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A. CHENEY

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SEEPAGE PROTECTOR FOR MASONRY BUILDINGS

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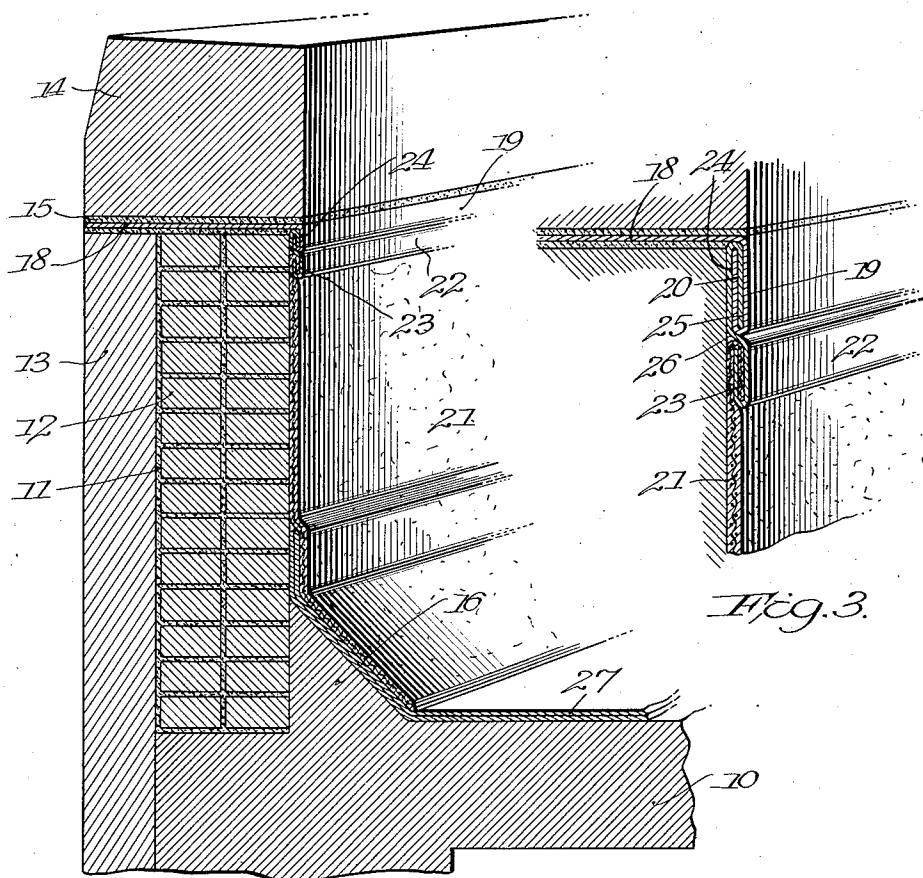


Fig. 1.

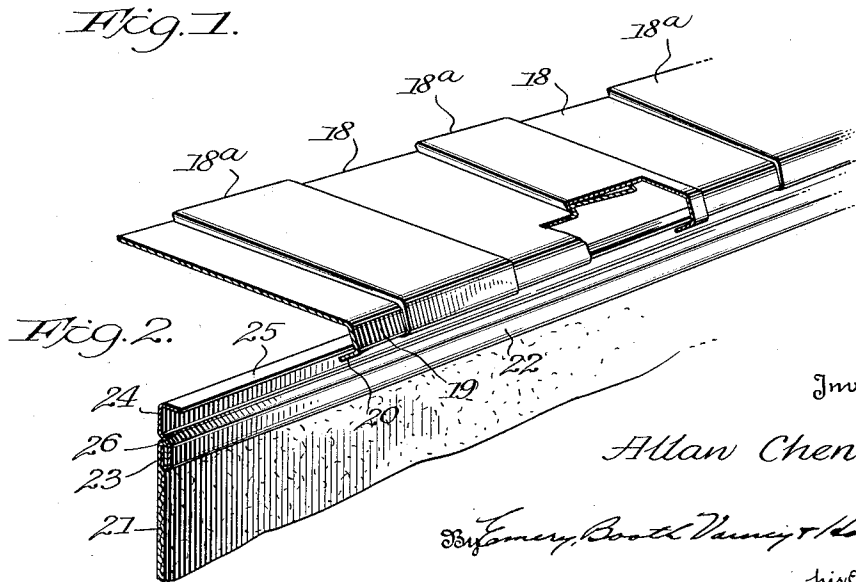


Fig. 2.

