F. D. RENAUD.

FLASHING BLOCK.

APPLICATION FILED FEB. 10, 1912.

1,039,320. Patented Sept. 24, 1912.

Fig. 1.

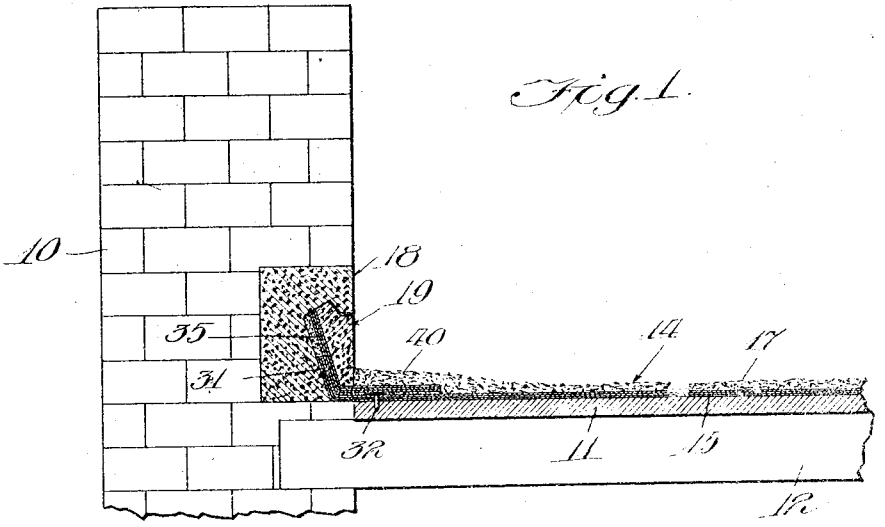


Fig. 3.

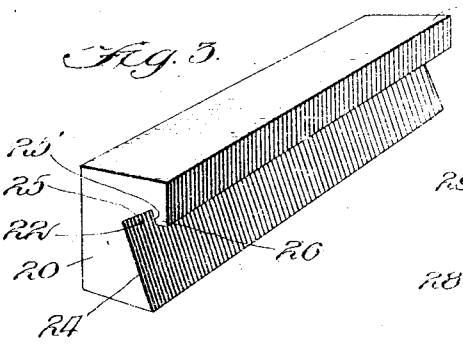


Fig. 4.

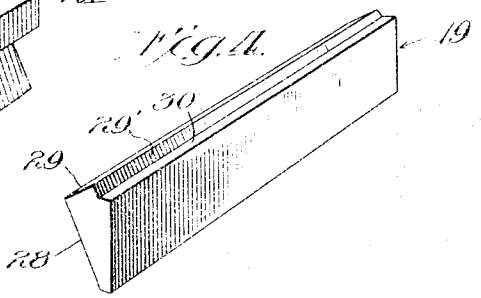
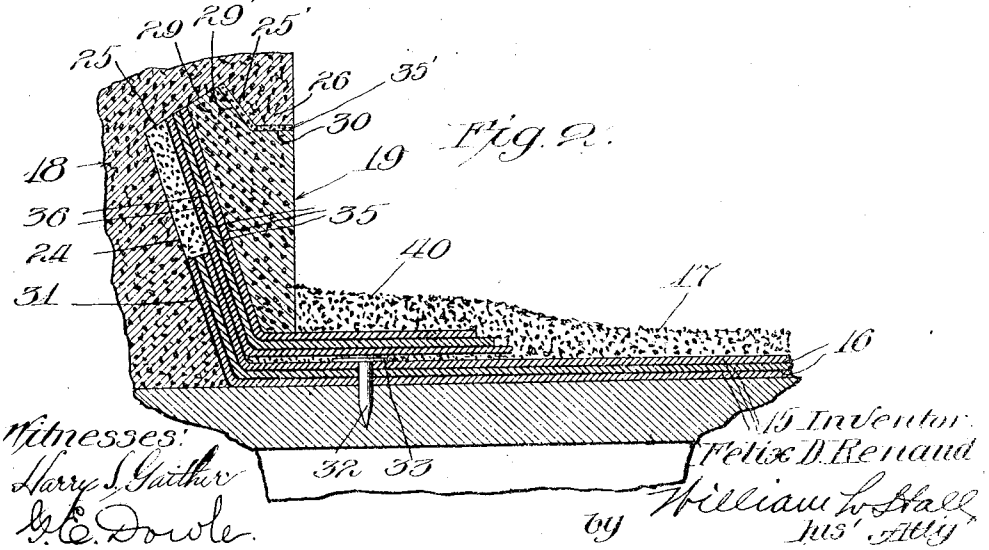


Fig. 2.



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UNITED STATES PATENT OFFICE.

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FLASHING-BLOCK.

1,039,320. Specification of Letters Patent. **Patented Sept. 24, 1912.**

Application filed February 10, 1912. Serial No. 676,792.

