

May 4, 1948.

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2,441,081

AWNING

Filed May 8, 1946

2 Sheets-Sheet 1

Fig. 1.

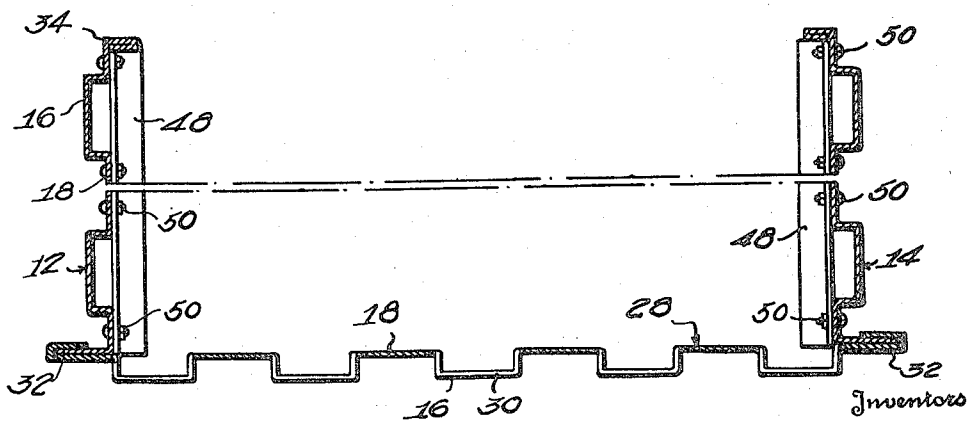
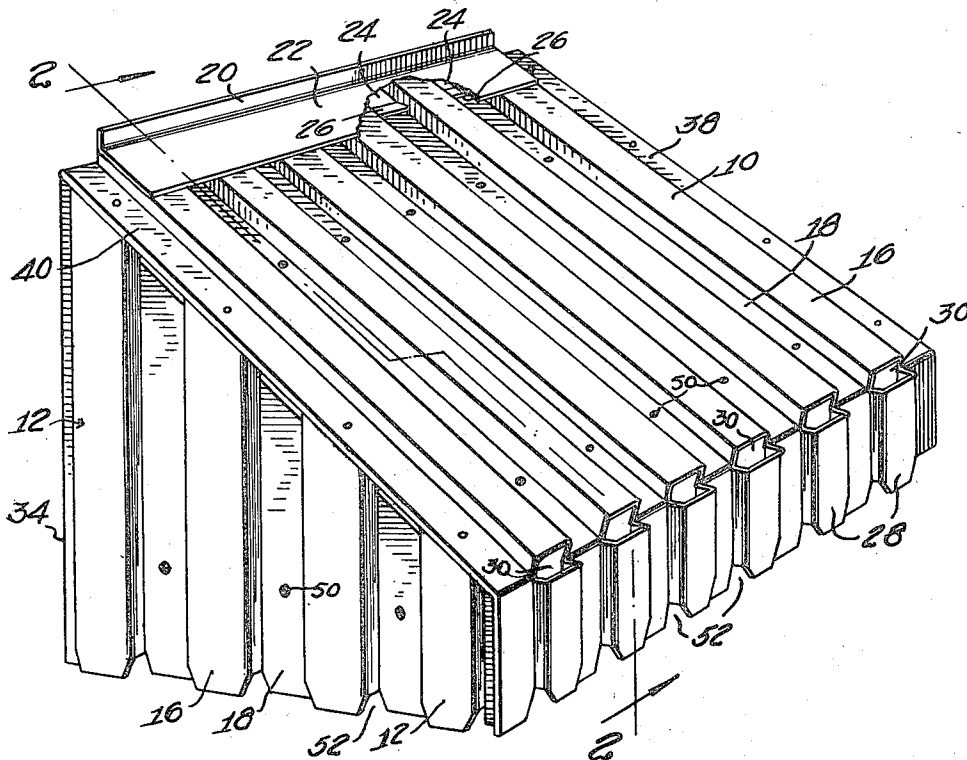


Fig. 3.

