June 8, 1954 W. REMSTEIN 2,680,267

CORNER ELEMENT

Filed Aug. 4, 1949

FIG. 1.

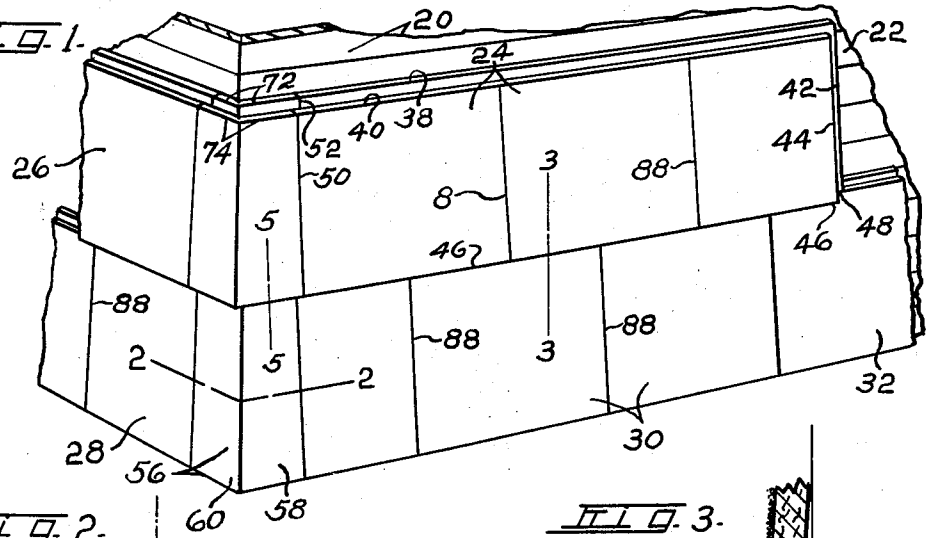


FIG. 2.

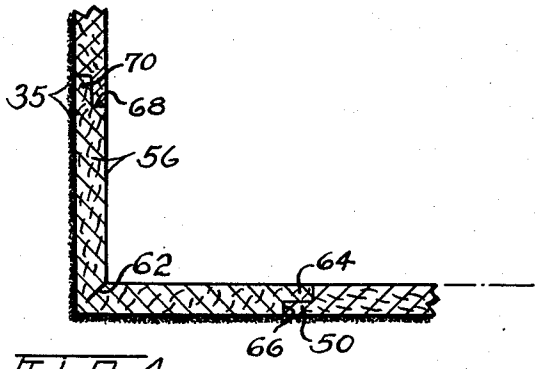


FIG. 3.

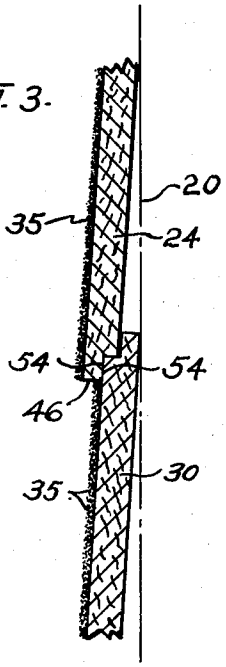


FIG. 4.

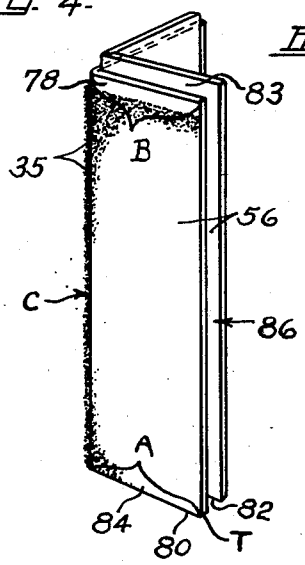
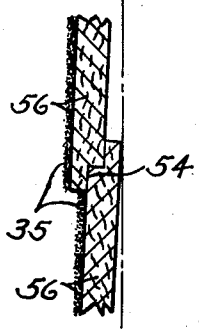


FIG. 5.



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Patented June 8, 1954

2,680,267

UNITED STATES PATENT OFFICE

2,680,267

CORNER ELEMENT

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Application August 4, 1949, Serial No. 108,459

1 Claim. (Cl. 20—5)

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This invention relates to siding for building construction and more particularly a corner construction for insulating sectional covering material therefor.

