May 12, 1964 C. D. SWANSON 3,132,445

PLASTIC GRAVEL STOP AND FASCIA

Filed Nov. 14, 1960

2 Sheets-Sheet 1

Fig. 1

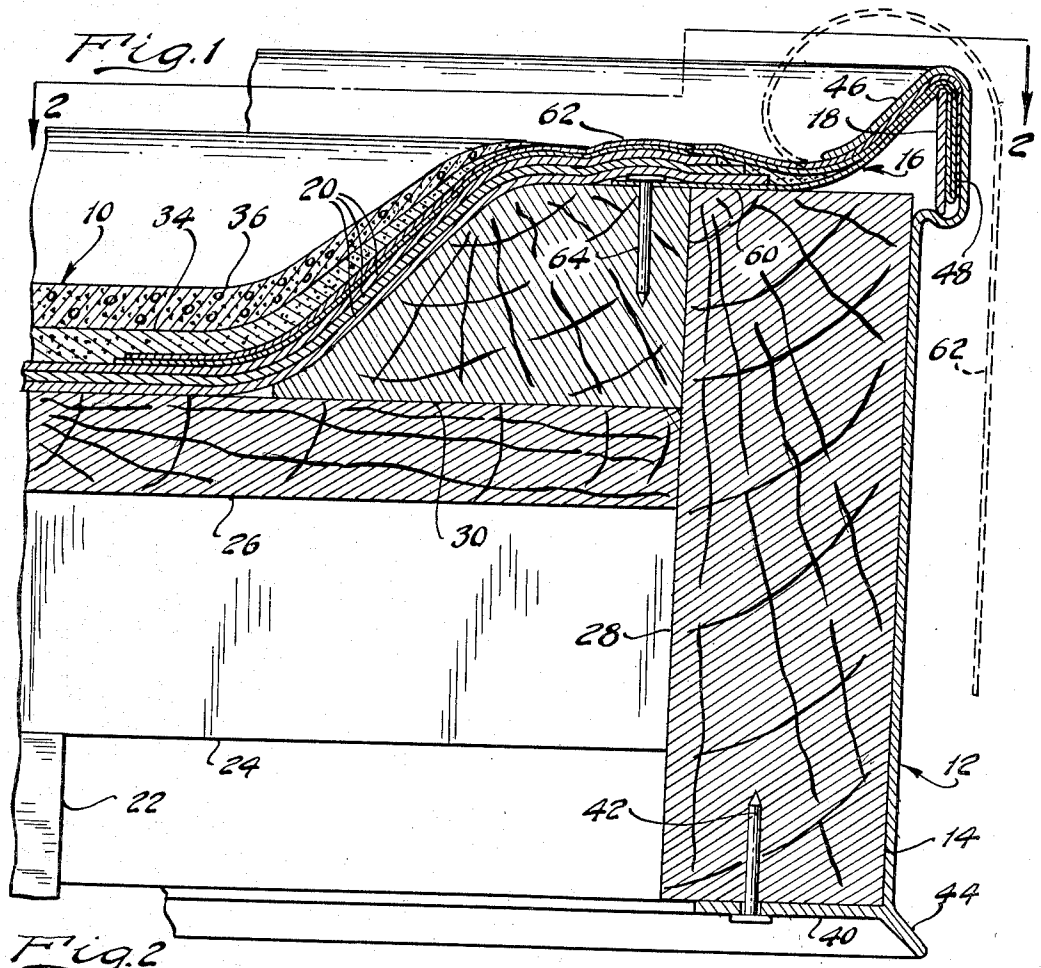
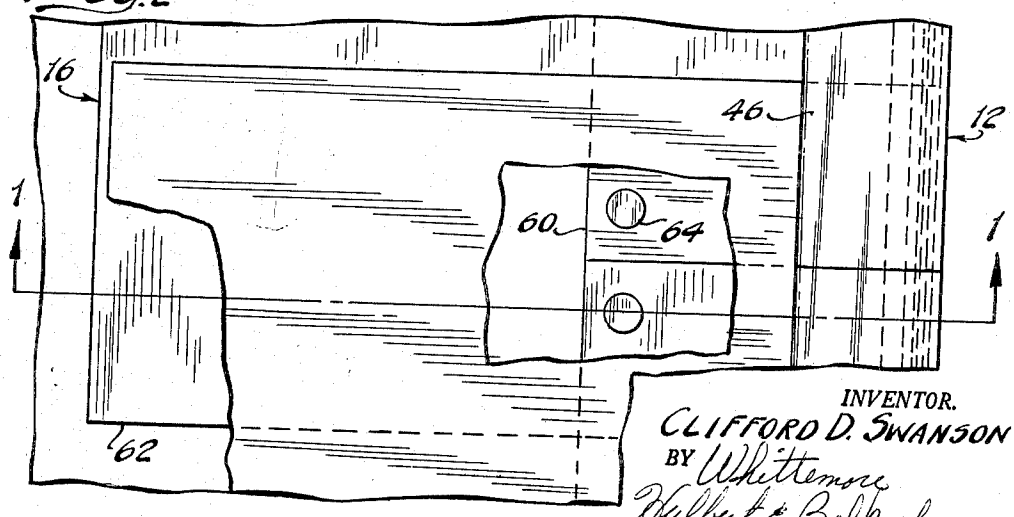