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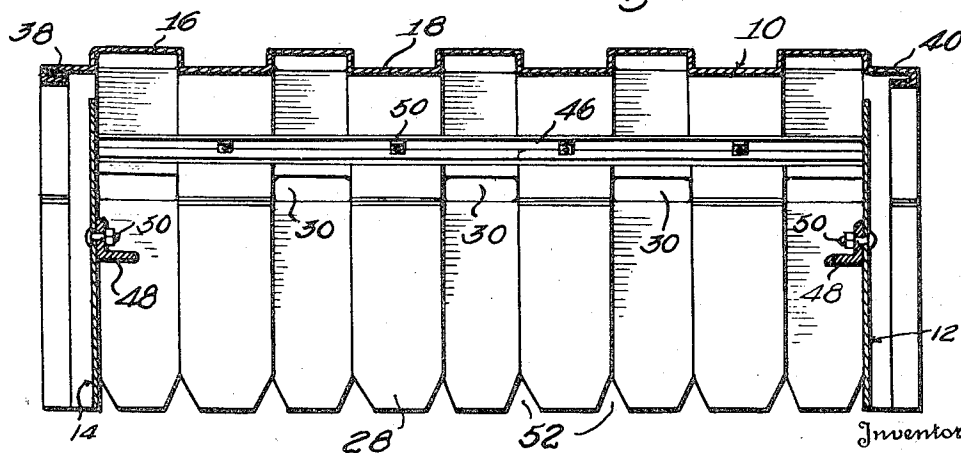
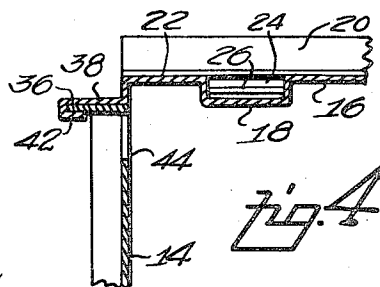
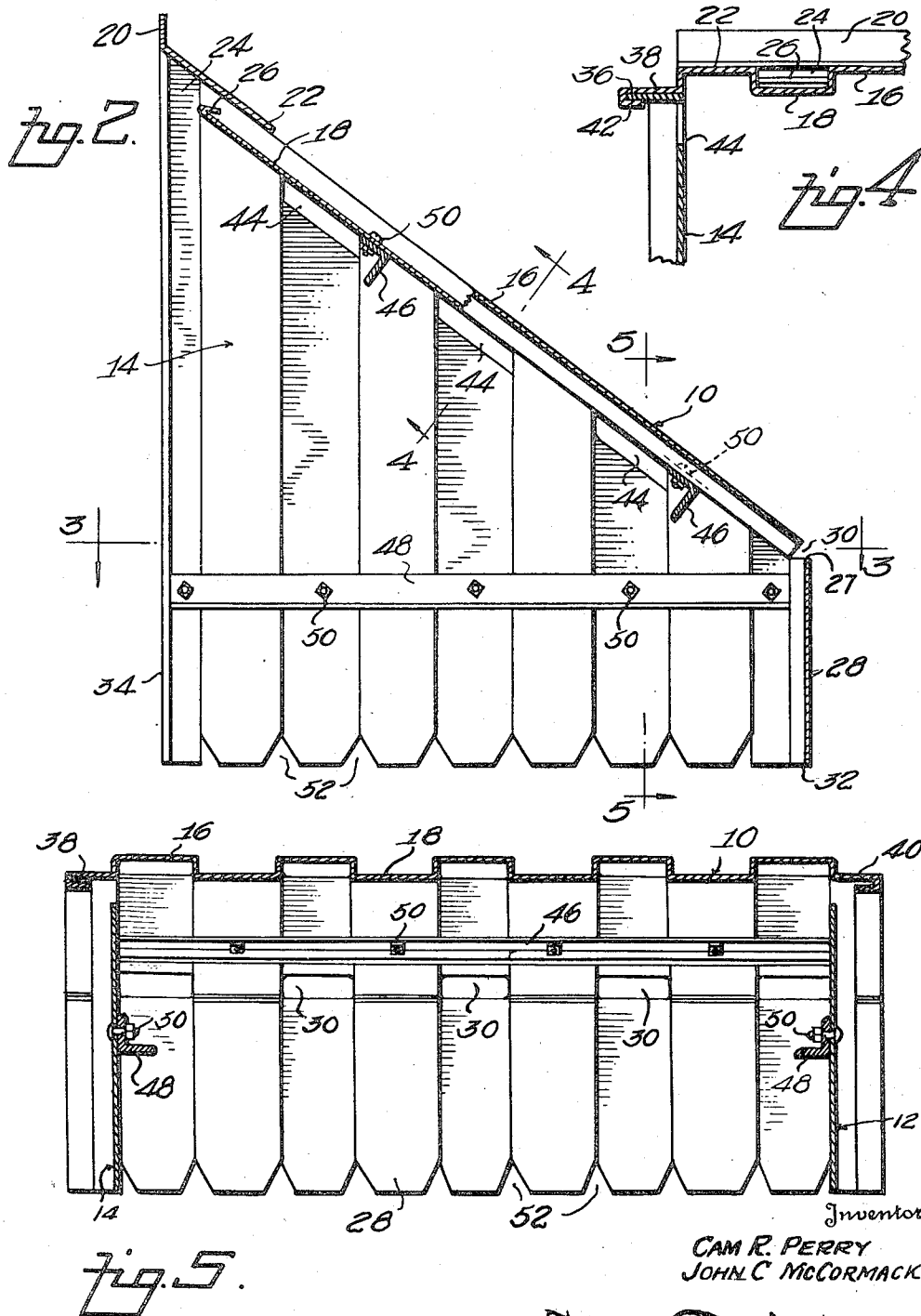
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2 Sheets-Sheet 2



