

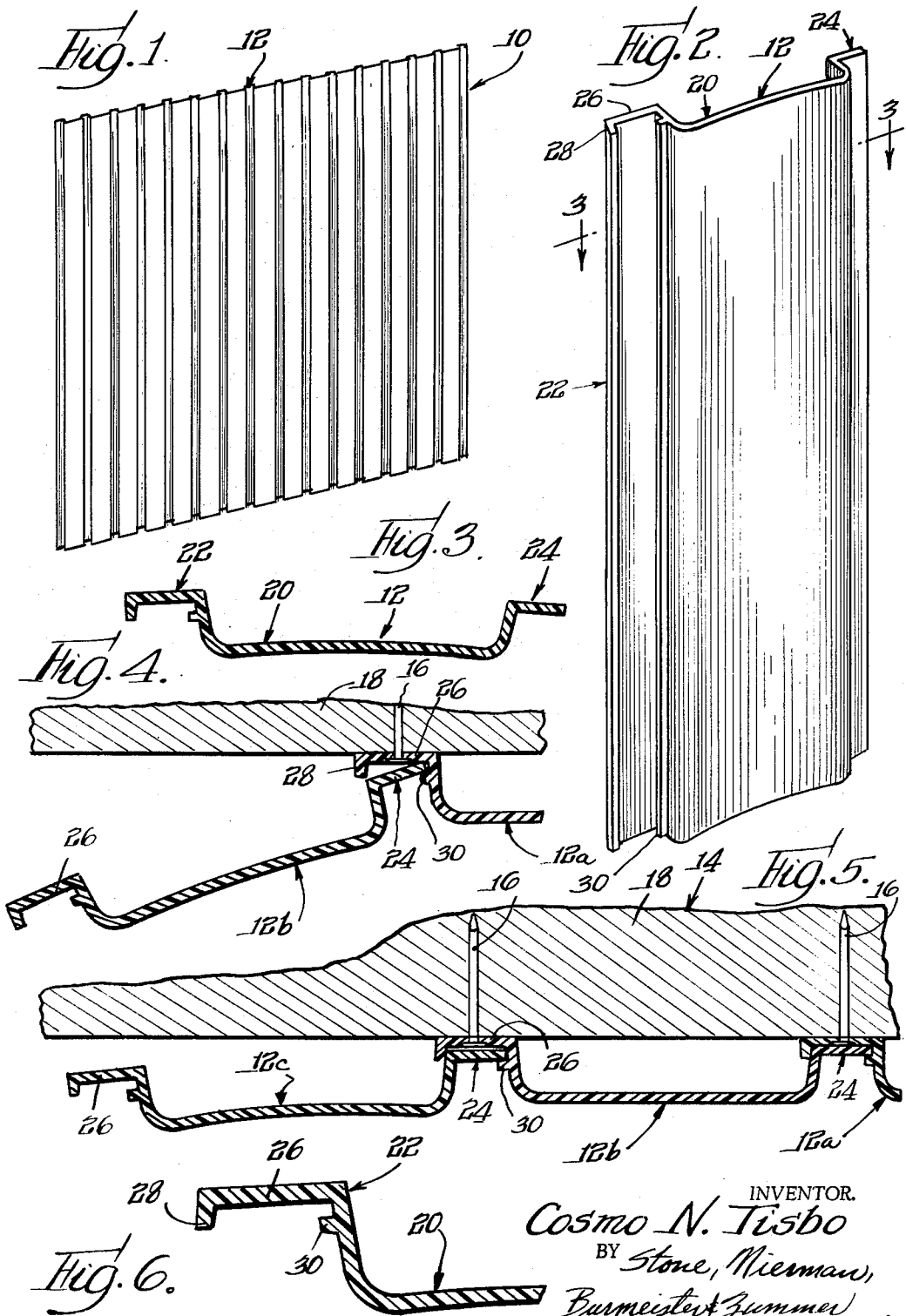
March 8, 1966

C. N. TISBO

3,238,687

PANEL

Filed Oct. 1, 1962



INVENTOR.
Cosmo N. Tisbo
BY *Stone, Mierman,*
Burmeister & Zummer
Atty.

1

3,238,687
 PANEL

Cosmo N. Tisbo, Prospect Heights, Ill., assignor to Custom Plastics, Inc., Bensenville, Ill., a corporation of Illinois

Filed Oct. 1, 1962, Ser. No. 230,133
 2 Claims. (Cl. 52—520)

This invention relates to an improved panel construction and to an improved panel strip for use in the panel construction.

In recent years, a demand for panelling for use in rumpus rooms, game rooms, family rooms, and outdoor use has arisen. The ordinary inexpensive panelling materials do not provide the housewife with a surface which is easy to maintain and simple to clean which features are particularly desirable. In many instances, it is also desirable to have a substantially watertight panel construction especially for outdoor use. In any panel construction, it is also desirable to have a simple means of mounting the panel. It is, therefore, a principal object of the hereindisclosed invention to provide a panel construction which is attractive in appearance, easy to maintain and simple in construction.

