Feb. 2, 1937. C. E. LOUNSBURY ET AL 2,069,319

SIGN

Filed March 21, 1934

Fig. 1

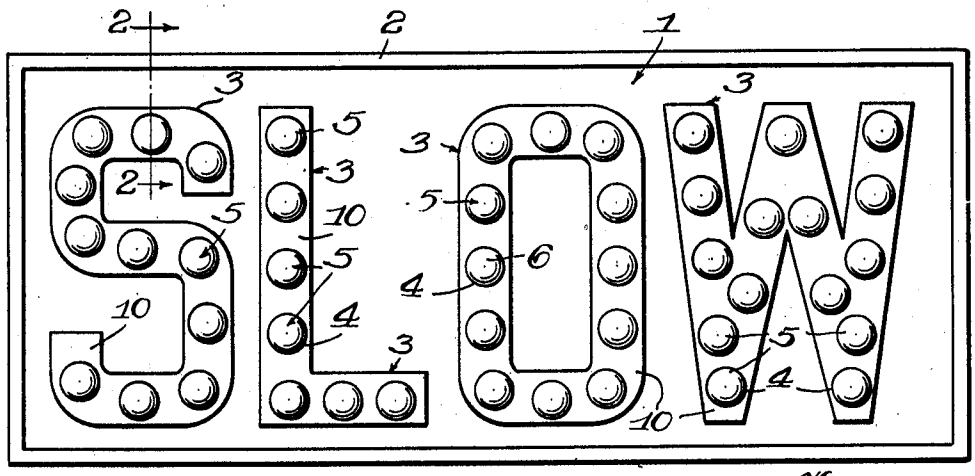


Fig. 2

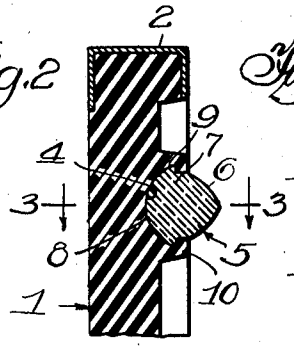


Fig. 6

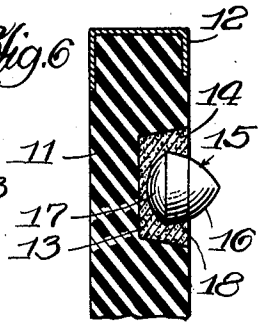


Fig. 4

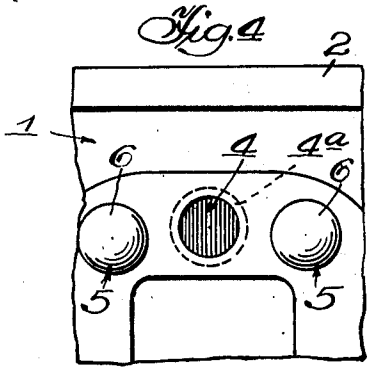


Fig. 3

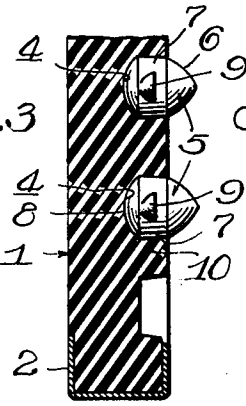


Fig. 7

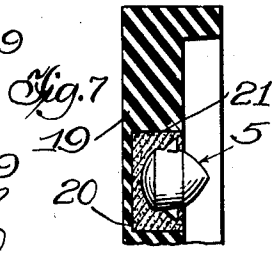


Fig. 8.

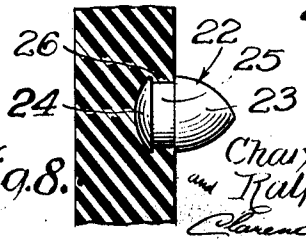


Fig. 5

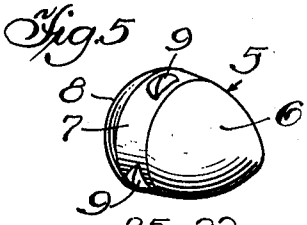
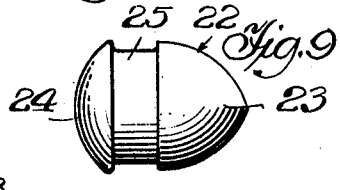


Fig. 9



Witness:
Chas. E. Koursh.

