March 27, 1934. B. A. STERN ET AL 1,952,471

STREET MARKER

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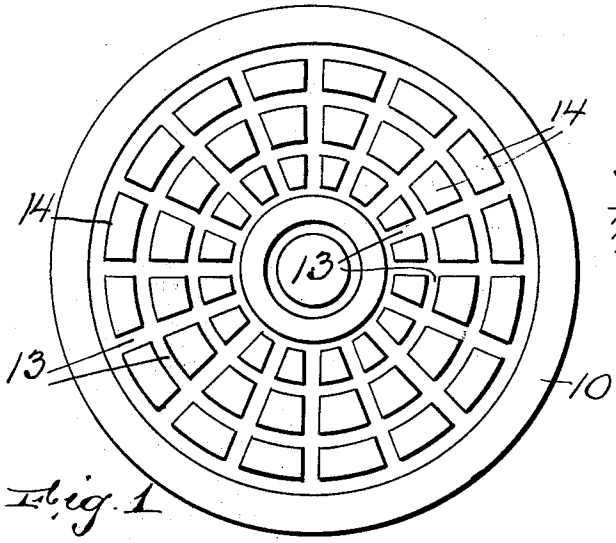


Fig. 1

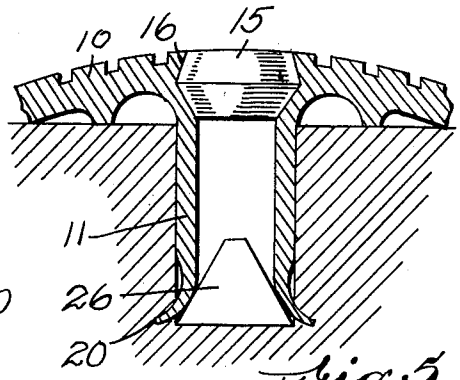


Fig. 5

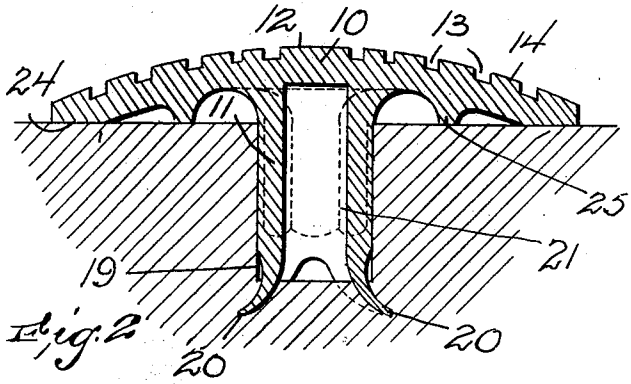


Fig. 2

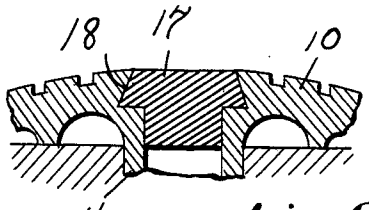


Fig. 6

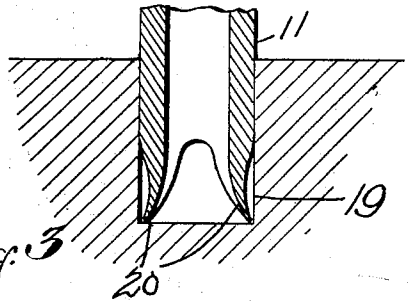


Fig. 3

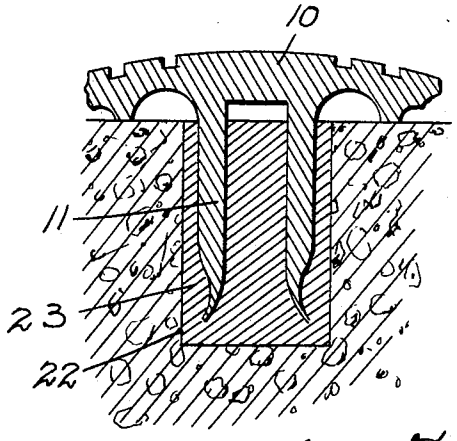


Fig. 7

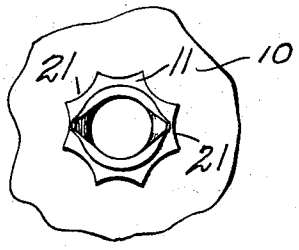


Fig. 4

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STREET MARKER

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2 Claims. (Cl. 94—1.5)

This invention relates to an improved street marker of the kind that is placed in a pavement to indicate stop lines and for similar purposes. The marker is made of one piece, is cast to provide a self-securing form of stem and is made of an alloy that remains bright under wear and weather conditions. Furthermore, the marker, which is of mushroom shape, has a slightly rounded top face which is cut up into relatively small projections and in this way providing a myriad of reflecting surfaces when a row of the markers is observed under daylight or in the light of headlamps.

