Jan. 21, 1941. C. L. MOORMAN 2,229,335

HIGHWAY MARKER

Filed April 4, 1938

Fig. 1.

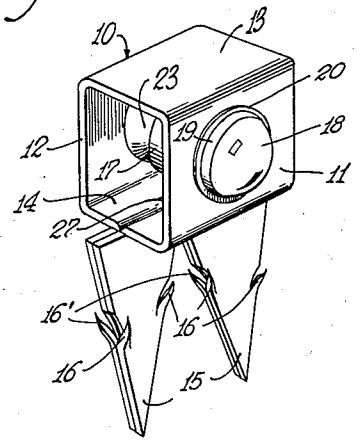


Fig. 2.

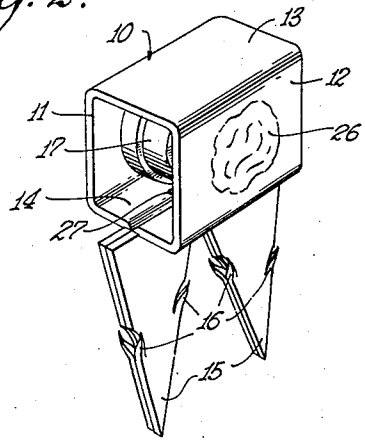
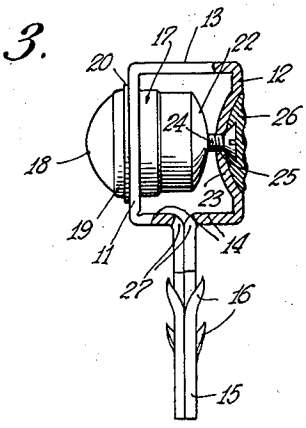


Fig. 3.



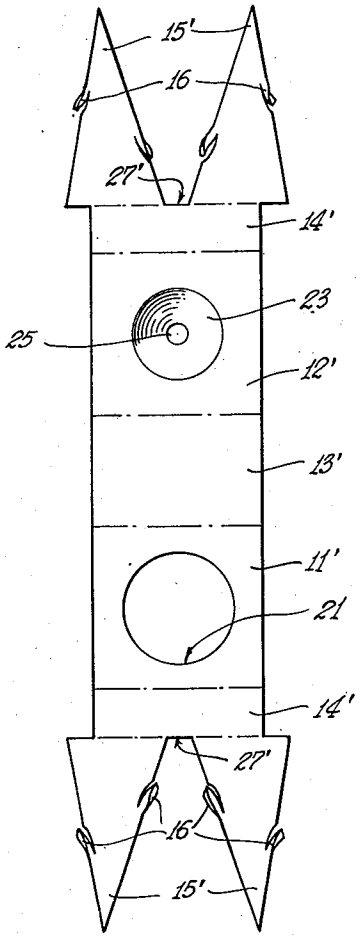


Fig. 4.

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HIGHWAY MARKER

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2 Claims. (Cl. 88—82)

This invention relates broadly to markers, and more particularly to highway markers of the reflecting type, the principal object being the provision of a simple and inexpensively constructed marker adapted to house a reflecting lens or lenses and constructed so that it may be driven into a mounting member, such as a post or other convenient means.

Another object is the provision of a marker formed from a single blank of metal folded back upon itself to provide a lens housing and mounting legs of a form suitable to be driven into a mounting member.

Another object is the provision of a marker of the class characterized, in which the leg formations are provided with burrs or the like arranged to permit driving movement of the legs into the mounting member or substance, but operable to prevent movement in the opposite direction, that is to say, withdrawal or removal of the marker from its mounting.

Other objects and novel aspects of the invention reside in the particular construction and arrangement of parts hereinafter described in view of the drawing, in which:

Fig. 1 is a front perspective view of the improved marker;

Fig. 2 is a rear perspective view;

Fig. 3 is a side elevation partly in section; and

Fig. 4 is a form of metal blank from which the preferred embodiment of the marker may be constructed.

In the following detailed specification of the form and manufacture of a preferred embodiment of the invention, it will be understood that the invention is not to be restricted to matters of form, location or method of manufacture, except as may be provided hereinafter by expressed limitations set forth in the appended claims, since the objects of the invention and benefits to be derived may be accomplished by other forms and methods without departing from the spirit of the inventive concept.

Referring to Fig. 1, a preferred form of the marker will be seen to include a lens mounting or housing 10 in the form of a sleeve-like member having opposite front and rear walls 11 and 12 respectively, with a top wall 13 and a bottom wall 14 adjoining the same, and having depending therefrom a pair of spaced wedge-shape and integrally attached mounting elements or legs 15. Each of the legs 15 is provided with outwardly projecting burrs 16.

Attention is called to the fact that the burrs 16 are struck up in such a manner that the trailing or tooth portions 16' thereof project in a general sense back toward the housing portion 10, thus permitting the legs to be driven into a post or other mounting member without interference from the burrs, the latter, however, substantially preventing any movement of the legs in an opposite direction for purposes of withdrawal.

