snowplows and the like.

Still further objects are to provide a marker which is simple, efficient and economical to manufacture, which may be easily installed and maintained, and which will not be affected by weather conditions such as snow and rain.

Other objects and advantages of the invention will become apparent during the course of the following description taken in connection with the accompanying drawing in which:—

Figure 1 is a plan view of a roadway equipped with the improved marker.

Figure 2 is a perspective view of the improved marker.

Figures 3, 4 and 5 are vertical sectional views thru the marker as installed in the roadway and showing what may be termed a "downhill", a "level" and an "uphill" position, respectively, of the marker with respect to its supporting base.

Figure 6 is a diagrammatic view in side elevation showing a roadway equipped with the improved adjustable marker.

In the drawing, where for the purpose of illustration is shown only a preferred embodiment of the invention, and in which similar reference characters denote corresponding parts thruout the several views, the letter A may generally designate the improved marker comprising a base B adapted to adjustably carry a spring C for yieldably supporting a marker plate D above the roadway E.

Referring to the base B, it may be formed of a rectangular, oblong block 10 of wood or other suitable material secured to the upper end of a stake 11 as by a nail 12. The upper face 13 of the block may be provided with a longitudinal groove 14 having a relatively wide flat bottom surface 15. Staples 16, 17 and 18 may be partially driven into the block in spaced apart relation along the groove 14 and transversely thereof, the upper ends of the staples being positioned above the bottom surface of the groove and below the plane of the upper face 13 of the block. The stape 16 preferably is located near one end of the groove and the staple 18 may be positioned inwardly of the opposite end thereof. As for the staple 17, it may be positioned intermediate the staples 16 and 18 and approximately halfway between the ends of the groove.

The spring C may consist of a thin, flat strip of suitable metal arcuately curved and somewhat similar in shape to the letter C. The lower end 19 thereof may be provided with a plurality of perforations 20. The spring C may be positioned in and preferably is adapted to slide along the groove beneath the upper ends of the staples. A suitable screw 21 passing thru one of the perforations may be provided for fixedly securing the spring C to the block.

A thin, flat, rectangular polished metal plate D, preferably chromium, may be secured to the opposite or upper end 22 of the spring C adjacent the outer surface thereof as by a pair of bolts 23 provided with round heads 24 adjacent the inner surface of the C-shaped spring.

Figures 3, 4 and 5 show the base B mounted in the roadway E with the upper face of the block substantially flush with the top surface of the road. In Figure 3, the plate D is positioned at an obtuse angle to the upper face of the block, this being accomplished by sliding the lower end of the spring beneath the staples 16, 17 and 18. This obtuse angular position of the plate D is desirable when the marker is placed at the foot of a hill as shown at 33 in Figure 6. In Figure 4, the plate D is positioned substantially at a right angle to the upper face of the block, this being accomplished when the lower end of the spring is beneath the staples 16 and 17 only. This position of the plate D is desirable when the marker is placed along a level stretch of road as shown at 34. In Figure 5, the plate D is positioned at an acute angle to the upper face of the block, this being accomplished when the lower end of the spring is positioned beneath the staple 16 only. This position is desirable when the marker is placed at the top of a hill as shown at 35.

When the marker is properly mounted in or along the roadway E, the polished plate D will reflect light rays from approaching vehicles at night and thereby vividly mark the extreme right hand side of the road. The reflector D will be about four inches above the roadway E and will therefore remain clear of snow or dirt. Should a snowplow or road scraper come in contact with the marker, the spring and reflector plate will be pressed to the ground and the blade of the

plow or scraper will ride over the rounded heads of the bolts 23. Subsequently, the marker will spring back to its normal position without having been damaged. A heavy weight passing over the marker will be borne by the upper face of the block and will not press the staples downwardly into the block. The staples will therefore remain in proper spaced relation to the bottom surface of the groove and the slidable spring will remain freely adjustable in the groove.

It will therefore be seen that an improved marker has been provided which utilizes the light rays from approaching vehicles, the reflection of the light rays by the marker being clearly visible at night.

Various changes may be made to the form of invention herein shown and described without departing from the spirit of the invention or the scope of the following claims.

I claim:

1. A road marker comprising an oblong block provided with a longitudinal groove in its upper face, a staple positioned transversely in the groove at one end thereof and below the upper face of the block, a flat C-shaped spring having one end slidably positioned in the groove and beneath the staple, a fastening element securing the spring in a predetermined slidably adjusted position in the groove, and a flat plate secured to the other end of the spring.

2. A road marker comprising a block provided with a groove in its upper face, a plurality of spaced apart staples positioned transversely in the groove and below the upper face of the block, a flat C-shaped spring having a perforation adjacent one end, said end being adapted to slide along the groove and beneath one or more of the staples, a screw passing thru the perforation and into the block for securing the spring in a predetermined slidably adjusted position in the groove and a flat plate secured to the other end of the spring.

3. A road marker comprising a base including an elongate surface, an elongate normally arcuate spring, a reflector plate fixed to one end portion of the spring, the other end portion of the spring being positioned longitudinally of said surface with the convex side of the last-named end portion facing said surface, said convex side having a contour differing from the contour of said surface, and means carried by the base and relatively slidably associated with said last-named end portion of the spring, engaging and flexing a variable length of said last named end portion against the surface so that the effective length of the spring may be varied, whereby the angular relation of the reflector with respect to the base may be varied.

4. A road marker comprising a base having an elongate groove in its upper face, an elongate normally arcuate spring, a reflector fixed to one end portion of the spring, the other end portion of the spring being positioned longitudinally in said groove with the convex side of the last-named end portion toward the bottom of the groove, said convex side having a contour differing from the longitudinal contour of the bottom of the groove, and means carried by the base, relatively slidably associated with the last-named end portion of the spring, engaging and flexing a variable length of said last named-end portion into conformity with the contour of the groove bottom, so that the effective length of the spring may be varied and whereby the angular relation of the reflector with respect to the base may be varied.

JAMES J. JOYCE.