United States Patent

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[54] SILL TRIM ASSEMBLY
6 Claims, 6 Drawing Figs.

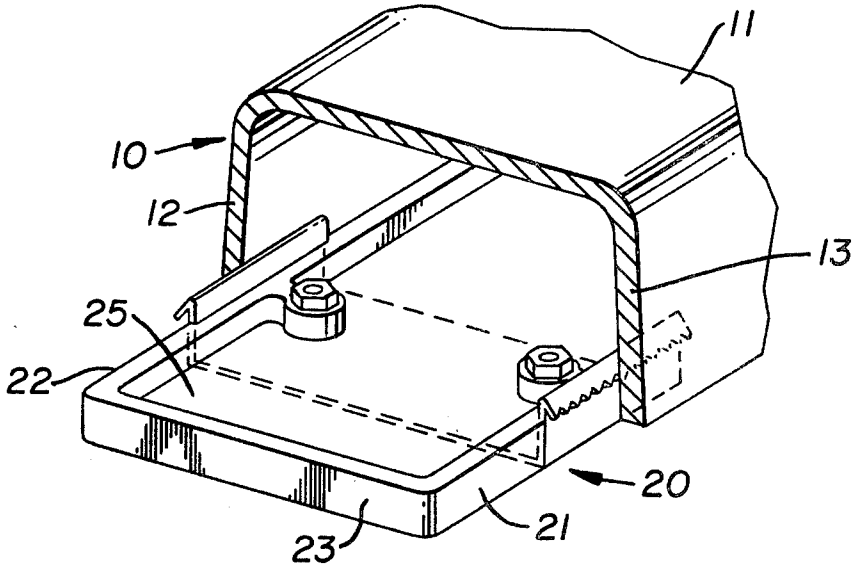
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[51] Int. Cl. E04c 2/40, E04f 19/02
[50] Field of Search 52/718, 717, 716, 287, 288, 316, 314, 311, 300, 730, 731, 732, 512, 98, 105, 284, 489

[56] References Cited
UNITED STATES PATENTS

2,000,466	5/1935	Howard	52/717 X
2,086,989	7/1937	Raad	52/284 X
2,137,508	11/1938	Powell	52/512
3,181,663	5/1965	Mason	52/718
3,300,940	1/1967	Golasz	52/718
3,341,994	9/1967	Olson	52/512 X
3,342,006	9/1967	Joseph et al.	52/718
3,365,854	1/1968	Gallo	52/716

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ABSTRACT: A plastic trim assembly adapted to be placed on window sills, for example. The device is essentially of three-piece construction including a base which can be secured to the existing sill, clips which fit about the base and are secured thereto and have gripping means for engaging a cover or cap unit which is snapped into place thereon and has a decorative outer surface simulating stone, for example. Both the cover and the base have a series of spaced, transversely extending reinforcements enabling the assembly to be cut to size.



