Feb. 3, 1931. G. F. MATTMAN 1,790,871

DISPLAY DEVICE

Filed Nov. 11, 1927 2 Sheets-Sheet 1

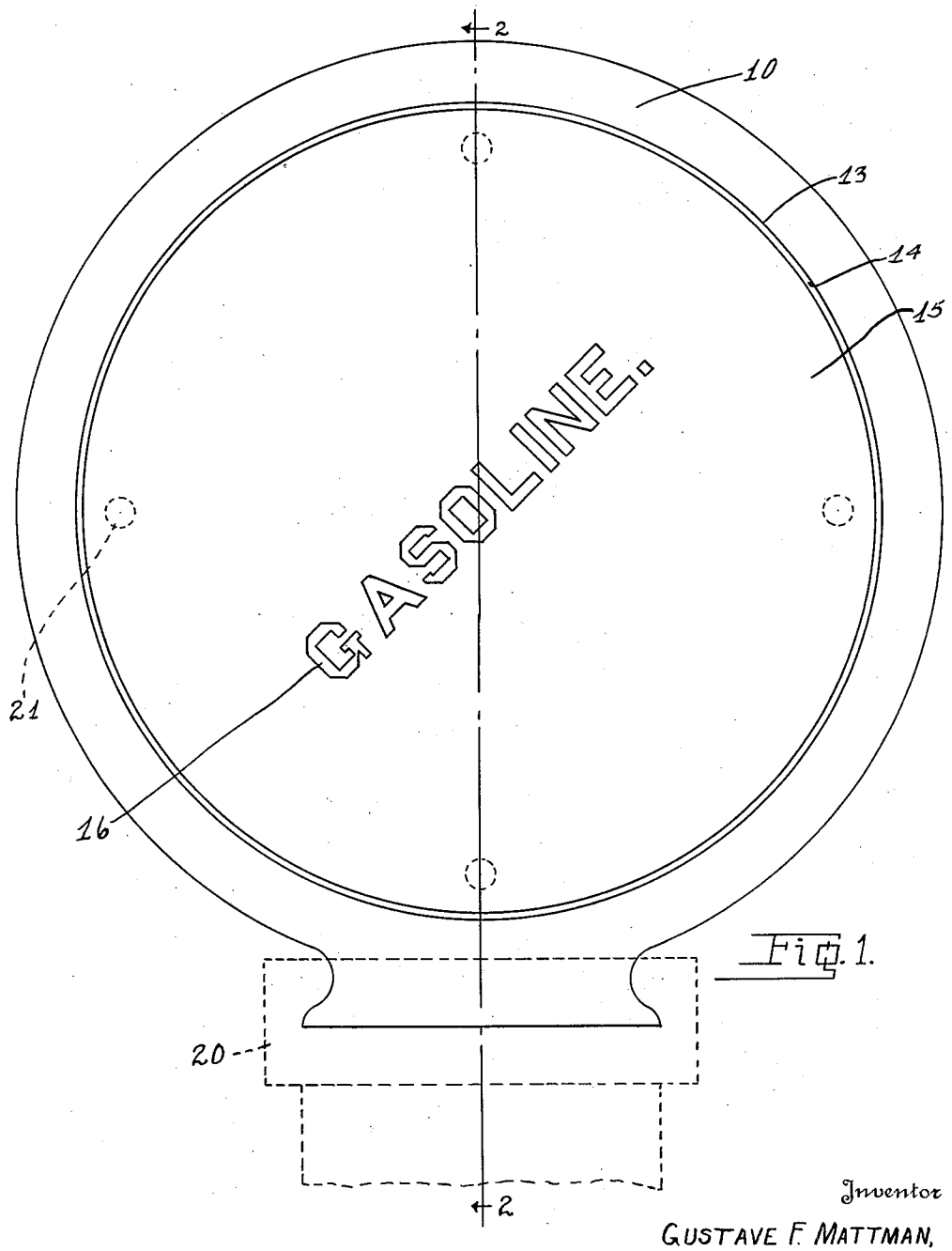


Fig. 1.