Exterior siding in the form of asphalt impregnated insulating board having various exterior simulated appearances such as shingle, brick or stone is commonly employed to provide an exterior insulating and protecting sheathing for buildings, such as dwellings and the like. Such material usually is supplied in relatively rigid panels of standard dimensions and having interlocking edge formations, for example such as shiplap, in order to facilitate installation with tight seams. Where such material is used, difficulty is had in providing a corner construction of a satisfactory nature, and the usual practice is to provide an overlapping angle piece at the corners which is applied, after the adjacent sides have been covered up to the corners. Such angle pieces rarely match the simulated appearance and spoil the overall effect, and where a shingle construction is employed, fail to make a tight joint over the slight saw tooth shingle surface. Further, the overlap is wasted insofar as effectiveness is concerned.

The present invention is directed to a corner construction in which the corner angle piece may be laid flush with the siding without overlap, or flush with and act as an extension of a shingle or brick simulated siding whereby the appearance and overall effect of a continuous shingle or brick surface from corner to corner is provided.

Accordingly, it is an object of the present invention to provide a corner element or angle piece, which may in effect interlock with and form a natural extension of the side covering.

Another object of the invention is to provide a corner construction in which the corner element cooperates with both adjoining sides with suitable interlocking edges in all respects similar to the interlocking siding edges.

A further object of the invention is to provide a siding construction which shall be economical in cost, eliminate overlap, easy to install and provide with the remaining siding a uniform overall effect as well as a weather-tight enclosure.

The above and other novel features of the invention will appear more fully hereinafter from the following detailed description when taken in conjunction with the accompanying drawings. It is expressly understood that the drawings are employed for purposes of illustration only and are not designed as a definition of the limits of the invention, reference being had for this purpose to the appended claims.

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In the drawings, wherein like reference characters indicate like parts:

Figure 1 is a perspective fragmentary view of a corner simulating shingles;

Figure 2 is a section taken on the line 2—2 of Figure 1;

Figure 3 is a section taken on the line 3—3 of Figure 1;

Figure 4 is a perspective view of a corner section; and

Figure 5 is a section taken on the line 5—5 of Figure 1.

Referring to Figure 1, there will be seen the side wall surface of a house or other building **20** composed of clapboards **22** or other siding, to which has been applied insulating sections **24**, **26**, **28**, **30** and **32**, simulating shingles or the like. Each section is preferably rectangular and is of standard dimensions, except short sections such as **24** may be utilized to break the vertical joints, provided with an edge suitably shaped to interlock with the adjoining sections to the right or left and to provide a shingle-like overlap at top and bottom. In the arrangement shown, a shiplap construction is utilized.

Each standard flat section may be composed of fibrous insulation board such as Celotex or the like, the same being impregnated with asphalt to render the same impervious to moisture, and the exterior is covered with a thick coating of crushed rock, ceramic granules, or the like **35**, fused upon a heavy asphalt surface at relatively high temperature. Each such section is provided along its edges with a tongue and groove, the section **24** having along its upper edge a tongue **38**, and groove or shoulder **40**, and along its right hand end, a similar tongue **42**, and shoulder groove **44**. Along its lower edge is a reversely arranged tongue **46** formed as a projection of the outer surface, there being a shoulder groove **48** therebehind. At its left hand edge is a similar tongue **50**, formed as a projection of the outer surface, there being a shoulder groove **52** therebehind.

It will be seen in the sectional view, Figure 3, that the thick coating of crushed rock or ceramic material is removed as at **54** for a distance equal to the length of the tongue **46** in order to permit the positioning of each course of sections in overlapping relation upon one another in shingle-like fashion, the sections being slightly sloped or slanted relative to the siding **20** in the manner of shingles.

As has previously been described, such construction, while forming excellent protection for the side walls, presents difficulties at corners, since the fibrous insulation board is prepared in mass production and cannot be provided with edges such as would be presentable and have shingle-like appearance if exposed at a corner, as is the case with natural wood shingles.

In order to provide a suitable corner construction which may be mass produced, and which will be adaptable for use with the panel sections described, a novel corner section or piece **56** is provided having flanks **58** and **60** angularly disposed, such flanks being constructed of the same material preferably as the siding material, and in the same manner, for example insulating board suitably impregnated with asphalt, and coated with crushed rock, minerals, ceramics or the like bonded in asphalt. Such corner section, while flat and before being formed to an angle, is suitably scored on its inner surface by providing during manufacture a deep 90° V cut, such cut being closed as at **62** upon forming to substantially a right angle. The cut may be coated with excess asphalt to seal the cut **62**. Each flank is provided with a tongue **64** and shoulder groove **66** along one side edge, the tongue being an extension of the inner surface, and a shoulder groove **68** and tongue **70** along the other side edge, the tongue being an extension of the outer surface. The upper edges of both flanks are provided with an inside tongue **72** and outer shoulder groove **74**, and the ceramic material commences at a distance down from the shoulder **74**, as at **78**, equal to the width of the tongue. The lower edges of the flanks are provided with an outer tongue **80**, and inner groove **82**.

