

No. 635,103.

Patented Oct. 17, 1899.

R. G. LAKE.
SIGN LETTER.

(Application filed Dec. 30, 1897.)

(No Model.)

Fig. 1.

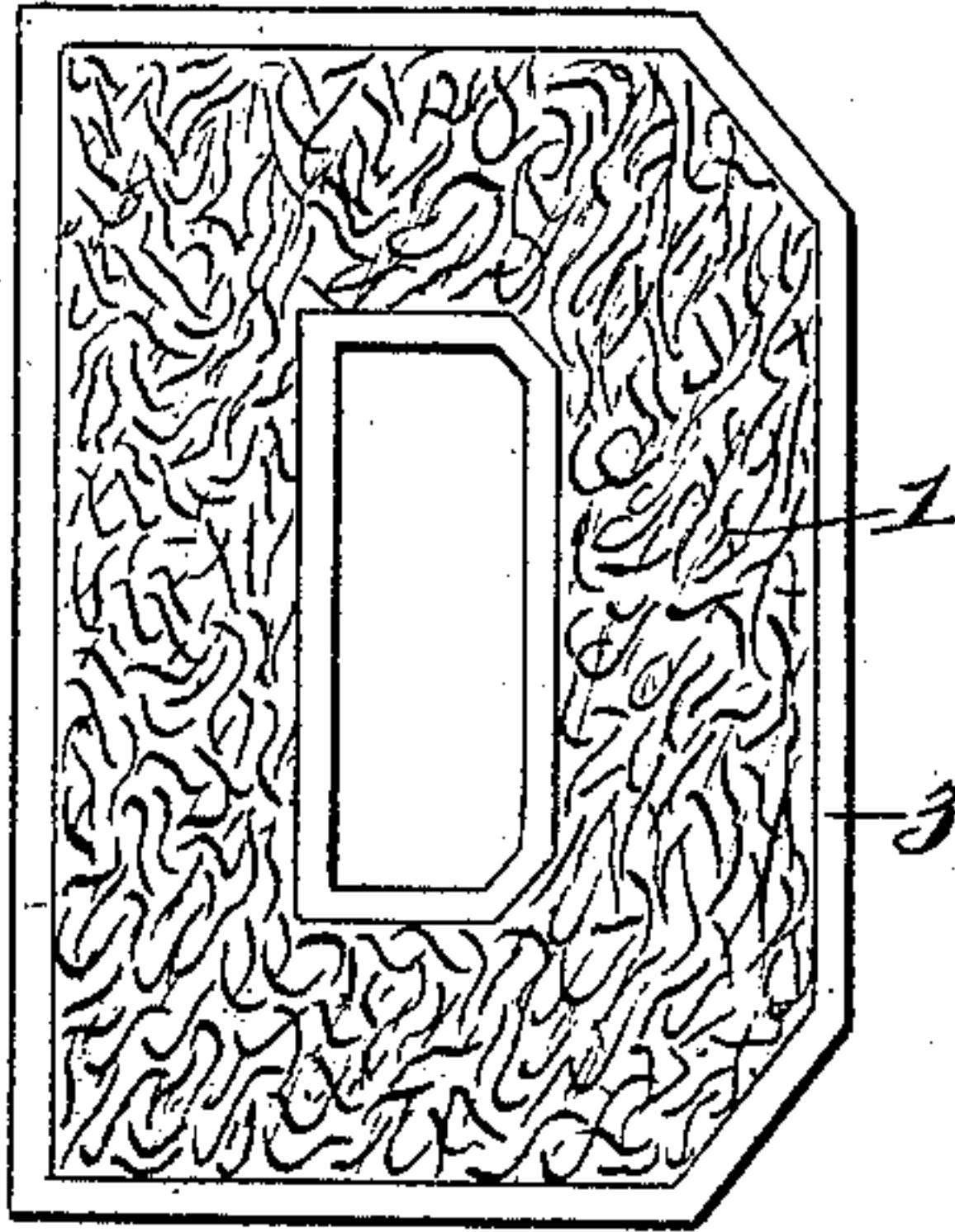


Fig. 2.

