May 26, 1953 E. J. FINN 2,639,679

COMBINATION THROUGH-WALL FLASHING AND RECEIVER FOR SIDE-WALL FLASHING

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Fig. 1.

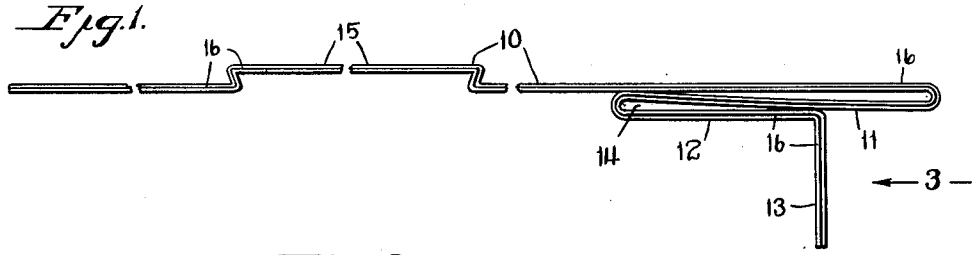


Fig. 2.

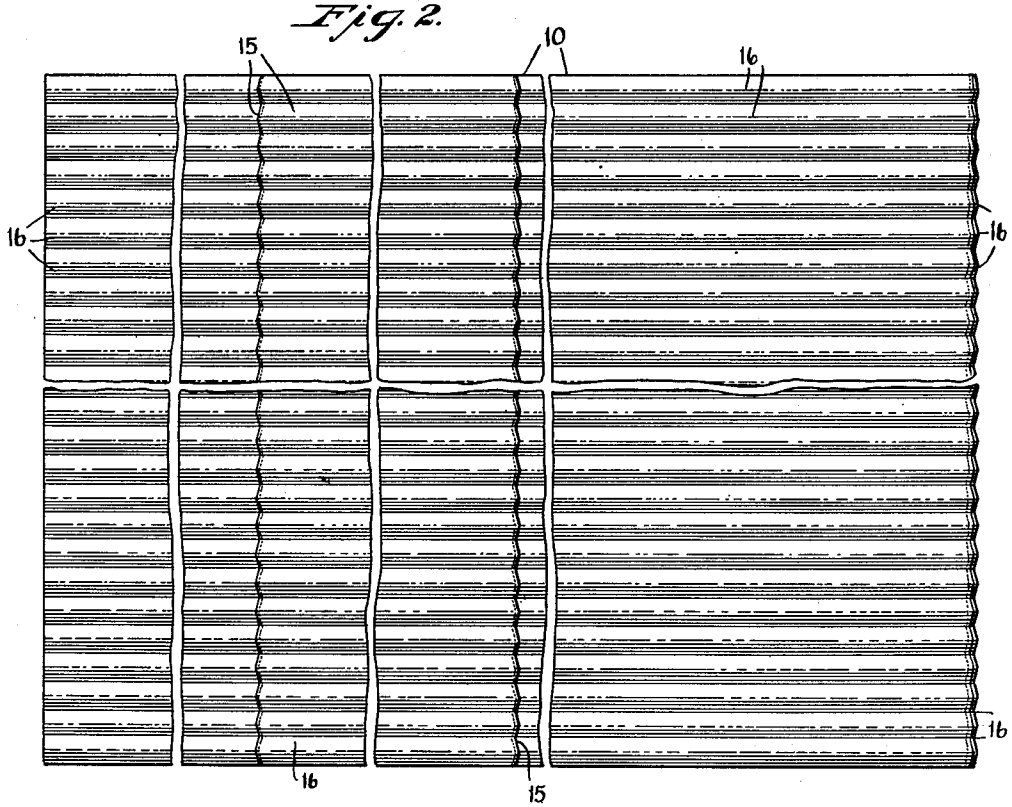


Fig. 3.

