United States Patent [19]

Hickman

[11] **3,719,010**

[45] **March 6, 1973**

[54] COPING AND SUPPORT THEREFOR

[75] Inventor: **John B. Hickman,** Birmingham, Mich.

[73] Assignee: **W. P. Hickman Company, Inc.,** Troy, Mich.

[22] Filed: **April 19, 1971**

[21] Appl. No.: **135,080**

[52] **U.S. Cl.**.....**52/60,** 52/94

[51] **Int. Cl.**.....**E04d 1/36**

[58] **Field of Search**.....52/60, 58, 94, 96, 300, 95, 52/59, 61

[56] **References Cited**

UNITED STATES PATENTS

3,237,352	3/1966	Edwards	52/60
3,533,201	10/1970	Tyler	52/94 X
2,855,776	10/1958	Trostle	52/300 X
3,405,485	10/1968	Edwards	52/96 X

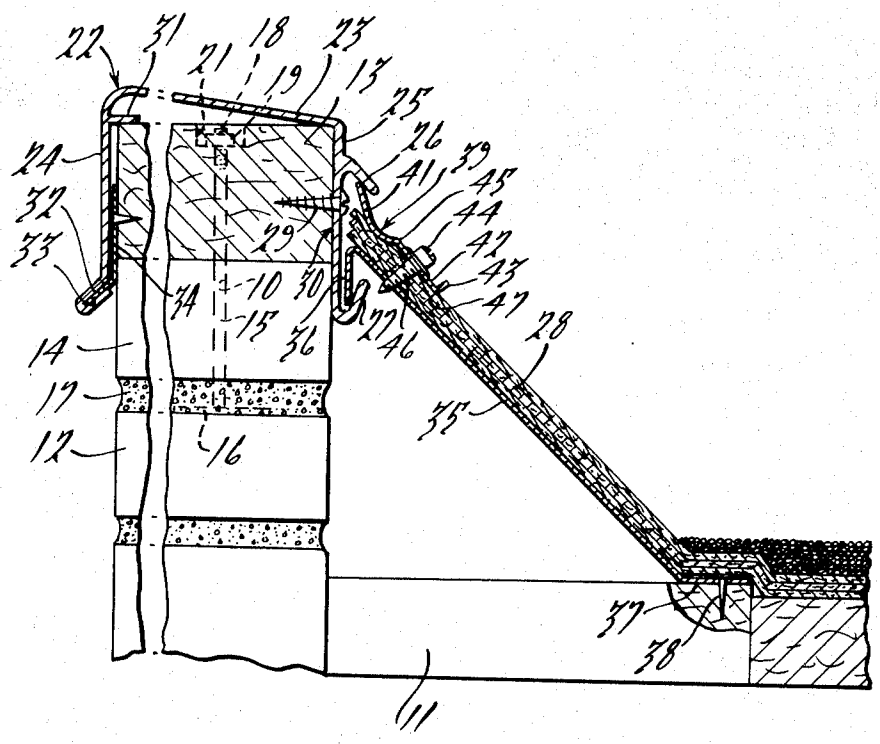
Primary Examiner—Price C. Faw, Jr.

Attorney—Harness, Dickey & Pierce

[57] **ABSTRACT**

The coping is of inverted U-shape to extend over the top of a parapet, wall or the like which projects upwardly above the roof deck. The coping is associated with a reglet which is supported on the inner face of the wall to provide a clamp and seal for the roofing material. The reglet may be extruded in unit relation with the coping or may be a separate element onto which the coping hooks to be supported thereby.

