Sept. 26, 1933. C. A. EARLEY 1,928,589

SHEET METAL FLASHING

Filed Sept. 16, 1930

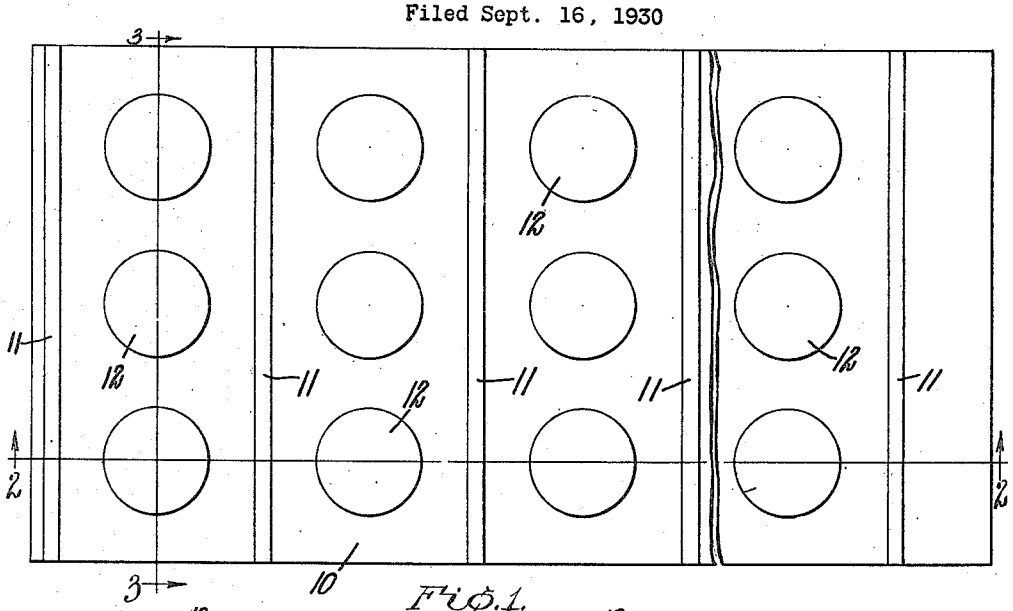


Fig. 1.

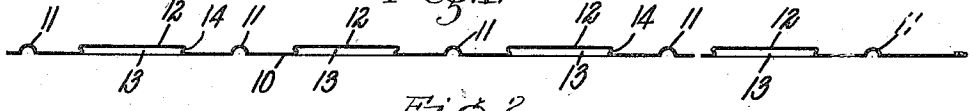


Fig. 2.

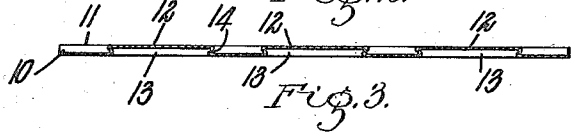


Fig. 3.

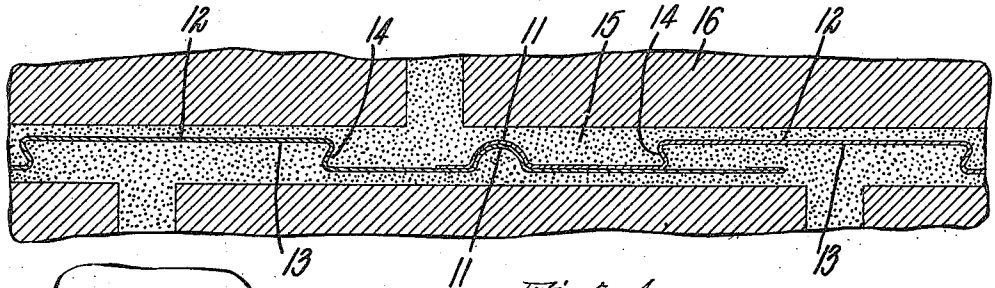


Fig. 4.