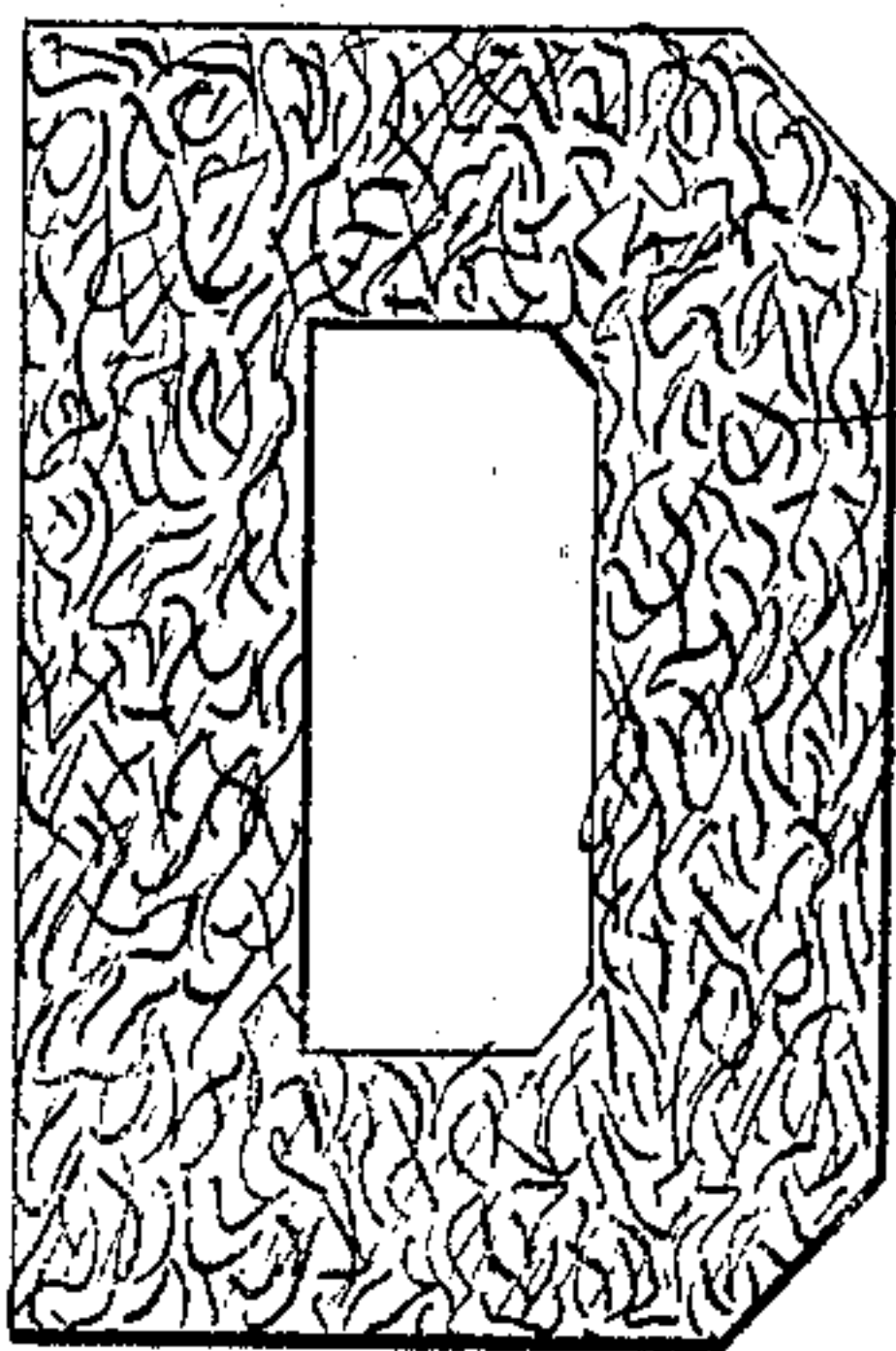


Fig. 3.