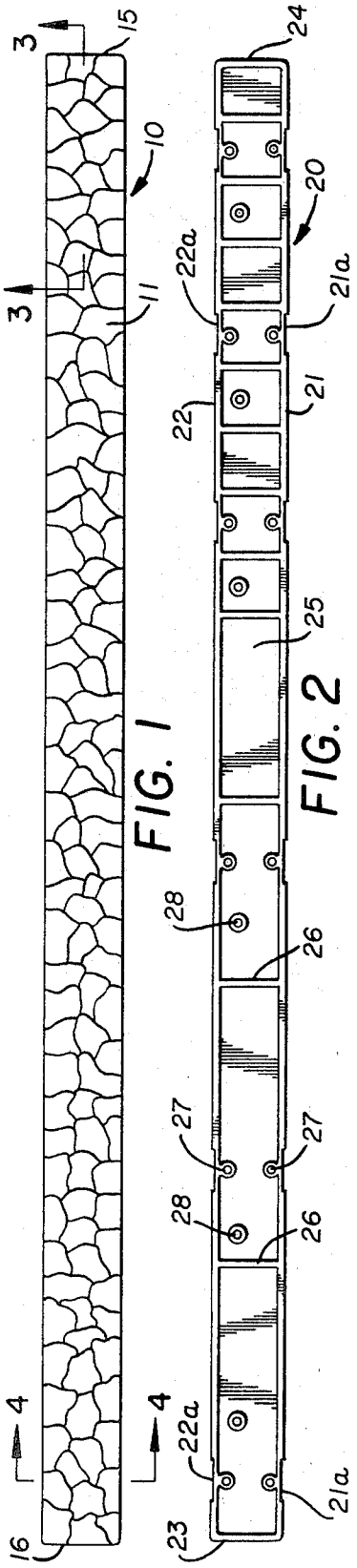


FIG. 1

FIG. 2

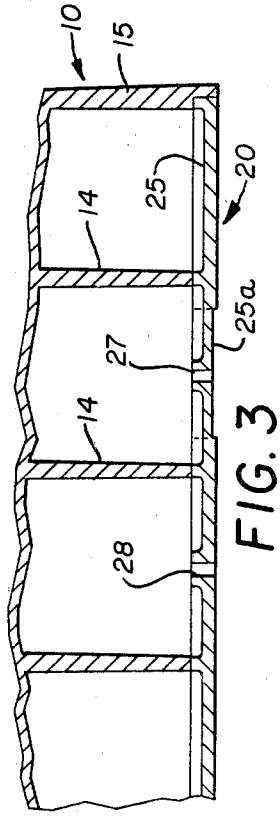


FIG. 3

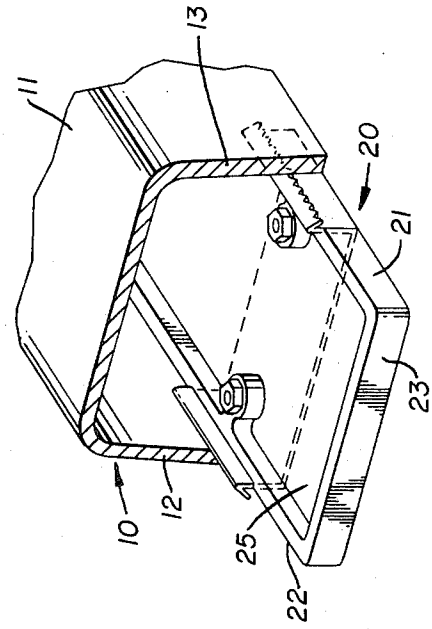


FIG. 6

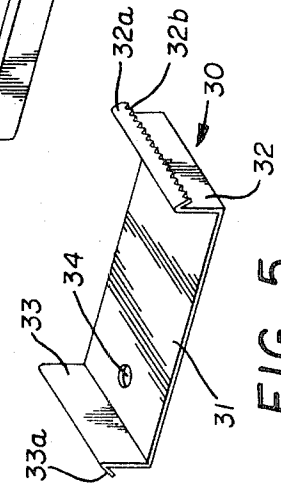


FIG. 5

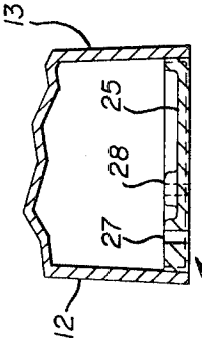


FIG. 4

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SILL TRIM ASSEMBLY

BACKGROUND OF THE INVENTION

This invention, in general, relates to the construction or home improvement field and more specifically relates to an improved, inexpensive and easy to install decorative trim strip assembly for windows and similar uses.

DESCRIPTION OF THE PRIOR ART

The following prior art patents are known to applicant:

U.S. Pat. No. 627,960 to Brower; U.S. Pat. No. 1,880,282 to Rithner; U.S. Pat. No. 2,240,951 to Guignon; U.S. Pat. No. 2,370,638 to Crowe; U.S. Pat. No. 3,217,453 to Medow; and U.S. Pat. No. 3,293,819 to Heirich.

While the art above, in general, shows facing or trim members which can be secured in place in a building, none of them show the unique connecting members disclosed in this application or the unique transverse ribs which enable the device to be cut to size on the job site. Furthermore, all attachment means are concealed when the unit is installed.

SUMMARY OF THE INVENTION

It has been discovered that a new and improved trim and facing assembly can be constructed by providing an elongate base member which can be readily secured to an existing building and clips which fit around and are secured to the base member.

These clips are provided with outwardly directed flanges having serrations thereon and in this fashion, a U-shaped cover member can be snapped into place over the base and the clips with the serrations preventing removal.

It has also been discovered that the utility of the trim assembly is enhanced if a series of spaced, transverse walls or ribs are provided both on the base and between the walls of the cover member. The respective ribs and walls are aligned and in this fashion, the assembly can be cut to size while still presenting a closed end wall at both ends.

Accordingly, production of an improved trim assembly of the character described becomes the principal object of this invention with other objects thereof becoming more apparent upon a reading of the following brief specification considered and interpreted in view of the accompanying drawings.

OF THE DRAWINGS

FIG. 1 is a top plan view of the cover strip.

FIG. 2 is a top plan view of the base strip.

FIG. 3 is a sectional view taken along the lines 3–3 of FIG. 1 partially broken away and showing the cover in place on the base.

FIG. 4 is a sectional view taken along the lines 4–4 of FIG. 1.

