May 15, 1962 J. Z. HOLLMANN ETAL 3,034,261

INSULATING SIDING

Filed March 29, 1956

2 Sheets-Sheet 1

Fig. 1.

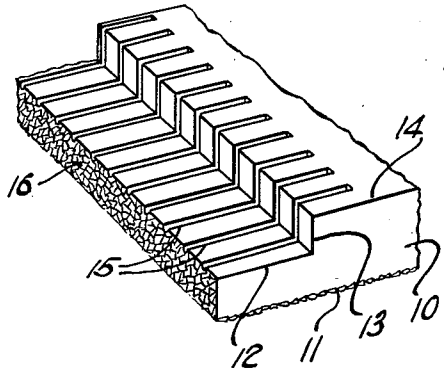


Fig. 2.

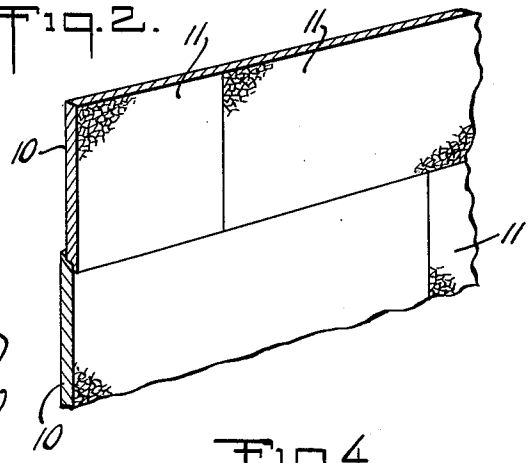


Fig. 3.

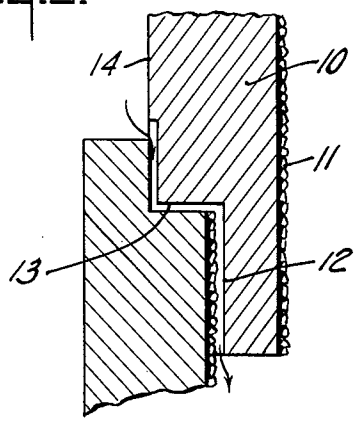


Fig. 4.

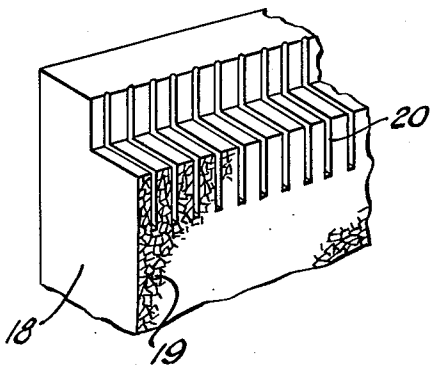


Fig. 5.

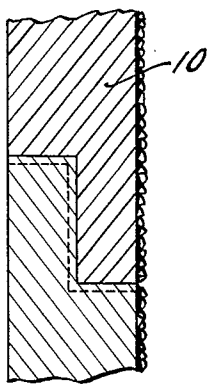
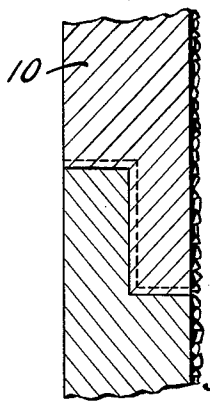


Fig. 6.



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Fig. 7.