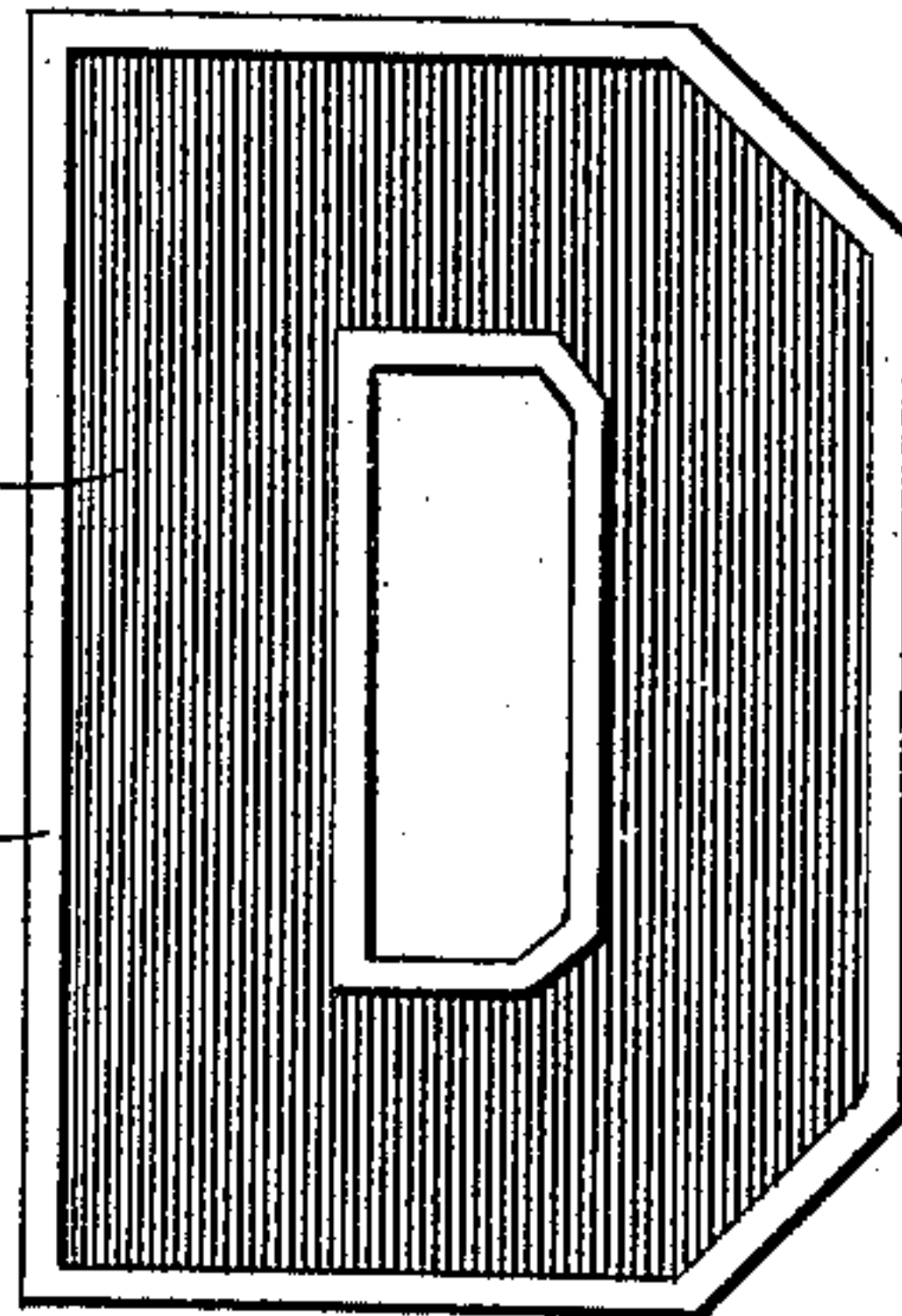


Fig. 4.

