July 4, 1961

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2,990,651

OVERLAP SHAKE SIDING

Filed May 16, 1958

2 Sheets-Sheet 1

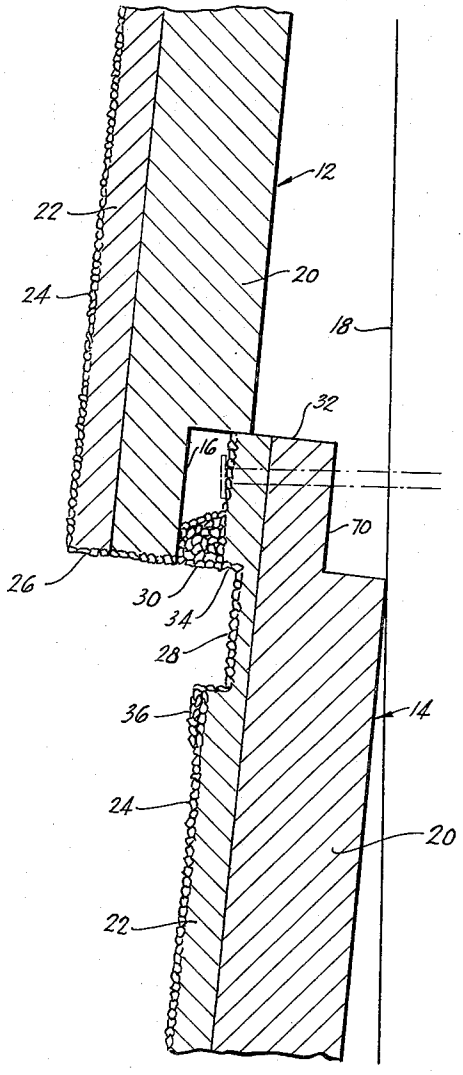


Fig. 1.

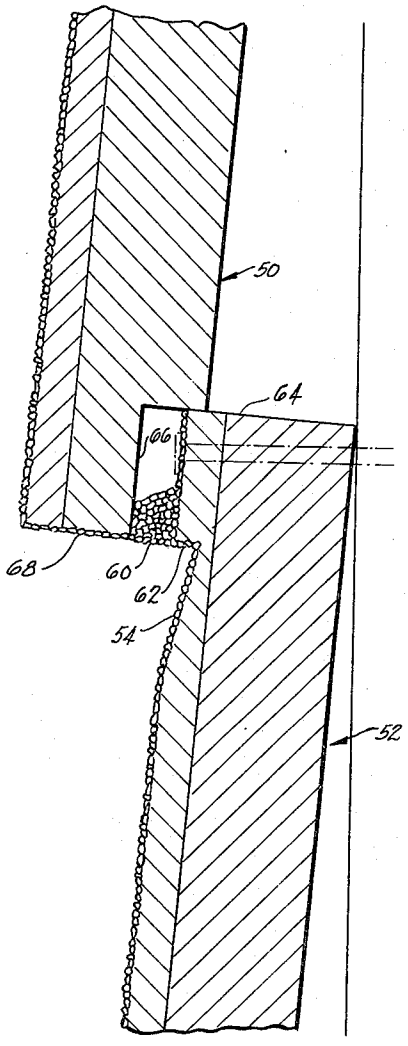


Fig. 2.

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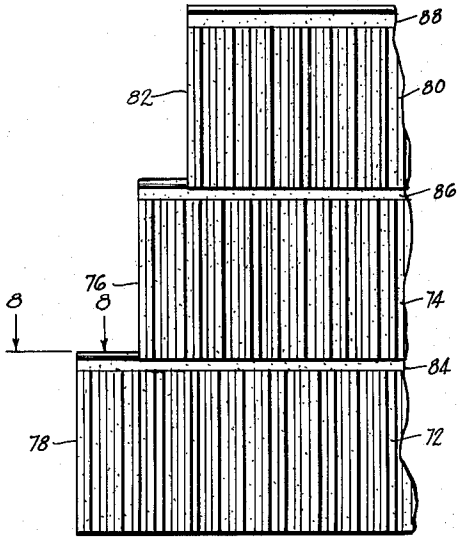


Fig. 3.

