

United States Patent

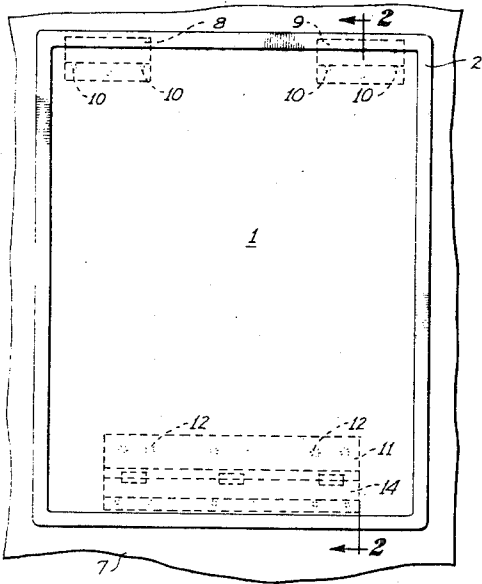
[11] 3,612,469

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[56] References Cited	
UNITED STATES PATENTS	
726,271	4/1903 Farley 248/224 UX
1,824,199	9/1931 Donohoe..... 24/20 (R)
2,299,443	10/1942 Walmsley..... 248/497
2,791,392	5/1957 Black 248/312 X
3,078,608	2/1963 Diack 248/475 (R) X
3,337,172	8/1967 Jackson 248/497
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[54] **THEFT-PROOF WALL-HUNG MOUNTING FOR MIRRORS AND THE LIKE**
4 Claims, 6 Drawing Figs.
[52] U.S. Cl..... **248/475 R,**
248/497, 248/224, 248/203
[51] Int. Cl..... **A47f 7/14**
[50] Field of Search..... 248/203,
224, 466, 475, 489, 497

ABSTRACT: A wall-hung mirror frame or the like adapted to be suspended from one or more frame engaging hangers, the rear of said frame being provided with a resilient locking bracket having an inturned flange selectively engageable with a series of louvers formed in a catch hanger affixed to the wall, the parts being positioned so that the locking bracket and catch hanger, when interengaged, will fixedly secure the frame so that it cannot be removed from the frame hangers.