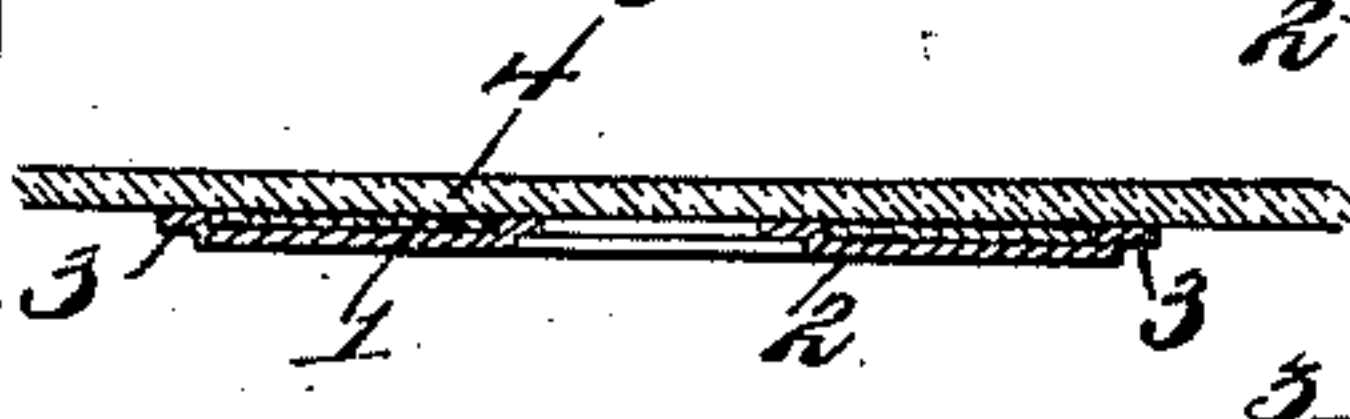
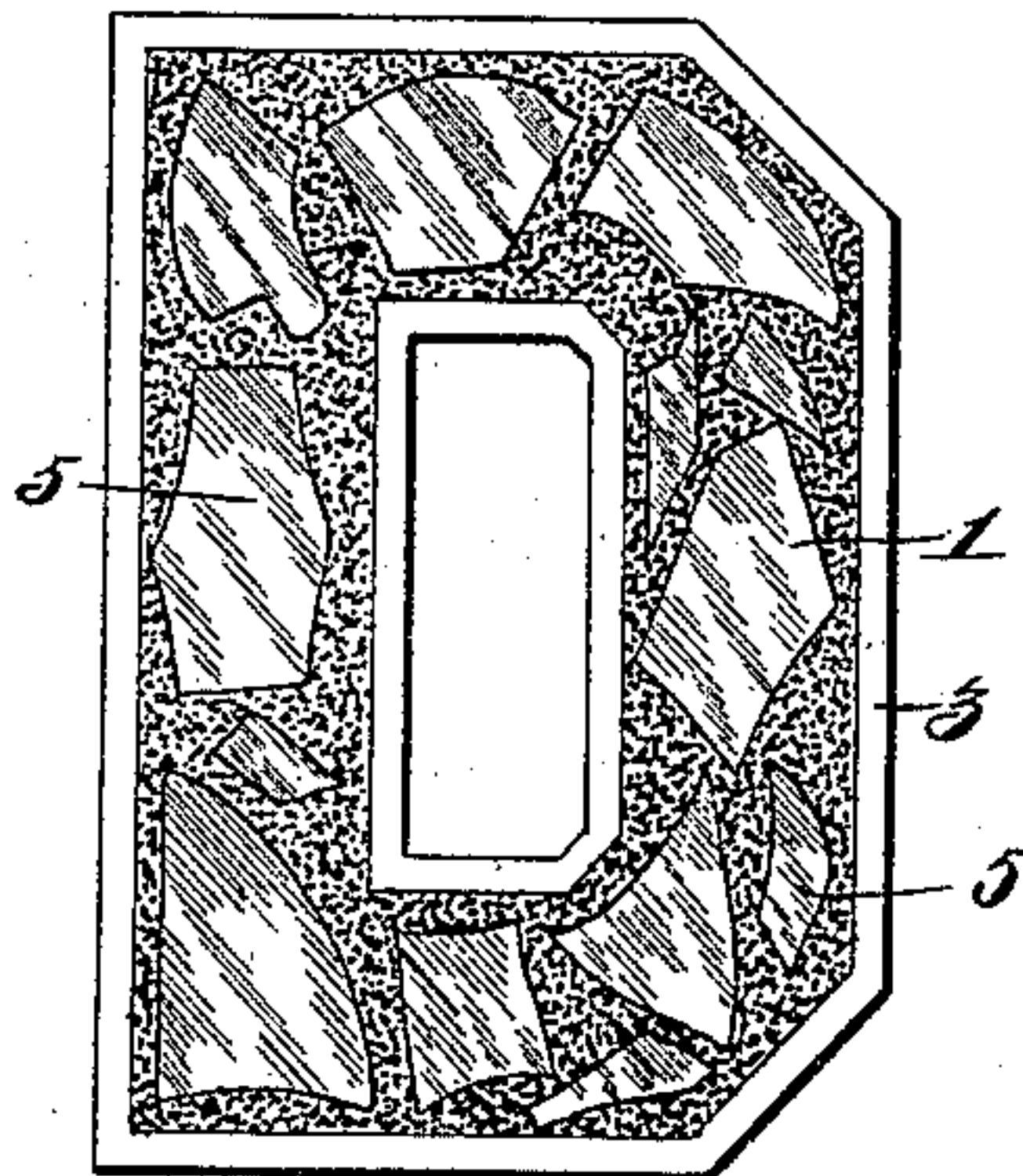


