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UNIVERSAL FLASHING FOR AWNINGS

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2 Sheets-Sheet 1

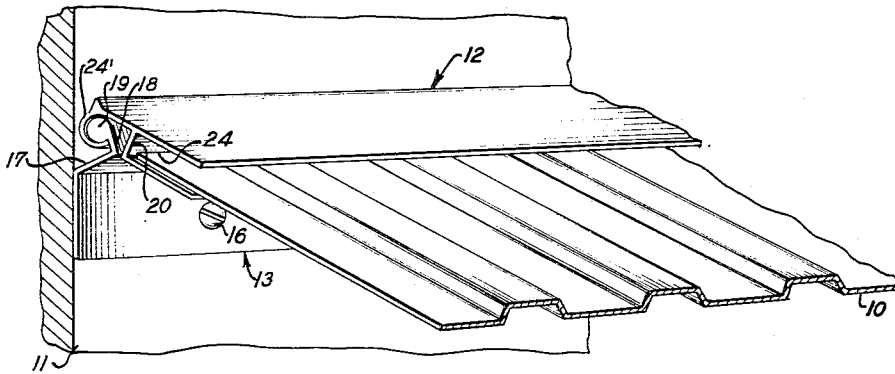


Fig. 1

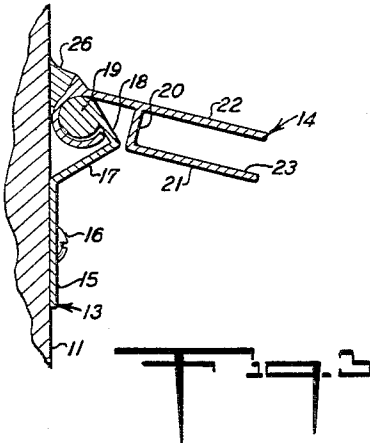


Fig. 2

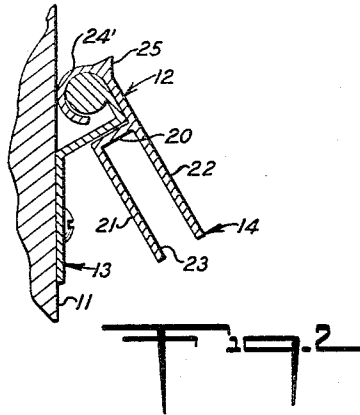


Fig. 3

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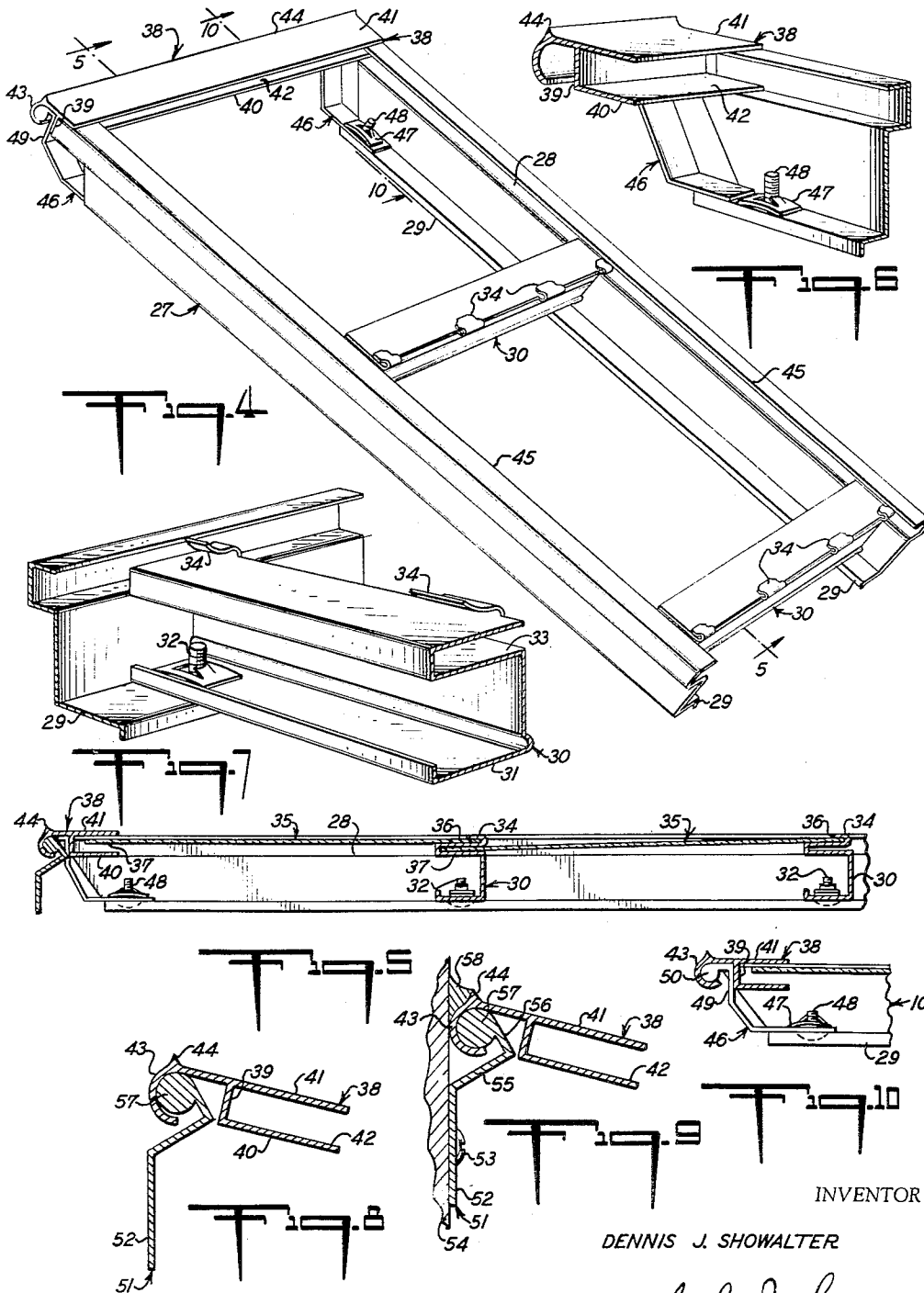
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5 Claims. (Cl. 20—57.5)

This invention relates to the building arts and more particularly to a universal flashing primarily designed to provide a weather-tight joint between the roof of an awning and the wall of a building to which the awning is attached and to permit adjustment of the roof of the awning to any desired pitch.

Heretofore, awnings have been supplied with adjustable flashing means for permitting adjusting the pitch of the awning roof and to provide a joint between the same and the wall of a building to which the awning is attached, but in general, these prior art flashing structures have included modification of the awning roof structure and it was necessary to supply such flashings as an integral part of the awning. Furthermore, these prior art flashings were, in general, formed of relatively thin sheet metal and were consequently subject to distortion and damage which frequently destroyed the utility thereof and materially increased the difficulty of installation.

In the installation of metallic awnings or awnings of other material which are semi-rigid in nature, it is often desirable to provide for variation in the roof pitch in order to accommodate the awning to a particular installation and without necessitating designing a special awning or flashing for such installation and accordingly the present invention contemplates the provision of an adjustable flashing for awnings, which flashing is conveniently formed of two relatively movable parts and in which the parts may be conveniently formed in a relatively simple metal extruding operation. The parts of the flashing may be formed of the same material as the awning, or of different materials as desired and serve to provide a substantially rigid adjustable joint which may be utilized to attach the roof structure of the awning to the wall of a building with the roof structure set at any desired pitch.

It is accordingly an object of the invention to provide a universal flashing for awnings which serve to provide an adjustable weather-tight joint between the awning roof structure and the wall of a building to which the awning is attached.

A further object of the invention is the provision of a universal flashing for awnings, which flashing may be conveniently manufactured from two extruded metal shapes pivotally secured together and serving to provide an adjustable weather-tight joint between the awning roof section and the wall of a building to which the awning is attached.

A still further object of the invention is the provision of a universal flashing for awnings, which flashing may be supplied in stock length and thereafter cut to the desired length for a particular awning installation.

Another object of the invention is the provision of a universal flashing for awnings which may be utilized to provide an adjustable joint between the awning roof section and the wall of a building to which the awning is attached and without requiring cutting or any modification, whatsoever, of the roof structure of the awning.