FIG. 5 is a perspective view of the improved clip.

FIG. 6 is a perspective view partially broken away and showing the interconnection between the base, the clip and the cover.

Considering first then FIGS. 1, 2 and 5, it will be seen that the assembly, which is the subject of this invention, includes three main components. These components are the cover member 10 which has a decorative outer surface 11, the base member 20 and the clips 30,30.

Considering first the cover member 10 in greater detail and referring to FIGS. 1, 3 and 6, it will be seen that the same is elongate and generally rectangular in planar configuration. As mentioned above, the outer surface of the cover 10 preferably has a decorative surface 11 formed in a rough pattern to simulate stone.

With particular regard to FIG. 6, it will be noted that the cover 10 has generally U-shaped cross-sectional configuration including opposed sidewalls 12 and 13 and a top surface 11 as well as end walls 15 and 16. In the preferred form of the invention, the cover 10 will be made of plastic or other suitable lightweight, inexpensive material.

Finally and considering FIG. 3, it will be seen that the cover member 10 has a series of transverse interior walls 14,14 spanning the distance between the sidewalls 12 and 13 and presenting a finished appearance similar to that of the end wall 15, for example, for purposes which will be described in greater detail below.

Turning next then to the base member 20, it will be seen that the same also has a generally rectangular planar configuration corresponding in its general dimensions to the dimensions of the cover 10 as will be clearly seen by comparing FIGS. 1 and 2 of the drawings.

The base 20 also has sidewalls 21 and 22 extending along its longitudinal length and interconnected by end walls 23 and 24. Also, this bottom member has a series of transverse ribs 26,26 spanning the distance between sidewalls 21 and 22 and spaced complementally with the transverse walls 14,14 of the cover member 10. In this regard, for example, assuming one measures from the right-hand end of both the cover 10 and base 20, the first rib 26 will be spaced the same distance from the end of the base as the first wall 14 will be spaced from the end of the cover. Successive ribs and walls will also have similar spacing.

Base 20 also has a series of apertures 28,28 in its bottom surface 25 with these apertures serving to permit the base to be secured to the supporting surface upon which it will rest by conventional screws.

Finally, the sidewalls 21 and 22 of the base have a plurality of recessed areas such as 21*a* and 22*a* which are designed to receive the clip 30 as will be more fully described. Associated with these recessed areas are screw mounting means 27,27 the purpose of which will also be described more fully below.

Turning next then to the clip 30 and referring particularly to FIG. 5, it will be seen that the clip is generally U-shaped and consists of a base 31 and opposed legs 32 and 33. These legs terminate in outwardly and downwardly directed flanges 32*a*, 33*a*, each of which has a serrated edge such as 32*b*. Finally, the clip has a pair of apertures 34,34 in the base 31 and the dimension between the walls 32 and 33 of the clip 30 is slightly greater than the external transverse dimension of the base 20 adjacent one of the recessed or cutout areas 21*a*,22*a*. This permits the legs 32 and 33 to flex slightly thus facilitating installation of the cover.

In use or operation of the improved assembly, it will first be assumed that the dimension of the area to be covered by the sill has been ascertained. At that time and assuming that this dimension is less than the dimension of the standard production model unit, it is merely necessary to cut off the base 20 and the cover 10 adjacent one of the transverse walls. This will have the effect of presenting a finished end surface when the device is assembled since the combination of a wall 14 and a rib 26 will result in a finished product resembling the normal end wall 15 when the unit is assembled.

In this regard, the greater number of conventional windows, etc. fall within a range of certain dimensions and therefore, the placement of the ribs 26,26 and walls 14,14 can be readily predetermined so that the assembly can be designed to fit virtually any existing window.

In this regard, it should be noted that a wide range of possible dimensions can be achieved by the unique arrangement of the walls 14,14 and ribs 26,26. Thus, it will be noted that these walls and ribs are not spaced in equal distances and it is possible to cut off the cover and the base from either end with the spacing between the walls, for instance, enabling a wide range of different overall longitudinal dimensions to be achieved.

Furthermore, the ribs 26,26, to a certain degree, and the walls 14,14, to a greater degree, provide increased stability and rigidity to the overall structure.

Continuing then with regard to installation and assuming that the base 20 and cover 10 have been cut to size, at least a pair of clips 30,30 will be secured to the base member 20 by placing them in the cutout areas 21*a* and 22*a* as is clearly shown in FIG. 6. The depth of cutout or recessed areas 21*a*,22*a* and the thickness of legs 32 and 33 of the clips are such that when in place on the base the outer surface of walls

21 and 22 present a flush or uninterrupted surface. In this regard, it might also be noted that the bottom of the base 20 also has a slightly recessed transverse area 25*a* associated with each of the recessed areas in the walls. In this fashion, due to the fact that the clip is a relatively thin metal piece, it can be put in place as shown in FIG. 6 and enable the bottom surface of the base to be substantially smooth and uninterrupted. Once the clip has been placed in position, it will be secured to the base by conventional screws utilizing the apertures 34,34 and mounting members 27,27 in the base.