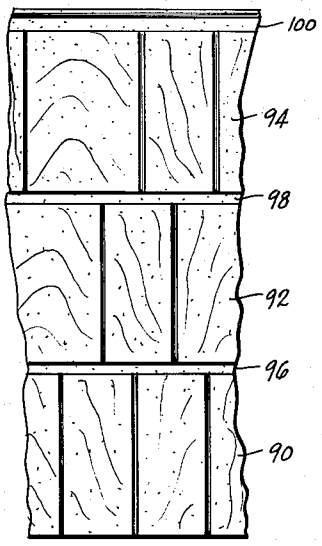


Fig. 4.

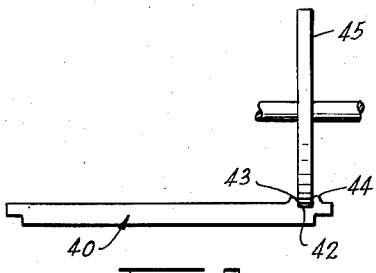


Fig. 5.

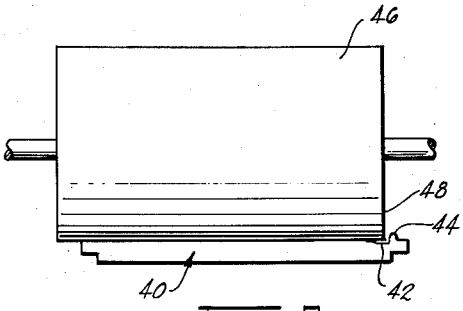


Fig. 6.

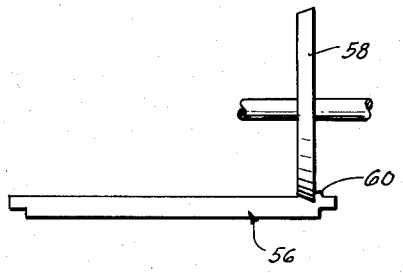


Fig. 7.

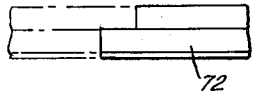


Fig. 8.

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2,990,651

OVERLAP SHAKE SIDING

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Filed May 16, 1958, Ser. No. 735,770
17 Claims. (Cl. 50—240)

This invention relates to building siding, and more particular to overlap shake siding which is applied in the form of relatively heavy panels, but which is intended to simulate shingles.

The general object of the present invention is to improve overlap shake siding of the specified character. In a common and popular size, the panels are about forty four inches long, eleven inches wide, and 5/8 inch thick. The edges are rabbeted at the back to a depth of 1/4 inch, leaving a thickness of approximately 3/8 inch. A panel is applied with its lower rabbeted edge overlying the upper edge of the next lower panel, and thus the apparent thickness of the simulated shingle, as exposed at the lower edge of the upper panel, is approximately 3/8 inch. This thickness is sometimes called the "butt thickness."

It is considered desirable to simulate a heavy shingle, that is, to increase the butt thickness. The primary object of the present invention is to provide a very substantial increase, say 1/8 inch or more, in the apparent butt thickness, without requiring an actual increase in the board thickness; without reducing the depth of the rabbet; without introducing extra filler strips between the overlapped boards; without increasing the cost of manufacture of the panel; and without increasing the labor and consequent cost of applying the panels to a building wall.

To accomplish the foregoing objects, and other more specific objects which will hereinafter appear, my invention resides in the overlap shake siding panel, and the elements thereof, as are more particularly described in the following specification. The specification is accompanied by a drawing in which:

FIG. 1 is a fragmentary vertical section showing the relation between overlapped panels made in accordance with my invention;

FIG. 2 is a similar fragmentary section showing a different form of the invention;

FIG. 3 is a fragmentary front view drawn to small scale and showing the relation of overlapped panels on a building wall;

FIG. 4 is a fragmentary view of panels simulating a different kind of shingle;

FIG. 5 is a schematic view explanatory of a step in the manufacture of the panel shown in FIG. 1;

FIG. 6 in a schematic view explanatory of another step in the manufacture of the panel shown in FIG. 1;

FIG. 7 is a schematic view explanatory of a step in the manufacture of the panel shown in FIG. 2; and

FIG. 8 is a fragmentary view looking in the direction of the arrows 8—8 in FIG. 3.

