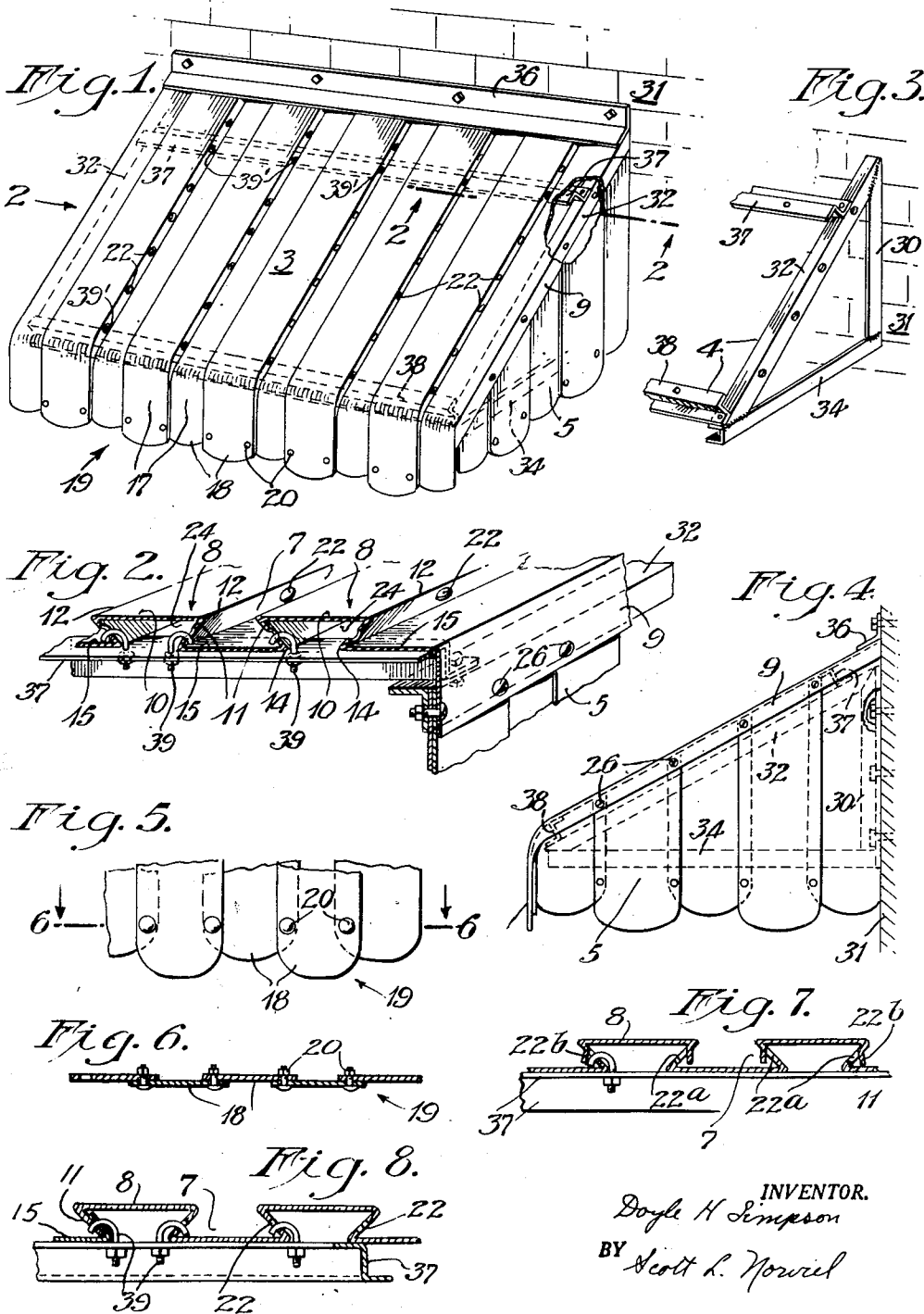


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VENTILATED METAL AWNING

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VENTILATED METAL AWNING

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2 Claims. (Cl. 20—57.5)

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This invention pertains to ventilated metal awnings.

One of the objects of the invention is to provide a metal awning structure which can be easily fabricated from sheet metal so that a ribbed roof structure is provided with alternate channel portions and raised portions in which ventilating openings are formed to give adequate air space for ventilation, but positioned so as to exclude rain or snow from the space beneath the awning:

Another object is to provide raised ridge portions and alternating channel portions with the side walls of the ridge portions converging and openings formed in the upper portions of the walls, just below the folded edge to provide ventilation openings which exclude ordinary rain;

A further object is to provide an awning with roof structure, as above stated, and with supporting frame work adapted to support the roof with a minimum number of fastenings and with end closures of similar suitable structure;

Still another object is to provide an awning structure, as above described, with suitable drop pieces at the outer edges of the roof structure adapted to form an ornamental fringe.

Other objects will appear hereinafter.

I attain the foregoing objects by means of the structure and devices shown in the accompanying drawings in which—

Figure 1 is a perspective view of an awning embodying my improvements as installed;

Figure 2, a section taken on line 2—2, Figure 1, shown in perspective and drawn on an enlarged scale;

Figure 3, a fragmentary end portion of the supporting frame of the awning;

Figure 4, an elevation of one side showing closure;

Figure 5, an elevation of a portion of the lower front portion of the awning, showing the fringe;

Figure 6, a section of the front portion of the awning taken on line 6—6 of Figure 5;

Figure 7 is a fragment of the roof structure showing a modified form of ventilating opening; and

Figure 8 is a section of fragment of the roof structure showing an over-lap seam formed where material is joined.

