Aug. 22, 1933. E. WEIL 1,924,009

ROOF FLASHING

Filed July 30, 1931

Fig.1.

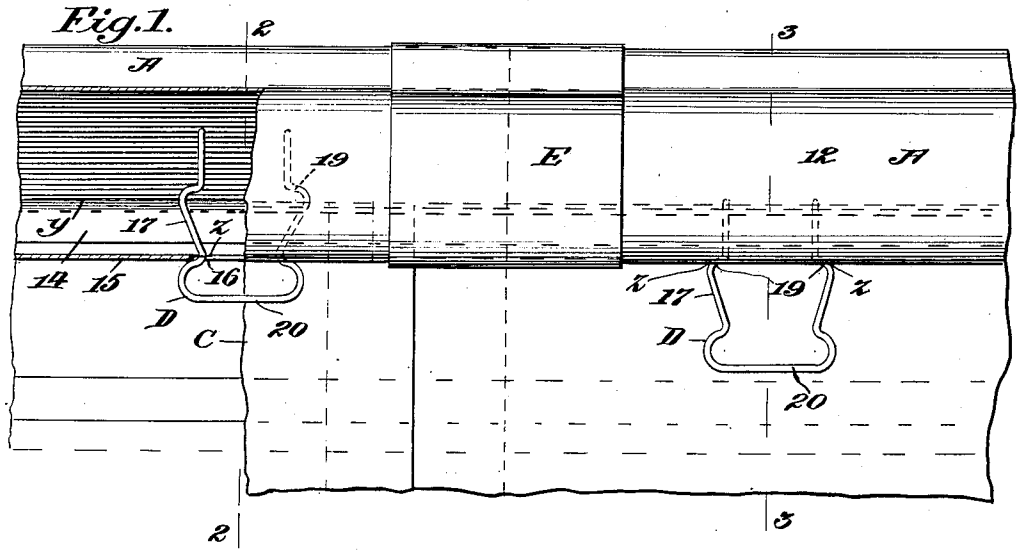


Fig.2.

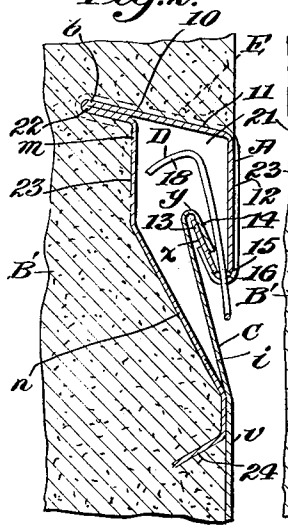


Fig.3.

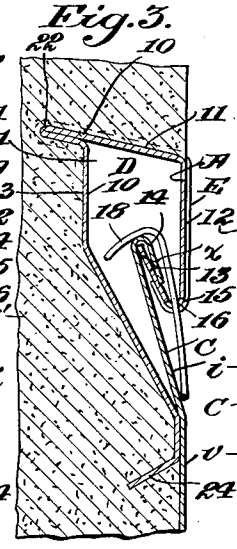


Fig.4.

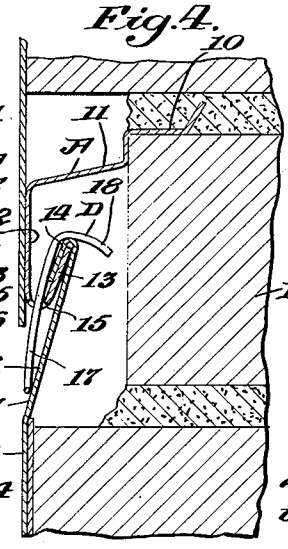


Fig.5.

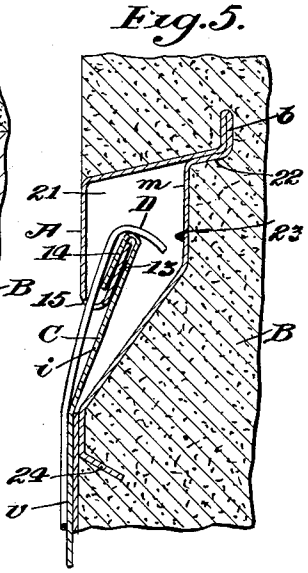


Fig.6.

