

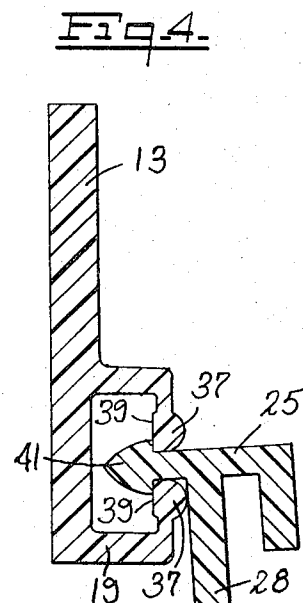
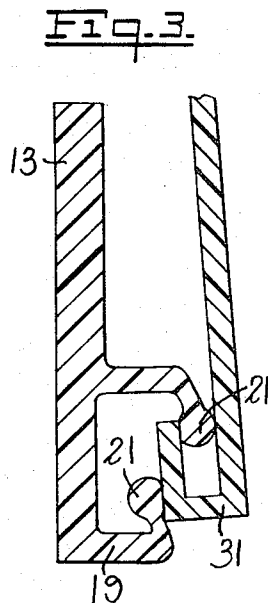
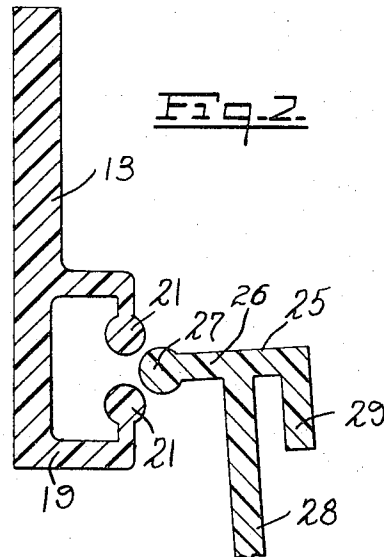
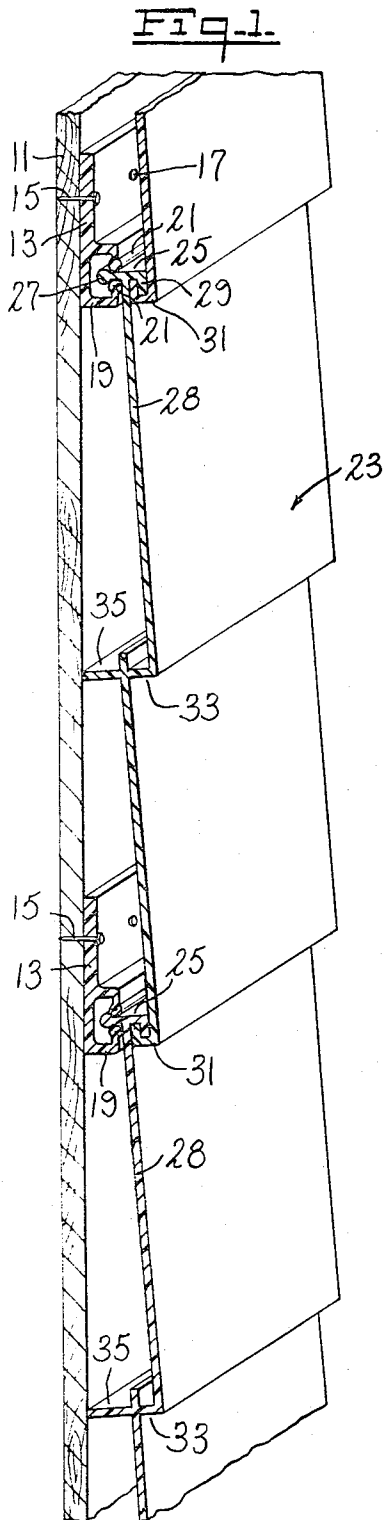
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ALUMINUM AND VINYL SIDINGS

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## ALUMINUM AND VINYL SIDINGS

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### ABSTRACT OF THE DISCLOSURE

This disclosure relates to a siding structure for buildings. The siding structure comprises an elongated attachment strip which is connected directly to the existing sheathing or other framing of the building. This attachment member defines a horizontally extending locking channel with a horizontally directed opening thereto. Such attachment strips are spaced vertically along the side of the building to be covered. A plurality of panels are provided, each having an inwardly directed flange along the top edge thereof adapted to be received in the locking channel and an outwardly directed downturned flange along the top edge thereof. Each panel has an inwardly directed upturned flange along the lower edge thereof adapted to engage the outwardly directed downturned flange of an adjacent panel.

