March 12, 1940.

J. D. BEEBE

2,192,878

TRAFFIC MARKER

Filed July 23, 1938

Fig-1

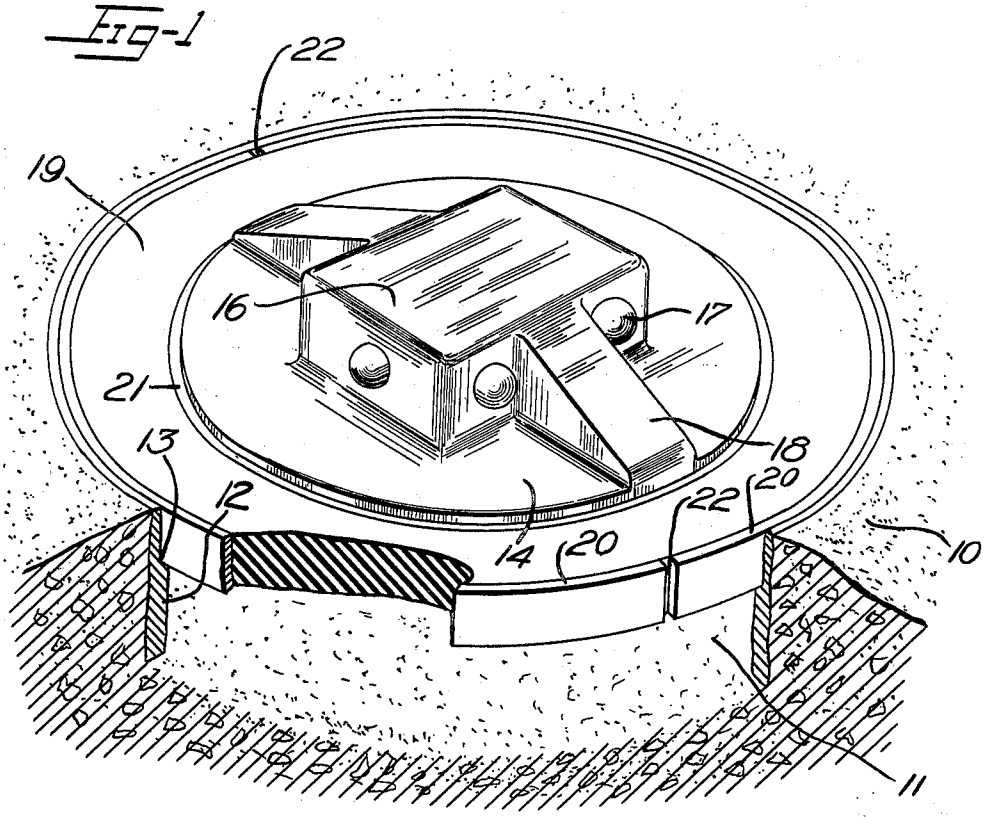
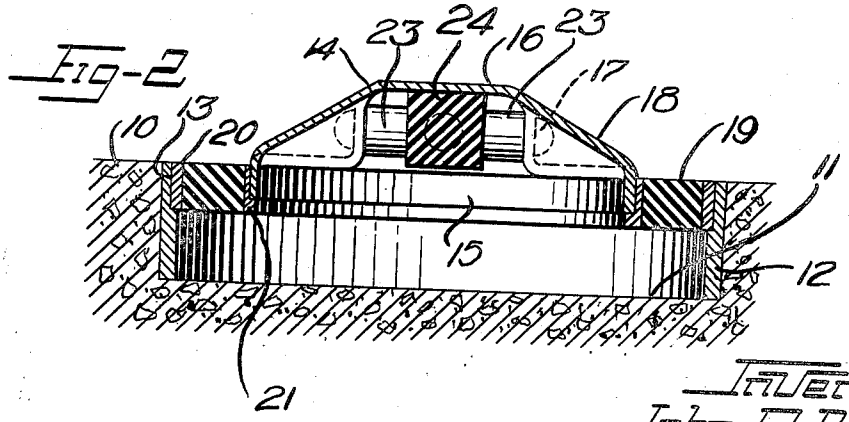


Fig-2



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TRAFFIC MARKER

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4 Claims. (Cl. 40—125)

This invention relates to traffic markers and more particularly to markers adapted to be embedded in a pavement for defining lines of traffic, cross walks, and safety zones.

In order to insure visibility from a distance, it has been proposed to provide markers projecting above the pavement and provided with reflective members adapted to reflect the rays of approaching vehicles. It has been found, however, that such projecting markers are often torn loose from the pavement by passing vehicles, street sweepers, and the like.