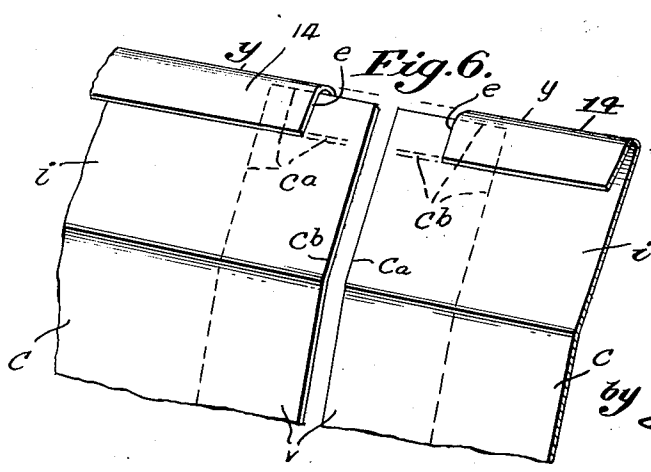
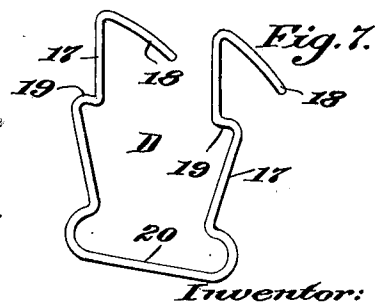


Fig.7.



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UNITED STATES PATENT OFFICE

1,924,009

ROOF FLASHING

Emile Weil, New Orleans, La.

Application July 30, 1931. Serial No. 554,110

23 Claims. (Cl. 108—26)

The present invention relates to improvements in flashings for excluding water or moisture from between joints in a roof, parapet wall, chimney, window frames or the like, as is disclosed in my pending application Serial No. 547,115.

The object of the present invention relates more specifically to a flashing construction including anchor member to which the flashing or counterflashing is detachably supported by means of complemental interengageable portions and a fastener movably mounted on the anchor member and movable into and out of position to lock the counterflashing against detachment from the anchor member.

With the above and other objects in view, the invention resides in the sundry details of construction, combination and arrangement of parts hereinafter more fully described and pointed out in the appended claims.

In the drawing, which shows the embodiment of the present improvement of the invention, as at present devised,

Figure 1 is a front elevation of a portion of a wall having the flashing of the invention secured thereto;

Figure 2 is a vertical sectional view taken substantially on line 2—2 of Figure 1;

Figure 3 is a vertical sectional view taken substantially on line 3—3 of Figure 1;

Figure 4 is a view similar to Figure 2, but of a modified form of the invention useful particularly with a masonry construction;

Figure 5 is a view similar to Figure 2 of a further modified form;

Figure 6 is a perspective view of the counterflashing; and

Figure 7 is a perspective view of the hook member for locking the counterflashing in place.

In the drawing, wherein like reference characters refer to similar and like parts throughout the several views, the letter A generally denotes the improved holder or anchor member which is adapted, as shown in the several views of the drawing, to assume several forms, whereby, it may be used with a brick or stone wall B or may be used in a concrete wall or stucco-surfaced wall or any monolithic surface B^1; while C denotes the flashing or counterflashing, which is readily attachable and detachable from the anchor member A without bending or deforming in any way the anchor member or flashing. The members A and C are preferably made from sheet material, such as sheet metal, which is stamped or otherwise bent into the forms or shapes shown and described. However, the forms may be obtained by the fabrication of a plurality of pieces of sheet metal.

