United States Patent [19]

Hickman

[11] **3,802,140**

[45] **Apr. 9, 1974**

[54] **COPING**

[75] Inventor: **William P. Hickman,** Birmingham, Mich.

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

[22] Filed: **Dec. 7, 1972**

[21] Appl. No.: **313,197**

[52] **U.S. Cl.** **52/300,** 52/96

[51] **Int. Cl.** **E04f 19/02**

[58] **Field of Search** 52/300, 96, 715, 465, 716, 52/717, 466, 254, 255

[56] **References Cited**

UNITED STATES PATENTS

2,554,779	5/1951	Goodwin	52/96 X
2,920,477	1/1960	Shaw	52/715

FOREIGN PATENTS OR APPLICATIONS

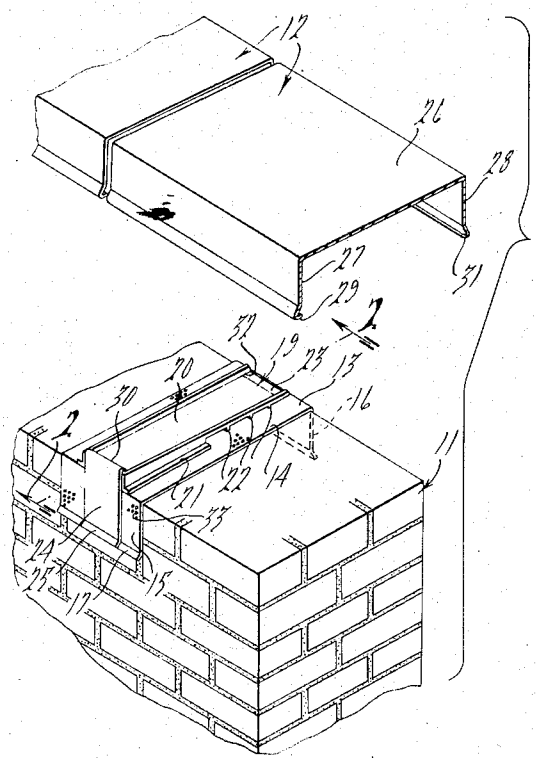
1,180,965	2/1970	Great Britain	52/300

Primary Examiner—Henry C. Sutherland
Assistant Examiner—Carl D. Friedman
Attorney, Agent, or Firm—Harness, Dickey & Pierce

[57] **ABSTRACT**

The top of a parapet brick wall of a building is protected from the elements by a coping which is simple in construction and readily applied thereto. Inverted U-shaped anchor elements are secured to the wall at space points where the lengths of the coping units substantially abut. The anchoring element may be 6 to 8 inches wide and may be secured by nails or screws to the sides of the wall or preferably is anchored by an adhesive placed upon the bricks which is extruded through apertures in the anchor element. A drain shoe of plastic material is placed centrally of the anchor element to slope toward the inside of the wall and after a cover plate is hung in the front end of the shoe the coping unit is hooked over the front side of the anchor element and swung downwardly over the center of the shoe and hooked onto the end of the inner side of the anchor element. The ends of the coping units are spaced apart to permit water to pass therebetween down onto the shoe and drain to the inside of the wall onto the roof.