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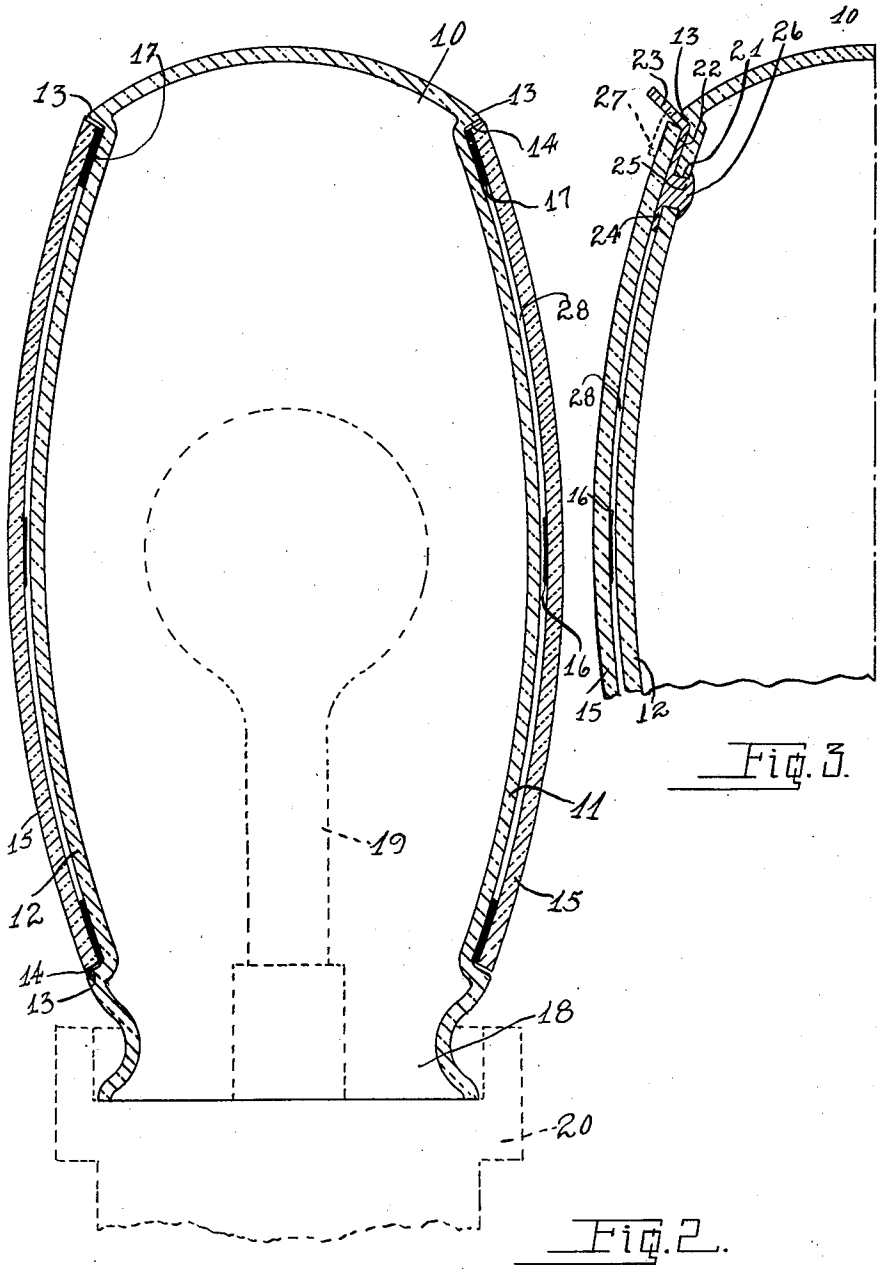


Fig. 3.

Fig. 2.

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Patented Feb. 3, 1931 1,790,871

UNITED STATES PATENT OFFICE

GUSTAVE F. MATTMAN, OF CINCINNATI, OHIO, ASSIGNOR TO THE CINCINNATI ADVERTISING PRODUCTS COMPANY, OF CINCINNATI, OHIO, A CORPORATION OF OHIO

DISPLAY DEVICE

Application filed November 11, 1927. Serial No. 232,692.

This invention relates to improvements in display devices and has for its object the production of an illuminated translucent type sign carrying suitable advertising matter and information which will not be affected by the weather.

Another object of this invention is to provide a glass globe or the like, to which a glass advertising and display sign may be attached by new and novel means.

These and other objects are attained by the means described herein and disclosed in the accompanying drawings, in which:

Fig. 1 is the front elevation of the display sign.

Fig. 2 is a sectional view taken on line 2—2 of Fig. 1.

Fig. 3 is a fragmentary sectional view similar to Fig. 2, showing a modification of this invention.