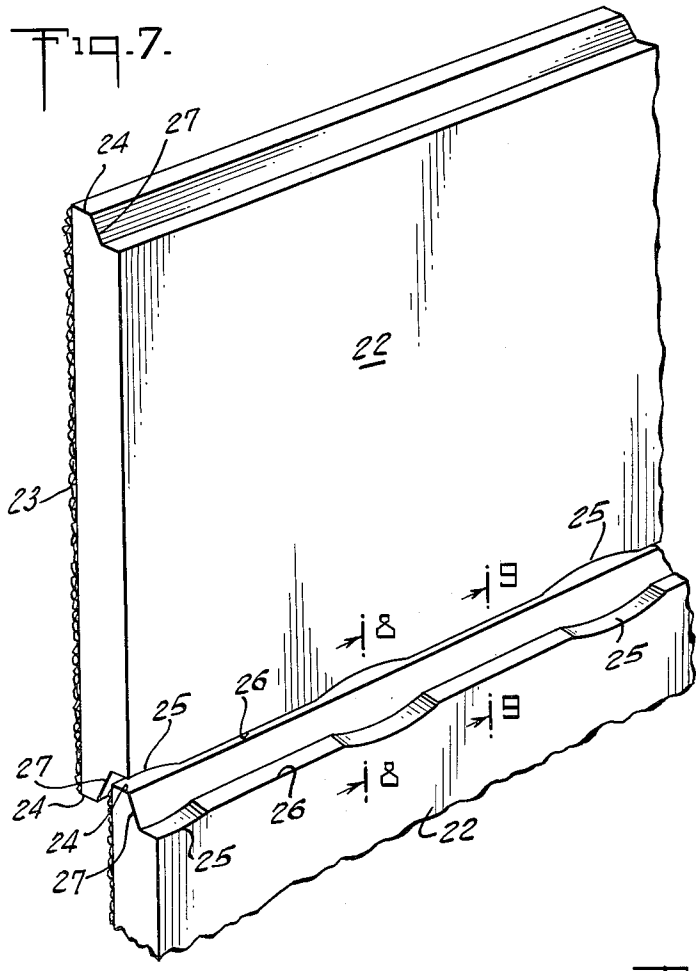


Fig. 8.

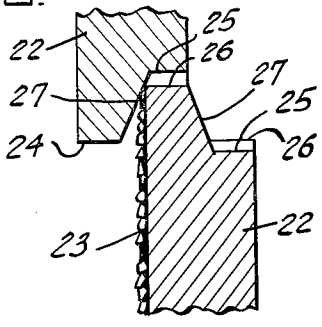
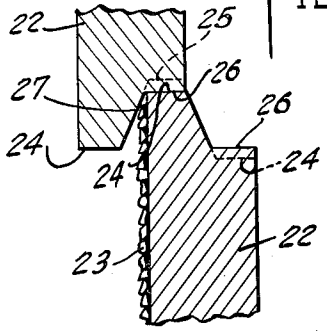


Fig. 9.



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United States Patent Office 3,034,261 Patented May 15, 1962

3,034,261

INSULATING SIDING

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Filed Mar. 29, 1956, Ser. No. 574,908
2 Claims. (Cl. 50—253)

This invention relates to an improved insulating siding and more specifically to improvements in insulating siding of the type comprising a plurality of rigid sections of decorative and weather-coated insulation board adapted to be mounted so as to form an exterior wall surface.

Insulating siding has been widely used for many years. It comprises insulation board which is a fibrous material made from wood, bagasse, or the like. The board is relatively non-flexible, light in weight and has good insulating value. Sections of the board usually one-half inch thick and preferably about one by three feet in size are preferably coated or saturated with asphalt. One side of the board is coated with a plastic material which may be plastic asphalt and building granules are embedded therein. The granules are ordinarily of a uniform color for decorative effect. The board may be perfectly rectangular and square on all edges, although preferably one or more edges contain a shiplap joint. Various designs may be impressed in the outer face of the board which may simulate brick or stone, for example.

When installed on the building wall the pieces of insulating siding ordinarily fit snugly together. Two possible problems may be created thereby. One problem is that moisture from within the house may not be able to pass from within the board and may condense on the back of the board and water may remain there which might cause deterioration of the board or of parts of the building. Another problem is that a small amount of rain water may enter the vertical joints, get behind the board and have no way to get out.

It is therefore an object of this invention to provide an improved insulating siding which will permit the escape of moisture from the back of the board through to the front of the board.

It is a further object of this invention to provide an improved insulating siding which will permit the escape of moisture from the back of the board through to the front of the board in an inexpensive manner.

It is a further object of this invention to provide an improved insulating siding which will permit the escape of moisture from the back of the board through to the front of the board even when tightly shiplapped.