Fig. 5.



Witnesses

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UNITED STATES PATENT OFFICE.

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SIGN-LETTER.

SPECIFICATION forming part of Letters Patent No. 635,103, dated October 17, 1899.

Application filed December 30, 1897. Serial No. 664,550. (No model.)

To all whom it may concern:

Be it known that I, ROBERT G. LAKE, a citizen of the United States, residing at New York, (Corona,) in the county of Queens and State of New York, have invented a new and useful Sign-Letter, of which the following is a specification.

This invention relates to that class of sign letters, ornaments, symbols, or characters applied to the inner side of a glass pane or other transparent or translucent support and cemented thereto, and is intended to simplify and cheapen this class of devices and admit of a greater range of ornamentation and prevent the entrance of moisture and dust between the glass and the sign letter or symbol, such entrance being the chief source of difficulty in maintaining a letter or design in the proper position upon the glass or other supporting-surface to which it is secured.

In accordance with this invention the display object, consisting of a letter or symbol and constituting the display portion of the sign character or ornamentation, is of metal foil or other pliable and foldable material, adapting it to yield transversely or to bend without affecting its shape or appearance when subsequently returned to a flat condition, and this display object or display portion of the letter, character, or design is applied to a glass or other transparent or translucent plate and is protected by an equally pliable metal backing conforming to the outline of the display object forming the letter or symbol which constitutes the face or body portion of the sign character or ornamentation and having a flat extended marginal portion which is securely cemented to the supporting-surface, said marginal portion being arranged to project beyond and bound the letter or symbol.

In the preferred embodiment of the invention the display object, as the letter or symbol forming the body or display portion of the sign character or ornamentation, is constructed of pliable sheet metal--such as lead or tin-foil, and is colored, crinkled, embossed, or otherwise ornamented and embellished, according to the character of work or effect to be produced. This display object or display portion of the sign character or ornamentation is attached to the glass or other support-

ing-surface by means of a backing of tin-foil or other pliable metal depressed to receive the letter or symbol forming the display object or body portion of the sign character or ornamentation and will either extend over the entire surface bounded by the outermost lines of said letter, symbol, or other display object or will be cut to conform to the inner as well as the outer boundary or marginal lines of the letter, symbol, or other display object.

Further objects and advantages of this invention will appear in the following description, and the novel features thereof will be particularly pointed out in the appended claims.

In the drawings, Figure 1 is a front view of a sign-letter, illustrating an application of the invention. Fig. 2 is an elevation of the preferred form of sign-letter. Fig. 3 is a similar view of the metal backing. Fig. 4 is a transverse section of the composite sign-letter attached to a glass or translucent plate. Fig. 5 is a front view showing a different application of the invention.

Similar reference characters indicate corresponding parts in all the figures of the drawings.