The anchor member A of the improved flashing construction primarily consists of a part 10 which is to be imbedded in the joint or surface of the masonry construction, and a forwardly projecting wall 11 which has a downwardly extending flange 12 behind which the flashing or counterflashing C is upwardly inserted so as to provide a weatherproof flap. In order to detachably retain the flashing C in position, the lower horizontal edge of the flange 12 of the anchor member A is turned inwardly and upwardly, or otherwise is provided with a flange 13 spaced rearwardly from the flange 12 and, preferably, having its surfaces extend in a rearwardly inclined plane. This flange 13, as can be readily seen, forms an upturned hook-like portion extending longitudinally of the anchor member and underlying the top wall and cover 11 thereof.

The counterflashing C has its upper edge formed to provide the forwardly and downwardly extending flange 14 spaced from the body of the flashing to provide a hook member complemental to hook member 13. It will also be observed that the upper end of the flange 13 is spaced from the overlying top wall 11 of the anchor member a distance greater than the width of the flange or hook portion 14 of the counterflashing. Thus, by merely raising the counterflashing C upwardly with a sliding movement and then tilting rearwardly, the counterflashing may be disengaged and removed from position, or may be readily replaced by a reverse operation.

At the juncture 15 between the downwardly extending flange 12 and the upwardly extending flange 13 of the anchor member are provided at intervals elongated openings 16 extending longitudinally of the anchor member. These openings 16 are for a two-fold purpose; namely, to provide drain and vent openings for permitting condensation or water to drain from under the anchor member and for permitting a circulation of air under the anchor member, as well as providing openings for retaining and through which operate counterflashing lock members D.

Each counterflashing lock member of the present invention broadly consists of a member mounted on the anchor member for movement into and out of locking position and is, preferably, non-detachable from the anchor member, and may have an exteriorly projecting part by which it may be operated and which may be so shaped

and formed to bear against or lie opposite the outer surface to prevent it from flapping in the wind.

As an illustrative example one form or embodiment of member D is shown in the drawing and consists of a resilient U-shaped loop, preferably formed of resilient wire, having its leg portions 17 extending upwardly through an opening 16 and normally under a tension tending to spread them apart into engagement with opposed end edges of the elongated openings 16. The free ends of the legs 17 are extended or bent laterally and rearwardly to provide hook-fingers 18 for overlying the upper edges *x* of the flange 13. The intermediate portions of the legs 17 of the lock member are formed with oppositely and outwardly extending and upwardly directed shoulders 19 which, when the locking fingers 18 are in their lowermost position in engagement with the upper end *y* of the counterflashing, will pass through the slot or opening 16 and bear against the outer surface of the anchor member at the end edges of the opening, as at *z*. Thus, it will be observed that with lock member D in its lowermost position, as shown in Figures 1 to 5, the counterflashing is locked against removal, but, when it is desired to remove the counterflashing, by pressing opposite legs 17 of the lock member toward each other and against their resilient tension, the shoulders 19 will be moved out of the path of the edges *z* of the opening 16 and the lock member D may be slid or lifted upwardly to move the hook-fingers 18 thereof to the position shown at the left in Figure 1, and in Figure 2, thereby permitting the flashing to be removed or replaced, in the manner above stated.

The closed or bight end 20 of the lock member may be shaped or formed to bear against the outer surface of the counterflashing, when it is in its lowermost position, thus pressing the counterflashing against the opposing surface of the wall D, to prevent undue rattling or flapping of the same by the wind, resting either against the inclined surface *i* (Figures 2, 3 and 4) or the vertical surface *v* (Figure 5). The length of the legs 17 is greater than the distance from the opening 16 and the top wall 11 of the anchor member, and the lock member D is limited in its upward movement by the wall 11 and in its downward movement by the fingers 18 striking the edge *x* of the flange 13. Therefore the lock member D is held against removal or withdrawal from the anchor member.