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2,441,081

AWNING

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Pensacola, Fla., assignors, by mesne assignments,
to White Metal Awning Company,
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Application May 8, 1946, Serial No. 668,289

6 Claims. (Cl. 20—57.5)

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This invention relates generally to awnings, and more particularly to an improved canopy or awning of the permanent type made of sheet metal or the like and forming a relatively rigid structure which is adapted to remain in position over long periods of time.

In the fabrication of rigid awning structures of the type involved herein, it is highly desirable that some means be provided to insure adequate ventilation of the structure while at the same time preventing the entry of rain thereinto. As the field is a highly competitive one, it is also most important that the provision of this ventilation means be accomplished in the simplest and most expeditious manner in order that the cost of fabrication may not be excessive.

It is, accordingly, an important object of the present invention to provide an awning of sheet metal or the like having a sloping roof and vertical side walls of corrugated construction and including ventilating apertures spaced along the front, rear, and side edges of the roof.

Another object of the invention resides in the provision of ventilating apertures in the corrugation grooves along the top edge of a corrugated awning roof and under a flashing plate mounted thereabove, a portion of said floors being curved upwardly to provide rain stops in said grooves.

A further object of the invention is to provide a plurality of ventilating apertures along the front edge of a corrugated sloping roof by slitting the corrugation ridges along a line extending transversely across the roof and bending the front portion thereof downwardly along the same line to open up these slits into ventilation apertures.