The following description relates to preferred embodiments of the invention by which these objects are attained but it will be understood that variations and substitutions may be made within the scope of the claims.

In the drawings:

FIG. 1 is a rear elevation of a segment of one edge of an insulating siding panel illustrating the present invention; and

FIG. 2 is a front elevation of a plurality of assembled panels of insulating siding; and

FIG. 3 is a segmental cross-sectional view of two panels in assembled relationship illustrating the invention shown in FIG. 1; and

FIG. 4 is a front elevation of one corner of an insulating siding panel alternative to FIG. 1; and

FIG. 5 is a segmental cross-sectional view of two panels in assembled relationship alternative to FIG. 3; and

FIG. 6 is a segmental cross-sectional view of two panels in assembled relationship alternative to FIG. 5; and

FIG. 7 is a rear elevation partly in section of two panels in assembled relationship illustrating an alternative type from that shown in FIGS. 1 to 6; and

FIG. 8 is a segmental cross-section taken at the line 8—8 of FIG. 7; and

FIG. 9 is a segmental cross-section taken at the line 9—9 of FIG. 7.

In FIGS. 1, 2 and 3, the insulation board 10 is covered on the exterior by building granules 11 pressed into plastic asphalt. The boards are rabbetted along one edge forming a shiplap joint 12 which contains a bearing edge 13. In the shiplap 12 the bearing edge 13 and continuing on to the back of the panel 14 are a series of parallel indentations 15 which are adapted to permit the moisture to pass from the back to the front of assembled panels particularly as shown at FIG. 3. The board may be rabbeted at its opposite edge as shown at FIG. 4 wherein board 18 is coated at the front with granules 19 and the plurality of indentations 20 extend through the rabbeted or shiplap joint on to the granule face so that when the boards are in assembled relationship as at FIG. 3, the indentations 20 provide additional passage for moisture.

The board may contain shiplap joints as at FIG. 1 on only one edge thereof and an equivalent shiplap joint at the opposite edge thereof without indentations, in which case the boards may be assembled as at FIG. 5 or in reverse position, as at FIG. 6.

Ordinarily the insulating siding panels are assembled by either the method shown at FIGS. 5 and 6, which is most suitable for a brick design, and the like, or assembled as shown at FIGS. 2 and 3, which is most suitable for the so-called shake design. It will be seen that in either case, the invention is equally applicable.

FIGS. 7, 8 and 9 disclose an alternative device for permitting the passage of moisture which is particularly suitable for the shake type insulating siding. A board 22 containing granules 23 is cut back from the edges 24 forming a slanting inner face 27 terminating in a back ledge or shelf 26 which contains spaced indentations 25 permitting the passage of moisture from the inside to the outside of the assembled panels.

The fluting or indenting may be made by the use of a knurled roll, or the like means, for embossing or pressing the insulation board. A hot knurled roll may be most suitable for this purpose which may be used to burn in the indentations instead of pressing them in. These flutes or indentations can be put into the board on either side and may be at any intervals that may be desired. The depth of the indentations may vary. The indentations on the improved insulating siding may allow vapor to pass through the back of the assembled boards outwardly and similarly may permit water to pass outwardly which might otherwise accumulate in the horizontal joint.

We claim:

1. An insulating siding panel substantially rectangular in shape, said panel having a front face and a back face and having two opposite rabbeted edges, one rabbeted edge being in the front face and the opposite rabbeted edge being in the back face of the panel, a plurality of indentations in the panel in each of said rabbeted edges coextensive on both faces of the rabbeted edges to permit passage of water vapor from the inside to the outside of the panel when in an assembly with other like panels.

2. An insulating siding panel having a ship-lap joint

on at least one edge thereof, a plurality of grooves in the faces of the ship-lap in the panel communicating between the front face of the panel and the back face of the panel and passing through said ship-lap and extending from the ship-lap through the edge of the panel adjacent the ship-lap, each of said grooves being continuous and containing two substantially right angle turns to permit the passage of water vapor from the inside to the outside of the panel when in an assembly with other like panels.

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