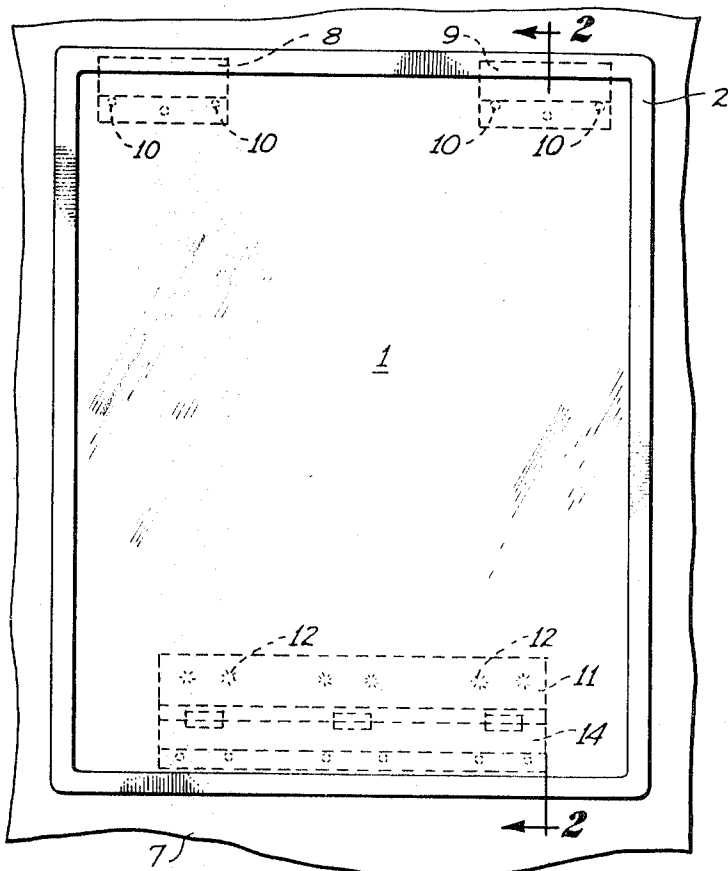


Fig. 1

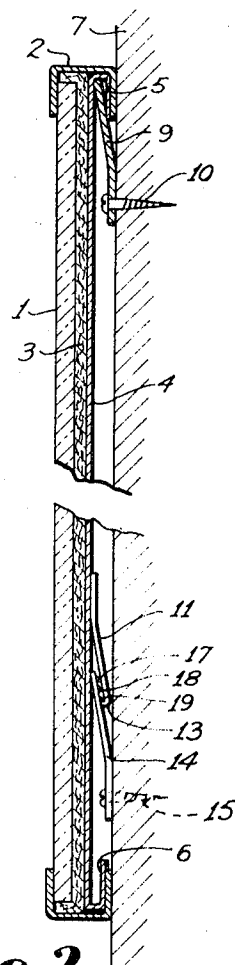


Fig. 2

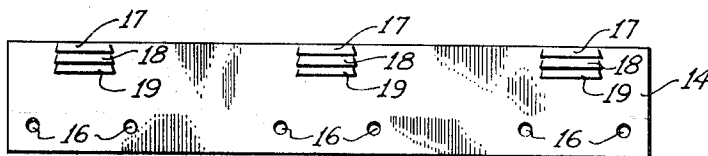


Fig. 3

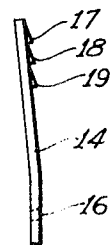


Fig. 4

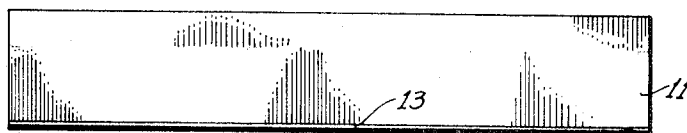


Fig. 5

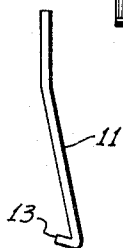


Fig. 6

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THEFT-PROOF WALL-HUNG MOUNTING FOR MIRRORS AND THE LIKE

BACKGROUND OF THE INVENTION

Numerous expedients have hitherto been proposed to provide mirrors or similar framelike structures with means for affixing them to walls or other supporting surfaces in a theft-proof manner. Many such structures rely on setscrew means requiring special wrenches, others rely on a wedging action, and still others on interlocking or interengaging parts. Often, however, the parts are complicated and difficult to install, or they may lack sufficient strength and rigidity to resist removal if a concerted effort is made to remove the mirror from its mounting. The cost of the mounting means is also a factor, not only from the standpoint of the number of parts involved but also the labor required for their manufacture as well as their installation.

The present invention seeks to overcome the shortcomings of prior art structures by providing a rugged yet inexpensive mounting which may be easily fabricated from inexpensive sheet metal, the parts being capable of ready installation with a minimum of time and effort.

RESUME OF THE INVENTION

The present invention is particularly suited for mounting mirrors having an enclosing channel-shaped frame; and while the utility of the invention is not so limited, it will be described in conjunction with a typical wall-hung type of mirror having a frame of U-shaped cross sections surrounding the mirror glass, the mirror being supported in the frame by means of a sheet metal back the upper and lower edges of which are also of channel shape so as to nest within the frame.

The mirror frame is suspended from the wall by means of one or more hangers comprising plates adapted to be affixed to the wall by means of screws, the plates having outwardly extending upper portions which engage the channel-shaped frame to the rear of the mirror back. A catch hanger is also adapted to be secured to the wall, the catch hanger being of similar configuration to the frame engaging hangers but having one or more sets of louvers on its outwardly extending portion. The louvers are engageable by a locking bracket welded to the mirror back, the locking bracket having a rearwardly projecting portion with a reversely bent flange at its free end selectively engageable with the louvers.

The arrangement of parts is such that when the mirror is brought to the wall and moved downwardly over the frame engaging hangers, the hangers will engage the uppermost portion of the frame and, simultaneously, the flange of the locking bracket will engage the louvers on the catch hanger, thereby locking the mirror against upward movement so as to disengage the frame from the hangers. The mirror is thus fixedly secured to the wall surface and positively locked against upward movement. At the same time, should it subsequently be desired to remove the mirror from the wall, it may be deflected forwardly from the wall by a slight distance so that a tool, such as a screwdriver, may be inserted at the proper place to disengage the locking bracket from the catch hanger.

DESCRIPTION OF THE DRAWINGS

FIG. 1 is a front elevational view of a framed mirror in accordance with the instant invention.

FIG. 2 is a vertical sectional view taken along the line 2—2 of FIG. 1.

FIG. 3 is an enlarged front elevational view of the louvered catch hanger.

FIG. 4 is a side elevational view taken from the left side of FIG. 3.

FIG. 5 is a front elevational view of the locking bracket.

FIG. 6 is a side elevational view taken from the right side of FIG. 5.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring first to FIGS. 1 and 2 of the drawing, a mirror glass 1 is provided with a channel-shaped frame 2, the mirror being held in the frame by means of felt padding 3 and sheet metal backing 4 having channel-shaped upper and lower ends 5 and 6, respectively, engaged within the frame 2.