7 Claims, 6 Drawing Figures



PATENTED MAR 6 1973

3,719,010

SHEET 1 OF 2

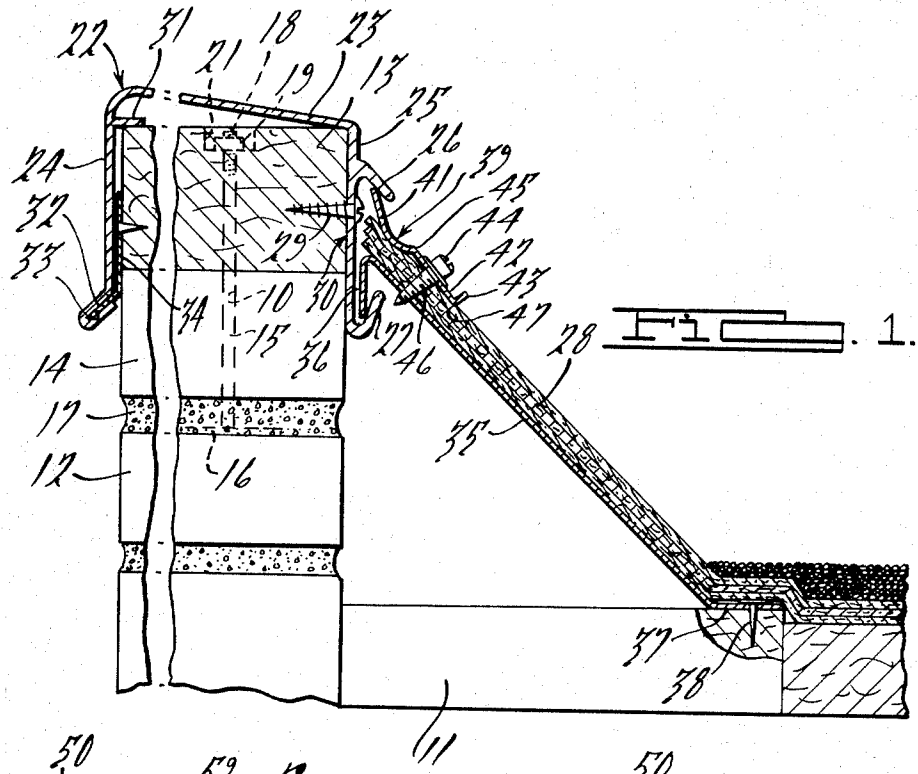
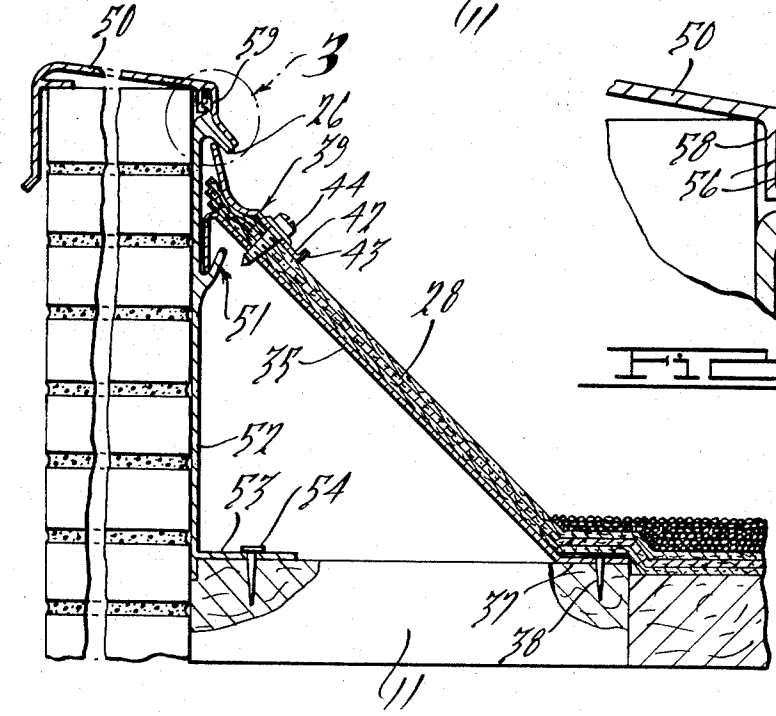


FIG. 1.



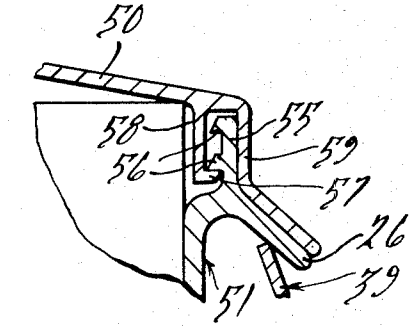


FIG. 3.

FIG. 2.

INVENTOR.
John B. Hickman.
BY
Warness, Dickey & Pierce
ATTORNEYS

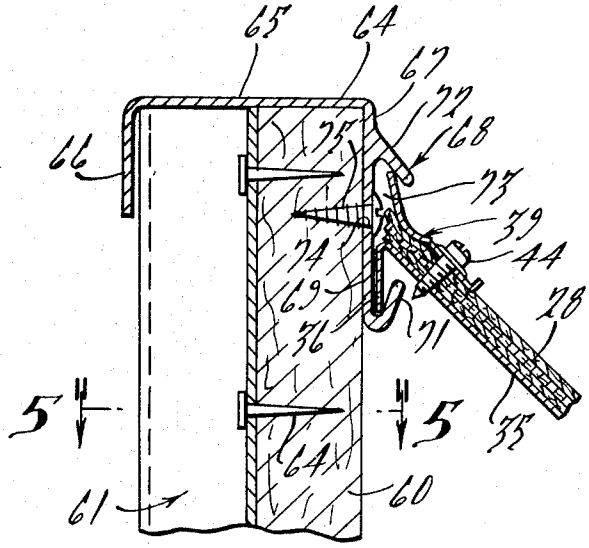


FIG. 4.