Referring to the drawing, and more particularly to FIG. 1, the lower edge of an upper siding panel **12**, is shown overlapping the upper edge of a lower panel **14**. Both panels are nailed in conventional fashion to a building wall **18**. The panels are alike, that is, the lower edge of panel **14** is as shown for panel **12**, and the upper edge of panel **12** is as shown for panel **14**. The panels have a rabbeted bottom edge as shown at **16**, to definitely fix the overlap when applying the panels to a building wall **18**.

The panels are conventional in comprising a composition or fiberboard base **20** characterized by good heat insulation properties. This is heavily coated with a waterproofing adhesive substance, typically asphalt, as shown at **22**. Usually, and preferably, the board **20** is impregnated with asphalt, apart from the coating at **22**. The

latter is surfaced with mineral granules, sometimes called "grit," is indicated at **24**.

In the prior practice, the panel has an overall thickness of about 5/8 inch, and the rabbet **16** has a depth of 1/4 inch, thus leaving an exposed edge at **26** with a thickness of about 3/8 inch.

In accordance with the present invention, however, the front face of the panel has an indented channel **28** extending parallel to the upper edge, and spaced a little below the upper edge. The formation of this channel serves to displace material and to raise a ridge **30** at the upper edge of the channel, and this ridge is nearer the upper edge **32** of the panel than the width of the rabbet **16**, so that the rabbet of upper panel **12** rests on the raised ridge **30** of lower panel **14**. In preferred form the upper edge **34** of channel **28** is so spaced from the upper edge **32** of the panel, relative to the width of the rabbet **16**, that the lower edge **26** of the upper panel **12** is flush with the lower edge of the ridge **30**, and also with the upper edge **34** of the channel **28**.

In the particular case shown, the rabbet **16** is 1/2 inch wide, and the upper edge of channel **34** is located 1/2" from the upper edge **32** of the panel. In any case, with this arrangement, the apparent thickness of the shingles (or the so-called butt thickness) is made up of the parts **26**, **30** and **34**, and adds up to 1/2 inch or more, instead of 3/8 inch. The channel **28** is indented to a depth of 1/16 to 1/8 inch, and the ridge **30** rises at least 1/16 inch and ordinarily, somewhat more than that.

The channel **28** is preferably indented by a narrow roller as schematically shown at **45** in FIG. 5, beneath which a panel **40** is being run. Of course, when the channel **42** is first indented, two ridges **43** and **44** are formed at the edges of channel **42**. However, one step in the treatment of the panel is to run it under a roller which helps level and control its final thickness, and this roller is so disposed as to flatten the ridge **43** without affecting the ridge **44**. This is schematically indicated in FIG. 6, in which panel **40**, having channel **42** and ridge **44**, is being run beneath a finishing roller **46**. The latter is disposed with its edge **48** over the channel **42**, so that it will flatten the ridge at the lower side of the channel, without however flattening the ridge **44**.

Referring now to FIG. 2 of the drawing, I there show overlapping panels **50** and **52**. These differ in two respects. The first is in providing a sloping channel **54** instead of a rectangular channel. To form such a channel, the roller which produces the channel is preferably frusto conical instead of cylindrical. This is illustrated in FIG. 7 in which a panel **56** is channeled by running it beneath frusto conical roller **58**, thereby producing a ridge **60** at one side of the channel, without producing any significant amount of corresponding ridge at the other side of the channel.

Reverting to FIG. 2, the ridge **60** corresponds to the ridge **30** in FIG. 1, and is similarly located, that is, the upper edge **62** of channel **54** is preferably spaced from the top edge **64** of panel **52**, an amount substantially equal to the width of the rabbet **66**. In a typical case, this spacing and width may be 1/2". The depth of the channel at **62** may be 1/16 to 1/8 inch, and ridge **60** has a height of 1/16 inch or more. The butt thickness is then made up of the lower edge **68** of panel **50**, and the ridge **60** and the channel **62**, making a total of 1/2 inch or more instead of 3/8 inch.

