T. SAPP.

SIGN AND ADVERTISING DEVICE.

APPLICATION FILED DEC. 10, 1921.

1,425,142. Patented Aug. 8, 1922.

Fig.1.

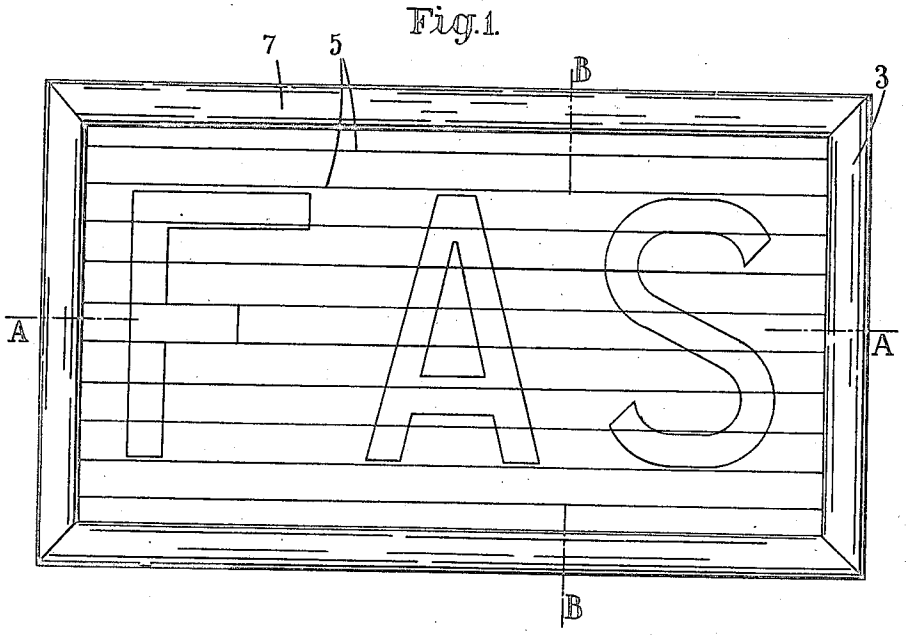


Fig.2.

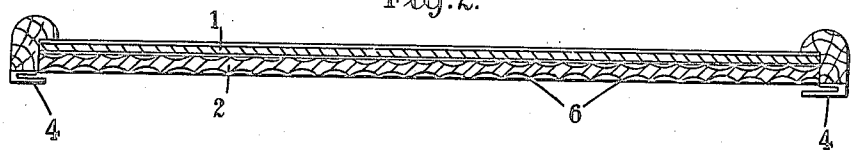


Fig.4.

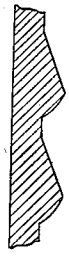
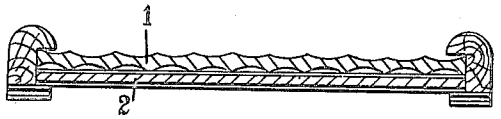


Fig.3.



INVENTOR.

T. Sapp

By [signature]

Atty.

UNITED STATES PATENT OFFICE.

THOMAS SAPP, OF LONDON, ENGLAND.

SIGN AND ADVERTISING DEVICE.

1,425,142. Specification of Letters Patent. Patented Aug. 8, 1922.

Application filed December 10, 1921. Serial No. 521,454.

To all whom it may concern:

Be it known that I, THOMAS SAPP, a British subject, residing at 24 Essex Street, Strand, London, England, have invented certain new and useful Improvements in Signs and Advertising Devices, of which the following is a specification.

This invention relates primarily to an improved sign intended for use in such places as theatres, railway stations, or on ships where the amount of available illumination is diminished or is designedly dim. In such places, the available light is usually directed from elevated or laterally disposed sources, and the object of my invention is to provide an improved sign which shall have maximum visibility without requiring to be tilted to any great extent from the vertical.

According to my invention I provide a sign having a ribbed front glass and a ribbed reflector situated closely behind said front glass, the ribs of the two members being arranged transversely to each other, and one surface of one of said members being suitably blackened according to an advertising or other design.

In the preferred form, both surfaces of the front glass are provided with horizontal ribs, and the rear reflector is formed of glass having vertical ribs on both surfaces, the rear surface of the said reflector being silvered and the two glass panels being in contact. I do not, however, wish to be limited to horizontal and vertical ribs, as the ribs of the two elements may cross each other at any desired angle. Further, the reflector may be formed of corrugated metal or of any other suitable material if desired.

In the preferred form, the rear surface of the front glass is stencilled so as to leave the design clear, but the design may be blackened and the background left clear if desired, and the stencilling may be performed on any other suitable surface of either the front glass or the reflector.

