March 1, 1966 J. W. GOSS 3,237,898

MIRROR MOUNTING AND SUPPORTING DEVICE

Filed Sept. 4, 1964

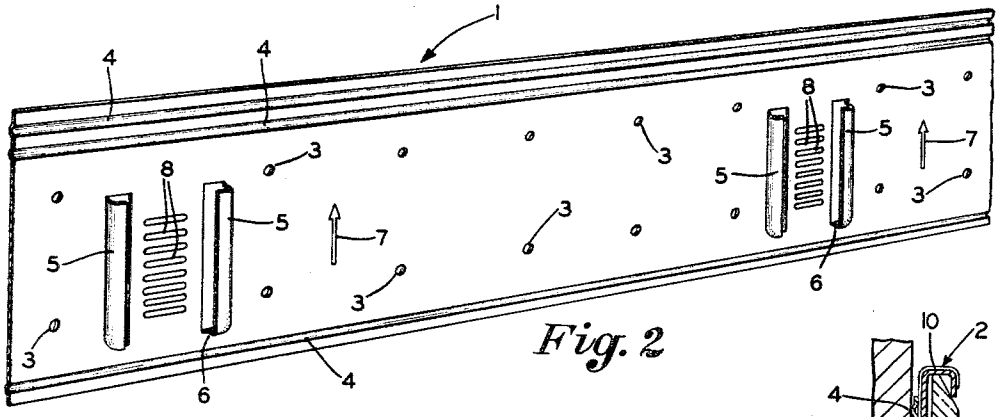


Fig. 2

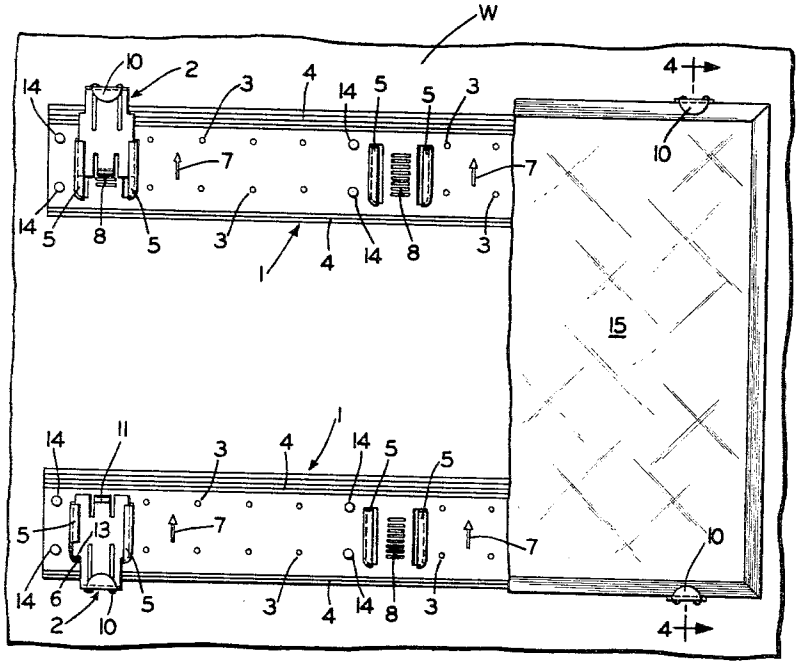


Fig. 3

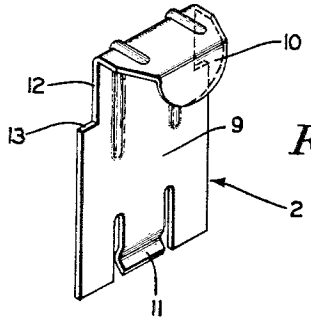


Fig. 1

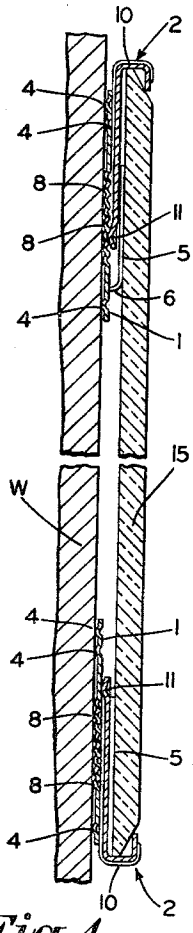


Fig. 4

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MIRROR MOUNTING AND SUPPORTING DEVICE

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The invention relates to means for mounting and supporting large unframed mirrors, or similar objects, upon a substantially flat wall or other surface, and more particularly to an improvement upon my U.S. Patent No. 2,696,962, dated Dec. 14, 1954.

The invention disclosed in said prior patent comprised a pair of substantially flat strips adapted to be fastened to a wall, or other surface, in spaced parallel horizontal position, and a plurality of adjustable, two-piece, object-supporting means connected to each of said strips.