The frame is adapted to be secured to the wall surface 7 by means of frame engaging hangers 8 and 9 which are secured to the wall surface 7 by means of screws 10. As will be evident from FIG. 2, the upper portions of the hangers project outwardly from the wall surface and are adapted to be engaged by the rear portion of the channel-shaped frame and the channel-shaped upper end 5 of backing member 3.

The backing member is also provided with a locking bracket 11 the base end of which may be conveniently welded to the backing 3, as by means of the welds 12 diagrammatically illustrated in FIG. 1. The locking bracket projects outwardly from the rear surface of the mirror backing and is provided at its free end with an intumed flange 13. Preferably, the locking bracket 11 will be mounted toward the lowermost end of the frame, substantially as illustrated.

A catch hanger 14 is adapted to be secured to the wall surface 7 by means of screws 15 (FIG. 1) which pass through openings 16 (FIGS. 3 and 4) in the base of the catch hanger. It is also provided with one or more sets of louvers 17, 18 and 19 arranged to be selectively engaged by the intumed flange 13 of locking bracket 11. Thus, as illustrated in FIG. 2, the flange of the locking bracket is engaged with louvers 19.

As should be evident, the catch hanger 14 will be positioned beneath the hangers 8 and 9 by a distance such that the locking bracket will readily engage the louvers. With such arrangement, the parts need not be precisely spaced since the locking bracket may be selectively engaged with the louvers 17, 18 or 19, depending upon their relative locations. It should be evident, however, that the interengagement of the locking bracket and catch hanger will securely fasten the mirror frame to the wall and will prevent upward movement of the frame which would otherwise disengage it from the hangers 8 and 9. Yet if desired, the bottom portion of the frame may be displaced outwardly by a slight distance sufficient to permit the insertion of a screwdriver or the like from either side of the frame, whereupon it may be manipulated to disengage the parts.

Various modifications may be made in the invention without departing from its spirit and purpose. For example, where the mirror frame is of substantial length and it is intended to be hung in a horizontal position, a pair of coacting locking brackets and catch hangers may be provided. Similarly, in many installations wherein the user has a choice of hanging the frame either vertically or horizontally, a pair of locking brackets may be provided, one disposed for horizontal installation and the other for vertical installation. While a preference is expressed for sets of louvers, such as those illustrated in FIG. 3, it will be evident, however, that the louvers could be continuous and of substantially the same length as the intumed flange on the locking bracket. While the dimensions of the parts do not constitute a limitation on the invention, it has been found that the spacing apart of the free edges of successive louvers by approximately one-eighth inch is particularly suited for most installations and effectively insures a snug locking action with little or no vertical movement of the frame once the parts are engaged. It should also be evident that the mirror backing need not be a continuous sheet, but rather may comprise spaced apart brace members one of which is positioned to mount the locking bracket. It should also be evident that the positions of the locking bracket and catch hanger could be reversed, with the locking bracket secured to the wall surface and the catch hanger secured to the mirror back.

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

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1. Mounting means for a wall mirror or the like having a frame including a backing member extending between opposite edges of said frame, said mounting means comprising:

- a. a wall hanger having an upper portion projecting outwardly relative to the wall surface to which it is secured, said frame being engageable over the outwardly projecting upper portion of said bracket to support said frame against downward movement;
- b. a locking bracket comprising a plate secured to the rear surface of said backing member and having a rearwardly projecting lowermost portion terminating in a reversely bent flange; and
- c. A catch hanger adapted to be secured to the wall surface in alignment with said locking bracket when said frame is in engagement with said wall hanger, said catch hanger comprising a plate having an upper portion projecting outwardly relative to the wall surface, and a plurality of louvers formed one above the other in the outwardly projecting portion of said catch hanger, said louvers being

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oriented to be selectively engaged by the reversely bent flange on said locking bracket when said frame is engaged by said wall hanger, whereby said locking bracket and catch hanger coact to lock said frame against upward movement which would release said frame from said wall hanger.

2. The mounting means claimed in claim 1 wherein said plurality of louvers are formed in laterally spaced apart sets with the corresponding louvers in each set lying in a common plane.

3. The mounting means claimed in claim 2 wherein said frame is U-shaped in cross section and wherein the outwardly projecting upper portion of said wall hanger is engageable beneath the uppermost edge of said frame.

4. The mounting means claimed in claim 2 wherein said backing member includes flanged edge portions engageable within said U-shaped frame.

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