The marker is also of advantage over the prior types in that the stem is formed to receive material of the pavement that is displaced by the spreading or forked end of the stem and thus allowing the top of the marker to be seated firmly down on the pavement and also assisting in holding it against removal or turning.

The invention is illustrated in the accompanying drawing in which Figure 1 is a top view of a marker embodying our invention. Figure 2 is a central vertical section of the marker after it has been driven into a pavement. Figure 3 is a similar view of the lower part of stem before the prongs have been spread by driving the marker down. Figure 4 is a bottom view of the marker with the head broken partly away. Figure 5 is a section of a modified form of marker. Figure 6 is a similar view of the top part of a still further modified form of marker. Figure 7 is a sectional view of a marker installed in a new way particularly used in concrete or granite blocks.

The marker is, in general, similar in shape to a mushroom with a relatively flat head 10 and a stem 11. The head has a rounded top face 12 which is cut up by grooves 13 into a series of smaller projections 14. These, on account of the rounded top provide a myriad of reflecting surfaces. This attracts the attention of the driver of an approaching vehicle. The marker is made of material that does not tarnish in weather or under wear and we find any alloy containing nickel and which can be cast and which also has a considerable degree of malleability best suited for the purpose. The reflecting surface on the top face of the marker can be aided by insets or plugs usually of contrasting color such as white or red plugs. The plug or insert is placed in a cavity or hole in the centre of the marker. In Figure 5 we show the plug 15 in the recess 16 and wider at the center than the top and bottom. The plug may be of hard material that will stand wear as cement, plastic wood and similar material. It can also be made of rubber which can be supplied in any color and forcibly wedged into a cavity to hold it with or without an adhesive. Such a plug is shown at 17 in Figure 6 the plug fitting under the overhanging edges of the cavity 18. Such plugs of contrasting color are used to give additional visual warning and are an additional safeguard to pedestrians and vehicle drivers.

Previous to the insertion of the stem 11 in the pavement a hole 19 is drilled in the pavement. The hole is not as deep as the length of the stem 11. The end of the stem is bifurcated and the two prongs 20 are slightly divergent. When the marker is driven down by a sledge or other means from the position shown in Figure 3, to the one shown in Figure 2, the jaws or prongs 20 are spread and hold the marker in place.

The stem 11 is hollow and on the outer face it has recesses that can be suitably disposed but we show the longitudinally arranged grooves 21. The grooves allow the entrance of paving material displaced by the prongs 20. This material is squeezed into the recesses and allows the marker to come down to a point even with the pavement as the material is not humped up to the surface and by being located in the recesses 21 it assists in holding the marker against turning and also prevents canting or tilting of the marker by heavy vehicles.

These grooves are concave and form ridges between them which ridges as longitudinal projections facilitate the entrance of the stem and assist in holding the marker against becoming loosed by strains tending to rotate the marker.

The hole is usually drilled through the asphalt until it reaches concrete underneath. When the hole is filled with cement and the marker imbedded, a solid pillar is formed upon which the marker rests and in this way one of the great faults of existing methods of installing markers is eliminated. That is that the markers sink into the asphalt during hot weather.

We wish to include in the material to be used for the plug, a plug made of nonshattering glass of any contrasting color which will be cemented into cavity 16 in Figure 5 or cavity 18 in Figure 6. Also any material such as transparent cellulose or gelatine material may be used.

The plugs are made in pieces separate from the body of the marker to give them longer life as the plugs do not abut on their bottom faces on the solid material of the marker and are therefore less liable to crack under heavy impacts.

The marker may be installed as shown in Fig-

ure 7. The hole 22 is drilled larger and deeper than the stem 11 and is filled with material 23 that hardens, such as concrete. This material may be plastic material such as plastic wood. It is desirable that it harden quickly. We have found it very satisfactory to use sulphur in which the stem 11 is embedded.

The under face of the head 10 is provided with a flat marginal annular surface 24 and an intermediate annular rib 25 which also rests on the pavement and limits the entrance of the stem 11 into the pavement.

In case of concrete and similar pavements the spreading of the prongs or jaws 20 is helped by a block 26 shown in Figure 5. This block is a tapered block. It can be pyramidal or conical and insures the proper spreading of the prongs in very hard material.

We claim:

1. A street marker comprising a mushroom-shaped article having a stem with a forked end subject to distortion, the stem having longitudinally extending recesses above the forked end which recesses are concave whereby longitudinal ridges are formed in the stem between the recesses.

2. A street marker comprising a one-piece mushroom shaped article having a central opening extending through the stem and the head, the upper end of the opening having its wall undercut, and a separate plug of a color contrasting with the head to fit into undercut portion to form a closure for the opening and as a central marker on the head.

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