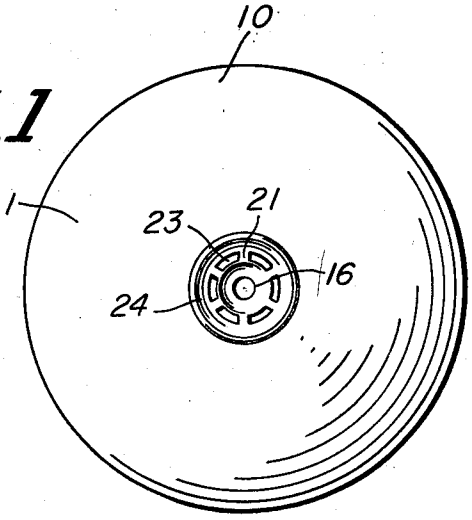
Jan. 18, 1955 C. K. BATTERSON 2,699,982

TRAFFIC MARKER

Filed Feb. 19, 1951

Fig. 1



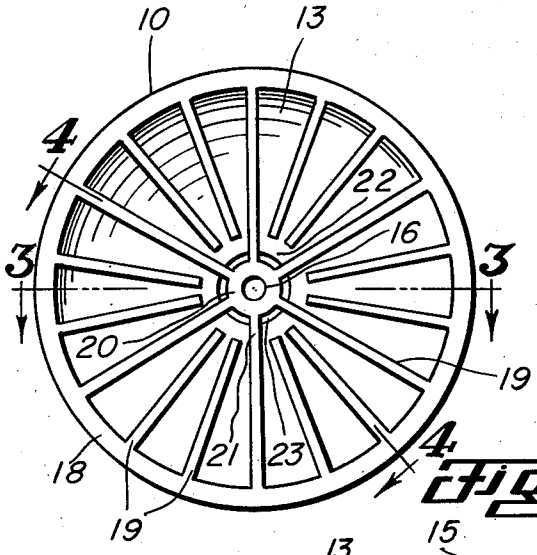


Fig. 2

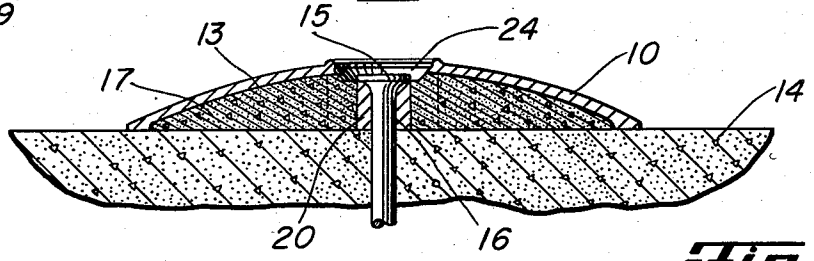


Fig. 3

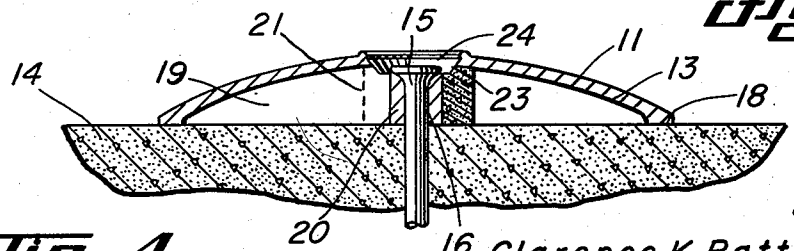


Fig. 4

Inventor

Clarence K. Batterson

By Akley & Akley

ATTORNEYS

United States Patent Office 2,699,982 Patented Jan. 18, 1955

2,699,982

TRAFFIC MARKER

Clarence K. Batterson, Houston, Tex.; Gladys C. Batterson, executrix of said Clarence K. Batterson, deceased, assignor to Thomas C. Batterson, Houston, Tex.

Application February 19, 1951, Serial No. 211,751

2 Claims. (Cl. 94—1.5)

This invention relates to new and useful improvements in traffic markers.

One object of the invention is to provide an improved traffic marker which is so constructed that the same may be used efficiently in permanently marking lanes on streets, roads and parking areas.

Another object of the invention is to provide an improved traffic marker which is of reinforced construction so as to be capable of being formed of plastic material and subjected to vehicular traffic without danger of breakage.

A further object of the invention is to provide an improved traffic marker having a substantially concavo-convex body reinforced by radial ribs whereby the marker may be firmly secured to pavement by bonding material and will withstand loads and wear imposed by contact with vehicles.

A particular object of the invention is to provide an improved traffic marker, of the character described, wherein the body has an axial opening for receiving a fastening element or spike for positively fastening the marker to pavement together with openings communicating with the spaces between the reinforcing ribs for venting air, water and excess bonding material upon installation of said marker.