A further object of the invention is the provision of

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a combined universal flashing and awning rafter and purlin structure in which the entire structure may be prefabricated for a particular installation, with a portion of the flashing secured to the rafters and with the other portion of the flashing adapted to be secured to the wall of a building or other structure prior to installation of the remainder of the awning structure.

Further objects and advantages of the invention will be apparent from the following description taken in conjunction with the accompanying drawing wherein:

Fig. 1 is a fragmentary view in perspective showing a portion of the roof structure of an awning and a universal flashing constructed in accordance with this invention and providing a joint between the roof section and the wall of a building;

Fig. 2 a fragmentary transverse sectional view showing the universal flashing of this invention in one position of adjustment;

Fig. 3 a fragmentary transverse sectional view similar to Fig. 2 and showing the universal flashing of this invention in another position of adjustment as well as the manner in which caulking material is held in place to provide a weather-tight joint between the flashing and the wall of a building;

Fig. 4, a view in perspective showing the flashing of this invention secured to an awning rafter and purlin structure by means of special brackets;

Fig. 5 a sectional view taken substantially on the line 5—5 of Fig. 4 and showing the wall-engaging member of the flashing assembled with the roof-engaging member;

Fig. 6, a fragmentary view in perspective to an enlarged scale with parts in section for greater clarity and showing in greater detail the relationship of the roof-engaging flashing member, the attaching bracket and the awning rafter;

Fig. 7, a fragmentary view in perspective with parts in section for greater clarity and showing the relationship of the purlin and rafter structure;

Fig. 8 a fragmentary sectional view showing the relationship of the wall-engaging member and the roof-engaging member of the flashing prior to final assembly;

Fig. 9 a view similar to Fig. 8 and showing the wall-engaging member and the roof-engaging member of the flashing after final assembly; and

Fig. 10 a fragmentary sectional view taken substantially on the line 10—10 of Fig. 4 and showing the structure of the attaching bracket and the manner of securing the roof-engaging member of the flashing to the rafter structure.

With continued reference to the drawing there is shown in Fig. 1 a portion of a semi-rigid type of awning which is designed for more or less permanent installation and in which the roof section 10 may comprise a corrugated sheet of metal, reinforced fiberglass or any other suitable material. The awning including the roof section 10 is normally attached to the wall of a building 11 or other upstanding wall and in order to provide a weather-tight joint between the roof section 10 and the wall of the building 11, and also to permit installation of the awning with the roof section 10 at any desired pitch, it is contemplated by this invention to provide a universal adjustable flashing structure 12 which will conveniently and economically accomplish this purpose.

The flashing structure 12 may well include a wall-engaging member 13 and a roof-engaging member 14 and the wall engaging member 13 may well comprise a relatively flat wall engaging plate 15 which may be apertured to receive screw threaded fasteners or the like 16 to secure the plate 15 to the wall of the building 11. The plate 15 is provided along its upper edge with an outwardly and upwardly extending flange 17 which ter-

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minates in an upwardly and inwardly extending second flange 18. The flange 18 terminates along the upper edge thereof in a bead 19 which is substantially circular in cross section and with the bead 19 disposed entirely inwardly of the outer surface of the second flange 18 and overhanging the flange 17. The wall engaging member 13 may be conveniently and economically formed by a relatively simple continuous extruding operation which serves to provide an endless extruded shape which may be cut to any desired length.

The roof engaging member 14 may be conveniently formed as a channel having a web 20 and side walls 21 and 22 which serve to provide an elongated groove 23 for receiving the upper edge 24 of the roof section 10. The wall 22 of the roof engaging member 14 extends beyond the web 20 and away from the roof receiving groove 23 and terminates in a curled portion 24' which is substantially circular in cross section and partially embraces the bead 19 to provide a pivotal or hinged connection between the roof engaging member 14 and the wall engaging member 13. As will be seen from an inspection of Figs. 2 and 3, the curled portion 24' does not form a complete circle and consequently permits pivotal movement between the roof engaging member 14 and the wall engaging member 13 and the bead 19 performs substantially the same function as the pintle in an ordinary hinge structure.

An elongated ridge 25 is provided on the upper side of the curled portion 24 and extends throughout the length of the roof engaging member 14 and this ridge 25 serves to provide a channel or valley adjacent the wall 11 of the building, to receive caulking material 26 which serves to seal the space between the curled portion 24 and the wall 11 and thereby prevent flow of water between the flashing 12 and the wall 11 of the building.