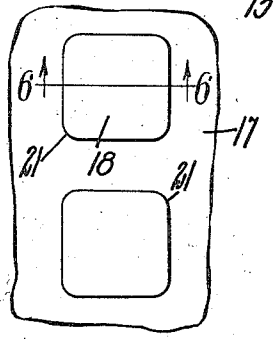


Fig. 5.

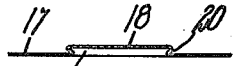


Fig. 6.

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SHEET METAL FLASHING

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Application September 16, 1930
Serial No. 482,174

8 Claims. (Cl. 72—127)

This invention relates to improvements in sheet metal flashing and has for its object to provide a strip of flashing that may be inserted in the binding material that is employed between the adjacent courses of masonry of a wall for the purpose of arresting the downward seepage of water through said wall and then diverting said water to the exterior of the wall.

Another object of the invention is to form a strip of flashing in such a manner that when it is inserted in the binding material that the flashing and binding material will be bonded together in all directions.

Still another object of the invention is to provide the strip of flashing with a plurality of transversely extending arch-shaped beads spaced at regular distances along the surface thereof, said beads acting to stiffen the strip transversely and prevent it from buckling, as a stop to prevent water from working its way longitudinally along the strip between the under surface of the binding material and upper surface of the flashing, and finally said beads are also utilized as a means for locking the end portions of adjacent strips of flashing together.

The invention consists in an improved form of sheet metal flashing as set forth in the following specification and particularly as pointed out in the claims thereof.

Referring to the drawing:

Fig. 1 represents a plan view of a portion of a strip of flashing embodying my invention.

Fig. 2 is a longitudinal section taken on the line 2—2 of Fig. 1.

Fig. 3 is a transverse section taken on the line 3—3 of Fig. 1.

Fig. 4 is an enlarged detail sectional view of a portion of a wall illustrating the adjacent end portions of two strips of flashing interlocked together and embedded in the binding material that is employed between adjacent courses of masonry.

Fig. 5 is a plan view of a portion of a strip of flashing illustrating projections of a modified type formed thereon.

Fig. 6 is a section taken on the line 6—6 of Fig. 5.

Like numerals refer to like parts throughout the several views of the drawing.

In the drawing, referring particularly to Figs. 1 to 4 inclusive, 10 represents a strip of flashing preferably constructed of sheet metal. Spaced at regular intervals along the strip of flashing 10 and extending transversely thereacross are arch-shaped beads 11 which act as a means to stiffen the strip of flashing transversely thereof, and also as a means for preventing water from seeping lengthwise along said strip between the upper surface thereof and the under surface of a binding material 15 in which the strip of flashing is embedded. The beads or ribs 11 thus divide the sheet lengthwise into a plurality of separate or confined drainage zones. The beads 11, furthermore, are utilized to interlock the end portions of adjacent strips of flashing, the end bead of one strip being adapted to nest within the end bead of an overlapping strip as illustrated in Fig. 4.

Formed upon the strip of flashing 10 between the transversely extending beads 11 are a plurality of oppositely disposed projections 12 and depressions 13, the depressions being located within the projections. The projections 12 and depressions 13 are preferably circular in form and have an inclined or overhanging side wall 14 extending entirely therearound. The projections 12 and depressions 13 are so formed that when the strip of flashing 10 is inserted in the binding material 15 for a wall 16, which may consist of any suitable form of masonry, that the binding material will enter the depressions 13 and closely surround the overhanging or inclined side wall 14 of the projections 12 and depressions 13 and act to bond the strip of flashing and binding material together in all directions. Furthermore, owing to the fact that the projections 12 and depressions 13 are circular in form, the side walls 14 thereof will offer a resistance against a movement of the flashing within the wall in a plane parallel to the opposite faces of the flashing which will be equal in all directions.

In Figs. 5 and 6 I have illustrated a modified embodiment of my invention, in which a strip of flashing 17 is provided with oppositely disposed projections 18 and depressions 19 that are approximately square in outline. These projections and depressions have an inclined or overhanging side wall 20 which extends entirely therearound and the action of the projections and depressions when the strip of flashing is embedded within the binding material between two courses of masonry is to bond the strip of flashing and the binding material together in all directions in exactly the same manner as described in connection with the strip of flashing 10. In order to facilitate the formation of the projections 18 and depressions 19, the corner portions thereof are rounded at 21.