The above as well as other and further objects and advantages of the invention, together with a more complete understanding thereof will become more readily apparent to one skilled in the art from a consideration of the following detailed specification taken in conjunction with the accompanying drawings wherein:

Fig. 1 is a perspective view of an improved awning in accordance with the present invention, a portion of the flashing plate being broken away to show a ventilation aperture and rain stop;

Fig. 2 is a vertical transverse cross-sectional view through the awning taken substantially along the line 2—2 of Fig. 1;

Fig. 3 is a cross-sectional view in a horizontal plane taken substantially along the line 3—3 of Fig. 2;

Fig. 4 is a detail cross-sectional view taken substantially along the line 4—4 of Fig. 2; and

Fig. 5 is a transverse cross-sectional view in a vertical plane taken substantially along the line 5—5 of Fig. 2.

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Referring to the drawings and particularly to Figs. 1 and 2 thereof, there is illustrated an improved awning in accordance with the present invention comprising a sloping roof 10 having a pair of substantially vertical side walls 12 and 14 attached to and depending from the side edges of the roof 10. Both the roof and side walls are preferably made of sheet metal or the like and are rectangularly corrugated to produce a series of alternate ridges 16 and grooves 18 of rectangular cross section. An angle-shaped flashing plate having a vertical portion 20 and a sloping portion 22 is attached to the top rear portion of the roof 10 by any suitable means such as welding, brazing, or the like, and extends transversely across the ridges 16 overlying the grooves 18.

As shown in Fig. 2 and in the broken away portion of Fig. 1, a plurality of ventilation apertures 24 are formed in the top rear portion of the roof 10 under the flashing plate 22 by cutting the floors of the grooves 18 and bending them reversely and forwardly to form a plurality of lips 26 constituting rain stops to prevent the flow of rain upwardly through the grooves 18 and into the apertures 24 as might otherwise occur under conditions of extremely heavy rainfall or excessive wind. The flashing plate 22, of course, serves to prevent the direct entry of rain into the apertures 24, while the vertical portion 20 of the flashing plate is adapted to closely engage the wall or other structure on which the awning is mounted. It will be particularly noted that an appreciable distance is left between the top of the reversely curved rain stop 26 and the under side of the flashing plate 22 to provide for adequate ventilation at this location.

The ridges 16 of the roof 10 are slit in a plane 27 (Figure 2) extending transversely across the front portion of the roof, the slitting operation extending only through the ridges 16 and leaving the floors of the grooves 18 intact. The roof 10 is then bent along this same line, the floors of the grooves 18 serving as hinge points, until the front portion of the roof 10 assumes a substantially vertical position thus constituting the vertical front wall 28 of the awning. During the bending operation the slits formed in the ridges 16 will be opened up and spread apart separating the edges of the ridges to form a plurality of apertures 30 for ventilating the front portion of the awning. By this relatively simple expedient of slitting and bending the corrugated roof 10, there are thus provided, simultaneously, a plurality of ventilation apertures and a front wall for structural as well as decorative support, and since no rain protection at this point is needed, it is not necessary to provide any flashing plate.

Referring now particularly to Figs. 2 and 4,

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It will be noted that the side walls 12 and 14 are of substantially trapezoidal shape having parallel front and rear vertical edges 32 and 34, respectively, the front edges being substantially shorter than the rear edges. The rear edges 34 are adapted to extend along the surface of the structure to which the awning is attached and the front edges 32 are secured in any suitable manner, as by crimping to the side edges of the front wall portion 28 of the awning. As best shown in Fig. 4 the ridges of the side walls 12 and 14 are provided with outwardly bent portions or tabs 36 along their top edges and the roof 10 is formed with a pair of horizontal ledges 38 and 40 along its side edges, a portion of each of the latter being reversely curved and bent back around the tabs 36 as indicated at 42. The ledges 38 and 40 extend outwardly over and protect a plurality of ventilation apertures 44 formed along the top edges of the side walls 12 and 14 by cutting away portions of the groove floors at these points.