The roof engaging member 14 may likewise be formed as a relatively simple and economical extruded shape and the same may be cut to any desired length and assembled with the wall engaging member 13 merely by inserting the bead 19 within the curled portion 24'.

Both the wall engaging member 13 and the roof engaging member 14 may, of course, be cut to the required length for a particular installation and such installation is conveniently accomplished by securing the wall engaging member 13 to the wall 11 of the building by suitable screw threaded fastening means or the like 16, and thereafter the upper edge 24 of the roof section 10 of the awning is inserted in the groove 23 provided by the walls 21 and 22 of the roof engaging member 14 and such member may, if desired, be secured to the roof section 10 in any suitable manner. However, in many installations no additional securing means is necessary, since the roof section engages in the groove 23 with sufficient friction to hold the same in place. The remainder of the awning supporting structure; is then attached to the wall 11 of the building with the roof section 10 at any desired pitch which is permitted by the pivotal joint between the roof engaging member 14 and the wall engaging member 13 and after completion of the installation, caulking material 26 may be deposited between the ridge 25 and the wall 11 of the building, in order to seal the joint between the awning and the building.

A slightly modified form of the invention is shown in Figs. 4 to 10 in which the universal flashing of this invention is prefabricated together with a rafter and purlin structure for an awning and in which the roof engaging member of the flashing is secured to the rafter structure by special bracket members and after attaching the wall-engaging member of each flashing to the wall of a building or other structure the roof engaging member which has heretofore been attached to the rafter structure is then secured to the wall-engaging member in a manner to be later described.

The rafter members 27 may well comprise elongated

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metallic members which may be conveniently formed by an extruding process or in any other desired manner and such rafter members are provided with inwardly facing channels 28 adjacent their upper edges and with inwardly extending flanges 29 along their lower edges. The rafter members 27 are secured together at spaced intervals by purlins 30 and each purlin may well comprise a lower flange 31 secured to the flange 29 of the rafter members 27 by screw threaded fastening means or the like 32 and it is to be noted that the purlin 30 is provided with a channel 33 and spaced clips 34 the purpose of which will be presently described.

As best shown in Fig. 5, roof sheets of any suitable material such as metal or plastic may be assembled with the rafter members 27 and the purlins 30 and the roof sheets 35 are disposed with their side edges received in channels 28 of the rafter members 27 and with their lower edges 36 received beneath the clips 34 on the purlins 30. The upper edge 37 of the right hand roof sheet 35 as shown in Fig. 5 is received in the channel 33 of the purlin 30 which in conjunction with the clips 34 on the right hand purlin 30 serves to retain the right hand roof sheet 35 in position. Other roof sheets on the awning are, of course, held in place in the same manner.

As stated above, the universal flashing utilized in connection with this form of the invention includes a roof-engaging member and a wall-engaging member and the roof-engaging member 38 may be conveniently formed as a channel having a web 39 and side walls 40 and 41 which serve to provide an elongated groove 42 for receiving the upper edge 37 of the left hand roof section 35 as shown in Fig. 5. The wall 41 of the roof-engaging member 38 extends beyond the web 39 and away from the roof-receiving groove 42 and terminates in a curled portion 43 which is substantially circular in cross-section and serves to pivotally attach the roof-engaging member 38 to the wall-engaging member in a manner to be presently described. An elongated ridge 44 is provided on the upper side of the curled portion 43 and the purpose of such ridge will be later described.

As best shown in Figs. 4, 6 and 10, the roof-engaging member 38 is assembled with the rafter members 27 with the upper flanges 45 of the rafter members 27 received in the groove 42 of the roof-engaging member 38 and the roof-engaging member 38 may be conveniently secured to the rafter members 27 by brackets 46, which as shown in Fig. 10, are of generally Z-shape in cross-section and in which one leg 47 is secured to the flange 29 of the rafter member 10 by screw threaded fastening means or the like 48 and in which the other leg 49 terminates in a bead 50 which is received in the curled portion 43 of the roof-engaging member 38 thereby securing the roof-engaging member 38 to the rafter members 27.