Fig. 2



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Fig. 3

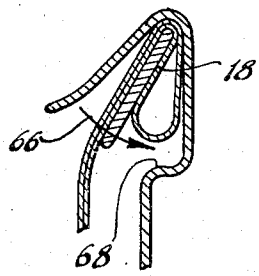


Fig. 5

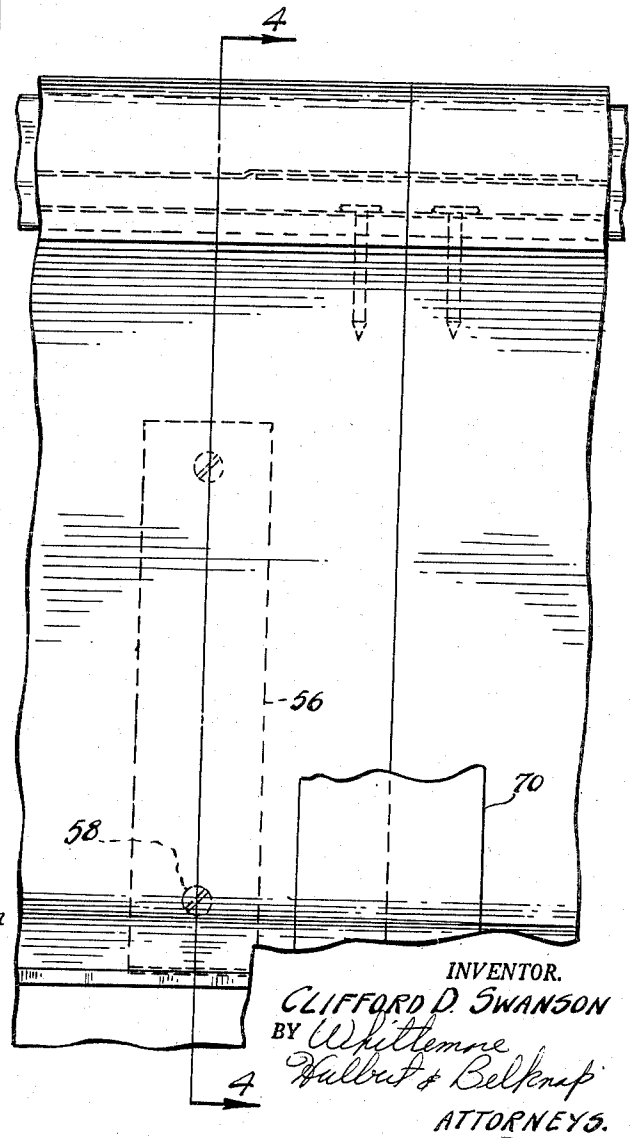
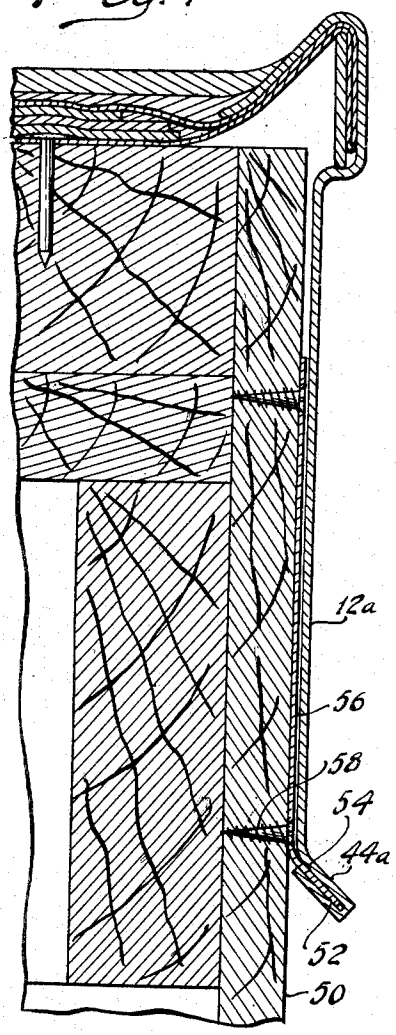