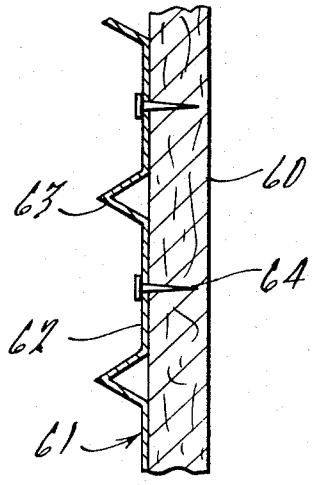


FIG. 5.

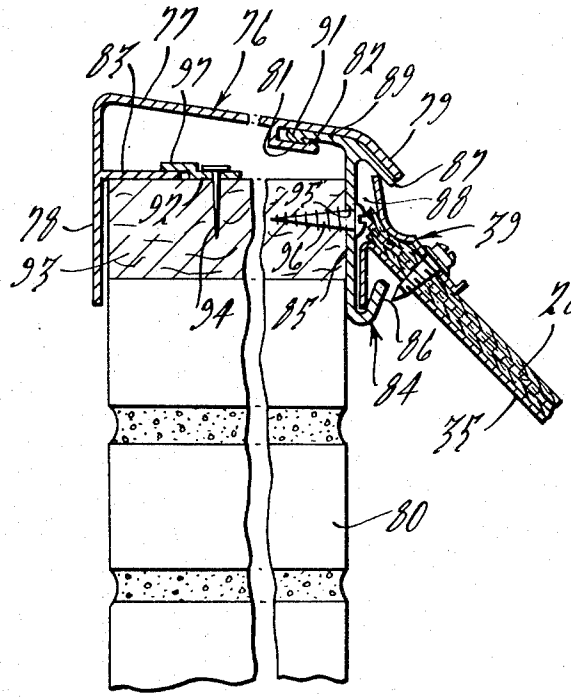


FIG. 6.

INVENTOR.
John B. Hickman.
BY
Harness, Dickey & Pierce
ATTORNEYS.

COPING AND SUPPORT THEREFOR

SUMMARY OF THE INVENTION

The present invention pertains to a coping for covering the top of a building parapet, wall or the like which extends above the roof deck. The coping unit is of inverted U-shape to cover the top and the upper sides of the parapet or wall, constructed in such manner as to have a reglet at the inner side of the wall which supports the cant on which the marginal edges of the roofing material, such as layers of felt, are supported. The roofing material is pressed against the cant by a flashing strip which has the free end extending upward in sealing contact with the inner surface of the reglet. The reglet is of channel section having a recess facing outwardly with the top and bottom flanges converging at a substantial angle. The cant is a strip mounted at an angle to the wall and roof deck with a vertical flange at the top extending into the reglet and with a horizontal or vertical flange at the bottom which is nailed or otherwise secured to the roof deck. The marginal portion of the roofing material extends upwardly over the cant to within the reglet and a flashing strip which is preferably resilient and so formed as to compress the felt layers of the roof material against the cant is secured thereby by spaced screws. The extending edge of the flashing strip is forced upwardly against the inner surface of the downwardly extending top flange of the reglet in sealed relation therewith. The screws secure the flashing strip to the felt layers and cant and the layers are compressed forwardly of the screws to retain the roofing material from movement relative to the cant.

Where the reglet is extruded as a unit with the coping, the parapet or wall is provided at the top with a treated wood member which permits the unit to be nailed, screwed or otherwise secured thereto. In another form of the invention, the reglet may be a part of an extrusion which is nailed or otherwise secured to the roof deck and which is provided at the top with an extending portion having a detent therealong over which a detent on a flange at the inner edge of the coping interlocks when forced thereover. Where the parapet or wall is substantially higher than the location of the reglet, the extending portion with the detent thereon may project upwardly to near the top of the parapet or wall so as to be in position to support the coping over the top thereof.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is a broken sectional view of a roof deck and parapet having the coping of the present invention applied thereto;