This invention relates to construction materials and more particularly to siding and to means for attaching same to structures.

In the prior art there are many types of siding that have been used over the years. For example, in the dwelling type of construction wooden shingles and clapboard have been applied over the outside sheathing as the finished or outermost construction material. In addition, more recently siding such as the aluminum sidings have come into widespread use along with the more recent introduction of various types of plastic siding such as "vinyl" sidings, and the like. While these non-wooden sidings have various advantages and properties, they do suffer from one disadvantage which is commonly referred to as "oil canning". "Oil canning" is a condition which detracts from the appearance of the structure or dwelling and is manifested by a waviness or unevenness along the length of the siding. This is due to many factors, but mainly due to the manner in which the siding is attached to the sheathing or studs, not to mention the thin cross-sectional thickness of the aluminum or plastic siding. As a result many owners have been reluctant to employ aluminum, plastic or comparable siding to their dwellings or structures.

In view of the foregoing I have discovered a device for attaching aluminum and vinyl siding to structures which substantially eliminates all such "oil canning." This is accomplished by the use of a particular attachment plate fastening the siding to the dwelling or structure.

Briefly stated, the invention in one form thereof comprises an attachment member adapted to be attached directly to the sheathing of a structure. The attachment member defines a horizontal channel. A plurality of elongated panels adapted to extend in horizontal courses along the structure have inwardly directed flanges arranged to be lockably received in the channel. Each panel also has an outwardly directed downturned flange at the top thereof and a mating inwardly directed upturned flange at the bottom thereof.

In view of the foregoing an object of my invention is to provide new and improved means of attaching aluminum and vinyl siding to structures so as to prevent sagging and unevenness of the siding along the length thereof.

Another object of my invention is to provide a new and novel attachment plate which together with means on

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the siding prevents unevenness and sagging of the siding.

Other objectives of the invention will in part be obvious and will in part appear hereinafter.

The invention accordingly comprises a product possessing the features, properties and relationship of elements which will be exemplified in the product hereinafter described and the scope of the invention will be indicated in the claims.

For a fuller understanding of the nature and objects of the invention, reference should be had to the following detailed description taken in connection with the accompanying drawing in which:

FIG. 1. is a perspective view partially in section illustrating a preferred embodiment of my invention;

FIG. 2 is a partial cross sectional view of a portion of of the attachment plate and siding shown in FIG. 1;

FIG. 3 is a partial cross-sectional view showing a portion of the attachment plate and the bottommost portion of the siding, and

FIG. 2 is a partial cross sectional view of another embodiment of my invention.

Referring now to the drawings, there is shown in FIG. 1 sheathing 11 from a structure or dwelling which is usually applied to the studs or other support means which forms a part of the structure or dwelling (not shown). As shown, an attachment plate 13 according to the preferred embodiment of the invention, is attached to the sheathing 11 by suitable fastening means, such as nails, staples, screws and the like, 15. The attaching means are preferably in the form of nails or screws and are attached to the sheathing at apertures or eyes 17 which are spaced along the horizontal length of the attachment plate. In application, another attachment plate is spaced a suitable distance above the first attachment plate so as to facilitate the attachment of the particular section of the siding.

The attachment plate 13 (FIG. 2) comprises, at its lowermost portion, a C-shaped channel portion 19 which includes pairs of first and second flanges and which is provided with longitudinal channel beads 21 defining a longitudinally extending horizontally directed opening into the channel. The C-shaped channel portion and the longitudinal channel beads can either be provided continuously along the entire length of the attachment plate or at discrete positions thereof. In other words there can be sections along the attachment plate which do not possess the C-shaped channel member 19 or the beads 21.