An example of one manner of carrying the invention into effect is illustrated in the accompanying drawing in which Fig. 1 illustrates an elevation; Figs. 2 and 3 sections along the lines A—A, and B—B respectively of Fig. 1; and Fig. 4 is an enlarged sectional detail, showing a modified form of rib.

Referring now to the drawing, the sign comprises two glass plates 1, 2 held in a frame 3 provided with lugs 4. The front surface of the front plate 1 is provided with horizontal ribs or corrugations 5 and the rear surface is also similarly ribbed. The rear surface is blacked, with the exception of the lettering, where it is left transparent. The rear plate 2 is provided on both surfaces with oppositely placed vertical corrugations 6 as shown and its rear surface is silvered, the silvering being visible when the sign is in use through the clear lettering of the front plate.

I prefer that the lettering or ground work desired to be made visible be formed of silvered glass, but the invention is not limited to this form of construction, as polished metal may be employed or any other material capable of reflecting light to a satisfactory extent.

Preferably, the glass plates in the form shown are arranged to be easily detachable in order to provide for replacement of the sign displayed. I may effect this by having the top bar 7 of the frame 3 made detachable so that both plates may be slipped in and out as desired. Alternatively, any other suitable means may be employed for this purpose.

Obviously, if desired, the lettering may be blackened and the ground work be left transparent to display the silvering. Further, the term "blackened" is to be understood as covering the use of any opaque composition of any suitable or effective colour.

The invention is of particular value in connection with advertising signs intended to be mounted on the backs of seats in theatres or other similar places where it is not permitted to mount the sign at an angle with the vertical owing to the obstruction that would be caused to the free passage of the public behind the seats.

The invention is also applicable for use at night in darkened shop fronts lit only by a small light or by the light of street lamps. Thus the sign is adapted to reflect light from a casual elevated source and also light from a casual lateral source.

The ribs and glass need not necessarily be laterally symmetrical in cross-section in cases where the available light will fall upon the glass from a known fixed direction, and I may for instance arrange to

have one wall of the ribs plane and the other wall of the ribs outwardly convex as shown enlarged in Fig. 4.

I claim:—

1. In a sign the combination of a front glass having ribs formed upon it and a reflector having ribs formed upon it, said reflector being situated closely behind said front glass, the ribs upon the front glass and the ribs upon the reflector being arranged transversely to each other, and one surface of one of said members being partially blackened according to a predetermined design.

2. In a sign, the combination of a plurality of sheets of ribbed glass arranged one behind the other with ribs on one sheet crossing those on an adjacent sheet, the rear surface of the rear glass being mirrored, and sign characters on one of said glass portions.

3. In a sign adapted for use without special means for illumination, the combination of a sheet of glass provided with ribs to refract light from a casual source, a sheet of glass adapted for substantial surface contact with the first sheet of glass and provided with ribs to refract light, a reflecting surface, and means to render a portion of the ribbed surface of the sheet of glass opaque to display a design.

4. In a sign the combination of a front glass having ribs formed upon both its surfaces, and a reflector having ribs formed upon it, said reflector being situated closely behind said front glass, the ribs upon the front glass and the ribs upon the reflector being arranged transversely to each other, and one surface of one of said members being partially blackened according to a predetermined design.

5. In a sign the combination of a front glass having ribs formed upon both its surfaces and a glass reflector having ribs formed upon both its surfaces, said reflector being situated closely behind said front glass, the ribs upon the front glass and the ribs upon the reflector being arranged transversely to each other, and one surface of one of said members being partially blackened according to a predetermined design.

6. In a sign, the combination of a front glass having ribs formed on both surfaces and a rear glass having ribs formed on both its surfaces, the rear wall of the front glass being blacked according to a design and the rear wall of the rear glass being mirrored.

7. In a sign adapted for use without special means for illumination, a sheet of glass provided with ribs arranged to reflect light from a casual elevated source, a sheet of glass adapted to contact with the first mentioned sheet of glass and formed with ribs to reflect light from a casual lateral source, a back reflecting surface, and means to render a portion of the sign opaque to display a design.

8. In a sign, a front transparent sheet having ribs on both its surfaces, a reflector in the rear of the front sheet and arranged closely adjacent thereto, said reflector having ribs arranged at an angle to the ribs on the front transparent sheet, one of the surfaces thus provided having outlined thereon a predetermined sign design, the angular arrangement of the respective ribs serving to reflect light from different casual sources for the illumination of the sign.

In testimony whereof I affix my signature.

THOMAS SAPP.