Dec. 13, 1927. 1,652,477

L. HALL

SIGN

Filed March 13, 1926

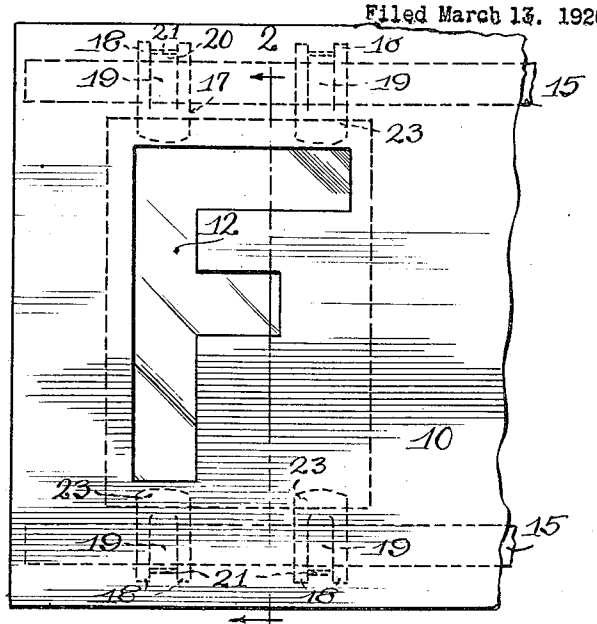


Fig. 1

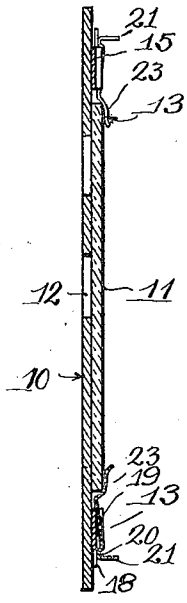


Fig. 2

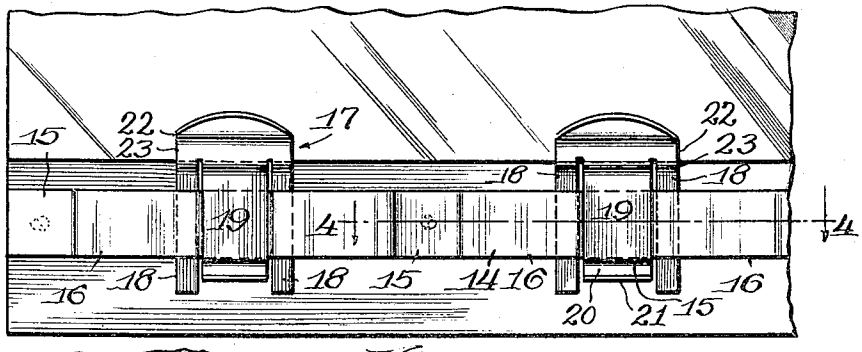


Fig. 3

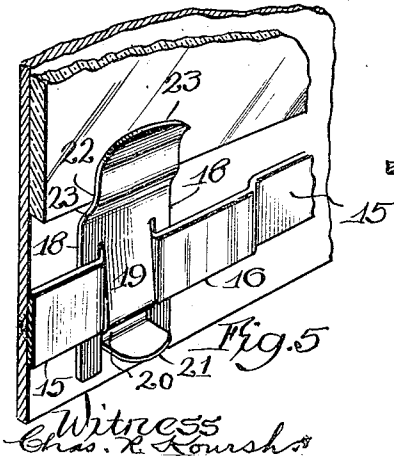


Fig. 5

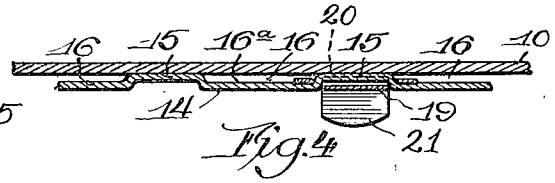


Fig. 4

Witness
Chas. R. Kourshs

Inventor,
Lee Hall,
by Clarence E. Wallop, Atty.

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UNITED STATES PATENT OFFICE.

LEE HALL, OF CHICAGO, ILLINOIS, ASSIGNOR TO FEDERAL ELECTRIC COMPANY, INC., OF CHICAGO, ILLINOIS, A CORPORATION OF NEW YORK.

SIGN.

Application filed March 13, 1926. Serial No. 94,398.

This invention relates to improvements in signs and consists of the matters hereinafter described and more particularly pointed out in the appended claims.