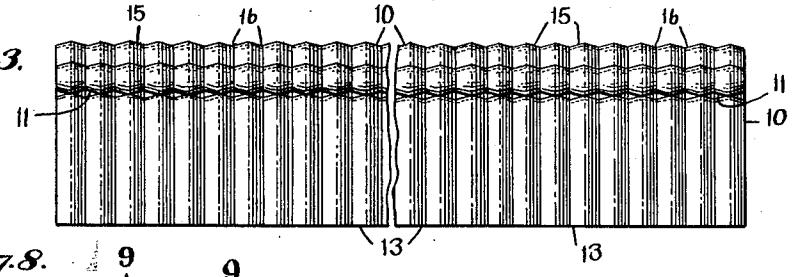


Fig. 8.

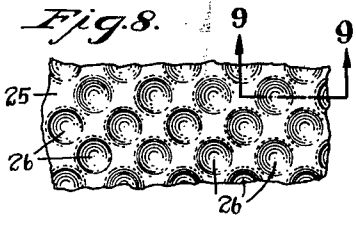
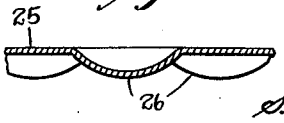


Fig. 9.



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Fig. 4.

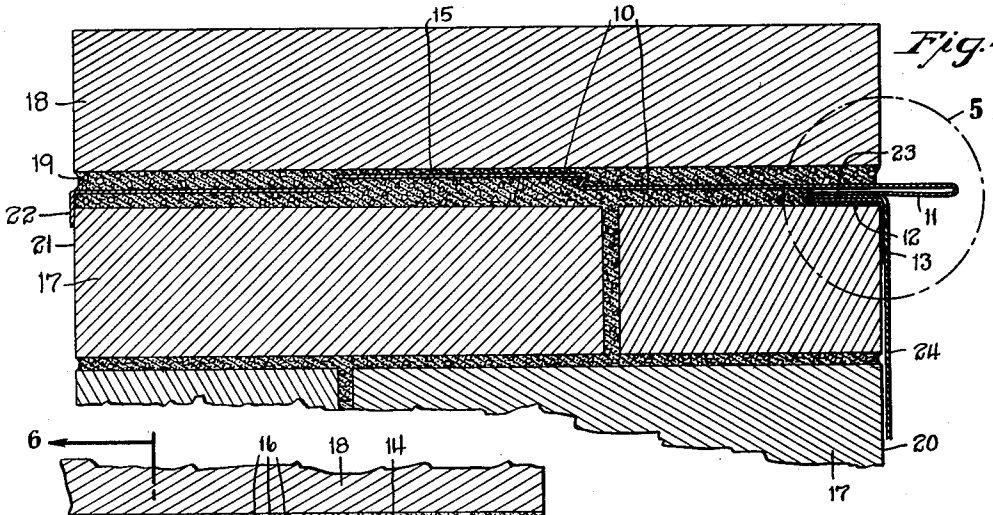


Fig. 5.