It is another object of the present invention to provide a panel construction which gives a substantially watertight panel and is easy to install.

It is a further object of the hereindisclosed invention to provide an improved panel strip for use in a panel construction which panel strip may be easily installed and interlocks with other panel strips to provide a substantially watertight interlocked panel.

It is a still further object of this invention to provide a panel strip which is capable of interlocking with identical panel strips and is inexpensive to manufacture.

Other objects and uses will become readily apparent to those skilled in the art, upon a perusal of the following specification in light of the accompanying drawing in which:

FIGURE 1 is a perspective view of a panel embodying the hereindisclosed invention;

FIGURE 2 is a perspective view of a panel strip used in the panel shown in FIGURE 1;

FIGURE 3 is a cross-sectional view taken on line 3—3 of FIGURE 2;

FIGURE 4 is a cross-sectional view showing how a panel strip embodying the hereindisclosed invention is positioned in cooperation with a second panel strip;

FIGURE 5 is a cross-sectional view showing a panel strip fixed to a frame and a second panel strip positioned in cooperation with the first-mentioned panel strip and being ready to be fixed to a frame; and

FIGURE 6 is an enlarged cross-sectional view of a female strip portion of the panel strip shown in FIGURE 2.

Referring now to the drawing, it may be seen that a panel generally indicated by numeral 10 and embodying the hereindisclosed invention generally consists of a plurality of interlocked panel strips 12 being mounted on a frame 14 and being held thereon by fastening means 16, that is, nails, as may be seen in FIGURES 4 and 5. In this instance, the frame 14 is a plurality of wooden boards 18 held together in a conventional fashion. It is readily apparent that the frame for the panel may be any suitable material, depending upon use of the panel.

Considering now the specific construction of the panel strip 12, it may be seen that the panel strip generally consists of an elongated face section 20, an elongated female strip 22 being formed integral with one edge of the face section, and an elongated male strip 24 formed integral with the opposite edge of the face section. In this instance, the panel strip is made of an extruded plastic ma-

2

terial and specifically a rigid vinyl. However, it is readily apparent that any suitable resilient material may be used, depending upon the specific application of the panel strip.

Looking now to FIGURE 3, it may be seen how the face section 20 is bowed transverse the length of the section and the other portions are formed integral with the face section. The male strip 24 is substantially flat, is adjacent to and extends away from the convex side of the bowed face section. The female strip 22 is also adjacent to the convex side of the bowed face section for reasons which will become apparent hereinafter, and extends away from the face section in a direction opposite to the male strip.

Looking now specifically to FIGURE 6, a construction of the female strip may be seen therein. The female strip includes an elongated flat base strip 26 which has a holding edge 28 formed integral with one elongated edge of the base strip. Formed integral with the opposite edge of the base strip is an elongated locking ledge 30. Inasmuch as all of the parts are formed integral with each other, it is readily apparent that the panel strip 12 may be readily extruded by a conventional plastic extrusion press using a simple die.

The panel 10 is assembled in a very simple fashion. First of all, the frame 14 is made up in a conventional manner. Although a frame is disclosed herein, it is readily apparent that the instant panels may be fixed directly to a wall which acts as a frame. Looking now to FIGURES 4 and 5 it may be seen how the panel 12 is assembled in a conventional fashion. Inasmuch as all of the panel strips are identical in construction, all of the parts are identically numbered; however, letter suffix are applied to the numbers 12 designating the panel strips in order to distinguish one panel strip from another in describing the assembly of the panel. Panel strip 12a is the first panel strip mounted on the frame. Nails 16 are driven through the base strip 26 into the frame to secure panel strip 12a to the frame. The male strip 24 of panel strip 12a, which is not shown, is fixed by either fixing it to the frame or fixing it to another member which cooperates with the panel.

A second panel strip, panel strip 12b, is then connected to panel strip 12a and fixed to the frame. In mounting panel strip 12b, the male strip 24 of the second panel strip is positioned between the locking ledge 30 and the base strip 26. As is clearly shown in FIGURE 4, the outermost edge of the male strip is positioned in engagement with the female strip 22, and the second panel strip is pivoted to bring the interior portion of the male strip 24 between the holding edge 28 and the locking ledge 30. Nails 16 are then driven through the base strip 26 of panel strip 12b to secure the panel strip to the frame and to hold the male strip in engagement with the locking ledge of its respective female strip as shown in FIGURE 5. A third panel strip 12c is then mounted in cooperation with panel strip 12b and on the frame in the same manner that panel strip 12b is connected to panel strip 12a and fixed to the frame. Any desired number of panel strips may be added to produce a panel of any selected size.