Fig. 4



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PLASTIC GRAVEL STOP AND FASCIA

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6 Claims. (Cl. 50—66)

The invention relates to building structures and refers more specifically to a method of and means for constructing the periphery of a roof or the like whereby improved weatherproofing is provided and finishing members are protected during construction.

In the past leaking of substantially flat roofs about the periphery thereof has been a particular problem in the construction industry. Leakage occurring specifically at the overlap of the felt flashing and the fascia member is primarly caused by defects in the cohesion between the two dissimilar materials of the flashing and fascia which on movement between the flashing and fascia produce breaks in the flashing felt allowing water to penetrate the roof at this point.

In addition the constructing of roofs in the manner above indicated often results in the pitch being splashed on the fascia members during the mopping operations. The pitch is extremely difficult to remove from the fascia members and often leaves permanent stains thereon.

It is therefore one of the objects of the present invention to provide means for constructing the periphery of a roof having improved weatherproofing characteristics which means is operable to protect the fascia members during construction.

Another object is to provide a method of constructing the periphery of a roof whereby improved weatherproofing characteristics are provided and the fascia members of the roof are protected during construction.

Another object is to provide a positive watertight seal between a flexible flashing and a fascia member which seal will still allow dissimilar movement to occur between the fascia and flashing, said movement being absorbed by and/or compensated for by the seal without the seal losing its waterproofing abilities.

Another object is to provide means for constructing the periphery of a roof comprising a fascia member adapted to be secured around the periphery of the roof and including a gravel stop portion, a flashing having two separate portions adapted to be integrally included with roofing material at different times during the construction of the roof periphery and a key strip for securing the flashing to the fascia member.

Another object is to provide structure as set forth above wherein the fascia member is constructed entirely of plastic and has the exposed surface thereof serrated to reduce the sheen thereof.

Another object is to provide structure as set forth above wherein the fascia member may be installed on a roof having extending eaves or at the top of a substantially vertical wall.

Another object is to provide structure as set forth above wherein the flashing is a flexible plastic sheet, one portion of which is a short flap adapted to be secured directly to the roof deck and the other portion of which is a long flap particularly adapted to be mopped into the upper layers of felt of a pitch and gravel roof.

Another object is to provide a method of constructing a roof comprising attaching a flexible flashing to a fascia member so that the flashing has a lower short flap and an upper longer flap securing the fascia member to the periphery of the roof being constructed, fastening the short flap to the roof surface to be finished, covering the short flap with the roofing and adhering the long flap to the top of said roofing.

Another object is to provide a method of constructing the periphery of a roof as set forth above wherein during the securing of the short flap to the roof surface and the constructing of the roof material over the short flap, the long flap is folded over the fascia member to protect the fascia member during the construction of the roof.

Another object is to provide a method of and means for constructing the periphery of a roof which is simple, economical and efficient.

Other objects and features of the invention will become apparent as the description proceeds, especially when taken in conjunction with the accompanying drawings, illustrating a preferred embodiment of the invention, wherein:

FIGURE 1 is a section view of the periphery of a roof constructed in accordance with the invention taken substantially on the line 1—1 in FIGURE 2.

FIGURE 2 is a partly broken away plan view of a portion of the periphery of the roof shown in FIGURE 1 with the roofing material removed taken in the direction of arrows 2—2 in FIGURE 1 and particularly showing the lap joint of the upper flap of the flashing and the butt joint of the lower flap thereof.

FIGURE 3 is a section of the gravel stop portion of the flashing member shown in FIGURE 1 illustrating the method of securing the flashing to the fascia member.

FIGURE 4 is a cross section of the periphery of a roof construction wherein the fascia member is secured to a substantially vertical wall taken along the line 4—4 in FIGURE 5.

FIGURE 5 is an elevation view of a portion of the periphery of the roof structure shown in FIGURE 5.

With particular reference to the drawings one embodiment of the present invention will now be disclosed.