Inventor

Allan Cheney

Emery, Booth Vane & Holcomb  
his Attorneys

## UNITED STATES PATENT OFFICE

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## SEEPAGE PROTECTOR FOR MASONRY BUILDINGS

Allan Cheney, Melrose, Mass.

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13 Claims. (Cl. 108—26)

The present invention relates to seepage protectors for masonry buildings and the like, and aims generally to improve existing seepage protectors such as the type illustrated, described and claimed in my prior Patent No. 1,868,092, granted July 19, 1932.

In my prior patent above referred to adequate seepage protection for the parapet wall of a building is provided, combining a metal through-wall flashing embedded horizontally in the wall to prevent seepage downwardly through the wall, and a flexible fabric siding or base flashing rigidly attached to one edge portion of the flashing and adapted to overlie the vertical face of the wall below the flashing and the roof joint.

In the construction of masonry buildings the roofing is often applied or finished after the parapet walls are completed. In utilizing the seepage protector shown in my prior patent, the entire assembled protector was installed during the construction of the wall, subjecting the flexible fabric siding or base flashing to damage by the weather or workmen during the period intervening the installation of the through flashing and the final completion of the roof, at which time the lower portion of the flexible siding was cementitiously secured to the prepared roof. In some instances severe weather occurred following the building of the wall, delaying the laying of the roof, with consequent serious damage to the flexible siding, and when the siding was damaged so as to be unsuitable for use, it could not be replaced without replacing the through-wall flashing.

According to my present invention, the through-wall flashing, which may be of any approved design and construction, may be embedded in the masonry wall as the building of the wall progresses, and at a later date, when the roof is ready for finishing the flexible fabric waterproof siding or base flashing may be readily, quickly and easily attached to the flashing in such manner that it will hang snugly to the masonry wall.

Furthermore, according to my prior patented construction, the length of the fabric siding or base flashing strips was limited to the length of flashing sheets, which for practical purposes of installation are preferably in four-foot lengths. By reason of my present invention the fabric siding strips may be of lengths coextensive with the flashing sheet or may be in a single continuous length coextensive with the length of the wall.

The invention will best be understood by reference to the following description when taken in connection with the accompanying drawing, of a certain illustrative embodiment thereof, and in which

Fig. 1 is a vertical sectional view of a portion of a masonry building having a seepage protector embodying the present invention;

Fig. 2 is a perspective view of a series of assembled flashing sheets and a single length of siding, the two being separate and ready for attachment; and

Fig. 3 is an enlarged detail sectional view illustrating how the attached siding lies flush with the vertical face of the wall.

Referring to the illustrated embodiment of the invention, there is shown in the drawing, by way of example, a portion of a masonry building comprising a roof 10, a parapet 11, which may be composed of brickwork 12, and facing stones 13, surmounted by a coping block or stone 14, united as is customary by a layer 15 of binding material, such as mortar. Adjacent the parapet 11 the roof may have an oblique portion 16 of conventional design.

A through-wall metal flashing sheet 18 is embedded in a layer of mortar 15 of the parapet wall, said sheet being continuous and preferably imperforate to prevent moisture which enters through the coping 14 from seeping downwardly through the wall. This flashing sheet may be of any suitable construction and design, and may advantageously be formed with means, such as ribs 18<sup>a</sup> for interlocking engagement with the mortar, whereby the flashing sheet may have a permanent bonded connection with the wall.

The through-wall flashing may advantageously be embedded in the wall 11 at any desirable point above the roof line, and although it is herein illustrated as embedded just below the coping block, it is to be understood that such is for purposes of illustration only.

The flashing sheet is advantageously of a width exceeding the width of the wall so as to extend completely through the wall and have a marginal edge extending beyond the inner face of the wall. This marginal portion 19, protruding beyond the face of the wall 11, is advantageously formed with an inwardly bent angular marginal edge 20, and in the event that the flashing sheet is ribbed transversely, as at 18<sup>a</sup>, the ribs of the portions 19 and 20 are advantageously flattened.