In the present embodiment, there is utilized a lenticular or reflecting lens type of marker now in widespread use for highway marking and signal purposes. Such a signalling means includes (Fig. 3) a small button-like lens mounting member 17 in which there is mounted some form of light-reflecting means positioned behind a lens 18 secured in the button or mounting by an annular rim formation 19 adjoining an annular shoulder 20.

The reflecting button is inserted through a lens receiving opening 21 formed in the front wall 11 of the housing portion so that its rearward wall part 22 is positioned close to the inwardly flared surface portions of an attaching formation or boss 23 struck in the rear wall 12.

A novel means for attaching the indicating or signalling button 17 includes an attaching element or headed screw 24 inserted through an opening 25 in the boss 23 and threaded into the rear wall portion 22 of the button. When the reflector button is positioned as aforesaid, unauthorized removal of the same is prevented by flowing metal 26, such as molten lead, into the cavity of the boss 23 so that the metal lies substantially flush with the rear wall surface 12. The metal filler may be easily removed with proper tools, such as a soldering iron or small blow torch, without necessitating removal of the marker housing itself and without injury to the reflector button or other signalling attachment.

A preferred method of manufacturing a marker, such as heretofore characterized, includes the provision of a blank of metal (Fig. 4) of substantially elongated shape and having intermediate body portions or sections 11', 12', 13' and 14', respectively constituting, when the marker is formed-up, the front and rear wall portions 11 and 12 and the adjoining top and bottom walls 13 and 14. At some stage in the formation of this blank, the lens receiving formation or opening 21 is struck in the front wall section 11' of the blank, along with the formation of the concavo-convex boss 23 and the concentric attaching hole 25 therein, in the rear wall section 12'.

At opposite longitudinal ends of the blank,

there are provided outwardly projecting leg-forming portions 15', preferably of acutely triangular or wedge-like shape, corresponding leg-forming portions at opposite ends of the blank being in alignment so that the same will be brought together to form leg elements when the blank is formed-up.

The burrs 16 are preferably cut into the leg-forming portions prior to the forming-up operation, it not being of great importance whether the same are accurately aligned in the leg-forming portions or not.

As will be observed particularly in Fig. 4, the leg-forming portions 15' at each end of the blank are spaced as at 27' to provide a drain opening 27 (Figs. 2 and 3) formed between the confronting edge portions of the bottom forming sections 14' of the blank at the region of their juncture with the legs, when the blank is formed-up.

It is a feature of the invention to form the blanks or stampings from an inexpensive metal of a gauge and temper suitable for stamping operations, such for example as sheet iron, and in order to assure that a marker constructed from such a material shall be adequately weather-resistant, the formed-up blank is immersed in a galvanizing bath of molten lead, for example, before the lens or indicating element 17 is mounted thereon; and this operation not only provides the metal with a suitable coating resistant to corrosion and other forms of weathering, but serves to join confronting leg-forming portions securely together, there being provided an adequate tolerance in forming-up the blank to leave a slight clearance between confronting leg members sufficient to permit the flowing of the molten metal therebetween. In this sense, the cooperating or confronting leg-forming portions 15' when formed-up, to provide the leg members 15, may be said to be fluxed or sweated together, and in this manner the individual wedge-shaped driving legs are greatly strengthened and any possibility of the several confronting leg-forming portions being wedged apart when the marker is driven into place is thus obviated due not only to the cohesive forces existing between such portions, but to the presence of the fluxed metal along the marginal cracks formed between the confronting portions so that it is impossible for foreign body portions to become wedged between the leg portions as aforesaid.

It is also of importance to observe that the particular form of the lens mounting or housing 10, with reference especially to its flat top portion 13, particularly lends itself to mounting by means of a driving force applied by a hammer or the like to the top portion so that the marker may be driven into a post or other mounting means found convenient to the particular location in which it is desired to set up the marker. However, the improved marker is not restricted in its use to mounting by the application of driving means applied thereto, but may be permanently mounted by molding into a cement or analogous highway surfacing material when the latter is laid.

In addition to the advantages of the improved marker as emphasized heretofore, attention is called to the fact that its usefulness is not limited as a mounting means for the reflecting button type of signalling device illustrated in the figures, but is of wider scope.

Another advantage of the peculiar construction of this marker resides in the fact that while there is a sleeve portion which substantially covers the major portion of the reflector button, yet the housing has adequate drainage openings at its opposite ends and through the opening 27 in the bottom.

Having thus particularly described my invention, what I claim as new and desire to protect by Letters Patent of the United States is:

1. A road marker comprising a unitary elongated strip of metal bent upon itself from its central portion to form a substantially rectangular housing with the ends of the strip offset to extend from a side of said housing and form mounting legs adapted to engage a support, and a light reflecting device mounted on a side of said housing adjoining the side thereof from which said legs extend.

2. A road marker comprising a unitary strip of metal bent upon itself at its mid region to form a housing, the opposite ends of said strip being cut to form bifurcations of approximately triangular shape constituting leg elements, the leg elements on corresponding sides of the strip at opposite ends thereof being bent into juxtaposition to project from a side of said housing and adapted to be driven into a support, and a light reflecting member mounted on a part of said housing adjoining the side thereof from which the leg elements extend as aforesaid.

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