Inventors,
Charles E. Lounsbury
and Ralph J. Sheafe
Clarence J. Lofting Atty.

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UNITED STATES PATENT OFFICE

2,069,319

SIGN

Charles E. Lounsbury and Ralph J. Sheafe,
Chicago, Ill.

Application March 21, 1934, Serial No. 716,598

1 Claim. (Cl. 40—130)

The present invention relates to signs and more particularly to a novel sign construction in which the reflecting members or surfaces may be readily assembled, removed and/or replaced.

Among the objects of the present construction is the provision of a novel base or mounting for a sign in which reflecting members, units or surfaces are removably inserted and yieldingly retained.

A further object of the invention is the provision of a novel base or mounting for a sign constructed of a substantially indestructible material having a longer life and able to withstand greater natural wear, shocks and abuse than signs now in use.

Another object of the present invention is the provision of a novel sign construction in which the reflecting units or surfaces are yieldingly but firmly retained by the resilient material or composition of the base. In the preferred embodiment, such resilient material consists of rubber, rubber composition or other similar or suitable resilient or yieldable material, composition or substance having the properties of withstanding impacts or abuse without danger of breakage or other damage. When assembled, the material of the base retains the reflecting units firmly in position regardless of weather conditions which would tend to cause the base to contract or expand.

A still further object of the invention is to provide novel light reflecting surfaces or members adapted to be mounted in a sign and retained or anchored therein by reason of the shape or configuration of such surfaces or members.

Yet another object of the present invention is the provision of novel reflecting units for a sign formed or provided with self-retaining means permitting their ready assembly, removal and/or replacement with ease and by one having no previous experience.

Another object of the invention is in the provision in a sign construction of the novel combination of a resilient or yieldable mounting or base and reflecting members or units adapted to be readily mounted therein after such base or mounting has been completely formed and whereby a damaged reflecting member or unit may be quickly removed and replaced at the location of the sign and without tampering with the remainder of the construction.

A still further object of the present invention is to provide in a sign construction, readily removable and replaceable reflecting members or units adapted to be mounted on and retained in position by a yieldable retaining means having sufficient resiliency to permit the snapping into position of the reflecting units or members. In the preferred embodiment, the reflecting members or units and the mounting are formed with complementary retaining means.

By reason of the present construction, the reflecting members or surfaces may be standardized and inserted wherever necessary, and it is a simple matter to replace a damaged or broken member and maintain the sign at all times at a maximum efficiency and perfect working condition. The construction further eliminates all danger of breakage in transit, as the reflecting units may be assembled or mounted in position after the sign has been erected.

Further objects are to provide a construction of maximum simplicity, efficiency, economy and ease of assembly, operation, repair and maintenance; and such further objects, advantages and capabilities as will later more fully appear, and as are inherently possessed thereby.

The invention further resides in the combination, construction and arrangements of parts illustrated in the accompanying drawing, and while there is shown therein a preferred embodiment, it is to be understood that the same is susceptible of modification and change and comprehends other details, arrangements of parts, features and constructions, without departing from the spirit of the invention.

In the drawing:

Fig. 1 is a view in front elevation of one embodiment of the invention.

Fig. 2 is a fragmentary view in vertical cross section through the sign taken on the line 2—2 of Fig. 1.

Fig. 3 is a fragmentary view in horizontal cross section taken on the line 3—3 of Fig. 2, but showing the light reflecting units or members in plan.

Fig. 4 is a view in front elevation of a fragment of the sign.

Fig. 5 is a perspective view of the reflecting unit or member.

Figs. 6, 7 and 8 are views similar to Fig. 2 but showing alternate forms of the sign construction.

Fig. 9 is a view in side elevation of another form of reflecting unit or member.

Referring more particularly to Figs. 1, 2, 3, 4 and 5 of the drawing, the novel sign consists of a mounting or base 1 constructed wholly or in part of rubber, rubber composition or any other material having suitable resilient or yield-

ing properties. This base may be molded or otherwise formed or fabricated and is freferably encased in a frame or housing 2 constructed of metal, wood or the like. Upon the base may be formed, painted or outlined letters, numbers, designs or other suitable insignia or advertising. In the disclosed embodiment letters 3 are outlined and such outline may be of a contrasting color to that of the remainder of the base, and such outline of contrasting color may be formed or molded in or on the base or mounting and form a part thereof. Also, if found desirable, only the parts forming the letters may be of a resilient or yieldable material such as rubber, composition or other material having like or similar properties.