To all whom it may concern:

Be it known that I, FELIX D. RENAUD, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Flashing-Blocks; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the characters of reference marked thereon, which form a part of this specification.

This invention relates to improved flashing construction for connecting the foundation layers of a composition or water proofed roof with a vertical wall, a chimney, a sky-light inclosure, and the like, and the object of the invention is to provide an exceedingly strong, durable and efficient weather proof connection of the roof with the building walls and at a moderate cost.

The invention consists in the matters hereinafter set forth and more particularly pointed out in the appended claims.

In the drawings—Figure 1 is a fragmentary sectional view taken through the vertical wall of a building and the roof thereof, showing the manner of connecting the roof to the wall by my improved flashing block. Fig. 2 is an enlarged sectional view at the joint between the roof and the wall. Fig. 3 is a perspective view of one member of the duplex flashing block made in accordance with my invention. Fig. 4 is a perspective view of the other member of said duplex flashing block.

The vertical wall 10 of the building (or other analogous part) may be made of masonry construction, concrete or the like. The roof board 11 is supported by joists 12 that are embedded at their ends in the wall in the usual manner, as shown in Fig. 1.

13 designates as a whole a composition roof which is supported on the roof board 11 and may be made of one or a plurality of superposed layers of material such as sheet metal, paper or composition 14, 14 which are cemented together by the intervening layers of a cementing material, usually of coal tar pitch structure, and overlaid by a layer of gravel and tar or pitch mixture. The invention relates to the means of connection between the layer or layers of roof structure and the vertical wall whereby a durable weather-proof connection may be affected by moisture and which is so constructed and arranged as to prevent the layers of the roofing material being pulled away from the adjoining vertical wall, chimney or like vertical portion of the building to which the roof is anchored.

In accordance with my invention I provide at the inner side of the vertical wall 10, or other like part, adjacent to the roof level a duplex flashing block composed of two members, to wit, the main body member 18 and the counter-flashing member 19. Said flashing block is embodied in the wall structure and is arranged with its inner face flush or substantially so with the inner face of the wall. The duplex flashing block may be made of concrete, terra cotta or other suitable durable material. The main body 18 of the duplex flashing block may be built in the wall or like part at the time of the erection of the latter. It comprises a vertical portion 20 and an overhanging, horizontal portion 21, and is formed between the vertical and horizontal portions with a recess 22 that is shaped to receive the counter-flashing member 19; the said main and counter-flashing members being constructed to permit the latter to be inserted into place after the main or body member is built into the wall and to be interlocked therewith so as to prevent the counter-flashing member being withdrawn or pulled away from the main body member. As herein shown the main or body member is formed with a vertically oblique surface 24 on the front face of the vertical portion 20, and opposing oblique surfaces 25, 25′ on the under side of the overhanging portion 21, and said overhanging portion terminates exterior to the shoulder 25′ in a lip 26 which is preferably made of some width. The overhanging lip 26, at the rear of which is formed the shoulder 25′, is made with a thickened edge, as shown, in order to prevent the same from readily breaking in the handling of the block. The counter-flashing member 19 is formed with a rear inclined surface 28, which opposes and corresponds to the inclined surface 24 of the main member, and upper oblique surfaces 29, 29′ which oppose and correspond to the oblique or inclined surfaces 25, 25′ of the main member; and said counter-flashing member has a squared horizontal shoulder or upper surface 30 which opposes the horizontal edge of the lip 26. The said inclined interfitting parts 25

and 29 and 25′ and 29′ of the main and counter members of the flashing block constitute an interlocking connection between the upper side of the counter member and the main body of the flashing block to prevent the counter member being removed or withdrawn from the block when it is fitted into the recess. The interfitting connection between the upper side of the counter member of the flashing block and the main body thereof constitutes an under-cut or interfitting connection for the purpose set forth and, so far as the broader features of my invention are concerned, said members may be otherwise shaped at their interfitting parts to produce the same results.

The roof layers or strips 15 extend beyond the roof board 11 directly into the recess 20 of the flashing block and thence upwardly into overlapping relation with and are supported by the inclined surface 24 of the recessed portion of the main body of the flashing block, as best shown at 31 in Fig. 2, the turned up portion of the lowermost strip or layer being cemented to said inclined surface 24. Said strips are preferably fastened just inside the flashing block, to the roof board, as by means of nails 32 which are driven downwardly through the buttons or washers 33 that rest on the roof strips or layers 15.