As shown best in FIGURE 1 the periphery of a built-up pitch and gravel roof 10 is formed by a fascia member 12 secured to the fascia board 14 in conjunction with the flexible flashing 16 secured to the fascia member 12 by means of a key strip 18. The construction as shown provides a roof periphery having an upper and lower seal which is not subject to leaking due to water collecting in air pockets formed between the sheets of roofing felt 20. Further in accordance with the method of constructing the roof periphery illustrated in FIGURE 1 the fascia member 12 is protected during the construction.

More specifically the roof construction shown in FIGURE 1 comprises the upper end of a wall 22, joist member 24 extending outwardly therefrom, the roofing boards 26 and the fascia board 14 secured over the ends of the joists 24 and roofing boards 26 as shown. The inclined member 30 is provided between the roofing boards 26 and fascia member 28 so that drainage will generally be inwardly of the roof in the usual manner. While one particular roof structure is illustrated it will be understood that similar structures having the same general configuration, such as structures using metal trusses and roof decks may have the periphery of the roof constructed in accordance with the invention.

The roofing material to be applied over the roof boards 26 includes the roofing felt 20 usually applied in from three to six layers, each layer being mopped in with pitch. A liberal layer of pitch 34 is applied over the last layer of roofing felt and gravel 36 is spread over the pitch layer. It will be understood that substantial variation in the particular roof material is also possible within the scope of the present invention.

The fascia member 12 in accordance with the invention may be an extruded plastic strip varying in length and having the general cross section indicated in FIGURE 1. The plastic fascia strip may be extruded from well known resinous materials, such as Geon 8700 or Cycolac. A substantially unplasticized Geon material has been used

successfully and has a Durometer hardness on D Scale of approximately 85, a tensile strength of approximately 7000 pounds per square inch and a specific gravity of 1.38. The plastic strip has exterior surface thereof serrated, as shown best in FIGURE 5, to reduce the sheen of the plastic whereby the fascia strip is more pleasing in appearance. Further the plastic strip may be of substantially any desirable color.

The fascia member 12, as shown in FIGURE 1, is provided at the bottom thereof with a nailing flange 40 whereby the fascia member 12 is secured to the fascia board 14 by means of nails 42 and further includes the drip ledge 44. At the upper end of the fascia member 12 as shown the gravel stop 46 is formed therein having the pocket 48 in which the flashing 16 is secured by the key strip 18.

A modified fascia member 12*a* is illustrated in FIGURE 5 which is particularly adapted to be secured to building structures having vertical walls 50 to which it is desired to secure the fascia member 12*a*. The cross section of the fascia member 12*a* is similar to that of the fascia member 12 except that the drip ledge 44*a* includes the recess 52 therein to which the end 54 of a bracket 56 which is secured to the wall 50 by convenient means, such as screws 58, is inserted to secure the lower portion of the fascia member 12*a* to the wall 50. If desired the fascia member 12 may be formed with a recess, such as 52, in the drip ledge 44 whereby the flange 40 may be cut therefrom to produce the fascia member 12*a* so that a single fascia member may be provided for all jobs.

The flashing 16 as shown best in FIGURE 1 is a flexible plastic material, such as the well known Nervastral or Saraloy having a Durometer A Scale hardness of approximately 60, a tensile strength of 900 pounds per square inch, an ultimate elongation of 350% and a specific gravity of 1.52.

As shown the flashing 16 is folded to provide a short flap 60 and a long flap 62. The short flap 60 is secured to the member 30 by convenient means, such as nails 64. The long flap 62 is secured to the roofing by means of mopping the long flap into the pitch 34 on top of the last layer of roofing felt 20. With such construction there is practically no chance of leaks forming at the periphery of the roof 10 since a double seal is provided thereat both above and below the roofing felts. Thus even if air bubbles do form in the periphery of the roof 10 water will not collect therein to form leaks.

In addition the short flap 60 provides a stop for the pitch as the roofing felts are being mopped in place around the periphery of the roof. Further the long flap 62 during the mopping in of the roofing felts 20 may be thrown over the exterior of the applied fascia member 12, as shown in dotted line in FIGURE 1, and in such position prevents the pitch slopped over the edge of the roof during mopping in of the felts from contacting the fascia member 12.

The flashing 16 is secured within the pocket 48 in the fascia member 12 as shown best in FIGURE 3 by means of the key strip 18 after folding the flashing 16 to provide the long and short flaps as desired by merely inserting the flashing 16 and key strip 18 in the recess 48 and pivoting the key strip 18 in the direction of the arrow 66 whereupon the key strip 18 is locked in position behind the projecting portion 68 of the gravel stop portion 46 of fascia member 12.

