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WALL PANELING JOINT SEAL

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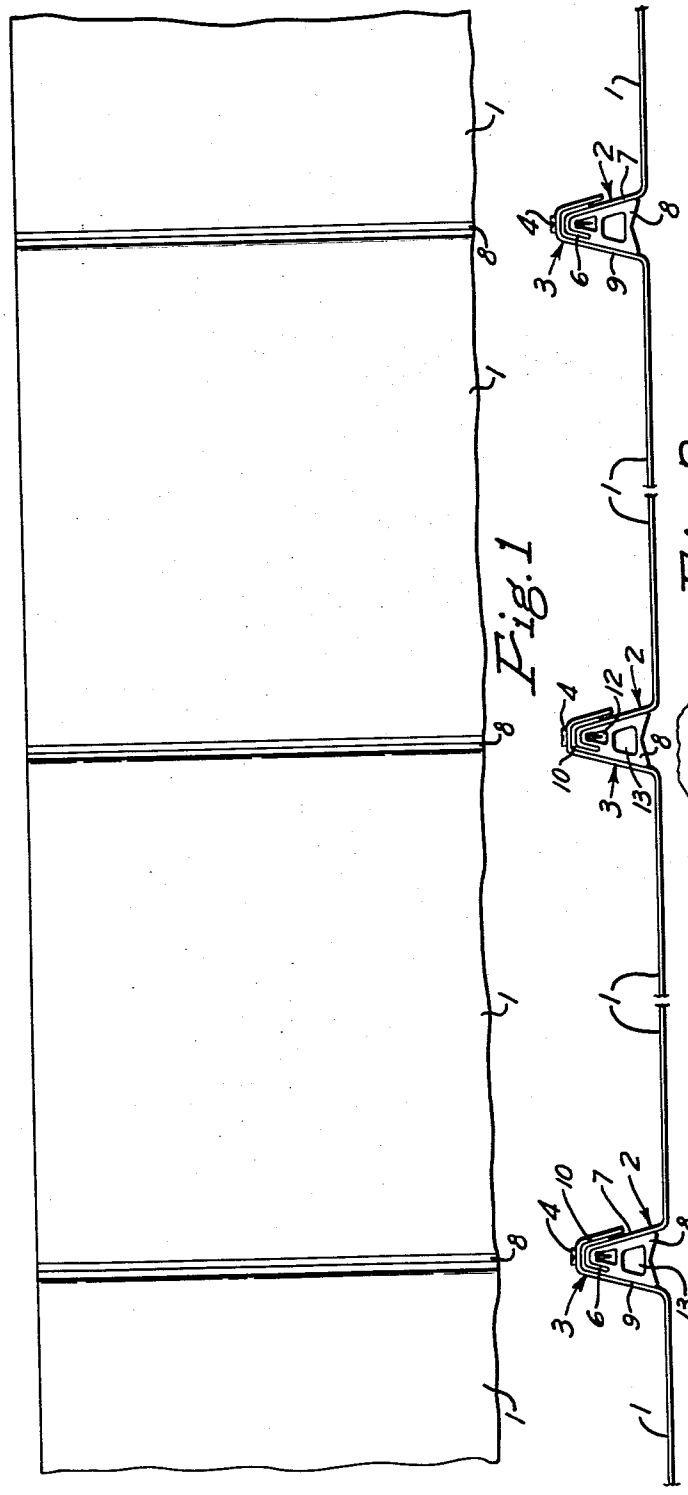

Fig. 1

Fig. 2

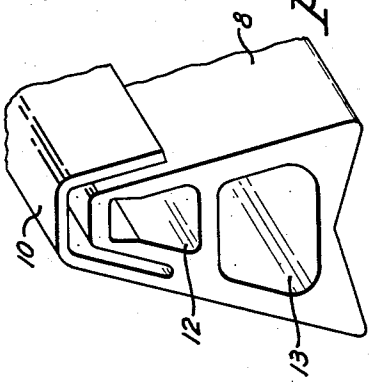

Fig. 3

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WALL PANELING JOINT SEAL

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This invention relates to sheet metal wall paneling, and more particularly to the joints between the panels.

A not uncommon way of making or finishing walls is to place a series of sheet metal panels side by side with their edges overlapping and fastened together. For this purpose the overlapping edges of the panels may be provided with integral nesting channels, which are secured together by fastening members extending through their engaging bases. Often, such a joint is caulked to seal it and to cover the exposed ends of the fasteners inside the channels. The caulking requires a considerable amount of time and it may not be uniform, whereby it detracts from the appearance of the wall.

It is among the objects of this invention to provide wall paneling of the type just referred to, in which a preformed sealing strip is clamped between the nesting channels and conceals the fastening members holding the channels together, in which the sealing strip can be quickly and easily applied, and in which all of the finished joints have the same appearance from the open side of the channels.