The invention relates to signs containing glass letter plates, which are attached against a sheet metal face having the letter cut out or stenciled therein, so that the form of the letter is blocked out on the glass letter plate by the said metal face in a familiar manner. Difficulty has been had in providing efficient holding means for securing the glass plates to the metal face of the sign plate. The holding means must be such as to securely attach the letter plate in position, but at the same time, the attachment must not be so rigid that there will be a tendency to break the glass plate under the shocks and jars encountered when the signs are in transit and before erection. In addition, said holding means should be such that the glass letter plate may be easily and quickly applied to the metal sign plate or removed, when removal is required for change or renewal.

The object of my invention is to provide a holding means which will fully meet the above requirements and which at the same time is of cheap and economical construction. Another object of the invention is to produce a holding means free of rivets or bolt heads, so that it may not interfere with the ready and easy cleaning of the inside of the sign body and will make possible a neat and sightly appearance on the interior of the sign body.

The several advantages of the invention will appear more fully as I proceed with my specification.

In the drawings:—

Figure 1 is a fragmentary view of a sign body of the kind showing the metal plate in which the stencil outline of the letter is cut out with the glass letter plate which is attached to the back of said metal plate and forms the body of the letter.

Figure 2 is a view representing a vertical section through Figure 1 in a plane indicated by the line 2—2 thereof.

Figure 3 is a view on an enlarged scale representing a fragmentary rear view of the parts shown in Figure 1.

Figure 4 is a view representing a partial horizontal section through Figure 3 in a plane indicated by the line 4—4 of Figure 3.

Figure 5 is a fragmentary perspective view of the holding means.

Referring now to that embodiment of the invention illustrated in the drawings:—10 indicates a plate preferably made of sheet steel, which forms one face of the sign body and in which are cut the stencil openings defining the letters, in this case, the letter "F", which are to appear on the sign. 11 indicates a glass letter plate which is attached to the back of the metal plate 10, in position to cover the stencil opening therein, so that it will provide the body 12 of the sign letter. The glass letter plate 11 may be of any familiar type and is generally of opal or similar glass. It may be flat or may have the letter raised thereon, as desired.

13, 13 indicate the holding means or devices at the top and bottom of the letter plate, by means of which it is held against the metal sign plate 10. Said holding means consist of the following:—14 indicates a corrugated metal strip which is attached to the rear face of the metal plate 10 in a position somewhat spaced from the edge of the glass letter plate 11 and extending parallel to said edge. Said strip 14 is corrugated transversely so as to provide on the face adjacent the plate 10, in alternate arrangement, flat, vertically extending ribs 15, 15 and intermediate channels 16, 16 (see Figure 4). The strip is attached to the rear face of the metal plate 10, preferably by spot-welding the ribs 15 to said plate. When secured to the plate in this way, there are provided by the means of the channels 16, a plurality of vertically extending parallel slots 16^a, 16^a between the strip 14 and the rear face of the metal plate 10.

17 indicates a clip adapted to be engaged in the slots 16^a, between the strip 14 and the back of the metal plate 10 with its upper end engaged against the marginal edge of the glass letter plate in such manner as to hold the glass plate against the sheet metal plate 10. Said clip is preferably made of brass or like elastic or springy material and is formed in such a manner that it may be stamped or cut from a sheet of metal in quantities. The body of the clip is cut to provide laterally spaced prongs 18, 18, with a tongue 19 intermediate said prongs. The

said parts may be provided by simply severing the metal along the lines defining said prongs and tongue.

The prongs 18, 18 are spaced apart a distance adapting them to straddle a rib 15 of the strip 14, so that they may be inserted in the slots 16ª, 16ª, at either side of said rib. The tongue 19 will then engage back of the rib 15. Said tongue 19 is formed near its bottom to provide an inturned horizontal shoulder 20 and an outturned finger hold 21. Since the clip is made of spring metal, when it is applied as described, with the prongs 18, 18 straddling a rib 15 of the strip 14 and with the tongue 19 engaged back of said rib, the shoulder 20 will engage below the bottom edge of the rib 15 of the strip 14 and thus lock the clip against withdrawal from the strip 14.

The upper end of the clip 17 is preferably formed to provide an off-set part 22 for engagement with the rear margin of the letter plate, and a finger hold 23 at an angle to the part 22, to be grasped by inserting one thumb or finger back of the glass plate. The part 22, which engages the back of the glass plate, being offset from the body of the clip 17, a more or less defined transverse shoulder 23, is formed for supporting engagement with the proximate edge of the glass letter plate.