The aluminum or plastic siding 23 is provided with a T-shaped portion 25 which includes an inwardly directed flange 26 and a longitudinal bead 27. The bead is designed so that it is slightly larger than the space between the longitudinal channel beads 21 and when engaged with the latter (FIG. 1) it forms a weathertight seal, with a central leg 28 on the T-shaped portion. The T-shaped portion 25 is also provided with an outwardly directed and depending portion 29 whose function will be described below.

The siding 23 which is illustrated here (by way of example only) is in the form of the ever popular clapboard type siding and it extends down from the T-shaped portion to a U-shaped portion 31 (FIG. 3) which provides an inwardly directed upturned flange. Intermediate the T-shaped portion 25 and the U-shaped portion 31 is an X-shaped member 33 (FIG. 1). This is formed as an integral part of the siding 23 and has a support extension 35 which is substantially at right angles with the vertical contour of the siding. This support extension bears against the sheathing 13 and provides the intermediate support for the siding.

When the particular siding is attached to the lowermost region on the structure, the U-shaped portion 31 engages the C-shaped channel portion 19 as shown in FIG. 3. Thereafter the workman or mechanic places the longi-

tudinal bead 27 between the longitudinal channel beads 21 thus securing the section of the siding in place. The next section of siding is placed above the previous section of siding and the C-shaped portion 31 engages the depending portion 29 as shown in FIG. 1.

Referring now to FIG. 4, there is shown an alternate embodiment of the T-shaped portion 25 as well as an alternate embodiment of the C-shaped channel portion 19. In this embodiment longitudinal channel beads 37 are provided with flats 39 which cooperate with a substantially triangular bead 41 on the T-shaped portion 25. This triangular bead at its base is much wider than the opening between the longitudinal beads 37 so as to require as in the previous embodiment a deformation of the respective portions, thus insuring a weather-tight seal.

The structure and arrangement shown substantially eliminates "oil canning" and provides a cheap and easy way of attaching siding to structures and dwellings. It is understood of course that additional means and members will be necessary, as is well known to those skilled in the art, in order to complete the siding operation.

However, the gist of my invention lies in the system of attachment between the siding and the structure and, while one type of siding has been shown for purposes of illustration, it is also to be understood that others are also adaptable to the instant invention.

It will thus be seen that the objects set forth above, among those made apparent from the preceding description, are efficiently attained and, since certain changes may be made in the above product without departing from the scope of the invention, it is intended that all matter contained in the above description and shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

It is also to be understood that the following claims are intended to cover all of the generic and specific features of the invention herein described, and all statements of the scope of the invention which as a matter of language, might be said to fall therebetween.

What is claimed is:

1. Building siding members mounted in horizontal courses on a building to simulate clapboard siding comprising a plurality of horizontally extending, spaced,

parallel elongated attachment members of synthetic material attached to a building surface, said attachment members each including an attachment plate and a pair of spaced substantially parallel first flanges projecting substantially normal to said plate outwardly of said building surface, said first flanges having second flanges on the remote ends thereof, said second flanges projecting toward each other in substantially co-planar relationship and terminating in enlarged beaded edges in spaced relation to each other, the space between the terminals of said second flanges constituting a restricted opening into locking channels defined by said plate and said first and second flanges, a plurality of elongated panels extending in horizontal courses along the building surface, each of said panels having an inwardly directed flange along the top edge thereof projecting toward said surface and terminating in a horizontal bead, said bead being larger than said restricted opening, said bead and said inwardly directed flange being lockingly received in said opening, each of said panels having an outwardly directed flange along the top edge thereof and a further flange integral therewith directed toward the lower edge of said panel, each of said panels having an inwardly directed upturned flange along the bottom edge thereof lockingly engaging the outwardly directed downturned flange of the adjoining panel in the next lower course.

2. The siding structure of claim 1 wherein said panels are provided with an elongated inwardly directed extension intermediate the edges thereof contacting the building surface and spacing the panel therefrom.

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