The vertical siding or base flashing 21 is preferably a flexible waterproofed fabric, such as

saturated cotton drilling sanded to enhance its appearance and durability. The fabric siding 21 may be formed in any desired length, ranging from short lengths coextensive with the flashing sheets to a single continuous length of the length of the wall.

The vertical siding or base flashing 21 has formed therewith a metal attaching and locking strip 22 in order that the siding may be readily attached to the through-wall flashing 18. Advantageously the strip 22 includes a fabric-gripping portion 23, which may be formed by reversely bending the metal so as to clinch the fabric 21 between the sides thereof, and a lock portion 24 for ready locking engagement with the protruding portion of the flashing sheet 18. The locking portion is of bendable sheet metal, a portion of which is preferably bent to provide a flange 25 adapted to be positioned over the marginal flange 20 of the flashing and folded in between the portions 19 and 20 of the flashing as they are folded and pressed together. Preferably the fabric-gripping portion 23 and the lock portion 24 of the attaching strip 22 are laterally offset, as at 26, so that the outer face of the gripping portion 23 will be in line with the outer face of the portion 19 of the flashing when the parts are assembled, and the fabric siding will lie flush with the wall as shown in Fig. 1.

As in the case of my prior patent, the flexible siding or base flashing is preferably of woven cotton drilling saturated with asphalt and having coatings of asphalt on both sides thereof, thus providing a durable waterproof siding that may be overlapped with the roofing material 27 in a manner as illustrated in Fig. 1.

In using my improved seepage protector the mason installs the through-wall flashing 18 in the parapet wall during the construction of the wall in such a way that the marginal edge portions 19 and 20 extend beyond the face of the wall. Thereafter when the roofer is ready to lay the roof 27, he may readily attach the flexible waterproof siding 21 to the flashing by merely inserting the flange portion 25 over the flange 20 of the flashing and then bending the two together and toward the wall so as to provide a lock joint. As stated above, the siding may be in short lengths coextensive with the lengths of the flashing or may be in a single length coextensive with the length of the wall and as it is in perfect condition at the time, it is applied to the face of the wall, it may be readily mopped with cementitious material to the roofing composition 27, producing a highly satisfactory sheathing of pleasing appearance.

Having described one embodiment of my invention but without intending to limit myself thereto, what I claim and desire to secure by Letters Patent is:

1. A seepage protector for masonry walls and the like, the combination of a through-wall flashing extending through said wall and adapted to be embedded in a layer of mortar of said wall, a portion of said flashing sheet extending beyond said wall, and a flexible waterproof sheet adapted to be attached to said protruding edge portion of the through-wall flashing and sheet metal attaching means secured to said fabric and having a portion readily bendable into interlocking engagement with the protruding edges of said flashing.

2. In a seepage protector for masonry walls and the like, the combination of a sheet of

metal flashing extending through said wall from side to side and for embedding horizontally in a layer of mortar, a flexible waterproof siding for overlying a vertical portion of said wall and a portion of the roof, and means for attaching said siding to said flashing sheet comprising a metal attaching strip having a portion clamped to said fabric and another portion adaptable to be bent into interlocking engagement with the flashing.

3. In a seepage protector for masonry walls and the like, the combination of a series of through-wall flashings of sheet metal embedded horizontally in said wall, said sheets when in assembled relation in said wall providing a continuous sheet metal waterproof flashing from side to side and through a length of said wall, and a separate single length of flexible waterproof siding adapted to overlie a vertical face of said wall throughout the length of said assembled flashing sheets, and means for attaching said length of flexible siding to said flashing sheets.

4. In a seepage protector for masonry walls and the like, the combination of a series of through-wall flashings of sheet metal embedded horizontally in said wall, said sheets when in assembled relation in said wall providing a continuous sheet metal waterproof flashing from side to side and through a length of said wall, said flashing sheets being of a width in excess of the width of the wall to provide, when in place, overhanging bendable marginal flanges, and a separate continuous strip of flexible waterproof siding adapted to overlie a vertical face of said wall throughout the length of said assembled flashing sheets, and sheet metal attaching means carried by said flexible siding adapted for interconnection with the protruding marginal flanges of said flashing sheets whereby said siding may be attached to the flashing strips.