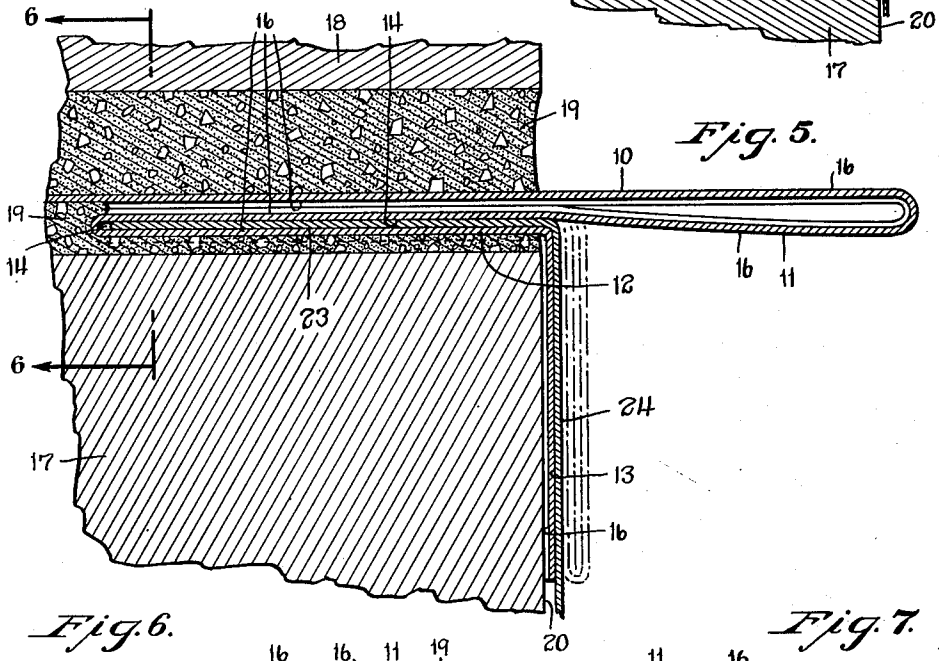


Fig. 6.

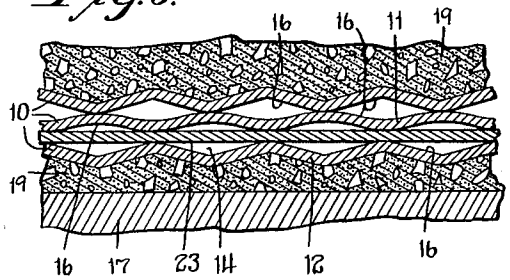
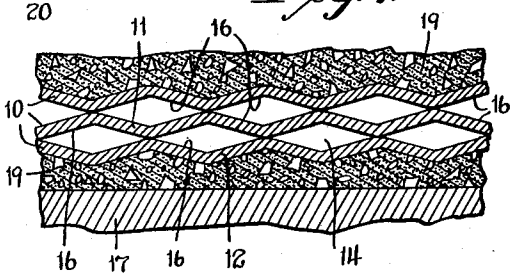


Fig. 7.



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Patented May 26, 1953 2,639,679

UNITED STATES PATENT OFFICE

2,639,679

COMBINATION THROUGH-WALL FLASHING AND RECEIVER FOR SIDE-WALL FLASHING

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Application August 29, 1950, Serial No. 182,046

1 Claim. (Cl. 108—26)

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The present invention relates to improvements in through-wall flashing, i. e., flashings which are adapted to be extended transversely completely through a masonry wall or parapet to thereby prevent the seepage of water down through the masonry seams. More particularly, the present invention relates to such flashings when constructed so as to provide a pocket or groove to receive one edge of a counter-flashing or side-wall flashing, which latter is sometimes referred to in the art as "cap-flashing."

One of the main objects of the present invention is to provide a superior combination through-wall flashing and receiver for side-wall flashing of improved design adapted to conveniently receive one edge of a side-wall flashing or the like.

Another object of the present invention is to provide a superior flashing of the character referred to of such construction and arrangement of features that after it has been firmly cemented in a wall or parapet with considerable weight superimposed upon it, it may still conveniently receive one edge of a side-wall flashing or the like.

A further object of the present invention is to provide a superior flashing of the character referred to and having its elements constructed and arranged so as to provide a pocket or groove for the reception of a portion of a side-wall flashing or the like and without requiring the employment of wedges to hold such pocket or groove in condition to receive such side-wall flashing.

Other objects and advantages will appear to those skilled in the art from the following, considered in conjunction with the accompanying drawings.

In the accompanying drawings, in which certain modes of carrying out the present invention are shown for illustrative purposes:

Fig. 1 is a broken end view of one form which a combination through-wall flashing and receiver for side-wall flashing may assume in accordance with the present invention;

Fig. 2 is a top or plan view thereof;

Fig. 3 is an edge view looking in the direction of the arrow 3 of Fig. 1;

Fig. 4 is a broken transverse sectional view of a portion of a parapet showing installed therein, a flashing corresponding to that shown in the preceding figures of the drawings, together with a fragment of side-wall flashing or counter-flashing, and showing the projecting portion of the main-reach and upper clamping-reach prior to being bent downwardly to retain the said side-wall flashing;

Fig. 5 is an enlarged scale fragmental view of

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the portion of Fig. 4 indicated by the broken lines 5;

Fig. 6 is a broken sectional view taken on the line 6—6 of Fig. 5;

Fig. 7 is a view similar to Fig. 6 but showing the condition of the corrugations prior to the introduction of the edge of the side-wall flashing or so-called "cap-flashing";

Fig. 8 is a fragmentary plan view of the so-called "upper clamping-reach" of a flashing embodying the present invention but showing another form which the yielding-means may assume in lieu of corrugations; and

Fig. 9 is a sectional view taken on the line 9—9 of Fig. 8, but on a larger scale.