In Figures 2, 3 and 5, the anchor member is shown in a form which may be used in a concrete or monolithic surface construction, and is formed to provide an inwardly extending upwardly inclined pocket 21 which may lie flush with the surface of the wall B or B' and may be set in position during the construction of the wall. To this end, the anchor member 10 is formed of a blank of sheet metal which is bent upon itself to form front and rear walls of the pocket. At the point *b* where the blank is bent or folded upon itself, the opposite portions are squeezed together to form a rearwardly extending flange 22, which may, if desired, be bent in a right angular flange as shown in Figure 5. From one edge of the flange 22 extends one folded portion of the blank to provide the forwardly extending top wall or cover 11, the downwardly extending front wall flange 12 and the upwardly and rearwardly inclined hook flange 13. From the same edge portion of the flange 22 extends the other folded portion of the blank which provides a back wall 23 of the pocket. This back wall 23 is, preferably, formed with an upper vertical portion *m* and a lower downwardly inclined portion *n*, the lower edge of which is bent rearwardly to form a right angle flange 24. The flanges 22 and 24 are to be imbedded into the wall construction for firmly holding the anchor in place, with the flange 12 and the flange 24 flush with the wall surface. It will be noticed that the opposite wall 11 is preferably inclined forwardly and downwardly to permit condensation or other moisture to drain toward the outer surface of the wall. As can be seen from Figure 1, lengths or sections of the anchor member may be arranged in butt end relation. In order to prevent leakage at these points as well as to facilitate the handling of the anchor members when placing them in position, a lap coupling member E is provided which conforms to the shape of the walls 11 and 12 and has its marginal edge portions bent to embrace the flange 22 and the flange 13. This coupling member E is of such proportions as to have a sliding fit with the opposing walls of the anchor member and to receive in its ends, the ends of adjacent anchor sections.

However, the elements of the counterflashing C may each then have one corner of the upper flanged end cut away, as shown in Figure 6, to leave the edges *e* which are spaced from the corresponding ends C*a* and C*b* of the right-hand and left-hand sections. When the two elements are slid together, so that these edges C*a* and C*b* assume the dotted line position of these figures, the corresponding surfaces *i* and *v* of the two elements will overlap, while the cutaway flanged ends will abut against one another at their edges *e*. These adjacent sections or lengths of the counterflashing will thus overlap for the weather-exposed portions *i* and *v*, while the concealed flanged portions 14 will abut and prevent telescoping of the sections.

In this specification and the annexed drawing, the invention is disclosed in the form in which it is considered to be the best, but the invention is not limited to such form because it is capable of being embodied in other forms: and it is to be understood that in and by the claims following the description herein it is intended to cover the invention in whatever form it may be embodied within the scope thereof.

What is claimed:

1. In a flashing construction, an anchor member having a downwardly extending flange, a counterflashing insertable under said member and behind the flange, interengageable means on said counterflashing and said member and constructed for permitting ready attachment and detachment of the counterflashing from said anchor member, and a lock member movably mounted on said anchor member and movable into and out of locking position and having a portion thereof formed to obstruct the disengaging movement of said counterflashing from said anchor member when in locking position.

2. In a flashing construction, an anchor member having a downwardly extending flange, a counterflashing insertable under said member and behind the flange, interengageable means on said counterflashing and said member and constructed for permitting ready attachment and detachment of the counterflashing from said anchor member, and a lock member movably mounted on said anchor means and movable into and out of locking position and having a portion thereof formed to engage the counterflashing

and hold the same against disengaging movement from the anchor member, when said locking member is in locking position.

3. In a flashing construction, a counterflashing having a hook-like means on its upper portion, an anchor member securable to the wall or like surface and having a forward downwardly extending flange behind which the hook-like means of said counterflashing extends, means carried by said anchor member engageable by the hook-like means of said counterflashing whereby the counterflashing is suspended in position, a locking member mounted on said anchor member and having a movement into and out of locking position, means on said locking member to overlie the upper end of said flashing when in supported position, and means on the locking member for locking it in the path of the detachment of said counterflashing.