Each of these object-supporting means is of the general character disclosed in my said prior patent and my prior U.S. Patent No. 2,532,162, dated Nov. 28, 1950, and comprises generally a double channel member having a corrugated surface, and a hook member slidably received in the double channel member and having a spring finger for engaging the corrugated surface thereof.

Two or more of the double channel members were required to be riveted to each of said strips. The adjustable hook members were inserted into the double channel members on the lower strip with the hooks depending downward and opening upward, and must further be riveted to the lower strip for supporting the lower edge of the mirror.

The adjustable hook members were slidably inserted into the double channel members on the upper strip with the hooks disposed upwardly and open downwardly. After the mirror was placed in position with the lower edge supported in the hooks of the supporting devices on the lower strip, the adjustable hook members on the upper strip were then pressed down in the respective double channel members until the hooks engaged the upper edge of the mirror, the spring finger on each of said adjustable hook members engaging the corrugations on the corresponding double channel member to hold the adjustable hook member in adjusted position.

It is an object of the present invention to improve and simplify the mirror mounting and supporting device disclosed in said Patent No. 2,696,962.

Another object of the invention is to dispense with the double channel members of said patent, thus eliminating the cost of material and labor for producing the same, and also eliminating the operation of riveting such members to the strips.

A further object of the invention is to form spaced, integral guide flanges on the strip to slidably receive the adjustable hook members.

A still further object of the invention is to provide stop flanges at the lower ends of said spaced guide flanges, and stop shoulders upon the adjustable members for contact therewith, thus limiting downward movement of the adjustable hook members and eliminating the necessity of riveting the same to the lower strip.

The above and other objects, apparent from the drawing and following description, may be attained, the above described difficulties overcome and the advantages and results obtained, by the apparatus, construction, arrangements and combinations, subcombinations and parts which comprise the present invention, a preferred embodiment of which, illustrative of the best mode in which applicant has contemplated applying the principle, being set forth in detail in the following description and illustrated in the accompanying drawing, in which:

FIG. 1 is a detached perspective view of the improved adjustable hook member;

FIG. 2 is a fragmentary perspective view of a portion of one of the strips;

FIG. 3 is a broken elevation of a mirror mounted by means of the improved mirror mounting and supporting device; and

FIG. 4 is an enlarged vertical sectional view looking in the direction of the arrows on the line 4—4, FIG. 3, through a mirror mounted upon a wall by means of the improved mirror mounting and supporting device, the central portion of the mirror and wall being broken out to reduce the size of the figure.

Referring now more particularly to the embodiment of the invention illustrated, similar numerals refer to similar parts throughout the several views.

The mirror mounting and supporting device to which the invention pertains comprises the metal strips, indicated generally at **1**, and the hook members, indicated generally at **2**, which are detachably connected directly to the strips **1**. The metal strips **1** may be made of indefinite length and adapted to be cut off to any desired length depending upon the horizontal dimension of the mirror to be mounted and supported.

As in my prior Patent No. 2,696,962, each strip **1** is provided with two spaced parallel rows of apertures **3**, located near the upper and lower edges of the strip, for receiving nails, screws or the like, to be driven into studding or other solid anchorage in a wall.

And also, as in my said prior patent, the spacing of these apertures in each row may be such that, in any horizontal location of a strip upon a wall, certain apertures **3** in each row will be so positioned that nails or screws may be driven therethrough into adjacent studs in the wall so as to solidly anchor the strips to the wall.

And as further disclosed in said patent, for the purpose of stiffening the strips **1**, which therefore can be made of light gauge strip metal, and for compensating for any unevenness in the surface of the wall upon which the mirror is to be mounted, each strip **1** may be provided with spaced, parallel corrugations, or ribs **4**, located upon the rear side of the strip for contact with the wall.

The double channel members of my prior patents are eliminated, and instead, transversely disposed pairs of integral guide flanges **5** are formed at spaced intervals throughout the length of each strip **1**.

As the strips **1** are located horizontally, the guide flanges **5** will be vertically disposed, as shown in the drawing. As best shown in FIG. 2, it will be seen that the flanges **5** are punched or stamped out of the strip **1** and offset outwardly from the forward surface of the strip.

An integral stop flange **6** is formed at the lower end of each guide flange **5**, joining the same to the main body portion of the strip **1**. Arrows **7** are formed at intervals throughout the length of each strip **1** indicating the edge of the strip which is to be located uppermost when the same is attached to the wall.

A plurality of spaced corrugations **8** are located between each pair of guide flanges **5** for a purpose to be later described. Each hook member **2** may be generally similar to the hook members in my prior patents and comprises a relatively flat body **9** with outwardly offset hook **10** formed at one end thereof.

The flat body **9** of the hook member **2** is of such width that it may be received between the guide flanges **5** and will have a sliding fit therein. For the purpose of restricting free sliding action of the hook member **2** within said guide flanges, a spring finger **11** is formed upon the opposite end of the body **9** thereof, from the hook **10**, and adapted to be resiliently positioned in any of the troughs between the corrugations **8**.