Heretofore display devices have been made by providing a substantially tubular metal casing with translucent end plates secured in the open ends of the casing by means of suitable flanges, lugs or the like integral with the casing, for example as shown in the patent to Smith 1,637,626. Metal casings have been found objectionable for various reasons, namely they are expensive and difficult to make and are furthermore liable to corrode or oxidize and they also limit the amount of illumination possible with display devices made entirely of glass. For this reason in many instances the casings and display signs have been made in the form of an integral glass member. Generally the glass is of a white translucent character and the advertising matter is applied to the exterior of the globe. The globe is then fired. The coloring matter used on such glass globes must be fired in order to secure permanency of the coloring matter used on such glass globes. The globes must be fired to such a high temperature that the glass will melt and distort; consequently the all-glass globes are not fired sufficiently in practice to permanently set or fix the coloring matter of the advertising characters thereon. The all-glass display globes have therefore retained the unfired or insufficiently fired advertising characters upon their outer surface but a short time before the characters were materially impaired or effaced by the action of the elements.

By the herein disclosed invention it is possible to provide all-glass globes in which the advertising matter is fully protected from the action of the atmosphere and elements. This is accomplished by providing glass globe 10 having comparatively flat sides 11 and 12 depressed or set below the surrounding flange 13 thereby forming a seat or depression 14. Suitable glass plates 15 conforming substantially to the depression 14 are provided and have suitable characters 16 disposed on the inner or reverse side thereof, or if it is desired to apply the advertising matter to the front or outer faces of the plates, said plates may be more economically fired to a sufficient degree to permanently set the coloring matter without danger of damage to the comparatively flat plates. The glass advertising plates 15 are then secured in the seats or depressions 14 by means of cement 17 or other suitable binding agents. By the structure of this invention the advertising characters are completely protected from the action of the elements in the one case, while in the other embodiment mentioned the exteriorly disposed advertising characters have been rendered permanent and lasting by reason of the adaptability of the plate to proper firing.

The globe 10 is provided at its lower end with a restricted opening 18, through which a suitable electric light bulb or the like 19 may be passed for enclosure within the globe 10. The bulb 19 may be carried by a suitable pedestal or the like 20, upon which the globe 10 rests for example as shown in the patent to Bowser 1,248,606.

The glass advertising and display plate 15 may be secured to the glass casing 10 by a mechanical means instead of by the means described above. A mechanical method and means are shown in Fig. 3. The sides 11 and 12 of the globe 10 have formed in them a plurality of perforations 21. Metal rings 22 are also provided, each having a pair of flanges 23 and 24. The flange 24 is provided

with lugs 25, made from lead or other soft material, which are received in the perforations 21 formed in the sides 11 and 12. After the lugs 25 are inserted through the perforations 21 a soldering iron or the like is used for burning the ends of said lugs and forming heads 26 on the inner ends thereof, thereby securing the rings 22 to the sides 11 and 12. After the ring 22 has been secured to the sides 11 and 12, the glass advertising plate 15 is placed in the depression 14 and contacts the flange 24, whereupon the flange 23 is bent downwardly into engagement with the plate 15, as shown in dotted lines at 27, to secure the plate 15 to the globe 10. This plate also carries the characters forming the advertising or display matter on the inner surface, which is protected from the atmosphere by the metal ring 22 and the wall of seat 14.

From the foregoing, it will be noted that a sealed chamber 28 is provided between the glass advertising plate 15 and the side of the casing 10 in which is disposed the advertising and display characters. The advertising and display characters are sealed from the atmosphere and their permanence will not be affected by the action of the elements.

What is claimed is—

1. A cylindrical globe having flattened sides and depressions formed in the sides, disc-shaped glass plates received in the depressions carrying on their inner surfaces suitable advertising and display characters, and cement carried by the edges of the plates for securing them to the sides of the globe, and forming a sealed chamber in which the advertising and display characters are disposed.

2. In a device of the class described the combination of a cylindrical globe having flattened depressed sides, disc-like plates coextensive with and received in the depressions, means for spacing the plates from the sides and securing said plates to the sides to form sealed chambers between the plates and sides, and advertising and display characters disposed on the inner faces of the plates.

3. As a new article of manufacture a device comprising a one-piece translucent all-glass globe body adapted to be illuminated interiorly thereof and having a shallow recess in its outer surface, a glass plate coextensive with said recess and cemented therein to provide a sealed chamber between the plate and globe, display characters fired into the non-exposed face of said plate, and securing means for holding the plate and globe in position relative to one another.

4. As a new article of manufacture a device comprising a one-piece translucent all-glass globe body adapted to be illuminated interiorly thereof and having a shallow recess in its outer surface, a glass plate coextensive with said recess and cemented therein to provide a sealed chamber between the plate and globe, display characters disposed adjacent the non-exposed face of said plate, and a ring-shaped securing means for holding the plate and globe in position relative to one another.

In testimony whereof, I have hereunto subscribed my name this 9th day of November, 1927.

GUSTAVE F. MATTMAN.