Another difference in panels **50** and **52**, compared to panels **12** and **14** in FIG. 1, is that there is a rabbet **66** at the lower edge only. The upper edge **64** has no rabbet, thereby differing from the panel shown at FIG. 1 in which the upper edge has a rabbet **70** (which ordinarily is similar in dimension to the rabbet **16** at the lower edge).

It will be understood that these elements are interchangeable, that is the triangular channel of FIG. 2 may be used on a panel having both edges rabbeted, as in FIG. 1, and conversely the rectangular channel of FIG. 1 may be used on a panel having only its bottom edge rabbeted, as shown in FIG. 2.

The ends of the panels may be rabbeted in accordance with present conventional practice. There are mating or reversed rabbets, that is, if the back is rabbeted at the left end, as shown in FIG. 8 for panel **72**, the front is rabbeted at the right end, thus permitting panels to be fitted with a flush fit at the ends as shown in broken lines for the next adjacent panel. In applying the panels to a wall, the overlapped ends of one pair are preferably offset or staggered relative to another pair, and this is shown in FIG. 3, in which a lower panel **72** is overlapped at its upper edge by a next panel **74**, which is applied with its end **76** offset sidewardly from the end **78** of panel **72**. Similarly, the next higher panel **80** overlaps the panel **74**, but its end **82** is offset still further to the right. The channeling of these panels is indicated at **84**, **86** and **88**.

In the example shown in FIG. 3, the simulated shingles are marked by closely adjacent vertical lines, some of which are deeper than others. However, the invention is applicable to overlapping panels simulating different kinds of shingles, and another example is illustrated in FIG. 4. Here again the panel **90** is overlapped by panel **92**, which in turn is overlapped by panel **94**, and each of the panels has a channel **96**, **98** and **100** to provide desired increased butt thickness. The panels have rather widely spaced lines to simulate separate shingles, and these shingles have wavy lines to suggest a wood surface. The ends of the panels are not shown in FIG. 4, but it will be understood that here again the ends preferably have reverse or mating rabbets for a flush fit, and that the end joints are preferably located in stepped or sidewardly displaced relationship.

It is believed that the construction, method of manufacture, and method of applying my improved overlap shake siding panel, as well as the advantages thereof, will be apparent from the foregoing detailed description. It will also be apparent that while I have shown and described my invention in several preferred forms, changes may be made in the structures shown, without departing from the scope of the invention as sought to be defined in the following claims.

I claim:

1. A building siding panel simulating thick shingles, said panel being rectangular with a rabbeted bottom edge for overlap, said panel comprising a composition base board coated with a waterproofing adhesive substance, and the latter being surfaced with mineral granules, the front face of said panel having an indented channel extending parallel to the upper edge a little below the upper edge and a ridge of displaced material at the upper edge of the channel, said ridge being nearer the upper edge of the panel than the width of the bottom rabbet, and being raised relative to the main front surface of the panel, whereby the rabbet of an upper panel will rest on the ridge of a lower panel in order to increase the apparent thickness of the shingles.

2. A building siding panel simulating thick shingles, said panel being rectangular with a rabbeted bottom edge for overlap, said panel comprising a composition base board coated with a waterproofing adhesive substance, and the latter being surfaced with mineral granules, the front face of said panel having an indented channel extending parallel to the upper edge a little below the upper edge and a ridge of displaced material at the upper edge of the channel, and being raised relative to the main front surface of the panel, the upper edge of the channel being so spaced from the upper edge of the board relative to the width of the bottom rabbet that the rabbet of an upper panel will rest on the ridge of a lower panel with the lower edge of the upper panel substantially flush with the lower edge of the ridge.