Mounting of the panel strips on the frame in cooperation with adjacent panel strips provides a panel which is substantially watertight at the joints of the panel strips. As is evident in FIGURE 3, the male strip 24 and the base strip 26 of each of the panel strips are not parallel inasmuch as the face section 20 is bowed. When a panel strip is initially positioned in engagement with its cooperative panel strip, the panel is in the attitude of panel strip 12c shown in FIGURE 5. After the male strip of a given panel strip is positioned in its respective female strip, the base strip 26 of the given panel strip is then pushed to-

3

ward the board 28 and nails are driven through the base strip 26. Inasmuch as the face section 20 is bowed and resilient, the resilience of the face strip holds the outermost edge of the male strip in watertight engagement with the locking ledge 30. It may be seen that the male strip also performs a dual function in that it covers the nail which holds its respective female strip in position to protect the nail head and to provide an attractive appearance. Once the base strip is fixed to the frame with its male strip locked into the male strip's respective female strip, the panel strip assumes a substantially flat attitude such as that shown for panel strip 12b in FIGURE 5.

It is important to note that a substantially continuous panel of any size may be made from the panel strips. As was mentioned above, any number of panel strips may be added. Since the panel strips are extruded sections, almost any length of panel strip may be made and the panel formed therefrom is still watertight. Even though the panel strips are of a substantial length and there is warpage along the length of the panel strips the panel formed therefrom is still watertight. Irrespective of any warpage of the length of the panel strips, the relative position of the male and female strips connected by the bowed face section remains constant, so that there is always the interlocking of two strips when the strips are flattened to produce a substantially watertight joint between the male and female strips of adjacent panel strips.

It is readily apparent that rather than using nails to fasten the female strips to the frame, any other convenient fastening means may be used, such as screw, clips or, in some instances, even an adhesive.

Although a specific embodiment of the hereindisclosed invention has been described in detail above, it is to be appreciated that those skilled in the art may make various and sundry modifications and changes without departing from the spirit and scope of the present invention. It is to be expressly understood that the instant invention is limited only by the appended claims.

What is claimed is:

1. A panel strip for use in cooperation with other identical panel strips comprising, an elongated resilient face section having a channel shaped cross-section, said face section having a major portion bowed with its bow transverse the length of the face section, an elongated continuous locking ledge formed integral with and extending outward from one of the channel sides of the face section and being adjacent to the convex side of the face section, an elongated base strip formed integral with and extending outward from the free end of said one channel side of the face section and being substantially parallel to the locking ledge, an elongated holding edge formed integral with the edge of the base strip spaced from the face section and extending substantially perpendicular to the base strip, and a flat male strip formed integral with the free edge of the other side of the channel of the face section, said face section having the major portion bowed with the bowed portion extending inward toward the base strip and the male strip, said male strip extending in a direction opposite to the base strip and being angularly disposed inward toward the face section relative to

4

the base strip for engagement with the locking edge of an adjacent panel strip.

2. A panel strip for use in cooperation with other identical panel strips comprising, an elongated resilient face section having a channel shaped cross-section, said face section having a major portion bowed with its bow transverse the length of the face section, an elongated continuous locking ledge formed integral with and extending outward from one of the channel sides of the face section, an elongated base strip formed integral with and extending outward from the free end of said one channel side of the face section and being substantially parallel to the locking ledge, an elongated holding edge formed integral with the base strip spaced from the face section and extending substantially perpendicular to the base strip toward the locking ledge, and a flat male strip having one edge formed integral with the free edge of the other side of the channel shaped face section and having a width less than the width of the base strip, said face section having the major portion bowed inward toward the base strip and the male strip, said male strip extending in a direction opposite to the base strip and being angularly disposed relative to the base strip, said male strip having a thickness slightly less than the minimum distance between the locking ledge and the base strip and being positionable between the holding edge of a second identical panel strip and the channel side of the second panel strip and beneath the locking ledge of said second panel strip for interlocking of said panel strips, whereby the bowed face section is flattened to hold the male strip in resilient engagement with the locking strip of a second panel strip to form a substantially water-tight seal therebetween, the holding edge of the second panel strip limits the movement of the male strip in one lateral direction and the channel side of the face section of the second panel strip limits movement of the male strip in the opposite lateral direction.

References Cited by the Examiner

UNITED STATES PATENTS

1,706,924	3/1929	Kane	189-86 X
2,430,200	11/1947	Wilson	50-235 X
2,620,906	12/1952	Ketchum	50-218
2,745,523	5/1956	Biggs	50-218

FOREIGN PATENTS

218,694	12/1961	Austria.
539,839	7/1955	Belgium.
503,358	5/1954	Canada.
875,251	8/1961	Great Britain.
896,611	5/1962	Great Britain.

OTHER REFERENCES

Architectural Record (publication), March 1949, p. 169.

CHARLES E. O'CONNELL, *Primary Examiner*.

JACOB SHAPIRO, EARL J. WITMER, *Examiners*.