May 20, 1958 W. I. STAAF 2,835,060

MOUNT FOR DISPLAY LETTERS OR THE LIKE AND METHOD OF MOUNTING LETTERS

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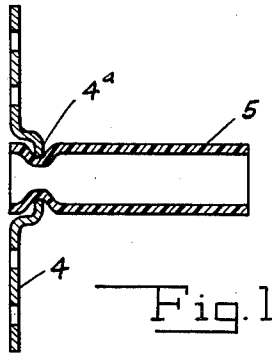


Fig. 1.

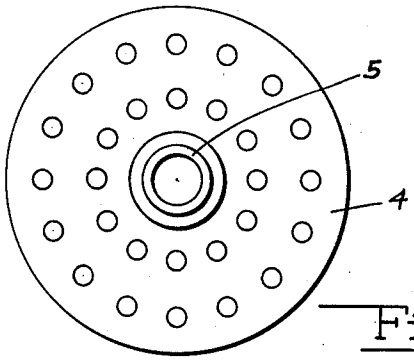


Fig. 2.

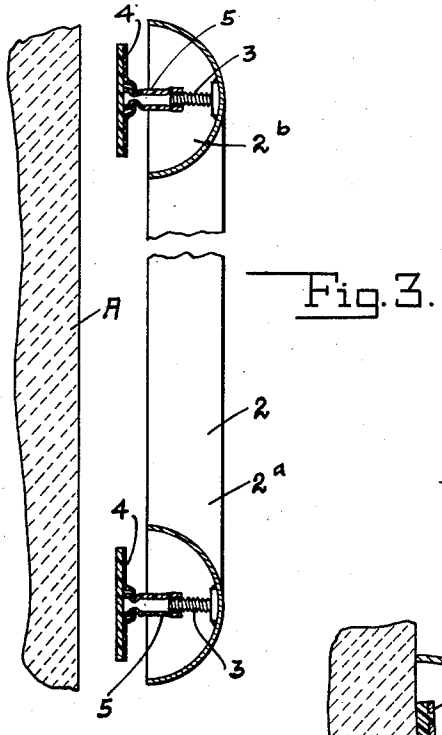


Fig. 3.

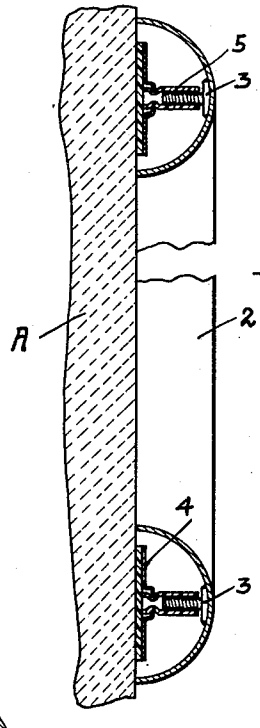


Fig. 4.

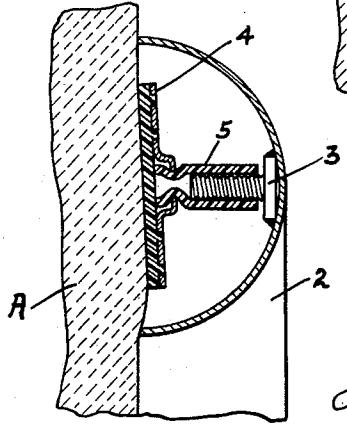


Fig. 5.

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MOUNT FOR DISPLAY LETTERS OR THE LIKE AND METHOD OF MOUNTING LETTERS

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2 Claims. (Cl. 40—140)

This invention relates to the securing of letters forming a name or other device to the face of a building or elsewhere, and is for a novel mounting element and method of using the same.

While the present invention is particularly applicable to the mounting of letters and numbers forming part of the name or display over a store front or the like, it may, however, be used for the mounting of various display or utilitarian articles to a surface. My invention will hereinafter be described particularly with reference to letters, but this is by way of illustration and not limitation.

Display letters, such for example as those constituting a name over a store front, are commonly formed of sheet metal, plastic or glass, and they are of concavo-convex section with the concavity being in the face of the letter that confronts the wall. These letters must be accurately positioned and firmly held in place, and should be as close to the wall as possible as their appearance would be spoiled either by being inaccurately positioned, or by their being spaced outwardly from the wall surface on which they are mounted.

My invention has for its primary object to provide a mounting for letters or the like which will enable them to be quickly and accurately positioned, simple in application, and economical to manufacture, and which enables the letter or other object to be held close to the wall with the mounting being entirely concealed.

A further object of my invention is to provide a novel method of attaching such letters or other objects to a wall.

These and other objects and advantages are obtained by my invention as will be more fully apparent from the detailed description hereinafter appearing.

In the accompanying drawings:

Fig. 1 is a vertical section through a mounting element constructed in accordance with my invention;

Fig. 2 is a front elevation of the device shown in Fig. 1;

Fig. 3 shows the application of the mounting elements to a letter or other object to be mounted on a wall preliminarily to the step of mounting, the view being a vertical transverse section;

Fig. 4 is a view similar to Fig. 3 showing the letter or other object applied to the wall; and

Fig. 5 is an enlarged fragmentary view partly in section and partly in elevation showing in an exaggerated manner how the mounting adjusts itself to irregularities in the wall surface.