Once the base and the clips have been secured in place, the base itself can be attached to the supporting surface by using conventional screws and the holes 28,28 which are provided in the bottom 25 of the base.

Following firm anchoring of the base in place, it is merely necessary to snap the cover 10 into place. As can be seen in FIG. 6, the flanges 32*a* and 33*a* of the clips are outwardly and downwardly directed and have serrated portions on their edges which will engage the interiors of the walls 12 and 13 of the cover 10. These serrations will have a tendency to dig into these walls and prevent removal of the cover 10 from the finished assembly.

Thus all the means for attaching the base to the support surface, the clips to the base and the cover to the base are completely concealed.

It has been shown, therefore, how, by providing a simple inexpensive, yet efficient three-piece assembly, a new and improved, easy to install trim assembly can be achieved.

It should be noted that while certain materials have been referred to in the foregoing specification, that the invention is not intended to be limited to the use of any specific material and any suitable lightweight material could be employed as an alternative.

While a full and complete description of the invention has been set forth in accordance with the dictates of the patent statutes, it should be understood that modifications thereof can be resorted to without departing from the spirit hereof or the scope of the appended claims.

What we claim is:

1. A sill trim assembly for mounting on a supporting surface, comprising;
   - A. a base adapted to be secured to said supporting surface;
   - B. a cover member having a planar configuration corresponding to the planar configuration of said base;
   - C. connecting means adapted to be mounted on said base and interconnect said cover and said base; and
   - D. said cover member being generally U-shaped in cross section and having
     1. a pair of opposed sidewalls
     2. a pair of opposed end walls
     3. a base portion and
     4. a series of spaced internal transverse walls spanning the distance between said sidewalls and lying parallel to said end walls.

2. The device of claim 1 further characterized by the fact that said base portion of said cover member has a decorative outer surface.

3. The device of claim 1 further characterized by the fact that
   - A. said base includes
     1. a pair of opposed sidewalls
     2. a pair of opposed end walls
     3. a bottom portion and
     4. a series of transverse ribs spanning the distance between said sidewalls and spaced in complemental relationship to said transverse walls of said cover member.

4. A sill trim assembly for mounting on a supporting surface, comprising;
   - A. a base adapted to be secured to said supporting surface;
   - B. a cover member having a planar configuration corresponding to the planar configuration of said base;
   - C. connecting means adapted to be mounted on said base and interconnect said cover and said base;
   - D. said base having
     1. a pair of opposed sidewalls each having a series of recessed areas therein
     2. a pair of opposed end walls and
     3. a bottom portion having
        - a. a first and second series of apertures therein, and
        - b. a series of recessed areas therein that span the distance between said recessed areas in said sidewalls; and
   - E. said first series of apertures being disposed in said bottom portion between the recessed areas in said sidewalls.

5. The device of claim 4 further characterized by the fact that said connecting means comprise
   - A. a U-shaped clip having
     1. a base portion and adapted to be secured to said base and
     2. a pair of opposed legs
        - a. projecting upwardly from said base and
        - b. each having an outwardly and downwardly extending flange adapted to engage said cover;
   - B. said clip being dimensioned to fit within said recessed areas of said base.

6. A sill trim assembly for mounting on a supporting surface of the character described, comprising;
   - A. an elongate base adapted to be mounted on a supporting surface and having
     1. a pair of opposed sidewalls each having a series of recesses therein and
     2. a pair of opposed end walls interconnecting said sidewalls and
     3. a bottom portion with
        - a. a second series of recessed areas spanning the distance between said recessed areas in said sidewalls and
     4. a series of spaced apart transverse ribs spanning the distance between said sidewalls;
   - B. a cover member of generally U-shaped cross-sectional configuration and having
     1. a pair of opposed sidewalls
     2. a pair of opposed end walls interconnecting said sidewalls
     3. a base portion and
     4. a series of transverse internal walls spanning the distance between said sidewalls and being spaced apart in complemental relationship with said ribs of said base; and
   - C. at least one U-shaped clip having
     1. a base portion adapted to be secured in said recessed areas of said base
     2. a pair of opposed legs
        - a. projecting upwardly from said base and
        - b. each having outwardly and downwardly extending flange adapted to engage said sidewalls of said cover
        - c. whereby said cover may be secured to said base.