It will be seen from the description of the corner element that the same is designed to interlock and fit with adjoining panel sections, the sections interfitting in such manner as to give the appearance of a normal abutment of adjoining natural wood shingles. It will appear that such corner elements, when arranged one over the other, will be inclined from the vertical, and for a perfect fit, lower dimension A of each flank will preferably be greater by the thickness of the tongue T than the dimension B at the top of the flank, and that preferably the upper and lower edges generally indicated at **83** and **84** will bear right angles to the interlocking edge generally indicated as at **86**.

From the foregoing, it will be observed that sections, if provided with a simulated shingle appearance, the sections having their ceramic surfaces scored suitably as at **88**, to simulate abutting shingles, the novel corner elements set forth will provide a flush continuation of the side sections to the corner, the appearance of which will be substantially authentic, and afford even better protection against the weather than wood shingles butt joined as in the usual practice at the corners.

Many and varied combinations may be designed to suit conditions, it being the main feature of the invention to provide a finished authentic corner, which will give the utmost protection against weather and in which all joints will be interlocking, of, for example, the shiplap type.

In covering a building with the shingle or brick simulated insulation, the present invention contemplates the positioning of the corner elements upon the building initially, and thereafter placing the siding sections working toward the center of the building. If the face of the building be broken vertically as by a door or window, it may be desirable to work from either side toward the center, so that the corners may have an authentic appearance. However, where such is not possible, the last section to be placed may be cut and provided with a tongue and groove and fitted into the corner section. Any two adjacent panel sections may be angularly bowed in position and then laid flat, the tongues and grooves thereby being extended into the adjacent panels already laid.

In some instances, a building wall may have a slight flare at the bottom. Where such is the case, the sections adjacent to the corner sections will necessarily be provided with inclined edges adjoining the corner section, and provided with a suitable tongue and groove edges to interfit with the corner section. If desired, corner sections having greater flank width at the bottom may be provided, but it will appear that such construction does not lend itself so well to mass production.

It will appear from the foregoing, that there is provided by reason of the novel corner sections described, a novel panel siding construction which may simulate wood, shingles, stone, brick, and the like, and which may extend from corner to corner with courses (if shingles) or the entire surface flush with the corner pieces. By such a construction, the overall simulated appearance will not be disturbed by the corner pieces, such pieces actually being a continuation of the central intermediate sections. Thus, not only is the overall appearance improved, but there is provided sealed protection unbroken at the corners.

While several modifications of the invention have been illustrated and described, it is to be understood that the invention is not limited thereto. As various changes in the construction and arrangement may be made without departing from the spirit of the invention, as will be apparent to those skilled in the art, reference will be had to the appended claims for a definition of the limits of the invention.

What is claimed is:

A shingle simulating corner element for siding of a building comprising an integral angle piece of asphalt impregnated insulating board having angularly disposed flanks each extending from a common corner edge, each of said flanks having shiplap edges along its top and bottom and shiplap edges along its side edges remote from the corner edge to interfit with adjoining rectangular shingle simulating sections having complemental adjacent shiplap edges and being otherwise of substantially uniform thickness, said angle piece being formed from a single piece of flat stock having an unbroken outside surface and having straight side edges and having a deep 90° V-notch formed on its inside surface dividing said stock into said flanks, said notch being closed and sealed with excess asphalt by the forming of said flanks at substantially right angles to one another and said angle piece being adapted to be overlapped along its upper edges by the tongue of the bottom shiplap of a similar element above and being adapted to have its tongue of the shiplap along the lower edge overlap the outer surface of an adjacent similar corner element below, said side flanks being trapezoidal in shape and

wider at the bottom by an amount equal to the tongue thickness whereby the side edges of said side flanks may lie in vertical planes and join smoothly with adjacent vertical side edges of shingle simulating sections when the bottom tongue overlaps the surface of the corner element below, and the upper and lower edges of each flank being formed at right angles to the corresponding flank side edges, whereby the upper and lower edges may form aligned extensions of the corresponding upper and lower edges of adjacent rectangular shingle simulating sections.

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