5 Claims, 3 Drawing Figures



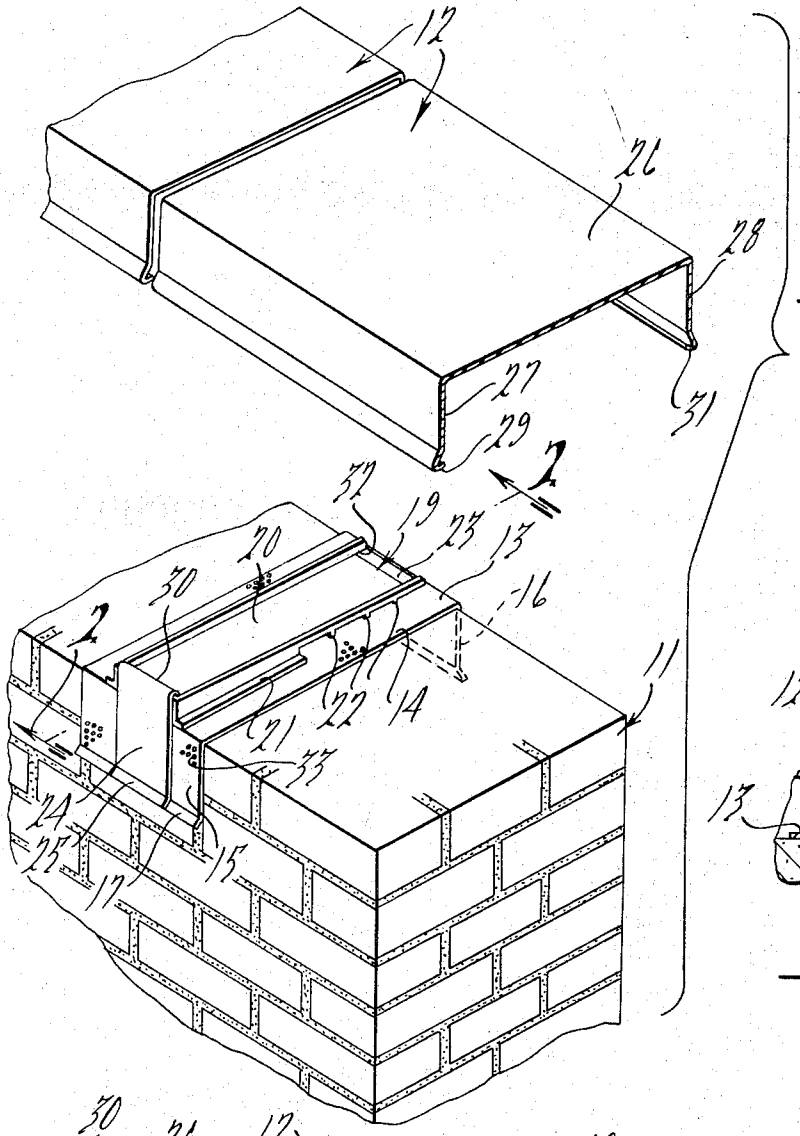


FIG. 1.

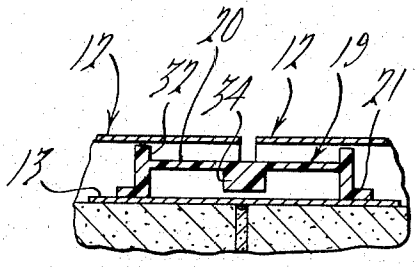


FIG. 3.

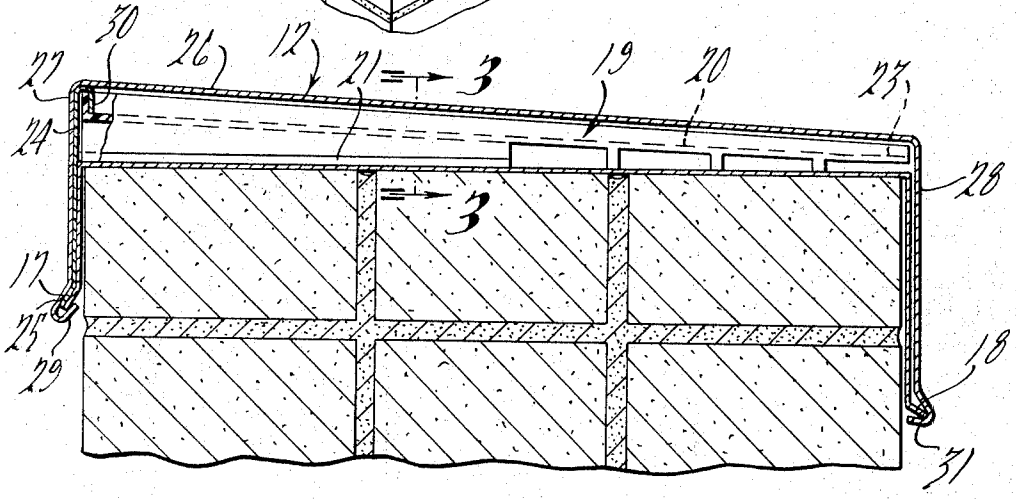


FIG. 2.