As best shown in Figs. 5, 8 and 9, the wall-engaging member 51 may well comprise a relatively flat wall-engaging plate 52 which may be apertured to receive screw threaded fasteners or the like 53 to secure the plate 52 to the wall of the building 54. The plate 52 is provided along its upper edge with an outwardly and upwardly extending flange 55 which terminates in an upwardly and inwardly extending flange 56. The flange 56 terminates along the upper edge thereof in a bead 57 which is substantially circular in cross section and with the bead 57 disposed entirely inwardly of the outer surface of the second flange 56 and overhanging the flange 55. The wall-engaging member 51 may be conveniently and economically formed by a relatively simple continuous extruding operation which serves to provide an endless extruded shape which may be cut to any desired length.

The rafter members 27, purlins 30 and the roof-engaging member 38 of the flashing structure are prefabricated and assembled for a particular installation and in installing this structure on a building the wall-engaging

plate 52 of the wall-engaging member 51 is secured to the wall 54 of a building or other structure by suitable fastening means 53 and it is to be assumed, of course, that the wall-engaging member 51 is cut to such a length that the same way may be disposed between the brackets 46 which secure the roof-engaging member 38 to the rafter members 27. As shown in Fig. 8, the curled portion 43 is hooked over the bead 57 of the wall-engaging member 51 and after installation of the awning the curled portion 43 is closed to the position shown in Fig. 9, whereupon such curled portion 43 substantially embraces the bead 57 and provides a pivotal joint between the awning structure and the wall-engaging member 51. The awning structure may be then fixed at any desired angle to the wall of the building and secured in place and thereafter caulking material 58 is deposited between the elongated ridge 44 on the roof-engaging member 38 and the wall of the building 54 thereby providing a weather-tight joint between the awning structure and the wall of the building.

It will be seen that by the above described invention there has been provided a relatively simple and economical universal flashing for permitting adjustment between the roof section of an awning and a wall of a building to which the awning is attached, which flashing may be supplied in standard lengths and thereafter cut to the required length for the particular installation and the use of which requires no cutting or other modification of the roof section of the awning or any of the remainder of the awning structure. The universal flashing of this invention may also be utilized with awnings having different types of roof sections, it being only necessary to provide a roof-receiving groove of sufficient width to receive the particular roof-section to be utilized. Furthermore, the universal flashing structure of this invention may be adapted to a pre-fabricated awning structure as fully described above in which one portion of the flashing is prefabricated with the rafter and roof section of the awning and in which the other portion of the flashing structure is applied to the wall of the building during installation of the awning structure thereon. In either case, the flash-structure permits installation of the awning at any desired angle with relation to the wall of the building and at the same time provides a weather-tight joint therebetween.

It will be obvious to those skilled in the art that various changes may be made in the invention without departing from the spirit and scope thereof and therefore the invention is not limited by that which is shown in the drawing and described in the specification, but only as indicated in the appended claims.

What is claimed is:

1. A universal flashing for providing an adjustable weather-tight joint between the roof of an awning and the wall of a building, said flashing including a wall engaging member and a roof engaging member, said wall engaging member comprising an elongated relatively flat wall engaging plate to be secured to the wall of a building, a flange extending upwardly and outwardly from the upper edge of said plate, a second flange extending upwardly and inwardly from the outer edge of said first flange, said second flange terminating along the upper edge in a bead substantially circular in cross section, said bead being disposed entirely inwardly of the outer surface of said second flange and overlapping said first flange, said roof engaging member comprising an elongated channel for receiving the upper edge of the roof of an awning, the upper wall of said channel extending beyond the web thereof away from the roof receiving portion and terminating in a curled portion substantially circular in cross section and partially embracing said bead to provide a pivotal connection between said wall engaging member and said roof engaging member and an elongated ridge on said curled portion providing an abutment to retain

caulking material in engagement with said wall thereby providing a weather-tight joint between said flashing and the wall of a building.

2. A universal flashing for providing an adjustable weather-tight joint between the roof of an awning and the wall of a building, said flashing including a wall engaging member and a roof engaging member, said wall engaging member comprising an elongated wall engaging plate to be secured to the wall of a building, a flange extending from the upper edge of said plate, a second flange extending from the free edge of said first flange, said second flange terminating along the free edge thereof in a bead substantially circular in cross section, said roof engaging member comprising an elongated channel for receiving the upper edge of the roof of an awning, the upper wall of said channel extending beyond the web thereof away from the roof receiving portion and terminating in a curled portion substantially circular in cross section and partially embracing said bead to provide a pivotal connection between said wall engaging member and said roof engaging member.