4. In a flashing construction, an anchor member, a counterflashing insertable under said member and having an attaching projection thereon, means on the anchor member engageable by said projection whereby the said counterflashing is supported in position, a lock member mounted on said anchor member and having a portion exteriorly of said anchor member and another portion to oppose the detachment of said counterflashing from the anchor member so as to hold it in position on said supporting means, said locking member being movable into and out of locking position, and means for holding said locking member in locking position, said locking member having its external portion formed to engage against the outer face of said counterflashing when the locking member is in locking position, whereby the counterflashing is firmly held against lateral or flapping movement.

5. In a flashing construction, an anchor member having a forward downwardly extending flange, a counterflashing insertable under and behind said flange and having an attaching projection thereon, means on the anchor member engageable by said projection whereby the said counterflashing is supported in position, a vertically slidable lock member mounted on said anchor member and having one end projecting below the lower edge of said flange, and means on its other end portion extending about the upper end of said counterflashing to hold it in position on said supporting means, said locking member being vertically slidable into and out of locking position, and means for yieldably holding said locking member in locking position.

6. In a flashing construction, an anchor member having a forward downwardly extending flange, a counterflashing insertable under and behind said flange and having a detachable projection thereon, means on the anchor member engageable by said projection whereby the said counterflashing is supported in position, a vertically slidable lock member mounted on said anchor member and having one end projecting below the lower edge of said flange, and means on its other end portion extending about the upper end of said counterflashing to hold it in position on said supporting means, said locking member being vertically slidable into and out of locking position, and means for holding said locking member in locking position, the lower end of said locking member being formed to engage against the outer face of said counterflashing when in locking position whereby the counterflashing is firmly held against lateral or flapping movement.

7. In a flashing construction, an anchor member securable to a wall or like surface and having a forward downwardly extending flange, an upwardly extending flange projecting from said downwardly extending flange and lying behind the same, a flashing element insertable upwardly behind said flanges, hook means on said flashing engageable with said upwardly extending flange for detachably supporting said flashing in position, whereby said flashing may be removed by lifting the said hook means upwardly from engagement with said upwardly extending flange and withdrawing said hook means from under said anchor member, and a releasable locking member carried by and projecting between said flanges of the anchor member to obstruct the detaching movement of said flashing and mounted on the anchor member to slide vertically into and out of locking position.

8. In a flashing construction, an anchor member securable to a wall or like surface and having a forward downwardly extending flange, an upwardly extending flange projecting from said downwardly extending flange and lying behind the same, a flashing element insertable upwardly behind said flanges, hook means on said flashing engageable with said upwardly extending flange for detachably supporting said flashing in position, whereby said flashing may be removed by lifting the said hook means upwardly from engagement with said upwardly extending flange and withdrawing said hook means from under said anchor member, said anchor member having an opening therein at the juncture of said downward and formerly extending flanges thereof, and a fastener member mounted in said opening and having a rearwardly extending projection positioned to overlie the upper edge of said flashing, when in supported position, said fastener member being slidable vertically in said opening, whereby it may be moved relatively to the upper edge of the flashing into and out of locking position.

9. In a flashing construction, an anchor member securable to a wall or like surface and having a forward downwardly extending flange, an upwardly extending flange projecting from said downwardly extending flange and lying behind the same, a flashing element insertable upwardly behind said flanges, hook means on said flashing engageable with said upwardly extending flange for detachably supporting said flashing in position, whereby said flashing may be removed by lifting the said hook means upwardly from engagement with said upwardly extending flange and withdrawing said hook means from under said anchor member, said anchor member having a drain opening therethrough at the juncture of said downward and forwardly extending flanges thereof, a U-shaped resilient locking member bearing against opposite edges thereof, the upper end of said flashing, when in supported position, being vertically slidable in said opening to move the hook means thereof into and out of position for opposing the detaching movement of said flashing.

