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E. H. HOBBIE

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CORRUGATED GLASS ROOF

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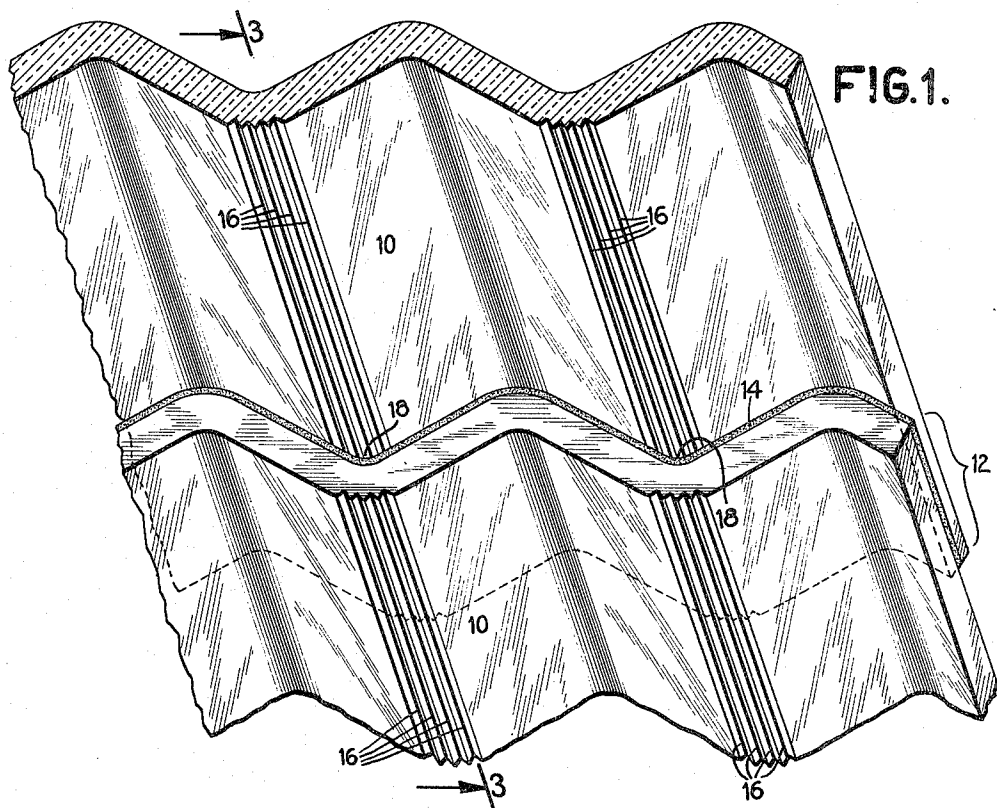


FIG. 2.

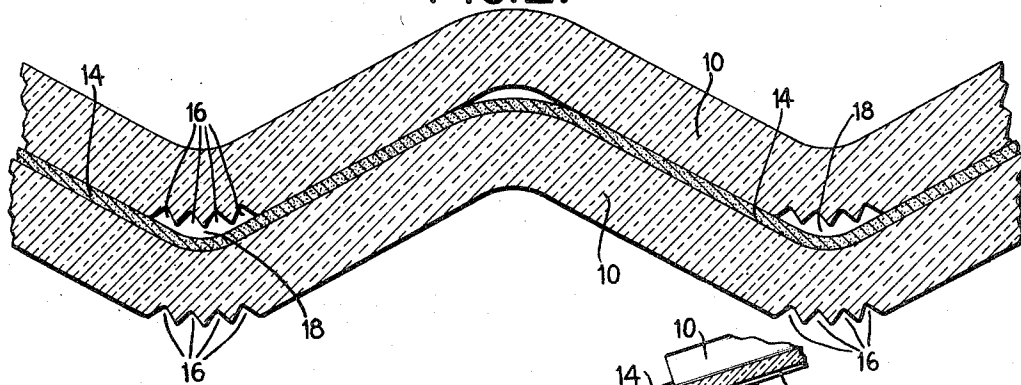
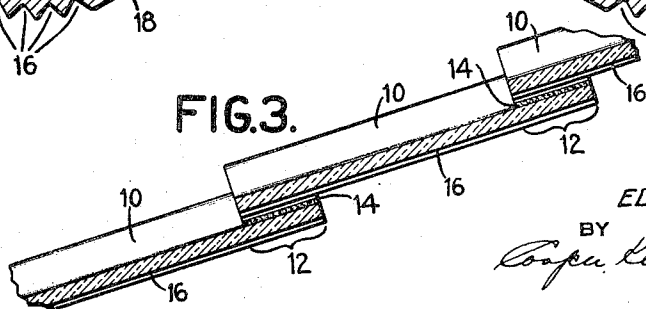


FIG. 3.