FIG. 2 is a view of structure, similar to that illustrated in FIG. 1, showing another form of the invention;

FIG. 3 is an enlarged broken sectional view of the structure illustrated in FIG. 2, taken within the circle 3 thereof;

FIG. 4 is a view of structure, similar to that illustrated in FIG. 1, showing another form thereof;

FIG. 5 is a sectional view of the structure illustrated in FIG. 4, taken on the line 5—5 thereof, and

FIG. 6 is a view of structure, similar to that illustrated in FIG. 2, showing another form thereof which the invention may assume.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to FIG. 1, a roof deck 11 is enclosed by an upwardly extending parapet 12 which may vary substantially in thicknesses. The top run 13 of the parapet is herein illustrated as being made of treated wood, which is secured to the top row of bricks 14 in an acceptable manner, herein illustrated as by bolts 15 having a plate 16 at one end secured in the mortar 17 between the bricks. The bolts extend through apertures 10 in the run 13 and are provided with a threaded end 18 which locks the wood run to the top row of bricks 14 when secured by nuts 19 located within recesses 21 at the end of the apertures 10.

The coping unit 22 has a sloping top section 23, a front side section 24 and a rear side section 25 with the side sections disposed in parallel relation. The section 25 has a downwardly sloping flange 26 near the top and an upwardly sloping flange 27 at the bottom forming a reglet 30 to which the roof material 28 is sealed. The rear side section 25 is secured to the wood run 13 by screws 29 and the front side section 24 is provided with an inwardly extending flange 31 which rests upon the run 13. The side section 24 may be secured to the run 13 by screws or otherwise but is herein illustrated as having the bottom edge deflected outwardly at the bottom and reversely bent to form an upwardly sloping channel 33. A securing strip 34 is nailed to the run 13 in position to have an angularly extending flange 32 project into the channel 33 for securing the front side section 24 against upward movement.

A cant 35 slopes from the parapet to the deck and is provided with a downwardly directed vertical flange 36 at the top which extends over the upwardly sloping flange 27 at the bottom of the reglet. The bottom end of the cant has a horizontal flange 37 which is secured by nails 38 to the roof deck 11. A plurality of layers of roofing material 28 extends from the roof deck upward over the cant into the recess 40 of the reglet with the layers secured to the cant by a flexible flashing strip 39.

The flashing strip 39 has a forward concave portion 41 extending from an angularly disposed flange 42 from which a flange 43 extends outwardly along the edge. Holes are provided through the angular portion 42 through which screws 44 with neoprene sealing washers 45 under the heads are driven into punched holes in the roofing material 28 and the cant 35 to force the flashing strip 39 into firm engagement with the roof material along the line 46. This forces the concave portion 41 of the flashing strip 39 upwardly to have the extending edge engaged and seal the inner surface of the top sloping flange 26 of the reglet.

A similar construction is illustrated in FIGS. 2 and 3 wherein a reglet 51 is supported on the upper end of a strip 52 having a horizontal flange 53 which is secured to the roof deck 11 by a plurality of nails 54. The reglet supports the cant 35, roofing material 28 and the flashing strip 39 in the manner described above with regard to the construction of FIG. 1. The reglet has an extending section 55 along the top edge with sloping lateral projections which form detents 56 one of which is engaged by a detent 57 on one of a pair of spaced flanges 58 and 59. The downwardly spaced flanges 58 and 59 retain the detents in interlocked relation. The outer flange 59 is extended to cover the downwardly directed

flange 26 of the reglet and the spaced edges of adjoining flanges 26. The flanges 58 form the inner side wall of the coping 50 which is otherwise the same as the coping 22 of the structure illustrated in FIG. 1. The advantage of this construction resides in the fact that the section 55 may extend upwardly any desired amount so that it will be adjacent to the top run of the parapet or wall when the latter is built to a height above the roof deck substantially greater than that herein illustrated.