3. A combined universal flashing and awning structure comprising elongated rafter members, inwardly facing channels in said rafter members and inwardly facing flanges on the lower edges of said rafter members, spaced purlins connecting said rafter members, spaced clips on said purlins for engaging and securing the lower edge of a roof sheet with the side edges of said roof sheet disposed in the channels of said rafter members, a channel in each purlin for receiving the upper edge of the next lower roof sheet, a roof-engaging member comprising an elongated channel for receiving the upper edge of the upper roof sheet, the upper wall of said last-named channel extending beyond the web thereof away from the roof-receiving portion and terminating in a curled portion substantially circular in cross section, an elongated ridge on said curled portion, brackets for attaching said roof-engaging member to said rafter members comprising generally Z-shaped members with one leg secured to the flanges on said rafter members and with the other leg terminating in a bead substantially circular in cross section and received in said curled portion to secure said roof-engaging member to said rafter member and a wall-engaging member comprising an elongated relatively flat wall-engaging plate to be secured to the wall of a building, a first flange extending upwardly and outwardly from the upper edge of said plate, a second flange extending upwardly and inwardly from the outer edge of said first flange, said second flange terminating along the upper edge in a bead substantially circular in cross section, said bead being disposed entirely inwardly of the outer surface of said second flange and overlapping said first flange, said bead being received in said curled portion between said brackets to provide a pivotal connection between said wall-engaging member and said roof-engaging member, said elongated ridge providing an abutment to retain caulking material in engagement with said wall thereby providing a weather-tight joint between said awning structure and the wall of a building.

4. A combined universal flashing and awning structure comprising elongated rafter members, inwardly facing channels in said rafter members, spaced purlins connecting said rafter members, spaced clips on said purlins for engaging and securing the lower edge of a roof sheet with the side edges of said roof sheet disposed in the channels of said rafter members, a channel in each purlin for receiving the upper edge of the next lower roof sheet, a roof-engaging member comprising an elongated channel for receiving the upper edge of the upper roof sheet, the upper wall of said last-named channel extending beyond the web thereof away from the roof-receiving portion and terminating in a curled portion substantially circular in cross section, brackets for attaching said roof-engaging member to said rafter members comprising generally Z-shaped members with one leg secured to said rafter

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members and with the other leg terminating in a bead substantially circular in cross section and received in said curled portion to secure said roof-engaging member to said rafter members and a wall-engaging member comprising a wall-engaging plate to be secured to the wall of a building, a first flange extending from said plate, a second flange extending from said first flange, said second flange terminating along the free edge thereof in a bead substantially circular in cross section, said bead being received in said curled portion between said brackets to provide a pivotal connection between said wall-engaging member and said roof-engaging member.

5. A combined universal flashing and awning structure comprising elongated rafter members, spaced purlins connecting said rafter members, means on said purlins for engaging and securing the lower edge of a roof sheet, means on each purlin for receiving the upper edge of the next lower roof sheet, a roof engaging member comprising an elongated channel for receiving the upper edge of the upper roof sheet, the upper wall of said last-named channel extending beyond the web thereof away from the roof-receiving portion and terminating in a curled portion

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substantially circular in cross section, brackets for attaching said roof-engaging member to said rafter members comprising generally Z-shaped members with one leg secured to said rafter members and with the other leg terminating in a bead substantially circular in cross section and received in said curled portion to secure said roof-engaging member to said rafter members and a wall-engaging member comprising a wall-engaging plate to be secured to the wall of a building, a first flange extending from said plate, a second flange extending from said first flange, said second flange terminating along the free edge thereof in a bead substantially circular in cross section, said bead being received in said curled portion between said brackets to provide a pivotal connection between said wall-engaging member and said roof-engaging member.

References Cited in the file of this patent

UNITED STATES PATENTS

2,629,903	Bird et al. -----	Mar. 3, 1953
2,746,537	Joslin -----	May 22, 1956
2,755,522	Tate -----	July 24, 1956