It may here be explained that in the construction of masonry buildings and the like, it is common practice for the masons to install the through-wall flashing in a wall or parapet, during which process superimposed cap-stones or other masonry serve to compress the through-wall flashing and thus make it difficult for the roofers or tinsmiths to later join a side-wall flashing or counter-flashing with such through-wall flashing. As will be apparent from the following, considered in conjunction with the accompanying drawings, the present invention provides a construction and arrangement of elements whereby such side-wall flashing or counter-flashing may be readily and conveniently joined with the through-wall flashing, despite the weight of the wall resting upon the said through-wall flashing and despite the rigidity imparted to portions of the flashing by hardened mortar or the like.

The showing of Figs. 1 to 7 inclusive

The particular combination through-wall flashing and receiver for side-wall flashing chosen for illustration in Figs. 1 to 7 inclusive of the accompanying drawings, may be conveniently formed of copper or other sheet material and includes a through-wall reach or main-reach generally designated by the reference character 10 and from one edge of which is reversely or inwardly bent a resilient upper clamping-reach 11 and from the inner edge of which latter is reversely bent a lower clamping-reach 12, as is especially well indicated in Fig. 1. The lower clamping-reach 12 is preferably made shorter than its complemental upper clamping-reach 11 and has its edge-portion bent downwardly to form a guard-flange 13.

The reverse arrangement of the integral upper clamping-reach 11 and the lower clamping-reach 12 provides what may be aptly termed a longitudinal "pocket" or "groove" 14 opening outwardly or

toward the direction of the guard-flange 13 and adapted to receive an edge of a slide-wall flashing or counter-flashing, as will later appear. Preferably and as shown, although not directly involved with the present invention, the through-wall reach or main-reach 10 is provided with a dovetail-shaped longitudinal rib 15 which serves to aid in anchoring the flashing in place in masonry and also for keying together portions of the masonry wall or parapet.

In the instance shown, the entire flashing above described, including the elements 10, 11, 12, 13 and 15, is formed with corrugations 16 which are continuous and which extend substantially transversely of the sheet material from which the above described flashing is formed. The corrugations 16 in the through-wall reach or main-reach 10 serve to provide interlocks for mortar which interlocks are effective at a right angle to the interlock or keying provided by the dovetail-rib 15. While it is preferred to have the corrugations 16 or their equivalent extend continuously in the features 10, 11, 12, 13 and 15, so far as the present invention is concerned, the said corrugations or their equivalent are required to be only in the upper clamping-reach 11 or its equivalent, for reasons as will hereinafter appear.

In Figs. 4 to 7 inclusive, the flashing above described is shown as installed in a parapet and supported on bricks 17 and having located above and pressing downwardly upon it a cap-stone 18. The major portion of the element 10 including its dovetail-rib 15, and the under portion of the lower clamping reach 12 are embedded in a horizontal mortar seam 19 between the uppermost bricks 17 and the cap-stone 18, as is especially well shown in Figs. 4 and 5. As shown, the right-hand or inner portion of the through-wall reach 10 and the similar portion of the upper clamping-reach 11 project beyond the inner face 20 of the parapet, for purposes as will hereinafter appear. The left-hand or outer edge of the through-wall reach 10 is preferably extended beyond the outer face 21 of the parapet and bent downwardly as indicated in Fig. 4, to provide a guard-flange 22 extending downwardly over the adjacent bricks 17.

As thus installed, the lower face of the lower clamping-reach 12 is rigidly supported by the material of the mortar seam 19 so that its corrugations 16 are substantially unyielding. Similarly the upper face of the corrugations 16 in the through-wall reach 10 are rigidly supported and held in shape by the material of the said mortar seam 19, all as is especially well shown in Figs. 6 and 7. Under the conditions just described, however, it will be noted by reference to Figs. 6 and 7 in particular, that the corrugations in the resilient upper clamping-reach 11 are free to distort or yield, since they are not directly supported by mortar.