The body portion 1, consisting of the display object or display portion of the sign character or ornamentation, may be of any configuration and may be formed of pliable sheet metal or other material or substance adapted to conform accurately to the surface in contact with which it may be arranged. This pliable body portion may be crinkled, corrugated, embossed, colored, gilded, or otherwise ornamented to secure the desired effect and appearance to meet the caprice of the designer or style of finish required. The backing 2 is also of pliable sheet metal, such as lead or tin-foil, and conforms at its outer edge or at both outer and inner edges to the shape of the said body portion of the sign character or ornamentation and is of slightly-larger area or dimensions than said body portion to form an extended marginal portion 3, which surrounds and bounds the part 1. This pliable backing is depressed in its face to form a receptacle to snugly receive the body portion of the sign character or ornamentation, the depression or recess being of such a depth as to

bring the marginal portion 3 about in the same plane with the face of the display object forming the body portion 1. The metal back is cemented to the body portion 1, thereby forming a composite sign character or ornamentation comprising a double-thickness or plural-layer intermediate portion and a single-thickness marginal portion or extension, the whole being pliable, so as to conform to and be pressed closely against the glass or other supporting-plate 4, to which the composite sign character or ornamentation is affixed. The cement is applied to the marginal or extended portion 3.

In certain classes of ornamentation separate flakes or pieces of pearl 5 or other substance may be used to break the monotony of the face of the letter or symbol, as indicated in Fig. 5, each flake or piece of material thus employed being of an area less than the face of the letter, symbol, character, or design or that portion of the sign character or ornamentation which is within the space bounded by the marginal portion 3, whereby the entire sign character may be bent or folded upon itself either by accident or design without destroying its utility and subsequently may be flattened or smoothed and returned to its original appearance or to that appearance which it had previous to such bending or folding, for the reason that the distortion of the letter constructed as described does not permanently affect, in the slightest degree, the appearance thereof when flattened for application to the glass or other surface. If preferred, the flakes or pieces 5 may be cemented directly to the depressed portion of the metal backing. By having the metal backing formed of pliable sheet metal, such as lead or tin-foil, the marginal or extended portion 3 can be pressed closely against the glass or translucent plate 4 and being non-elastic or non-resilient it will not spring away from the plate, and also by having the body portion of the character or ornamentation of pliable or foldable material (whether consisting of a continuous sheet of pliable metal foil, as in Figs. 1 and 2, or of separate small flakes of pearl or its equivalent spaced apart to form intervals in which the letter or symbol may be bent or creased, as shown in Fig. 5) the device is adapted not only to conform to the supporting-surface, but to be returned promptly and without the use of special tools to its original flat condition after having been distorted, folded, wrinkled, or otherwise rendered shapeless during shipment or by reason of rough handling.

A sign character constructed as set forth does not require skilled labor in its attachment to glass or other surface, and being of pliable and readily-foldable material a character can receive any amount of rough handling without sustaining injury and can also be removed after being attached to the glass and used again without being reëmbossed, crinkled or reblocked, or stamped.

It will be seen that the marginal or extended portion of the metal backing is arranged in a common plane with the general flat plane of the surface of the letter or symbol, and thus combines therewith to form an extended attaching-surface by which the security of fastening to a base, such as a transparent plate or sheet, is attained. This prevents displacement of any of the parts of the letter or the warping of the surface thereof to allow moisture and dust to gain access to the exposed surface.

In this connection it should be noted that those sign characters and symbols which embody elements having conventional shapes imparted thereto by means of stamping devices or dies and which must retain these shapes both before and after application to the supporting-surface are liable to be rendered useless by rough handling for the reason that any denting or disfiguration of a smooth-surfaced letter or symbol or one which is not particularly designed to adapt it for bending detracts from the appearance thereof and necessitates restamping or manipulation by means of special tools to return it to its original condition; but by constructing the entire device of foldable material, such as foil, or constructing the body portion of separate relatively-movable flakes attached to a pliable backing, and particularly by providing the body portion or face of the symbol when of foil with a crinkled or irregular surface, any bending or doubling will only emphasize the irregularity of the face, while the marginal securing edge or portion may be conveniently smoothed and returned to its original condition by pressing it, for instance, against the surface of the glass or other support.