The base is formed with a plurality of openings or recesses 4 for the reception of light reflecting units 5. These light reflecting units shown in Figs. 2, 3 and 5 are formed with a projecting or exposed portion 6 in the form of a parabolic curve, an intermediate cylindrical portion 7 and a rear portion 8 in the form of a spherical curve or arc. This latter surface is preferably silvered or plated with mercury or other light reflecting metal or substance whereby to efficiently reflect the light shining upon or projected against the sign.

On the cylindrical portion 7 are formed or provided one or more lugs, ears or projections 9, two or more suitably spaced apart being preferable. The openings 4 are so shaped or formed as to receive the portions 7 and 8 of the units or members 5, as well as the lugs, ears or projections 9, which preferably seat in an annular enlargement 4a when the units are forced or snapped into the openings. Due to the resiliency of the material about these openings, such material will expand as the unit is forced into position and after the unit is properly located, will again contract and tightly yet yieldably grip or retain the unit in position. The lugs or ears 9 will prevent the units from working loose but will permit a manual withdrawal thereof when found desirable in order to remove and/or replace a damaged unit or one having a defect. Any contraction or expansion forces due to change in temperature, etc. will not be sufficient to cause such unit to accidentally work loose and out. In Figs. 2 and 3, the letters 3 are raised or embossed as at 10.

Fig. 6 discloses a sign in which the base 11 is mounted in a frame 12. This base may be of rubber or any other suitable material. The letters, numbers, design or other insignia are provided with a series of openings or recesses 13 in which is placed a plastic composition 14, such as plaster of Paris, resilient or yieldable plastic material, cement or the like. Light reflecting units 15 are embedded in this plastic material and retained therein by reason of the greater inner cross section or diameter of the units and which therefore require no projections or projecting lugs as in the previous form. This reflecting unit 15 is disclosed as provided with an outer or exposed parabolic portion 16, inner reflecting or mirrored spherical portion 17, and an intermediate or connecting portion 18 having the contour of a section of a cone.

In order that the unit may be quickly removed and/or replaced as when damaged, the opening or recess 13 is shown as decreasing in cross-section or diameter throughout its depth whereby the plastic material may be more readily removed, cut or chiselled away.

In Fig. 7 there is disclosed a sign having a body portion or base 19 provided with openings or recesses 20 for receiving a plastic material or the like 21 in which is placed or embedded a light reflecting unit 5. The lugs or projections 9 thereof will more firmly retain the unit in position.

Fig. 8 discloses a sign similar to Fig. 2 but showing a reflecting unit 22 in position. Such a reflecting unit is more clearly shown in Fig. 9 and is provided with a parabolic exposed part 23, a spherical light reflecting part 24 and an intermediate cylindrical part 25 of less cross section to provide an annular recess for the reception of an annular flange or collar 26 formed in the opening or recess in the base or mounting, whereby the unit is suitably retained in adjusted position.

The reflecting units are preferably formed of glass or other transparent unit having like properties, although it is to be understood that the invention is not limited thereto. The novel construction of the sign, including its novel base or mounting for the light reflecting units whereby such units are yieldably but firmly placed and maintained in position, the novel construction of the reflecting units and the removability, replaceability and standardization of the units, should be readily apparent. The letters, numerals, designs or the like may be of different or contrasting color than the remainder of the sign, or different color schemes in the sign may be employed if desired.

Having thus disclosed the invention, we claim:

A sign construction comprising in combination, a base formed of resilient rubber and provided in one of its faces with a plurality of recesses having a concave bottom, and glass light reflecting units formed with retaining projections and a complementary convex rear surface adapted to be received in said concavity whereby when the units are forced into the recesses, the contraction of the rubber and said projections seating in the rubber surrounding the recesses anchoring the units in position, but permitting ready removal and/or replacement thereof.

CHARLES E. LOUNSBURY.
RALPH J. SHEAFE.