5. In a seepage protector for masonry walls and the like, the combination of a series of through-wall flashings of sheet metal embedded horizontally in said wall, said sheets when in assembled relation in said wall providing a continuous sheet metal waterproof flashing from side to side and through a length of said wall, said flashing sheets being of a width in excess of the width of the wall to provide, when in place, overhanging bendable marginal flanges, and a separate strip of flexible waterproof siding adapted to overlie a vertical face of said wall throughout the length of said assembled flashing sheets, and a metal attaching strip secured along one edge of the siding and having a bendable portion adapted for interconnection with the protruding marginal flanges of said flashing strip.

6. In a seepage protector for masonry walls and the like, the combination of a sheet of metal flashing extending through said wall from side to side and for embedding horizontally in a layer of mortar, said flashing sheet being of a width in excess of the width of said wall to provide, when in place, overhanging marginal flanges, a flexible waterproof siding for overlying a vertical portion of said wall and a portion of the roof, and means for attaching said siding to the flanges of said flashing sheets comprising laterally offset fabric-gripping and flashing-interlocking portions whereby the siding will lie flat against the vertical face of said wall.

7. In a seepage protector for masonry walls and the like, the combination of a series of through-wall flashings of sheet metal embedded

horizontally in said wall, said sheets when in assembled relation in said wall providing a continuous sheet metal waterproof flashing from side to side and through a length of said wall, said flashing sheets being of a width in excess of the width of the wall to provide, when in place, overhanging bendable marginal flanges, and a separate strip of flexible waterproof siding adapted to overlie a vertical face of said wall throughout the length of said assembled flashing sheets, and a metal attaching means comprising a siding gripping portion bent to clinch one edge of the siding throughout its length and a laterally offset flashing interlocking portion bendable into interlocking engagement with the marginal flanges of said flashing sheets.

8. In a seepage protector, a sheet of flexible waterproof fabric material, a metal attaching strip secured to said sheet along one edge thereof, the free portion of said strip comprising solely a thickness of bendable sheet metal.

9. In a seepage protector, a sheet of flexible waterproof fabric material for overlying a portion of the vertical side of a wall and the roof joint, a metal strip having an attaching portion and a bendable locking portion, the former being bent into clinching engagement with the material along one marginal edge thereof and the locking portion extending away from the fabric and providing a substantial area of bendable sheet metal adapted for interlocking engagement with a support.

10. In a seepage protector, a sheet of flexible waterproof fabric material for overlying a portion of the vertical side of a wall and the roof joint, a metal strip having an attaching laterally offset portion and a bendable locking portion, the former being bent into clinching engagement with the material along one marginal edge thereof and the locking portion being solely

of thin sheet metal adapted for interlocking with a sheet metal support and to form a thin flat connection therewith.

11. In a seepage protector of masonry walls a single continuous sheet of flexible waterproof fabric base flashing adapted for connection with a plurality of sheets of wall flashing embedded in a masonry wall, a metal strip of continuous length coextensive with said base flashing having a gripping portion bent into clinching engagement with said base flashing along one edge thereof, and also having a bendable locking portion for interlocking engagement with the plurality of flashing sheets.

12. In a seepage protector of masonry walls, a single continuous sheet of flexible waterproof fabric base flashing adapted for connection with a plurality of sheets of wall flashing embedded in a masonry wall, a metal strip of continuous length coextensive with said base flashing having a gripping portion bent into clinching engagement with said base flashing along one edge thereof, and also having a laterally offset bendable locking portion for interlocking engagement with the plurality of flashing sheets.

13. A seepage protector for masonry buildings containing a wall composed of superposed courses of masonry and a roof, of means for preventing the infiltration of moisture downwardly through said wall or at the roof joint, comprising a series of impervious sheet metal through-wall flashing sheets embedded in said wall to provide a continuous sheet metal cut-off against downward infiltration through said wall, and separate flexible waterproof fabric base flashing adapted to overlie a portion of the vertical face of said wall and the roof joint, and sheet metal attaching means for attaching and locking the base flashing to said series of wall flashings.

ALLAN CHENEY.