10. In a flashing construction, an anchor member securable to a wall or like surface and having a forward downwardly extending flange, an upwardly extending flange projecting from said downwardly extending flange and lying behind the same, a flashing element insertable upwardly behind said flanges, hook means on said flashing engageable with said upwardly extending flange

for detachably supporting said flashing in position, whereby said flashing may be removed by lifting the said hook means upwardly from engagement with said upwardly extending flange and withdrawing said hook means from under said anchor member, and a resilient U-shaped member having its leg portions slidably extended through said opening and normally yieldable against opposite edges of said opening and having its free end uppermost, said free ends being laterally and rearwardly extended to overlie said flashing in supported position, outwardly extending and upwardly directed shoulders provided on said legs to bear against the exterior surface of said anchor member adjacent said opening, when said member is in locking position, the bight end of said member forming a finger piece.

11. In a flashing construction as characterized and set forth in claim 10, further characterized by the bight end of the U-shaped member being extended and formed to engage the surface of said counterflashing when in locking position to prevent flapping of said flashing.

12. In a flashing construction, an anchor member securable in a wall or like surface and having a top wall and a front wall downwardly extending from said top wall, a flashing member insertable upwardly beyond said front wall, interengaging supporting means on said anchor flashing and said front wall including an upwardly extending flange on the front wall of the said anchor member and a downwardly extending flange on said flashing member, said anchor member having an opening therein between the said forward wall and said flange thereof, a hook member vertically slidably extending through said opening and of a length greater than the distance between said opening and said top wall, said hook member having its hooked portion positioned to engage said interengaging means to oppose disengagement of said means, when in its lowered position whereby said hook member is limited against withdrawal in its upper and lower position.

13. In a flashing construction, an anchor member securable in a wall or like surface and having a top wall and a front wall downwardly extending from said top wall, a flashing member insertable upwardly beyond said front wall, interengaging supporting means on said flashing member and said front wall, including an upwardly extending flange on the front wall of the said anchor member and a downwardly extending flange on said flashing, said anchor member having an opening therein between the said forward wall and said flange thereof, a hook member vertically slidably extending through said opening and of a length greater than the distance between said opening and said top wall, said hook member having its hooked portion positioned to engage said interengaging means to oppose disengagement of said means, when in its lowered position whereby said hook member is limited against withdrawal in its upper and lower position, and latch means for holding said hook means in its lowered position.

14. In a flashing construction, an anchor member securable in a wall or like surface and having a top wall and a front wall downwardly extending from said top wall, an upwardly extending flange rearwardly disposed on the lower edge portion of said front wall and spaced from said front and top walls, said anchor member having an opening therethrough between said front wall and said flange, a hook-member vertically slidably disposed in said opening and having its hooked-portion adapted to engage over said flange to limit the downward movement of said hook-member, and said hook-member being of a height greater than the distance between said opening and said top wall, whereby the hook-member is held against removal from the anchor member.

15. In a flashing construction, an anchor member securable in a wall or like surface and having a top wall and a front wall downwardly extending from said top wall, an upwardly extending flange rearwardly disposed on the lower edge portion of said front wall and spaced from said front and top walls, said anchor member having an elongated slot therethrough between said front wall and said flange and extending longitudinally thereof, a hook member vertically slidably disposed in said opening and having a shank of a width substantially the length of said opening and having a length greater than the distance between said opening and said top wall, the hooked portion of said hook member being in a position to overlie said flange and to move in contact therewith on its downward movement whereby its downward movement is limited, whereby the hook member is retained in the anchor member against withdrawal through said opening.

16. In a flashing construction, an anchor member securable in a wall or like surface and having a top wall and a front wall downwardly extending from said top wall, an upwardly extending flange rearwardly disposed on the lower edge portion of said front wall and spaced from said front and top walls, said anchor member having an elongated slot therethrough between said front wall and said flange and extending longitudinally thereof, a hook member comprising an open U-shaped loop having its free end portions extended forwardly and slidable through said opening and of a width substantially equal to the length of said opening, the free end portions being laterally and rearwardly extended to form the hook portion of the hook member and disposed to overlie said flange and engage the same at the end of its downward movement to prevent withdrawal of said hook member from said opening, the leg portions of said loop having a normal tendency to yieldably engage the opposite end edges of said opening and being of a length greater than the distance between said opening and said top wall.