In the claims the term "widely spaced ribs" defines ribs spaced apart a substantial distance as distinguished from corrugated or crimped metal.

I claim:

1. A through wall flashing for masonry structures comprising a continuous sheet of metal of desired width to extend substantially through a masonry wall and to be embedded in a mortar joint thereof, said metal sheet being provided with a plurality of widely spaced transverse arched ribs, and a plurality of projections pressed from said sheet and arranged between said ribs, presenting on the underside of said sheet a corresponding series of recesses for the reception of mortar to bond said sheet to the masonry, the body of said sheet surrounding said projections and between said ribs being flat to permit drainage of water of infiltration from said wall.

2. A through wall flashing for masonry structures comprising a continuous sheet of metal of desired width to extend substantially through a masonry wall and to be embedded in a mortar joint thereof, said sheet being provided with a plurality of widely spaced ribs dividing said sheet into a plurality of drainage zones, and a series of projections pressed from the body of said sheet between said ribs, and all projecting upwardly from the body of said sheet whereby adequate drainage of water of infiltration from said wall is permitted.

3. In a masonry structure comprising superposed courses of masonry and an intervening layer of mortar, a through wall flashing embedded in said layer of mortar, comprising a metal sheet, a series of transverse ribs widely spaced throughout the length of the sheet providing therein a plurality of confined drainage zones, with horizontal drainage surfaces, and a plurality of projections pressed upwardly from said sheets and entirely encased by the metal comprising said drainage zones, all of said projections extending upwardly whereby said drainage zones are free from depressions such as will prevent the drainage of water therefrom.

4. In a masonry structure comprising superposed courses of masonry and an intervening layer of mortar, a through wall flashing embedded in said layer of mortar, comprising a metal sheet, a series of transverse ribs widely spaced throughout the length of the sheet providing therein a plurality of confined drainage zones, with horizontal drainage surfaces, and a plurality of inverted frusto-conical projections pressed upwardly from said sheet and entirely encased by the metal comprising said drainage zones, all of said projections extending upwardly whereby said drainage zones are free from depressions such as will prevent the drainage of water therefrom.

5. A through wall flashing for use in building constructions comprising a sheet of metal of desired width to extend substantially from side to side of the wall in which it is used, said sheet being provided with a series of transverse ribs widely spaced throughout the length thereof, and a plurality of projections pressed from one side of said sheet only and providing on the under side of said sheet a plurality of recesses for the reception of mortar to bond said sheet against movement in a transverse direction.

6. A through wall flashing for use in masonry structures comprising a metal sheet of desired width to extend substantially through said wall, said sheet being formed with a plurality of circular projections on the upper surface of said sheet, presenting on the lower side a corresponding series of recesses for the reception of mortar, said projections being arranged in transverse rows, the upper surface of the sheet surrounding said projections being flat to provide free drainage of water of infiltration from said wall.

7. A through wall flashing for use in masonry structures comprising a metal sheet of desired width to extend substantially through said wall, said sheet being formed with a plurality of circular projections on the upper surface of said sheet, presenting on the lower side a corresponding series of recesses for the reception of mortar, said projections being arranged in transverse rows, the upper surface of the sheet surrounding said projections being flat to provide free drainage of water of infiltration from said wall, and ribs disposed between the several rows of projections and adjacent each end of the sheet, whereby means are provided for joining contiguous sheets of flashing by superposing said end ribs.

8. A through-wall flashing for use in masonry structures comprising a metal sheet of desired width to extend substantially through said wall, said sheet being formed with a plurality of projections, each extending upwardly from the sheet, presenting on the lower side of the sheet a corresponding series of recesses for the reception of mortar, said projections being arranged in transverse rows, the upper surface of the sheet surrounding and between the projections of each row being flat to provide free drainage of water of infiltration from said wall.

CHARLES A. EARLEY.