After the masons have completed the parapet or wall and the installation therein of the flashing comprising the elements 10 to 16 inclusive and as is indicated by full lines in Figs. 4 and 5, sheet-metal workers may in due course bend up a coupling-flange 23 along the upper edge of a side-wall flashing 24 and then force the said coupling-flange 23 in between the upper surface of the now-rigid lower clamping-reach 12 and the underface of the corrugated and still-yieldable upper clamping-reach 11, to thus bring the assembly into the condition illustrated in Figs. 4, 5 and 6. It is not necessary, however, to install the side-wall flashing 24 or its equivalent hurriedly or promptly, since it is feasible to wait many days or even weeks before so doing, to thus permit other work to be completed and full and careful inspection to be made before such installation.

The main portion of the side-wall flashing or counter-flashing 24 above referred to may extend downwardly in parallelism with the inner face 20 of the parapet and may be connected at its lower portion in a watertight manner to the roof or other desired feature of a building. It will be noted that in Fig. 7 the condition is shown just prior to the forcing-in of the flange 23 of the side-wall flashing 24. In Fig. 6, on the other hand, is shown the condition of the similar parts after the forcing-in of the said flange 23 to cause the corrugations or their equivalent in the upper clamping-reach 11 to distort or otherwise yield to receive the said flange 23 with a friction-tight fit.

After the installation of the flange 23 of the side-wall flashing 24, the portions of the through-wall reach 10 and the upper clamping-reach 11 projecting beyond the inner face 20 of the parapet, may be bent down over the upper portion of the said side-wall flashing, as indicated by the broken lines in Fig. 5.

From the foregoing, it will be apparent that by providing the upper clamping-reach 11 with corrugations or their equivalent yielding-means, a counter-flashing such, for instance, as the side-wall flashing 24 may be driven into and firmly connected with the through-wall flashing-portion of the assembly, after the mortar in the masonry has thoroughly set and all this despite the fact that the reaches 10 and 12 are held rigidly and unyielding by the said mortar. As before noted, it is not necessary to corrugate either or both of the through-reach 10 or lower clamping-reach 12, since these may be left straight and the corrugations or their equivalent placed only in the upper clamping-reach 11 so that the latter may yield as described when the flange 23 or its equivalent is forced into place in the pocket or groove 14.

The showing of Figs. 8 and 9

In Fig. 8 is shown a fragment of an upper clamping-reach 25 similar to the previously-described clamping-reach 11. Instead of being provided with yielding or distortable corrugations such as 16, the clamping-reach 25 is rolled or otherwise formed with yielding or distortable downwardly-projecting hollow bosses 26.

When the coupling-flange such as 23 of a counter-flashing such as 24 is forced into a pocket or groove such as 14 of a through-wall flashing of the character shown in Figs. 1 to 7 inclusive but having an upper clamping-reach of the character shown in Figs. 8 and 9, the bosses will yield and otherwise discharge the basic functions of the corrugations 16 in the clamping-reach 11.

The invention may be carried out in other specific ways than those herein set forth without departing from the spirit and essential characteristics of the invention, and the present embodiments are, therefore, to be considered in all respects as illustrative and not restrictive, and all changes coming within the meaning and equivalency range of the appended claim are intended to be embraced therein.

I claim:

A flashing, comprising a continuously corrugated sheet of resilient metal having its cor-

rugations extending substantially longitudinally of the sheet, said sheet having at one end of a major length thereof a reversely bent first corrugated clamping sheet length underlying an adjacent marginal portion of said major sheet length in close proximity thereto, and a second corrugated clamping sheet length reversely bent at the inner edge of said first clamping sheet length into underlying relation with and close proximity to the latter so that said first and second clamping sheet lengths combine to form an outwardly opening pocket, whereby the side formed by said first corrugated clamping sheet length is yieldingly compressible plane-wise on

forcing counter-flashing into said pocket of the flashing when the latter is installed.

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