17. In a flashing construction as set forth in claim 16 further characterized by said loop being reduced in width at a point adjacent and spaced from the bight end thereof.

18. In a flashing construction as set forth in claim 16, further characterized by shoulders on said leg portions to cooperate with the outer end edges of said opening when the hook member is in its lowermost position for releasably locking the same in position.

19. In a flashing construction, an anchor member securable in a wall or like surface and including a top wall and a front wall downwardly extending from the forward portion of the top wall, an upwardly extending flange rearwardly disposed on the lower edge portion of said front wall and spaced from said front and top walls, a flashing comprising a plurality of sections individually insertable upwardly behind said flange and each having a partially exposable wall portion and a downwardly extending flange on the upper edge portion thereof to hook over said flange on the

anchor member, the downwardly extending flange being cut away at at least one end of each section whereby adjacent flashing sections may have adjacent exposed side edges of their wall portions overlapping with the ends of said downwardly extending flanges in abutting relation between the front wall and the flange of said anchor member.

20. In a flashing construction, an anchor member comprising a plurality of sections securable in a wall or like surface and each including a top wall and a front wall downwardly extending from the forward portion of the top wall, an upwardly extending flange rearwardly disposed on the lower edge portion of said front wall and spaced from said front and top walls, a flashing comprising a plurality of sections individually insertable upwardly behind said flange and each having a partially exposable wall portion and a downwardly extending flange on the upper edge portion thereof to hook over said flange on the anchor member, the downwardly extending flange being cut away at at least one end of each section whereby adjacent flashing sections may have adjacent exposed side edges of their wall portions overlapping with the ends of said downwardly extending flanges in abutting relation between the front wall and the flange of said anchor member, and a coupling member for joining the abutting ends of adjacent sections of the anchor member comprising a plate overlying the top and front walls of the anchor member and conforming thereto and having its edges extended around the rear edge of the top wall and the lower edge of the front wall and adapted to slidably receive the ends of adjacent anchor sections.

21. In a flashing construction, a counterflashing section consisting of a flat lower wall portion and a flat upper supporting portion having a flat downwardly extending flange along its upper edge, said flange being cut away at one end for permitting the overlapping of the lower wall portions of two such sections when assembled in the construction.

22. In a flashing construction, an anchor member for counterflashings, said anchor member including a top wall and a front wall downwardly extending from the forward portion of the top wall, an upwardly extending flange rearwardly disposed on the lower edge portion of said front wall and spaced from said front and top walls, and a coupling member for joining the ends of adjacent sections of the anchor member comprising a plate overlying the top and front walls of the anchor member and conforming thereto and having its edges extended around the rear edge of the top wall and the lower edge of the front wall and adapted to slidably receive the ends of adjacent anchor sections.

23. In a wall flashing construction, an anchor member for a counterflashing having a rebent end and adapted to be permanently located in a wall recess, including a blank of form-sustaining sheet material bent upon itself to form two folded portions, said blank being pressed together adjacent the bight to form a squeezed flange, one of the folded portions of the blank extending forwardly from the squeezed flange to form a top wall of the anchor member and then downwardly for a distance to provide a flat front wall for the anchor member, the lower portion of said front wall having an upwardly and backwardly extending flange thereon with its upper edge spaced from said top wall, the other folded portion of the blank extending downwardly and forwardly from the squeezed flange to form back and bottom walls of the anchor member spaced from said front wall and having a downwardly extending marginal end portion located substantially in the same plane as said front wall and terminating in a backwardly bent flange for engagement in the structure of the wall whereby to prevent movement of said marginal end portion relative to the wall, so that said marginal end portion may provide a rigidly positioned protection to the wall for preventing contact between the counterflashing and the wall at such point, the upper edge of the marginal end portion being spaced from the lower edge of the front portion for providing an orifice into which the rebent end of the counterflashing may be inserted between the upward flange and the back wall and from which it may be removed without deformation of the anchor member or counterflashing.

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