

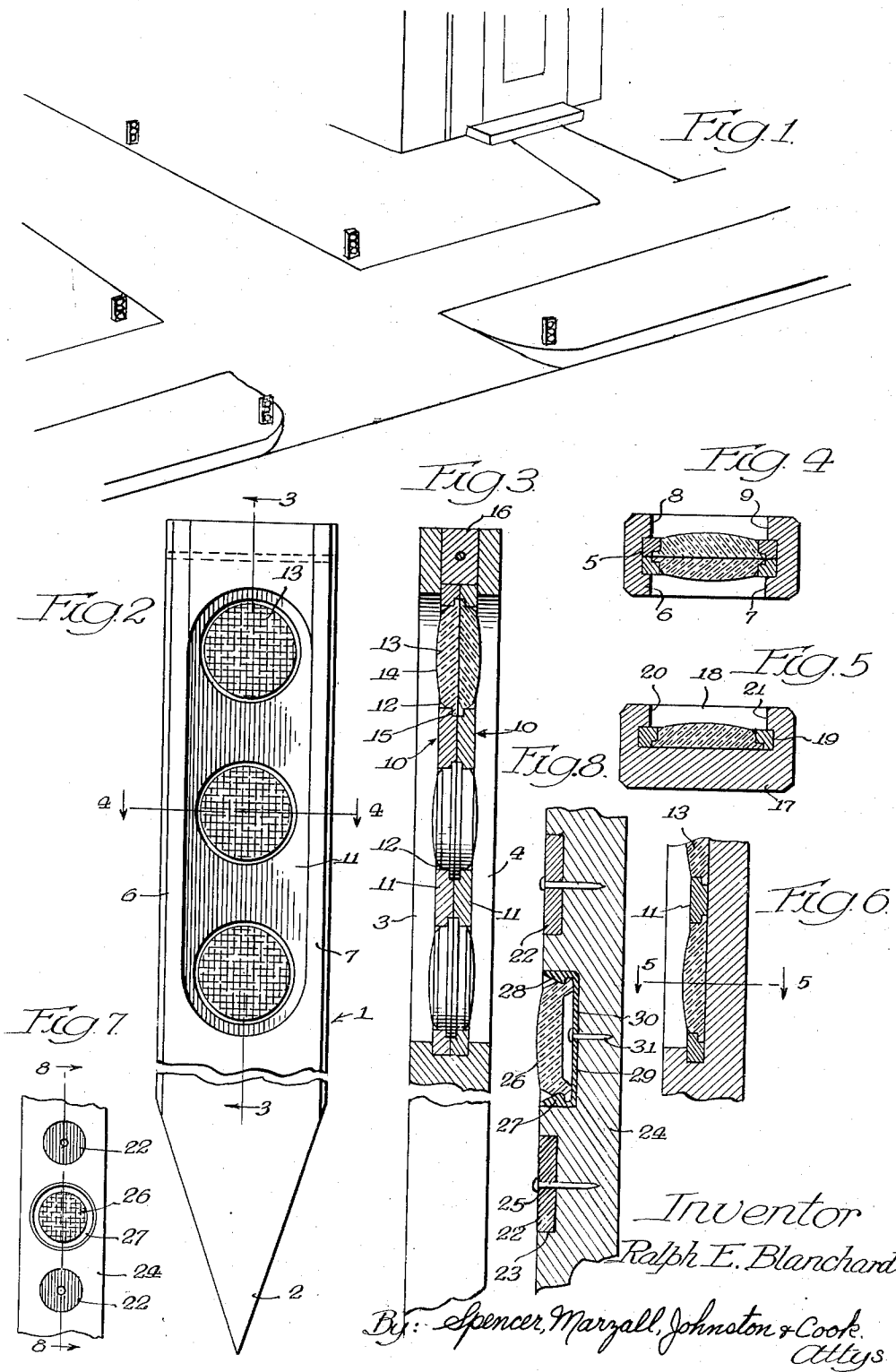
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MARKER DEVICE

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MARKER DEVICE

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This invention relates in general to marker devices which are particularly adapted for use in marking the edges of passageways such as sidewalks, driveways, highways and the like.

Driveway and highway markers, as such, which utilize the customary reflecting elements are old in the art, but the present invention contemplates not only a novel form of mounting means for these reflector units, but also utilizes an area of a luminous substance in conjunction with said reflector units.

The primary object of the present invention is to provide a marker device of the character herein described which combines as a single unit a reflector element and an area of luminous material adjacent thereto, both of which are adapted to be mounted on a suitable supporting member.

Another object of the invention is to provide a marker device wherein a supporting member has applied thereto, closely adjacent areas of light reflecting material and a luminous material.