The letter or character constructed in accordance with my invention cannot buckle, and being flat and parallel with the supporting-surface it is not liable to be displaced or injured by means of window-brushes, &c., as in cleaning or washing the supporting-surface. The letter cannot be injured by removal from the window or supporting-surface, a knife or other thin-bladed instrument being inserted therebetween, and hence the same may be transferred when necessary without altering the appearance and without involving expense other than that of reattachment. The device embodying my invention also may be transported with facility and without danger or injury, as by mail or otherwise, the blow of a postal canceling-stamp upon an envelop or other package containing the letters not having any injurious effect thereon.

In applying letters or characters to a smooth supporting-surface the greatest difficulty consists in causing a uniform contact of the flange or marginal portion with said surface; but as said marginal portion in the improved letter is pliable and the body of the letter can be flattened against the surface (hence not

offering any resistance to the shaping of the edge) the disadvantages of stiff or more or less resilient letters are avoided. Furthermore, the improved letter or symbol can be attached to curved surfaces, either convex or concave, and may be carried around or through the angle of a show case or window, and particularly is the letter adapted for attachment to bowed, bulged, or bent show windows when the lines upon which the letters are arranged are disposed obliquely to the curve of the surface, and it will be understood that this advantage and those above named apply equally to that form of the sign character wherein the body portion is of metal foil and that wherein the same is made up of flakes of pearl or equivalent material.

From the above description it will be seen that the letter or symbol embodying my invention consists, essentially, of a pliable backing having a central depressed portion which is separated from the supporting-surface to form a receptacle for a display object which is also pliable or foldable and yielding in quality, whereby the contact of a moving object with the back of the letter will not cause the forcible distortion or buckling of the display object and the resulting separation of the marginal portion of the backing from the supporting-surface. It should be noted that a crinkled body portion of metal foil is practically more pliable or less resistant than the backing, owing to the fact that it is capable of yielding in all directions and at all points where a strain or pressure may be applied without affecting other parts. It will be understood, moreover, that various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

Having described my invention, what I claim is—

1. A flat foldable composite sign character or ornamentation, comprising a pliable metal-foil backing, depressed in one side to form a receptacle, and having a flat extended marginal portion, bounding said receptacle, and adapted for uniform contact with, and attachment throughout its area to, a supporting-surface, and a display object, seated in said receptacle to fold with the backing, and allow the device to conform to the contour of the supporting-surface, and to return to its original

shape and appearance when the backing is flattened, substantially as specified.

2. A flat foldable composite sign letter or ornamentation, comprising a pliable metal-foil backing, depressed in one side to form a receptacle, and having a flat extended marginal portion bounding said receptacle, and adapted for uniform contact with, and attachment throughout its area to, a supporting-surface, and a display object of pliable metal foil, seated in said receptacle to fold with the backing, and allow the device to conform to the contour of the supporting-surface, and to return to its original shape and appearance when the backing is flattened, substantially as specified.

3. A flat foldable composite sign letter or ornamentation, comprising a pliable metal-foil backing, depressed in one side to form a receptacle, and having a flat extended marginal portion bounding said receptacle, and adapted for uniform contact with, and attachment throughout its area to, a supporting-surface, and a display object of pliable crinkled metal foil, seated in said receptacle to fold with the backing, and allow the device to conform to the contour of the supporting-surface, and to return to its original shape and appearance when the backing is flattened, substantially as specified.

4. A flat foldable composite sign letter or ornamentation, comprising a pliable metal-foil backing, depressed in one side to form a receptacle, and having a flat extended marginal portion bounding said receptacle, and adapted for uniform contact with, and attachment throughout its area to, a supporting-surface, and a display object consisting of a letter or symbol of pliable crinkled metal foil, seated in said receptacle with its surface flush with that of the said marginal portion, adapted to fold with the backing, and allow the device to conform to the contour of the supporting-surface, and to return to its original shape and appearance when the backing is flattened, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ROBERT G. LAKE.

Witnesses:

HATTIE R. LAKE,
JULIA LAKE.