The chief objects of the present invention are to provide an improved marker resiliently cushioned against shocks, to provide for deflection of the marker below the surface of the pavement under traffic loads and automatic return of the marker, and to provide facility of installation and replacement, and simplicity and durability of construction.

These and other objects will appear from the following description and the accompanying drawing.

Of the drawing:

Fig. 1 is a perspective view of a traffic marker corresponding to the invention mounted in a pavement, part of the pavement and part of the suspension member being broken away.

Fig. 2 is a cross sectional view of the same taken in a vertical plane.

Referring to the drawing, the numeral 10 designates a pavement, which may be, for example, of concrete or other monolithic material formed with a pocket or recess 11. A band 12 of metal is embedded in the material of the pavement and reinforces the wall thereof. The band 12 is counterbored adjacent the face of the pavement, as at 13 to provide a shoulder for supporting the marker above the floor of the pocket 11.

The marker illustrated includes a jewel housing which comprises a sheet metal stamping 14 of cupped form, having a downwardly turned margin 15 and a central domed portion 16 projecting above the face of the pavement and fitted with glass jewels 17, 17 or other reflective bodies facing laterally in all directions. For holding the jewels 17, 17 in place the sheet metal stamping may be provided with a plurality of sleeves 23, 23 projecting inwardly and terminating short of one another to provide a central space for the reception of a tightly fitting block 24 of rubber to hold all the jewels in place, the latter being retained at their outer ends by suitable shouldered connections with the stamping. Ramp-like ribs 18 may extend from the margin to the domed central portion to provide a less abrupt obstruction to passing vehicles.

To cushion the marker under the pressure of the wheels of vehicles which may contact with the marker, and to permit the marker to descend into the recess upon contact with vehicles and return automatically upon release of the pressure, the marker is supported from the band 12 by an elastic annular member 19 of soft vulcanized rubber. Preferably the rubber member 19 is bonded by vulcanization to an outer ring 20, adapted to be seated in the counterbore of the ring 12, and an inner ring 21 counterbored to receive the marker.

Preferably the outer ring 20 is divided at one or more places 22, 22, so as to be circumferentially discontinuous, and the rubber vulcanized to the ring with the ring portions held spaced apart somewhat so that upon assembly the ring portions may be moved toward each other and so held in the band 12 against the resilient pressure of the rubber. This makes for greater strength of adhesion of the rubber to the metal rings, and it also serves to hold the marker in position in the band 12, the resilient pressure being applied radially outward. Replacement can be effected simply by prying or forcing the marker from its seat.

The marker is pressed into the ring 21 and the ring 20 is pressed into the ring 12 so as to maintain their positions frictionally but to make possible replacement.

In use, the annular elastic ring 19 stretches under a traffic load by shear stress on the rubber and permits the marker to sink flush with the face of the pavement. After the vehicle wheel passes, the resilience of the annular ring immediately returns the marker to the elevated position.

While the marker has been shown in round form, markers of square, rectangular, or other shape may be similarly supported.

Variations may be made without departing from the invention as it is defined by the following claims.

I claim:

1. The combination with a pavement having a recess formed in the face thereof, of a resilient support seated in the mouth of the recess, and a marker element normally supported by said support so as to project above the face of the pavement, said support permitting the marker element to be depressed resiliently below the face thereof, and said support comprising a pair of spaced concentric frame members and an elastic

rubber body therebetween and bonded thereto in a relation to accommodate the depressing movement by shear stress on the rubber.

2. A traffic marker comprising a supporting structure adapted to be seated in a recess of a pavement, a marker structure within the supporting structure and spaced laterally therefrom, and a body of resilient rubber-like material interposed laterally between and secured to said structures, said body being secured by a vulcanized bond to a substantially vertical face of at least one of said structures and supporting said marker structure by shear stress of said material.

3. A traffic marker comprising a supporting structure adapted to be seated in a recess of a pavement, a marker structure within the supporting structure and spaced laterally therefrom, and a body of resilient rubber-like material interposed laterally between and secured to said structures, said structures comprising substantially vertical opposed faces and said body being secured by a vulcanized bond to said faces and supporting said marker structure by shear stress of said material.

4. A traffic marker comprising a marker structure, an enclosing band laterally spaced from said structure, and an annular body of rubber disposed between said band and structure and adhered to both in relation to accommodate depression of said structure with relation to the band by shear stress on the rubber, said band being circumferentially discontinuous so that the marker may be mounted with the band and rubber held pressed toward said structure.

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