Referring to the drawings, **2** designates a letter such as that commonly used in display signs over store fronts and in like locations, or any other similar object, the device **2** here being shown as being of concave or convex section with the exterior **2***a* being convexed while the wall confronting surface **2***b* is concave or trough-like. The letter may be formed of pressed metal, shaped from glass or other ceramic material, or formed from plastic. Acording to the present invention a plurality of studs **3** are welded or otherwise secured to the inner face of the convex face of the letter, these studs being threaded

or otherwise roughened on their exterior. As best shown in Fig. 5 the studs may conveniently be ordinary thumb screws having their heads welded to the interior of the letter, and having a shank which is of less length than the depth of the concavity in the rear face of the letter. The studs being shorter than the depth of the concavity, the letter can be pressed against the face of the wall on which it is mounted without the stud reaching to the wall.

The mounting elements themselves comprise a base, preferably a sheet metal base **4**, which may be of any suitable contour, preferably circular as shown, the base having a plurality of holes through it. It has a diameter less than the width of the concave face of the letter. This base or pad has a center portion which is pressed outwardly and deformed to firmly pinch and hold one end of a semi-flexible plastic tube **5**, the plastic tube being slightly resilient or elastic. It is preferably formed of styrene, but may be constituted of polyethylene or natural or synthetic rubber or other plastic of proper characteristics. It should be stiff enough so that it will not too readily bend or flex, but elastic enough so that it will yield slightly when one of the studs **3** is entered into the open end of the tube. The internal diameter of the tube is just slightly smaller than the maximum diameter of the stud **3**, and the length of the tube is less than the depth of the concavity in the letter.

In use the wall or other support to which the letter to be mounted, and which is designated A, is first marked to show exactly the position in which the letter is to be placed. One of the mounting elements of Fig. 1 is then applied to each of the studs **3** of the letter. When the stud is pressed into the tubular part **5** of the mounting, the mounting will stretch or expand just enough to let the stud be entered. As shown in Fig. 3, the mounting elements are applied to the studs only sufficient to start the studs into the tubular elements **5**, but so that the pads or bases **4** will project beyond the plane of the inner face of the letter. A suitable plastic or adhesive is then applied to the inner face at each of the pads or base elements **4**, and the letter is positioned against the face of the wall A in just the right position, and pressure is applied to it. Upon the application of pressure the studs **3** will telescope further into the tubes **5** until the edges of the letter contact the face of the wall as shown in Fig. 2. The pad and adhesive cement adjust automatically to the exact depth required, thereby insuring good mechanical contact of the pad with the support, and good contact of the letter with the face of the wall A. If the pad happens to contact an area of the wall which is slightly irregular, the tube will flex as shown in Fig. 5 to adapt itself to this irregularity without throwing the letter out of alignment. The letter is held in place until the cement or adhesive has set, a quick-setting cement being employed.

After the cement has set, the letter will be firmly held in position. Any force tending to pull the letter away from the wall A tends to contract the plastic tube or sleeve **5** onto the threaded shank of the stud **3**, thereby more firmly gripping and holding the stud against removal from the tube. Therefore once the letters have been mounted on the wall, they can only be removed by a force sufficient to either break the cement by which the pads are held against the face of the wall, or sufficient to rupture the tubes **5**.

An important feature in the use of my invention is the initial setting of the mounting elements **4—5** so that the pads are positioned outside the plane of the letter as shown in Fig. 3 with the subsequent application of pressure when the pads are placed against the wall A to force the letter into contact with the surface of the wall and

thereby automatically adjust the mounting to the wall and to the letter.

It will be seen from the foregoing that my invention provides a simple and economical means for mounting letters or the like onto a wall surface where they are to be secured, and a unique method by which the parts are brought to the proper relation. Once the letter has been mounted, the mounting is entirely concealed and no external screws or other fastening means are visible to mar in any way the appearance of the display.

As above indicated, the studs 3 are preferably threaded in order to provide a suitable rough surface for interlocking engagement with the semi-flexible tube 5, but they may be roughened in any other suitable manner. The tubes 5 are firmly attached to the metal base by the pinching of the metal at 4*a* into the tube to firmly hold and retain the tube on the base, and this operation can be accomplished with a simple pressing operation requiring no elaborate machinery. Instead of the device 2 being a letter, it may be any other object designed to be mounted on and held close to the face of the wall.

I claim as my invention:

1. In a display, a letter having a concaved wall confronting face, a plurality of studs secured to the concaved face with the studs being of a height less than the depth of the concavity, and a mounting element on each stud comprising a semi-flexible plastic tube fitted over the stud and of less length than the depth of the concavity in the letter, the tube having a base at one end adapted to be cemented to the surface of a wall.

2. A sign as defined in claim 1 in which the base is a sheet metal disk having a central opening contracted about the tube for attaching the tube to the base and of a dimension less than the concavity in the letter.

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