INVENTOR
EDWARD H. HOBBIE

BY
Cooper, Kerr & Steinhilber
ATTORNEYS

UNITED STATES PATENT OFFICE

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CORRUGATED GLASS ROOF

Edward H. Hobbie, West Orange, N. J., assignor
to Mississippi Glass Company, New York, N. Y.,
a corporation of New York

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4 Claims. (Cl. 108—16)

This invention pertains to roofs for buildings such as greenhouses and the like, with particular reference to means for handling the condensation of moisture which occurs on the lower sides of such roofs.

Although the invention may be used with various kinds of roofing material, such as metal, wood, or the like, it is described as applied to a roof of glass.

10 The glass is corrugated, with the corrugations running downwardly from ridge to eaves. The glass is in sheets of comparatively small size with reference to the dimensions of the roof. The sheets are usually arranged as illustrated in the drawing, in shingle-like relationship with the lower end of each sheet overlapping the upper end of the sheet next below it. The surface water on the upper side of the roof simply flows from one sheet to the next along the channels 20 formed by the corrugations, to the eaves. An object of this invention is to cause the water of condensation on the under side of the roof to also follow the corrugations to the eaves. The water forming on the under side of each sheet is deposited through weep holes onto the top surface 25 of the sheet or shingle next below it.

Further and other objects and advantages will be apparent from the specification and claims, and from the accompanying drawing which illustrates what is now considered the preferred embodiment of the invention.

Fig. 1 is a view of the under side of a portion of a roof, looking toward the eaves showing the shingle-like arrangement of sheets, and the packing between the overlapping parts of the sheets.

Fig. 2 is an end view of Fig. 1, looking from ridge to eave.

Fig. 3 is a reduced cross-section on line 3—3 of Fig. 1.

40 As will be clear from the drawing, the lower end of each sheet 10 overlaps the upper end of a similar sheet 12 next below it, as at 12. Suitable sheet packing 14 of any usual kind is placed between the overlapping portions of the sheets.

45 The lowest parts of the convex surfaces of the corrugations on the under sides of the sheets are provided with small longitudinal grooves 16, which serve to collect and guide the water of condensation. That water, after it forms, seeks a lower level, which means that it flows downwardly towards the eaves and sidewise towards grooves 16. When the water reaches the grooves

it flows downwardly along them, the grooves being so proportioned that the capillary attraction prevents the moisture from dripping off, while permitting it to flow longitudinally along the grooves downwardly towards the eaves. Of course, the outer grooves fill first and if there is too much moisture for those grooves to handle, the surplus simply overflows into the next adjacent grooves and continues on its way.

When the condensed moisture approaches the lower end of any set of grooves 16, it passes over packing 14, through space 18, called a weep hole, and drops into a channel on the upper side of the next lower sheet 10 and thence flows to the eaves, where it is disposed of in any well-known manner.

It is to be understood that the invention is not limited to the specific embodiment herein illustrated and described, but may be used in other ways without departure from its spirit as defined by the following claims.

1. An article of manufacture comprising a corrugated glass roofing sheet having a plurality of longitudinal capillary grooves in each of the convex underneath surfaces thereof, for the purpose set forth.

2. In a roof construction, shingles provided with corrugations down which water may flow, in combination with comparatively small longitudinal grooves on the underneath convex surfaces of said corrugations, for the purpose set forth.

3. A roof comprising sheets of glass in shingle-like relationship, said sheets being corrugated to provide channels down which the surface water may flow, in combination with longitudinal grooves in the underneath convex surfaces of the sheets by which water of condensation is gathered and deposited on the upper surface of the sheets next below said first-mentioned sheet.

4. A roof comprising, in combination, sheets of corrugated glass in overlapping shingle-like relationship with the corrugations arranged to conduct water towards the eaves, clearance spaces providing weep holes between the convex surfaces of the upper corrugations and the concave surfaces of the lower corrugations where they overlap, and longitudinal grooves in said convex surfaces whereby the water of condensation formed on the underneath surface of the roof is gathered and conducted through said weep holes onto the next adjacent lower sheet.

EDWARD H. HOBBIE.