A further object of the invention is to provide a marker device which has mounted thereon a plate or disc formed of a luminous material, and which plate or disc has mounted thereon one or more reflector elements. The luminous plate is of such a character as to absorb light during the day, or any other light which may be directed thereon, and to then emit the light thus absorbed at night. Also, the reflector units are such as to reflect any light which may be directed thereon at night, whereupon the markers may be seen by reason of the luminous material when no other light is present, and the reflector elements may be seen when light is directed thereon.

Still another object of the invention is to provide a novel form of mounting means for a reflector and luminous unit, wherein a supporting member is provided with a recess open at one side and at one end thereof. The luminous material is in the form of a plate or disc which is adapted to have one or more reflector units mounted thereon. The unit is then received within the recess of the supporting member and retained therein so that the entire device can be suitably located along the edges of sidewalks, driveways, and the like.

Other objects and advantages of the invention will become apparent upon reading the following description taken in conjunction with the accompanying drawing in which:

Fig. 1 is a perspective view showing a plurality

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of the marker devices suitably placed along the edges of a sidewalk or driveway.

Fig. 2 is an enlarged front elevational view of one form of the invention.

Fig. 3 is a vertical transverse sectional view along the line 3-3 of Fig. 2.

Fig. 4 is a horizontal sectional view along the line 4-4 of Fig. 2.

Fig. 5 is a horizontal sectional view through a modified form of device and taken along the plane of line 5-5 of Fig. 6.

Fig. 6 is a fragmentary vertical transverse sectional view through the device shown in Fig. 5.

Fig. 7 is a fragmentary elevational view of a still further modified form of device, and

Fig. 8 is an enlarged fragmentary vertical sectional view along the lines 8-8 of Fig. 7.

Briefly described, the invention involves the use of one or more reflecting discs and adjacent to which are areas formed of a luminous material. The luminous substance is preferably formed of a solid sheet or plate of material, and may either be adapted to support one or more of the reflector units thereon, or the reflector unit may be a separate and distinct element from the areas of luminous material. In one form of the invention the luminous member has openings therein, adapted to receive and mount a plurality of reflector elements. In another form of the invention, the reflector unit is mounted by itself, and portions of a luminous material are mounted closely adjacent thereto. The resulting object in either case will be the same. Also, in another form of the invention, the luminous disc and reflector elements may be so mounted on a supporting member as to face in two directions opposite to each other on opposite sides of the supporting member, all as will be more clearly pointed out hereinafter.

Referring now more particularly to the drawing, and especially to the form of the invention shown in Figs. 2, 3, and 4, the supporting member is generally indicated by the numeral 1, and may, if desired, have the lower end thereof tapered to form a point, as at 2, so that the entire device may be easily placed in the ground adjacent sidewalks, driveways, and the like.

In this form of the invention, both sides of the supporting member 1 are provided with recesses which may be indicated by the numerals 3 and 4. Actually, these recesses constitute an opening entirely through the supporting member with an enlarged portion intermediate the two sides of the member, as shown at 5. This enlargement of the recess thereby provides inwardly extending

flanges 6 and 7 at one side of the support, and flanges 8 and 9 on the opposite side of the support. The units formed by the reflectors and luminous substance are adapted to be received within the enlarged part 5 of the recess, and will thereby be held in place against lateral movement by means of the flanges 6, 7, 8 and 9.

Both units in this form of the invention are preferably identical, and are indicated generally by the numeral 10. Each unit consists of an elongated plate 11 formed of a luminous material which is capable of absorbing light and then emitting the light at night so it may be seen in the dark. Each plate 11 has a plurality of openings 12 therein, and the number of these openings is not an important consideration. For purposes of illustration, three such openings have been shown. The reflector element 13 may be of any conventional and commercially available type of light reflecting material. This element usually consists of a reflecting surface 14 and an annular flange 15 around the base thereof. Each reflector element 13 is adapted to be received in one of the openings 12 of the luminous plate 11. A recess is provided around each opening 11 at one side of the disc 12 which may receive the annular flange 15, as more clearly seen in Figs. 3 and 4. This will enable the reflecting part of the element 13 to extend into and through each of the openings 12, whereby the back or base of the reflector unit will be flush with the inner surface of the luminous plate 11.

The upper end of the recess in the supporting member is normally left open so that two of the units can be placed back to back, and inserted into the recess through the open upper end thereof. After the units are in place in back to back relation, a suitable block or plug 16 may be inserted to close the open upper end of the recess. Suitable means can be used, if desired, to permanently secure the plug 16 in place so that it may not be easily removed.

The entire device thus provided permits the luminous portion and reflector portions of the marker to be seen from both sides; thus if a number of the markers are placed along the sides of the driveway, they can be seen from either side thereof, and will locate the edges of the driveway at night. The flanges provided on opposite sides of each of the recesses are utilized to retain the units in place therein, and prevent removal thereof.