The operation of the clip will be manifest from the foregoing description and from an examination of the drawings. The strips or rails 14 are attached to the back of the metal plate 10 above and below, and if desired, at the sides of the space to be occupied by the glass letter plate, being spaced from the edges of said plate a sufficient distance to permit the use of the clips 17.

Since the hold provided by the clip is yielding, as above described, any jars to the sign body as when the sign is in transit, tending to separate the glass letter plate from the metal plate 10, will be taken up and compensated for by the elasticity of the clip 17, without any danger of breaking the glass plate, as where rigid, unyielding devices are used, as has been the practice heretofore.

In the case of raised glass letter plates, the convex body of the letters project through the stencil openings in the plate 10, and at the marginal edges of the stencil letter openings in the metal plate hold the glass letter plate against vertical or lateral movement, so it is only necessary to hold the glass letter plate in such case in close contact with the back of the plate 10. No particular assistance is therefore required from the clip 17 to prevent lateral or vertical movement of such glass letter plate. But in the case of flat glass letter plates, where there are no projections on the glass through the stencil openings in the plate 10, the clips 17 by means of the shoulders 23 provide the necessary stops against lateral and vertical movement of the plate, in addition to the frictional resistance to such movement brought about by the clamping action of the clips against the glass letter plate.

The glass letter plate is then brought to the position on the plate 10 which it is intended to occupy and a number of clips 17 are engaged with the rails 14 in the manner heretofore described, with the glass engaging part 22 of the clip 17 engaged upon the rear margin of the glass plate and with the shoulder 23 engaging the edge of said plate. Since the clips 17 are made of elastic metal the clips will provide a yielding but quite close engagement of the glass plate against the metal plate, which will hold them in the desired or intended relation. A sufficient number of clips 17 are used to maintain the contact of the letter plate and metal plate throughout.

The many advantages of my invention will be manifest to those familar with the art.

I claim as my invention:—

1. In a sign, in combination with a metal stencil plate, a glass letter plate associated therewith, and means for holding said plate to said metal plate comprising a rail extending parallel to but spaced from the edge of said letter plate, said rail being corrugated transversely to provide ribs for attachment to said metal plate and slots intermediate said ribs, a clip made of spring metal having laterally spaced prongs adapted to straddle the rib of said rail and to engage in the channels at either side of said rib, and an intermediate tongue adapted to be engaged back of said rib, the upper end of said clip being adapted for engagement with the margin of said glass plate.

2. In a sign, in combination with a metal stencil plate, a glass letter plate associated therewith, and means for holding said plate to said metal plate comprising a rail extending parallel to but spaced from the edge of said letter plate, said rail being corrugated transversely to provide ribs for attachment to said metal plate and slots intermediate said ribs, and a clip made of spring metal having laterally spaced prongs adapted to straddle the rib of said rail and to engage in the channels at either side of said rib, and an intermediate tongue adapted to be engaged back of said rib, said tongue being formed at its bottom end to provide a shoulder for engagement with the edge of said rail remote from the edge of said glass plate, the upper end of said clip being adapted for engagement with the margin of said glass plate.

3. In a sign in combination with a stencil plate, a glass letter plate associated therewith, and means for holding said plate to

said metal plate comprising a rail extending parallel to but spaced from the edge of said letter plate, said rail being corrugated transversely to provide ribs for attachment to said metal plates and slots intermediate said ribs, and a clip made of spring metal having laterally spaced prongs adapted to straddle the rib of said rail and to engage in the channels at either side of said rib, said clip being formed at its upper end with a part offset from the main body of the clip for engagement back of the glass letter plate with a shoulder for engagement with the edge of said glass letter plate.

4. A holding device for attaching a glass letter plate to a metal stencil plate comprising a rail attached to the metal plate and a clip made of spring material adapted for removable engagement with said rail at one end and for marginal supporting yielding engagement against said letter plate at its other end.

5. A holding means for attaching a glass letter plate to a metal stencil plate comprising a rail fixed to said metal plate and a clip adapted for supporting yielding engagement against the back of said letter plate, said clip being made of spring material, and the rail and clip being provided with correlated interengaging parts for removably locking the clip to the rail.

In testimony that I claim the foregoing as my invention, I affix my signature this 2d day of March, 1926.

LEE HALL.