COPING

BACKGROUND OF THE INVENTION

Reference may be had to U.S. Pat. Nos. 818,122; 1,860,240 and 3,012,376 to disclose some teaching of the prior art.

SUMMARY OF THE INVENTION

The invention pertains to a parapet wall for a building which is sealed at the top by inverted channel shaped coping units, the adjacent ends of which are slightly spaced apart. A channel shaped anchor element has a web which spans the wall and two downwardly extending sides which have the ends sloping outwardly. The anchor elements are secured at spaced intervals along the wall which are substantially equal to the length of the coping units. The anchor elements are 6 to 12 inches wide and are secured in any known manner, such as by nails, screws and the like but preferably by an adhesive which will be extruded through apertures in the anchor elements. The apertures permit the rigid securement of the anchor elements and the removal of the solvent from the adhesive so that it will quickly dry.

A shoe made of plastic material of approximately one-half the width of the anchor elements is placed thereupon to slope from the front to the rear surface of the wall. A cover plate is hung within a drain recess in the top of the shoe to extend downwardly over the front side of the anchor element down which water passing between the front side of the coping units may flow. The water between the web portions at the top of the wall will flow into the drain recess of the shoe and to the rear and onto the roof. The inner end of the shoe is flexible and after the hook on the front side of the coping unit is secured over the outwardly deflected flange at the bottom of the front side of the anchor element, the coping unit is swung rearwardly over the wall and pushed downwardly with the end of the shoe to engage the hook at the inner side over the flange on the inner side of the anchor element. This eliminates the cover plate at the top and inner side of the adjacent coping units and provides a clean and simple joint with the ends spaced apart approximately one-eighth inch to permit water to pass to the drain recess of the shoes, and to allow for thermal expansion of the coping channels.

BRIEF DESCRIPTION OF THE DRAWING

FIG. 1 is an exploded view in perspective of a parapet wall having an anchor element secured thereto which supports the adjacent edges of a pair of coping units embodying features of the present invention;

FIG. 2 is an enlarged sectional view of the assembled structure of FIG. 1, taken on the line 2—2 thereof, and

FIG. 3 is an enlarged sectional view of the structure illustrated in FIG. 2, taken on the line 3—3 thereof.

DESCRIPTION OF THE PREFERRED EMBODIMENT

A parapet wall **11** of a building has the top sealed by coping units **12** of the present invention. The coping units are of predetermined length such as ten feet and the anchor elements **13** are spaced the same distance apart when secured across the top of the wall. The anchor element has a web **14** the width of the wall, a front side **15** and a rear side **16** extending downwardly therefrom. The front side **15** has the edge provided with an outwardly sloping flange **17**, the rear side **16** has the edge provided with an outwardly sloping flange **18.** A molded styrene coping shoe **19** has a length which is substantially the width of the wall and of narrow width of approximately three inches. The shoe has a top drain recess **20** and is of greater height at the front end than at the rear end so as to slope from the front to the rear face of the wall. The shoe is placed centrally of the anchor elements **13** to rest upon a pair of longitudinal flanges **21** and transverse flanges **22** leaving the rear end **23** spaced above the anchor element **13** toward which it can deflect.