Figs. 5 and 6 illustrate a modified form of the invention, wherein only one of the units may be used, so that the luminous and reflecting portions thereof may be seen from only one side of the supporting member. In this case, the support may be indicated by the numeral 17, and will have a recess 18 open at one side thereof and at its upper end. The inner part of the recess 18 is enlarged as at 19, thereby providing the retaining flanges 20 and 21. The unit, consisting of the luminous plate and reflector elements, may be of the same form as that described above, and may include the plate 11 and reflectors 13. The unit may be inserted into the recess 18 from the open upper end thereof in the manner described above, and such open upper end may be either temporarily or permanently closed by means of a suitable plug similar to the plug 16. The two forms of the invention are similar, except that in the one case, the units may be seen from both sides of the support, and in the other case the units may be seen from only one side of the support.

Still another form of the invention is illustrated in Figs. 7 and 8. In this modification, the reflector units and luminous discs are entirely separate and distinct from each other. The luminous discs are entirely separate and distinct from each other. The luminous discs indicated at 22 may be of any suitable shape, and are adapted to be received in recesses 23 of the support 24. These recesses are preferably of the same configuration as the luminous discs 22, so that these discs will fit snugly therein, and be retained by any suitable means such as the nails 25.

From an economical standpoint, the luminous discs 22 shown herein have been illustrated as being circular. The reason for this is that when the luminous plates 11 have the openings 12 cut therein, the result will be the discs 22, which will have formerly filled the openings 12. Thus, there will be no waste to the luminous material used if both forms of the invention are to be manufactured.

The reflector elements 26 may be of a suitable form to be received within and retained by a holder element 27. This holder element may have any suitable form of retaining means, but preferably will include an inwardly extending annular rib 28 on the sides thereof. The holder member 27 may have any suitable form of base 29, and will be inserted in a recess 30 provided in one side of the support 24. Fastening means, such as the nail 31, may then be used to secure the holder 27 in place in the recess. The holder 27 is preferably formed of a resilient material, or at least the annular rib 28 thereof should be resilient, so that the reflector element 26 can be forced into the holder after it is mounted in place on the supporting member 24, and then retained therein by the rib 28.

Any suitable number of the luminous discs 22 and reflector elements 26 may be utilized, but for purposes of illustration, there has been shown one reflector unit 26 having a luminous disc 22 on each side thereof.

In the first form of the invention, the luminous material or area will be located not only closely adjacent and between the reflector elements, but will also completely surround these elements. This is true in both forms of the invention shown in Figs. 2 to 6 inclusive. The other forms shown in Figs. 7 and 8 do not have the luminous area surrounding the reflector elements, but they are merely located closely adjacent thereto. In all forms of the invention, however, the basic principal is employed of having at least one reflector unit and an area of luminous material adjacent thereto, both mounted on a supporting member, whereby the final marker device is adapted to define the edges or limits of passages such as side-walks, driveways, and the like.

Changes may be made in the form, construction and arrangement of parts from those disclosed herein without in any way departing from the spirit of the invention or sacrificing any of the attendant advantages thereof, provided, however, that such changes fall within the scope of the claims appended hereto.

The invention is hereby claimed as follows:

1. A marker device of the class described, comprising a supporting member, an elongated and substantially rectangular recess in said member open at one side and an end thereof, a luminous plate of substantially the same shape as the open side of said recess and having an opening there-
75 through, a reflecting element mounted in the

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opening of said plate, thereby forming a unit, and means for mounting said unit in the recess of said supporting member, whereby said plate and element will face outwardly through said recess.

2. A marker device of the class described, comprising a supporting member, an elongated and substantially rectangular recess in said member open at one side and an end thereof, said recess being enlarged between the sides of said supporting member to provide retaining flanges along opposed sides of the recess, a luminous plate positioned within the enlarged portion of said recess and retained therein by said flanges, and a reflector disc mounted on said luminous plate.

3. A marker device of the class described, comprising a supporting member, a recess in said member open at one side and an end thereof, the inner portion of said recess being enlarged between the sides of said supporting member to provide retaining flanges along opposed sides of the recess, a luminous plate positioned within the enlarged portion of said recess and retained therein by said flanges, a plurality of openings in said plate and a reflector element mounted in each of said openings.

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4. A marker device of the class described, comprising a supporting member, an elongated recess in said member open on two sides and an end thereof, the center portion of said recess being enlarged to provide a groove in the closed sides of said recess and retaining flanges along both sides of each open side of the recess, two luminous plates positioned back to back in the enlarged portion of said recess and retained therein by said flanges, a plurality of openings in each of said plates, and a reflector unit mounted in each of said openings.

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