Similar numerals indicate similar parts in the several views.

The awning 2 consists principally of a roof structure 3, a supporting frame 4, and side closures 5. The roof structure 3 is positioned on frame 4 so that it slants outward and down-

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ward from wall 31. The side closures are, therefore, substantially triangular.

The roof structure is made from a substantially continuous sheet of metal folded to provide channel portions 7, and adjoining ridge portions 8, arranged alternately. The top faces 10 of the ridge portions are flat. Edge bends 12 join these faces to side walls 11 of these ridge portions. These side walls converge downwardly from the top edge bends 12 to bottom bends 14. From bends 14 the material extends outwardly to provide flat channel faces 15. The top edges 12 are positioned outward from and overhang the bottom bends 14. All this roof structure can be made from one continuous sheet. However, where an extremely wide awning is required, overlaps are made along adjacent sides, with the depending side of one ridge portion over-laying the up-turned side of the adjacent channel portion, as shown in Figure 8.

At the sides of the roof 3 the material is bent downward to form seal strips 9. Along the front edge of the roof the ridge faces 10 and channel faces 15 are relieved by cutting out the side portions. These relieved ends 17 are then bent downward to form vertically disposed fringe tabs 18, the ends of which may be rounded to attain an ornamental effect. Since the ridge faces 10 overlay the channel faces 15 somewhat, holes 30 are drilled thru the over-lapping edges, and bolts 20 set in them to draw these face edges together. This structure produces a strong and solid roof with an ornamental fringe 19 along its front.

To secure adequate ventilation, holes 22 are punched in the side members 11 just beneath the overhanging edge bends 12 and above the bottom forming bends 14. Rain water ordinarily dropping on this roof structure runs down the ridge faces and channel faces and does not enter holes 22. Winds blowing rain sideways against sides 11, carry little or no water under the awning because of the pitch of these inwardly slanting sides. On the other hand, when the rays of the sun heat the roof structure, heated air travels upward along the under channels 24 beneath the ridges and quickly escapes thru holes 22. This circulation keeps the metal of the awning approximately at air temperature and minimizes heat radiation from the underside of the awning.

An alternate form of shielded ventilating opening is shown in Figure 7. Here holes 22a are formed by side and bottom cuts made in the side walls 11 and by folding out the resulting tabs 22b.

The side closures 5 are made from a continu-

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ous structure similar to the roof 3. Along the angular top edge the material forming ridges and channels is, however, crushed together, so that the sides 11 are flattened. This edge is then set under seal strips 9 and secured by screws 26.

The frame on which these parts are mounted consists of vertical angle members 30 secured to the building wall 31. Outwardly and downwardly slanting top end members 32, made of angle sections are attached to the top ends of members 30. Horizontal members 34 extend outward from the bottom ends of members 30 to join members 32 where they are welded or otherwise secured. Transverse frame members 37 and 38 having a Z section, are then attached to slanting members 32 near the top and bottom ends, and positioned so that the underside of each channel face 15 rests on their upper flanges. Attachment bolts 39, having hooked upper ends, are then hooked thru holes 22 in the ridge sides and inserted thru holes drilled in the upper flanges of Z bars 37 and 38 and their nuts screwed on so that the roof structure is drawn down tight against these Z bar faces. Similar hook bolts are likewise used to secure side shutters against horizontal end frame members 34. A back sealing strip 36 is then used to close the gap between the top edge of the roof structure and wall 31.

From the foregoing it will be understood that the completed awning is well supported, inherently strong, and easily made from a minimum number of parts.

Since numerous variations of the exact structure shown are possible, I wish to be limited only by the following claims.

I claim:

1. In a ventilated metal awning, as herein disclosed, roof structure adapted to attach to a wall along its rear edge and extend outwardly and downwardly therefrom, composed of a substantially continuous sheet of metal folded to provide outwardly extending alternate ridge portions and channel portions, said ridge portions having flat top faces and angularly converging sides, and said channel portions having flat faces adjoining the bottom edges of said sides, ventilating holes formed along the middle portion of

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said slanting sides and a fringe formed along the front edge of said roof structure consisting of a series of depending tabs formed by removing the sides from said ridge portions adjacent the outer edge of said roof structure, bending the flat ridge and channel faces downward and joining their adjacent edges.

2. In a ventilated metal awning, as herein disclosed, roof structure adapted to attach to a wall along its rear edge and extend outwardly and downwardly therefrom, composed of a substantially continuous sheet of metal folded to provide outwardly extending alternate ridge portions and channel portions, said ridge portions having flat top faces and angularly converging sides, and said channel portions having flat faces adjoining the bottom edges of said sides, shielded ventilating openings along the middle portion of said slanting sides formed by depending tabs folded out from side and bottom cuts made in said slanting sides, and a fringe formed along the front edge of said roof structure consisting of a series of depending tabs formed by removing the sides from said ridge portions adjacent the outer edge of said roof structure, bending the flat ridge and channel faces downward and joining their adjacent edges.

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