The hooked end of the hook member **2** is reduced in width, as indicated at **12**, forming the stop shoulders **13**

at opposite side edges thereof for engagement with the stop flanges **6** of the strips **1**, as will be later described.

In using the mirror mounting and supporting device, to which the invention pertains, to mount a mirror upon a wall, pieces of strip **1** of proper length are cut. In actual practice, the pairs of guide flanges **5** are preferably located about six inches apart on center, so that each length of strip **1**, cut for mounting a mirror, will have several pairs of guide flanges **5** thereon, whereby two or more pairs of guide flanges on each strip **1** may be utilized.

Two of the strips **1** are located horizontally and vertically spaced apart the desired distance, and secured to the wall W by nails or screws **14**, located through certain of the apertures **3** of the strip, and driven into studding or other suitable anchorage, in the wall.

Two or more of the hook members **2** are inserted, in inverted position, into desired pairs of guide flanges **5** in the lowermost strip **1**, as shown in FIG. 3. The stop shoulders **13** upon the hook members **2** will engage the stop flanges **6** at the lower ends of the guide flanges **5**, limiting downward movement of the hook members **2** relative to the lower strip **1**.

The mirror **15** may then be seated in the downwardly disposed hooks **10** of the hook members **2** upon the lower strip **1**, with the upper edge of the mirror tilted slightly forwardly. Hook members **2**, with the hook **10** upward, should be slidably inserted into the upper ends of the desired pairs of guide flanges **5** on the upper strip **1**.

The upper edge of the mirror may then be swung backwardly to vertical position, whereupon the hook members upon the upper strip **1** can be pushed downwardly, the hooks **10** thereof engaging over the upper edge of the mirror, holding the mirror mounted upon the wall as shown in FIGS. 3 and 4.

It will be apparent from the foregoing that a simple, efficient and effective device is provided which is an improvement over the construction shown in my prior Patent No. 2,696,962, as it eliminates entirely the double channel members and also eliminates the riveting thereof to the strips, and further eliminates riveting of the hook members to the lower strip, since the cooperating stop shoulders upon the hook member and stop flanges at the lower ends of the guide flanges will properly position the downwardly disposed hook members on the lower strip and hold them so as to support the mirror.

In the foregoing description certain terms have been used for brevity, clearness and understanding, but no unnecessary limitations are to be implied therefrom beyond the requirements of the prior art, because such words are used for descriptive purposes herein and are intended to be broadly construed.

Moreover, the embodiments of the improved construction illustrated and described herein are by way of example, and the scope of the present invention is not limited to the exact details of construction.

Having now described the invention or discovery, the construction, the operation, and use of preferred embodiments thereof, and the advantageous new and useful results obtained thereby; the new and useful construction, and reasonable mechanical equivalents thereof obvious to those skilled in the art, are set forth in the appended claims.

I claim:

1. A device for mounting and supporting an object such as a sheet glass mirror, said device comprising a pair of substantially flat strips adapted to be fastened to a wall in spaced horizontal position one below the other, equally, spaced pairs of vertically disposed integral guide flanges on each strip, an integral stop flange at the lower end of each guide flange joining the same to the main body portion of the strip object supporting members adapted to be selectively received between any pairs of said guide flanges and having integral hooks for engaging over opposite edges of the mirror, said hooks being of less width than the remainder of said object supporting members and forming stop shoulders on said object supporting members spaced from said hooks for engaging said stop flanges on the lower strip, the hooks of the object supporting members on the lower strip projecting downwardly and opening upwardly, said upwardly opening hooks being fixed relative to said lower strip by engagement of said stop shoulders with said stop flanges, the hooks of the object supporting members on the upper strip projecting upwardly and opening downwardly and being mounted for vertical adjustment.

2. A device for mounting and supporting an object such as a sheet glass mirror, said device comprising a pair of substantially flat strips adapted to be fastened to a wall in spaced horizontal position one below the other, equally, spaced pairs of vertically disposed integral guide flanges on each strip, an integral stop flange at the lower end of each guide flange joining the same to the main body portion of the strip corrugations between each pair of guide flanges on the upper strip, object supporting members adapted to be selectively received between any pairs of said guide flanges and having integral hooks at one end for engaging over opposite edges of the mirror, said hooks being of less width than the remainder of said object supporting members and forming stop shoulders on said object supporting members spaced from said hooks for engaging said stop flanges on the lower strip, a spring finger on the opposite end of each object supporting member, the hooks of the object supporting members on the lower strip projecting downwardly and opening upwardly, said upwardly opening hooks being fixed relative to said lower strip by engagement of said stop shoulders with said stop flanges on the lower strip, the hooks of the object supporting members on the upper strip projecting upwardly and opening downwardly, the spring fingers thereof engaging the corresponding corrugations on the upper strip for holding said last named object supporting members in vertically adjusted position.

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