Referring to FIGS. 4 and 5, a further form of coping is illustrated which is similar to that shown in FIG. 1 but which is applied to a wall section which embodies a wood extension 60 and a front face section 61. The front face section 61 herein illustrated is made from a sheet of metal which has flat sections 62 and angular sections 63 which may be in unit relation to the flat sections or may be angular elements which interlock therewith. In place of the metal front face section 61, a section may be built up from concrete having stones or other elements embedded therein to form the face section. The flat section 62 of the unit 61 is secured to the wood wall extension 60 by nails 64. A coping unit is herein illustrated as being an extruded section having a horizontal top flange 65, a downwardly extending front flange 66 and a downwardly extending rear flange 67 which is formed into a reglet 68. The reglet has a web section 69 which is in extension of the flange 67 and upwardly sloping bottom flange 71 and a downwardly sloping top flange 72 providing a recess 73 therebetween. The cant 35 has its top flange 36 supported within the bottom flange 71 of the reglet over which the roofing material 28 is supported and sealed against the cant 35 by the application of the flashing strip 39 in the manner pointed out hereinabove. The web section 69 of the reglet 68 has apertures 74 spaced therealong through which screws 75 are driven into the wood extension 60 of the wall section. The screws support the coping over the top edge of the wall section which supports the reglet 68, the cant 35, the roofing material 28 and the flashing strip 39 in firm fixed, sealed relation to each other and the wall section.

In FIG. 6, a further form of coping is illustrated which is similar to that illustrated in FIG. 2. In this construction, the coping element 76 has a sloping top web 77 and a vertically disposed front face 78. The web on the inner end has a downwardly extending flange section 79 and on the inner face a downwardly and inwardly extending flange section 81 on the forward edge of which a sloping detent 82 is provided. The front downwardly extending face 78 has an inwardly directed flange 83 which rests upon the top run of the wall 80 to space the forward edge of the top web 77 a substantial distance thereabove. A reglet unit 84 has a vertically extending web 85 and upwardly extending bottom flange 86 and a downwardly extending top flange 87 with an outwardly facing recess 88 therebetween. A flange 89 slopes upwardly and forwardly from the top of the reglet 84 and is provided with a sloping detent 91 along the outer edge. An offset locking strip 92 is secured to the top wood run 93 by a plurality of nails 94. The reglet is provided with spaced apertures 95 in the vertical web 85 through which screws 96 extend into the wood run 93 for securing the reglet on the inner face of the run. After the reglet has been secured in this manner by the screws 96, the coping element 76 has its forward end raised so that the rearward end including the flange section 79 can be slid over the top of the reglet to have the detent 91 engage the detent 82 after which the coping element is moved down and further slid toward the reglet to have the detents 82 and 91 interlock and the flange 83 advanced beneath the extending flange 97 of the securing strip 92 to thereby lock the coping element to the reglet and the top of the wall. The cant 35, the roofing material 28 and the flashing strip 39 are applied in the same manner as pointed out hereinabove with regards to the other Figures. In all of the arrangements the reglet supports the cant, roof material and flashing strip in fixed sealed relation and provides the main support for the coping portion associated therewith.

I claim:

1. In a coping element for the top of a wall element, a unit element having at least a top web section and a front flange section extending downwardly from the upper edge thereof, a downwardly extending reglet section on the inner face of the wall, joined means between the inner edge of said web section and the upper portion of said reglet, said reglet having a web engaging the inner face of the wall from the bottom of which an outwardly directed upwardly extending bottom flange is provided, an outwardly directed downwardly extending top flange is provided from the upper portion of said reglet web, the reglet web and flanges forming an outwardly presenting recess from said inner face of the wall, a cant having a downwardly extending flange at the top secured over the outwardly directed upwardly extending bottom flange of the reglet and having a flange on the bottom end which is secured to the roof deck, roof covering material extending upwardly over said cant, a flashing strip, and means for clamping said flashing strip to said roofing material with the forward edge extending within the recess beneath the downwardly extending top flange thereof.

2. In a coping element as recited in claim 1, wherein the reglet and unit element are constructed as a single extrusion.

3. In a coping for a wall element as recited in claim 2, wherein the bottom edge of the front flange section is reversely bent to form an upwardly directed channel, and a strip secured to the front face of the wall element having an angular outwardly extending flange at the bottom which projects into the upwardly directed channel of the front flange section.

4. In a coping for a wall element as recited in claim 1, wherein said joined means embodies interlocking detents which retain the edge of the top web section in fixed sealed relation to the reglet.

5. In a coping for a wall element as recited in claim 4, wherein said interlocking detents are supported on facing surfaces of flanges which when moved into interlocking position seals the coping element to the top edge of the reglet.

6. In a coping for a wall element as recited in claim 4, wherein the reglet has an extending flange at the top with the detent on the inner face thereof and wherein the edge of the coping element has spaced flanges extending downwardly with the inner flange provided with a detent which interlocks with the detent on the flange of the reglet when the flanges of the coping element are forced downwardly thereover.

7. In a coping for a wall element as recited in claim 6, wherein an inwardly extending flange is provided on the front flange section, and a securing strip on the top of the wall under which said extending flange projects after the detents are in interlocked relation.

* * * * *