In accordance with this invention a plurality of sheet metal panels are disposed side by side in overlapping relation. Each panel has upper and lower ends and vertical side portions. The overlapping side portions of each pair of adjoining panels are formed with a pair of vertical nesting channels slightly spaced apart. The outer side wall of the inner one of the two nesting channels is narrower than its inner side wall. Seated in the inner one of the two nesting channels is the body of a sealing strip. This strip body extends out of the channel and laterally from side to side of the space between the two panels to fill the major portion of that space. The sealing strip also has a thin lip that projects from its body into the space between the nesting channels. Fasteners extend through the nesting channel bases and the sealing lip and into the body of the strip to connect the panels together and clamp the sealing strip in place. The sealing strip conceals the fasteners inside the channels.

The preferred embodiment of the invention is illustrated in the accompanying drawings, in which

FIG. 1 is a fragmentary view of the inner side of my wall paneling;

FIG. 2 is an enlarged view of the upper end of the paneling; and

FIG. 3 is a further enlarged, fragmentary perspective view of a sealing strip.

Referring to FIGS. 1 and 2 of the drawings, the interior surface of a wall is formed from a plurality of sheet metal panels **1** that are disposed side by side with their edges overlapping. These panels may be fastened to a supporting structure (not shown) in any suitable manner. If desired, the central portions of the panels may be provided with integral vertical corrugations to strengthen them. The opposite sides of each panel are provided with vertical channels **2** and **3** by rolling or otherwise bending the metal sheet into the desired shape. Preferably, the channels have flat bases with side walls diverging therefrom. The overlapping areas of the channels are formed by nesting each channel **2** in a channel **3** of the adjoining panel, and are held together by screws **4** extending through the channel bases.

In accordance with this invention, one channel **2** of each panel is made smaller than the other one so that when the channels on overlapping panels are nested the channels can be spaced a slight distance apart without throwing the faces of the panels out of alignment. Also, the outer side wall **6** of inner channel **2** is considerably narrower than the inner side wall **7** of that channel. Most of the space inside the channels is filled with sealing material. This material is a preformed sealing strip, preferably a semi-rigid plastic extrusion that yields sufficiently to seal the joint adequately. Vinyl plastic is perfectly satisfactory. As shown in FIGS. 2 and 3, the sealing strip has a wedge-shape body **8** that engages most of the inner side wall **7** of the inner channel and seats snugly in that channel. The strip body also extends laterally across the edge of outer side wall **6** and into engagement with the inner side wall **9** of the outer channel **3**. Integral with the strip body at a point near the outer edge of the inner channel, there is a thin lip **10** that also is channel-shape so that it will seat in the space between the nesting channels. The sealing strip can be attached easily to the inner channel **2** before the panels are overlapped, by sliding the strip lengthwise along the channel with its body **8** on one side and its lip **10** on the other side of the channel wall.

After two channels have been nested with the sealing strip in place, the screws **4** are driven through the parallel bases of the two channels and through the sealing lip **10** between them and into the body of the strip. These screws clamp the sealing lip between the channels and rigidly connect the panels. In order to save material and also to facilitate drawing the strip body tightly into the inner channel, the strip may be provided with a longitudinal passage **12**, into which the inner ends of the screws project. A parallel larger passage **13** saves still more material. It will be seen that all of the joints will have the same appearance, the channels will be filled, and the screws will be concealed by the sealing strips.

I claim:

1. Wall paneling comprising a plurality of sheet metal panels disposed side by side in overlapping relation, each panel having upper and lower ends and vertical side portions, the overlapping side portions of each pair of adjoining panels being formed with a pair of vertical nesting channels spaced apart slightly, the outer side wall of the inner one of said pair of channels being narrower than the inner side wall thereof, a sealing strip having a body seated in said inner channel in engagement with both side walls thereof and extending therefrom laterally across the longitudinal edge of said outer side wall from side to side of the space between said pair of panels, the strip having an integral thin sealing lip projecting from said body and disposed in the space between said nesting channels, and fasteners extending through the nesting channel bases and sealing lip and into said body to connect the panels together, the sealing strip concealing said fasteners inside the channels.

2. Wall paneling comprising a plurality of sheet metal panels disposed side by side in overlapping relation, each panel having upper and lower ends and vertical side por-

tions, the overlapping side portions of each pair of adjoining panels being formed with a pair of vertical nesting channels spaced apart slightly, the outer side wall of the inner one of said pair of channels being narrower than the inner side wall thereof, a plastic extrusion sealing strip having a body seated in said inner channel and extending across the longitudinal edge of said outer side wall and into engagement with the inner side wall of the outer of said nesting channels, said strip having a thin channel-shape lip integral along one edge with said body and disposed in the space between the nesting channels,

and fasteners extending through the channel bases and sealing lip and into said body to connect the panels together, the sealing strip concealing said fasteners inside the channels.

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