An important object of the invention is to provide an improved traffic marker, of the character described, wherein the inner ends of the reinforcing ribs are spaced from one another to establish communication of the spaces between said ribs and with the vent openings whereby flow of the bonding material is facilitated and the filling of said rib spaces is assured.

A construction designed to carry out the invention will be hereinafter described together with other features of the invention.

The invention will be more readily understood from a reading of the specification and by reference to the accompanying drawing, wherein an example of the invention is shown, and wherein:

Fig. 1 is a top plan view of a traffic marker constructed in accordance with the invention,

Fig. 2 is an underside plan view of the marker,

Fig. 3 is a cross-sectional view, taken substantially on the line 3—3 of Fig. 2, showing the marker secured to pavement, and

Fig. 4 is a view, similar to Fig. 3, taken on the line 4—4 of Fig. 2.

In the drawing, the numeral **10** designates a traffic marker which includes a circular shell or body **11** of substantially concavo-convex or dished shape having a smooth, convex exterior or upper surface and a concave underside or lower surface **13**. It is preferable for the body **11** to be relatively flat and to have its curved surfaces swung on relatively large complementary arcs. The body is adapted to be formed of hard, non-elastic plastic or other suitable material. As shown in Figs. 3 and 4, the marker is adapted to be secured to pavement **14**, such as streets, roads and parking areas, which has been illustrated as concrete, by a fastening element or spike **15**. An axial opening **16** is formed in the body for receiving the spike **15**, as will be hereinafter explained. Securing of the marker to the pavement **14** is assisted by suitable bonding material **17** which is in the nature of a mastic or cement which expands upon setting. Although not illustrated, the markers are adapted to be placed in rows for defining traffic lanes, pedestrian crosswalks, parking lines and safety zones. The markers are used in place of painted lines and are slightly elevated above the surface of the pavement so as to be contacted by vehicles.

As shown by the numeral **18**, the external peripheral portion of the underside **13** of the body is flattened to provide a bearing surface for engagement with the pavement. For reinforcing the body, a plurality of spaced,

radial ribs or members **19** depend from the underside of said body and preferably have straight lower edge portions substantially flush with the flattened edge portion **18** so as to engage the pavement. An annular member **20**, in the form of a ring or collar, depends axially from the underside of the body and its bore provides the axial opening **16**. Certain of the ribs **19** have their inner ends connected to the collar **20** as shown by the numeral **21**, while the inner ends of the other or intermediate ribs terminate short of said collar to provide recesses **22** which are disposed in concentric relation to said collar. Manifestly, the recesses **22** are in free communication with the spaces between the ribs. Relatively small vent openings **23** are provided for the recesses **22** and communicate with an axial recess **24** formed in the upper surface of the body.

The marker is attached to the pavement **14** by driving the spike **15** through the opening or bore **16** of its axial collar **20**. Prior to installation, sufficient bonding material **17** is placed in the underside or concavity of the body to completely fill the same. Thus, the ribs **19** as well as the collar are embedded in the bonding material and said material fills the spaces between said ribs as well as the recesses **22**. Due to the provision of the openings **23**, any excess bonding material or extraneous matter, such as air or water, is vented. Therefore, the setting and hardening of the bonding material is assured. It is noted that the head of the spike **15** is spaced from the vent openings and does not interfere with the escape of excess bonding material or extraneous matter. Also, the curvature of the underside **13** of the body directs this material or matter toward the vent openings.

The foregoing description of the invention is explanatory thereof and various changes in the size, shape and materials, as well as in the details of the illustrated construction may be made, within the scope of the appended claims, without departing from the spirit of the invention.

What I claim and desire to secure by Letters Patent is:

1. A traffic marker including, a circular relatively flat body of plastic material adapted to be fastened to a pavement and having a convex top and a concave underside, an annular collar extending axially from the underside of the body and having a bore for receiving a fastening element, spaced radial ribs depending from said body underside and extending from the external periphery thereof to the collar for supporting and reinforcing said body and its collar, the ribs providing unobstructed radial channels therebetween, the channels being adapted to be filled with bonding material to bond said body to a pavement, said body having openings between the inner ends of its ribs in concentric relation to said collar and communicating with the inner ends of said channels to vent excess bonding material and extraneous matter during installation of the marker, and additional spaced radial ribs intermediate the ribs connected to said collar, the intermediate ribs extending from said body periphery and being spaced from said collar, said connected ribs and vent openings providing unobstructed recesses at the inner ends of said intermediate ribs in communication with the vent openings and spaces between said intermediate ribs so as to facilitate the flow and even distribution of the bonding material.

2. A traffic marker as set forth in claim 1 wherein the lower edge portions of the ribs are substantially flush with the undersides of the collar and periphery of the body.

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