A cover plate **24** has a U-shaped hook **30** at the top which extends over the front edge of the shoe **19** into the recess therein and downwardly to cover the face of the shoe and the side **15** of the anchor element **13.** The cover plate **24** has a flange **25** which mates with the flange **17** at the end of the side wall **15.**

The coping units have a top web **26,** a front downwardly extending side **27** and a rear downwardly extending side **28.** The side **27** has an inwardly presenting hook edge **29** while the side **28** has a similar hook edge **31.** After the anchor elements **13** have been secured at spaced points along the top of the parapet wall **11,** the shoes **19** are placed centrally thereof and the cover plates **24** are hung downwardly from the front edge of the shoe over the side **15.** A coping unit **12** has the ends of the hook edge **29** slid over the flanges **17** of the two adjacent anchor elements **13** and is hinged inwardly and downwardly over the top of the wall **11** until the hook edge **31** is deflected below the flange **18** on the inner side **16** of the two anchor elements **13.** The rear end **23** of the shoe is resilient and urges the hook edge **31** upwardly into engagement with the flange **17.** The ends of the coping units **12** are spaced apart approximately one-eighth to one-fourth inches and located above the recess **20** provided at the top of the shoe **19.** Any rain passing downwardly between the adjacent edges of the coping units will collect within the recess **20** and flow therefrom over the inner side **16** and onto the roof. The space between the ends of the coping units at the front of the wall will be adjacent to the cover plate **24** over which the coping units extend. It will be understood that when the hook edge **31** is moved beneath the flange **18** of the anchoring element **13** that the end **23** of the shoe will be deflected downwardly to permit the engagement as illustrated in FIG. **2,** which will be maintained when the coping unit is released by the upward urge of the end **23** of the shoe due to the resiliency thereof. The sheet of material from which the anchoring element **13** is made is preferably of galvanized steel having apertures **33** punched therethrough at the front side and over the greater portion of the web **14.** The adhesive in the apertures firmly maintains the anchoring element across the top of the wall **11** in firm fixed relation thereto. The apertures may be small, approximately one-sixteenth inch in diameter and located at the corners of squares having sides one-fourth inch in length. The adhesive material is of the construction type which will adhere to the wall and which is procurable from Franklin Glue Company, 2020 Bruck Street, Columbus, Ohio 43207. This is a neophrene base adhesive which has proven satisfactory for securing the anchoring element to the wall. A rib **34**

may be provided on the shoe beneath the recess **20** to eliminate the warping thereof.

I claim:

1. In a coping for a parapet wall, an anchor element secured across the top of the wall, said anchor element being of inverted channel shape having a web and front and rear downwardly extending sides which have an outwardly sloping flange at the bottom edge, means for securing a plurality of said anchored elements in predetermined spaced relation along the top of said wall, a shoe having a drain recess in the top disposed on each said element, said shoe and recess sloping from the front to the rear of the wall, and a coping unit of inverted channel shape having hook edges on the sides which are engaged by the sloping flanges at the bottom edges on the sides of the anchor elements to secure the ends of the units thereto with the adjacent ends in spaced relation over the top of said shoe recesses for directing any water passing between the ends to flow to the rear of the wall onto the roof.

2. In a coping for a parapet wall as recited in claim **1,** wherein the end of the shoe adjacent to the rear face of the wall is flexible to provide an upward bias for maintaining the hook edge on the rear side of the coping unit locked to the flange on the rear side of the anchor element.

3. In a coping for a parapet wall as recited in claim **1,** wherein a cover plate has a downwardly extending channel portion at the top edge which hooks into the front portion of the drain recess, said plate having an angularly directed flange at the bottom which mates with the flange on the outer side of the anchor element.

4. In a coping for a parapet wall as recited in claim **3,** wherein said shoe is molded from a plastic material and provided with flanges and ribs to form the drain recess and to prevent the warping thereof.

5. In a coping for a parapet wall as recited in claim **1,** wherein said anchor element is provided with a plurality of rows of apertures and wherein said means for securing the anchor element to the wall is an adhesive material which extends through at least some of said apertures.

* * * * *