At the joint between the roof and the wall are provided a plurality of counter-flashing strips 35, which extend lengthwise of the flashing block and are preferably made of a width to extend from the upper side of the recess 22 of the main body of the flashing block to a distance on the roof strips inside of the flashing block, as best shown in Fig. 2. These counter-flashing strips are cemented to the roofing strips and to each other by intermediate layers 36 of pitch or other cementitious material. As herein shown and preferably, there will be a number of these counter-flashing strips equal to the number of the roof strips so as to provide at the angle where the roof strips join the wall a reinforcement that is substantially equal in thickness to twice that of the roof layers or strips 15. The upwardly extending ends of the roof strips or layers and of the counter-flashing strips are confined and held between the surface 24 of the main member of the flashing block and the rear surface 28 of the counter member of the flashing block. The strips or layers are first laid in the position shown in Fig. 2, with the intervening layers of pitch or cementitious material between them and with the terminal portions of the roof and flashing strips laid against the inclined surfaces 24 of the main member of the flashing block. Thereafter the counter-flashing member 18 of the flashing block is inserted into place with the upper edge interlocked with the main member, as stated. Thereafter an added thickness 40 of the roofing surface material is applied to the top of the roof structure adjacent to the foot or lower edge of the counter member of the flashing block so as to constitute a rib or key to prevent the lower edge of the block from being withdrawn from the main member of the block.

The space behind the upper edges of the counter flashing strips 35, and above the turned up portions 31 of the roof strips may be filled with a body of cement or other suitable filling material, if found desirable. So also the spaces if such spaces occur, between the upper edge of the counter flashing member and the overhanging portion of the main member may be filled with a layer of cement 35′ to prevent the entrance of water between said member at these points.

In case the wall or other part to which the roof is joined be made of concrete, the recess to receive the flashing ends of the foundation strips and the counter flashing member 19 may be formed in said wall by the use of a suitable form, in a well known manner, so that the main body of the flashing block in this case becomes an integral part of the concrete wall. In such latter construction the counter flashing member corresponding to the member 19 may be made an integral part like the member 19 and applied in said recess as described or the recess may be filled and the flashing ends of the foundation strips covered and confined by a separately formed mass of cementitious material such as is used to form the wall proper. Such a construction is shown in my co-pending application for U. S. Letters Patent, filed on the 10th day of February, 1912, Serial No. 676,793. When an integral flashing member, such as the member 19 is employed, the layer 35′ of cement may be relied upon to hold the upper side of the flashing member in place without the undercut construction shown in Fig. 2. When used in a masonry wall, as shown in Fig. 1, the use of said block in no way weakens the wall, but said block reliably supports the portion of the wall above the same. Moreover, the block, being made of concrete, or like material, is as durable as any part of the wall.

If it be desired to repair the joint or connection between the roof and the wall, or if it be desired for any other purpose to remove the counter flashing member, when made an integral, separately applied part, said member may be removed by removing the thickened portion or rib 40 of the roof. Thereupon said member may be readily removed to afford access to the counter flashing strips and the flashing ends of the foundation strips.

The construction described produces an exceedingly strong and durable joint and

one which is entirely weather proof to protect the foundation strips from the action of the weather at the junction of the roof and wall.

It is to be understood that the details of the construction of the device are capable of variation within the spirit and scope of the invention and that the invention is not limited to such details except as imposed by the prior art.

I claim as my invention:—

1. A roof construction embracing, in combination with a roof including roofing strips, a vertical wall or member formed at the roof level with a recess to receive the flashing ends of the said strips, said recess having its lower wall substantially flush with the surface of the roof, and a flashing block fitted in said recess and between which and the bottom of the recess the flashing ends of said strips are confined.

2. A roof construction embracing, in combination with a roof including roofing strips, a vertical wall or member formed at the roof level with a recess to receive the flashing ends of said strips, said recess having its lower wall substantially flush with the surface of the roof, a flashing block fitted in said recess and between which and the bottom of the recess the flashing ends of the strips are confined, the upper side of the recess being undercut to interfit with the upper side of the flashing block.

3. A roof construction embracing, in combination with a roof including roofing strips, a vertical wall or member formed at the roof level with a recess to receive the flashing ends of said strips, said recess having its lower wall substantially flush with the surface of the roof, a flashing block fitted in said recess and between which and the bottom of the recess the flashing ends of the strips are confined, the upper side of the recess being undercut to interfit with the upper side of the flashing block, and means to engage the lower side of said block for the purpose set forth.

4. A roof construction embracing, in combination with a composition roof including foundation strips, a vertical wall or member formed with a recess to receive the flashing ends of said strips, and a flashing block fitted in the recess and between which and the bottom of the recess the flashing ends of the strips are confined, the upper side of the recess being undercut to interfit the upper side of the flashing block, a surface layer of roofing material covering said strips said surface layer being thickened at the lower outer side of said block to constitute a key, for the purpose set forth.

In testimony, that I claim the foregoing as my invention I affix my signature in the presence of two witnesses, this 20th day of January, A. D. 1912.

FELIX D. RENAUD.

Witnesses:
W. L. HALL,
G. E. DOWLE.