3. A building siding panel simulating thick shingles, said panel being rectangular with a rabbeted bottom edge for overlap, and with rabbeted end edges for a flush butt fit at the ends, said panel comprising a composition base board impregnated and heavily coated with asphalt, and the latter being surfaced with mineral granules, the front face of said panel having an indented channel extending parallel to the upper edge a little below the upper edge and a ridge of displaced material at the upper edge of the channel, said ridge being nearer the upper edge of the panel than the width of the bottom rabbet, and being raised relative to the main front surface of the panel, whereby the rabbet of an upper panel will rest on the ridge of a lower panel in order to increase the apparent thickness of the shingles.

4. A building siding panel simulating thick shingles, said panel being rectangular with rabbeted top and bottom edges for overlap, and with rabbeted end edges for a flush butt fit at the ends, said panel comprising a composition base board impregnated and heavily coated with asphalt, and the latter being surfaced with mineral granules, the front face of said panel having an idented channel extending parallel to the upper edge a little below the upper edge and a ridge of displaced material at the upper edge of the channel, and being raised relative to the main front surface of the panel, the upper edge of the channel being so spaced from the upper edge of the board relative to the width of the bottom rabbet that the rabbet of an upper panel will rest on the ridge of a lower panel with the lower edge of the upper panel substantially flush with the lower edge of the ridge and the upper edge of the channel in order to greatly increase the apparent thickness of the shingles.

5. A building siding panel as defined in claim 1 in which the channel is approximately triangular in cross-section, with the deep edge of the channel at the top.

6. A building siding panel as defined in claim 2 in which the channel is approximately triangular in cross-section, with the deep edge of the channel at the top.

7. A building siding panel as defined in claim 3 in which the channel is approximately triangular in cross-section, with the deep edge of the channel at the top.

8. A building siding panel as defined in claim 4 in which the channel is approximately triangular in cross-section, with the deep edge of the channel at the top.

9. A building siding panel as defined in claim 1 in which the channel is approximately rectangular in cross-section.

10. A building siding panel as defined in claim 2 in which the channel is approximately rectangular in cross-section.

11. A building siding panel as defined in claim 3 in which the channel is approximately rectangular in cross-section, and in which the lower edge of the channel is devoid of a raised ridge such as that existing along the upper edge of the channel.

12. A building siding panel as defined in claim 4 in which the channel is approximately rectangular in cross-section, and in which the lower edge of the channel is devoid of a raised ridge such as that existing along the upper edge of the channel.

13. An exterior building wall covered with a plurality of siding panels as defined in claim 1 in which the ends of the panels are offset or staggered, and in which the lower rabbeted edge of each upper panel overlies the adjacent raised ridge of each lower panel.

14. An exterior building wall covered with a plurality of siding panels as defined in claim 2 in which the ends of the panels are offset or staggered, and in which the lower rabbeted edge of each upper panel overlies the adjacent raised ridge of each lower panel with the lower edge of the upper panel substantially flush with the lower edge of the ridge and the upper edge of the channel, whereby

the apparent thickness of the lower edge of the upper panel is increased by both the height of the ridge and the depth of the channel.

15. An exterior building wall covered with a plurality of siding panels as defined in claim 3 in which the ends of the panels are offset or staggered, and in which the lower rabbeted edge of each upper panel overlies the adjacent raised ridge of each lower panel.

16. An exterior building wall covered with a plurality of siding panels as defined in claim 4 in which the ends of the panels are offset or staggered, and in which the lower rabbeted edge of each upper panel overlies the adjacent raised ridge of each lower panel with the lower edge of the upper panel substantially flush with the lower edge of the ridge and the upper edge of the channel, whereby the apparent thickness of the lower edge of the upper panel is increased by both the height of the ridge and the depth of the channel.

17. A building siding panel simulating thick shingles, said panel being rectangular with a rabbeted bottom edge for overlap, the front face of said panel having an indented channel extending parallel to the upper edge a little below the upper edge and a ridge of displaced material at the upper edge of the channel, said ridge being nearer the upper edge of the panel than the width of the bottom rabbet, and being raised relative to the main front surface of the panel, whereby the rabbet of an upper panel will rest on the ridge of a lower panel in order to increase the apparent thickness of the shingles.

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