Referring to Fig. 3, it will be noted that the vertical front wall portion 28 is attached to the respective side walls 12 and 14 in a manner similar to that just described for the attachment of the side walls 12 and 14 to the sloping portion of the roof 10 and illustrated in detail in Fig. 4. In each case, any suitable expedient such as spot welding, riveting, or the like may be employed to secure the turned-over edges together. It will also be noted as another feature of construction that there are provided a plurality of reinforcing members in the form of angle irons 46 and 48 secured by bolts 50 or any other suitable means to the sloping roof 10 and side walls 12 and 14, respectively.

The bottom edges of the side walls 12 and 14 and of the vertical front wall portion 28 are angularly notched between adjacent ridges and grooves as indicated by reference numeral 52 to provide a decorative treatment for the awning. It will be further understood that a sheet metal awning of this type may be suitably treated to resist corrosion by the elements and optionally may be enameled, painted, or coated in any desired manner to produce a decorative appearance. Obviously, numerous other modifications, alterations, and deviations from the specific structure disclosed herein for purposes of illustration will occur to one skilled in the art without departing from the spirit or scope of the invention as set forth in the appended claims.

We claim:

1. An awning comprising a unitary sloping roof of sheet material corrugated to form ridges and valleys and having side walls corrugated to form ridges and valleys depending from the opposite side edges of said roof, each side wall including a rear edge and a front edge, said roof having its ridges slit transversely and being bent downwardly to form a front wall secured at its opposite side edges to the front edges of said side walls, the bend in said roof forming at said slits a plurality of ventilation apertures, and a flashing plate overlying the top rear portion of said roof, the valleys of said roof being cut away to form ventilation apertures and being bent upwardly to form water stops under said flashing plate, the valleys in said side walls being cut away adjacent said roof to form a plurality of ventilation apertures.

2. An awning comprising a unitary sloping roof

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of sheet material formed in ridges and valleys, side walls depending from the opposite side edges of said roof and each including a rear edge and a front edge, said roof having its ridges slit along a transverse line and being bent downwardly about said line to form a front wall secured at its opposite side edges to the front edges of said side walls, the bend in said roof forming at said slits a plurality of ventilation apertures, and a flashing plate overlying the top rear portion of said roof, the valleys of said roof being cut away to form ventilation apertures and being bent upwardly to form water stops under said flashing plate.

3. An awning comprising a unitary relatively rigid sloping roof, and a pair of side walls connected at their upper ends to said roof, each side wall being right-angularly bent to form corrugations having relatively flat ridges and valleys, the latter of which are relatively wide and certain of which are cut away substantially throughout their width adjacent the roof to form ventilating openings, said roof projecting laterally beyond said openings to protect them against the entrance of water thereinto.

4. An awning comprising a unitary rigid sloping roof, and a pair of spaced side walls formed in corrugations having ridges and valleys and secured at their upper ends to said roof adjacent the side edges thereof, each of said side walls having a valley portion of the upper edge thereof spaced downwardly from said roof to form a ventilating opening spaced inwardly from the adjacent side edge of said roof.

5. An awning comprising a unitary sloping roof formed of relatively rigid material formed in ridges and valleys, a pair of spaced side walls secured at their upper ends to said roof adjacent the side edges thereof, the upper end of said roof having portions forming certain of said valleys terminating below the adjacent ends of the ridges to form ventilating openings when the upper ends of said ridges are arranged adjacent a supporting structure for the awning, and a flashing plate arranged over the upper end of said roof, said flashing plate having a downwardly and forwardly sloping portion contacting with said ridges and extending beyond said ventilating openings.

6. An awning comprising a unitary sloping roof of sheet material formed in ridges and valleys, side walls depending from opposite sides of said roof and each including a rear edge adapted to be arranged against a vertical supporting structure, portions of the inner edge of said roof being spaced from the supporting structure to form a ventilating opening, and a flashing plate adapted to be secured against the supporting structure, said flashing plate overlying said roof and extending downwardly and forwardly thereover substantially beyond said ventilating opening.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,926,609	Bauschard	Sept. 12, 1933
2,256,941	Crawford	Sept. 23, 1941