In installation the flashing 16 is first secured to the fascia member 12 in the manner shown in FIGURE 3 by means of the key strip 18. The portion 60 of the flashing 16 is then secured to the periphery of the roof to be finished as shown in FIGURE 1 by the nails 64 or other convenient means. The long flap 62 is then folded over the fascia member 12 as shown in FIGURE 1 to protect the fascia member 12 during the mopping in of the building felts 20. The building felts 20 are then mopped in place with pitch and the long flap 62 is laid on top of the last building felt 20 and a layer of pitch 34 is poured thereover followed by the spreading of the gravel 36.

At joints around the periphery of the roof the short flap 60 is cut off even with the edge of a length of fascia member 12 while the long flap is extended from the ends of both abutting fascia members 12, as shown in FIGURE 2. The long flaps 52 are then overlapped and sealed with solvent mastic. A short plastic coupling member may be secured over the abutting ends of the fascia member 12 if desired, as shown in FIGURE 5, to complete a joint. It will be obvious that the key strip 18 may either be cut off at the end of the abutting fascia members 12 or continued through the joint as desired.

The drawings and the foregoing specification constitute a description of the improved plastic gravel stop and fascia in such full, clear, concise and exact terms as to enable any person skilled in the art to practice the invention, the scope of which is indicated by the appended claims.

What I claim as my invention is:

1. Structure for finishing the periphery of built-up roof construction comprising an elongated fascia member of rigid resilient material having vertical extent in assembly and having a recess at the top thereof including upper and lower reentrant portions and opening toward the built-up roof construction, means for securing the fascia member to the edge of the roof construction, a flexible roof flashing comprising a longitudinally folded elongated flexible member, the folded edge of which is positioned within the recess in the fascia member and an elongated substantially rigid locking strip having a vertical extent in assembly substantially greater than the horizontal extent thereof perpendicular to the length thereof positioned within the recess with one vertical edge in contact with the fascia member within the lower reentrant portion of the recess and the other vertical edge in clamping engagement with the folded edge of the flashing within the upper reentrant portion of the recess for wedging the folded edge of the flashing within the recess, said locking strip constituting the sole means of securing the flashing within the recess.

2. Structure for finishing the periphery of built-up roof construction comprising a vertically extending fascia member of rigid resilient material the upper end of which includes an S-shaped portion extending substantially perpendicularly thereto away from the built-up roof construction, a vertically extending portion connected to the S-shaped portion and an upper horizontally extending arcuate portion connected to said vertically extending portion which terminates in a gravel stop portion extending downwardly toward the built-up roof construction at an angle to the vertical whereby a reentrant recess is provided in the fascia member opening toward the built-up roof construction, an elongated flexible roof flashing one edge of which is positioned within the reentrant recess and means positioned within the recess over the one edge of the flashing for wedging the flashing within the recess.

3. Structure as claimed in claim 2 wherein the flashing is folded longitudinally and said one edge is the folded edge thereof whereby upper and lower flashing flaps are provided for the roof construction.

4. Structure as set forth in claim 3 wherein the upper flap of the flashing is longer than the lower flap of the flashing.

5. Structure as claimed in claim 2 wherein the means for securing the flashing within the reentrant recess comprises an elongated relatively rigid flat locking strip the edges of which are locked in the reentrant recess and one of which edges wedges the edge of the flashing against the fascia member.

6. The method of finishing the periphery of a built-up roof construction comprising positioning the folded edge of a flashing folded to have a relatively long upper and a relatively short lower flap in a reentrant recess in the upper end of a fascia member, wedging the folded edge of the flashing within the reentrant recess by means of an

elongated relatively rigid flat locking strip engaging the folded edge of the flashing and positioned in the reentrant recess, securing the fascia member to the edge of the roof construction, fastening the lower flashing flap to the roof construction, folding the upper flashing flap over the fascia member to protect the fascia member during finishing of the periphery of the built-up roof, finishing the periphery of the built-up roof, folding the upper flashing flap over the roof periphery and sealing the upper flashing flap to the top of the roof periphery.

References Cited in the file of this patent

UNITED STATES PATENTS

397,534	Carrol	Feb. 12, 1889
684,113	Shaddle	Oct. 8, 1901
980,089	Ford	Dec. 27, 1910
2,585,324	Hutchisson et al.	Feb. 14, 1956
2,734,602	Dawson	Feb. 14, 1956
2,953,872	Baker	Sept. 27, 1960
3,012,376	Reddy et al.	Dec. 12, 1961