# United States Patent [19]

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[54] **TWIN VENTILATOR FIXTURE**


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[52] **U.S. Cl.** ..... **98/2.17**; 98/37; 98/62

[51] **Int. Cl.**[2] ..... **B60H 1/28**

[58] **Field of Search** ..... 98/13, 37, 42, 62, 64, 98/2.07, 2.16, 2.17



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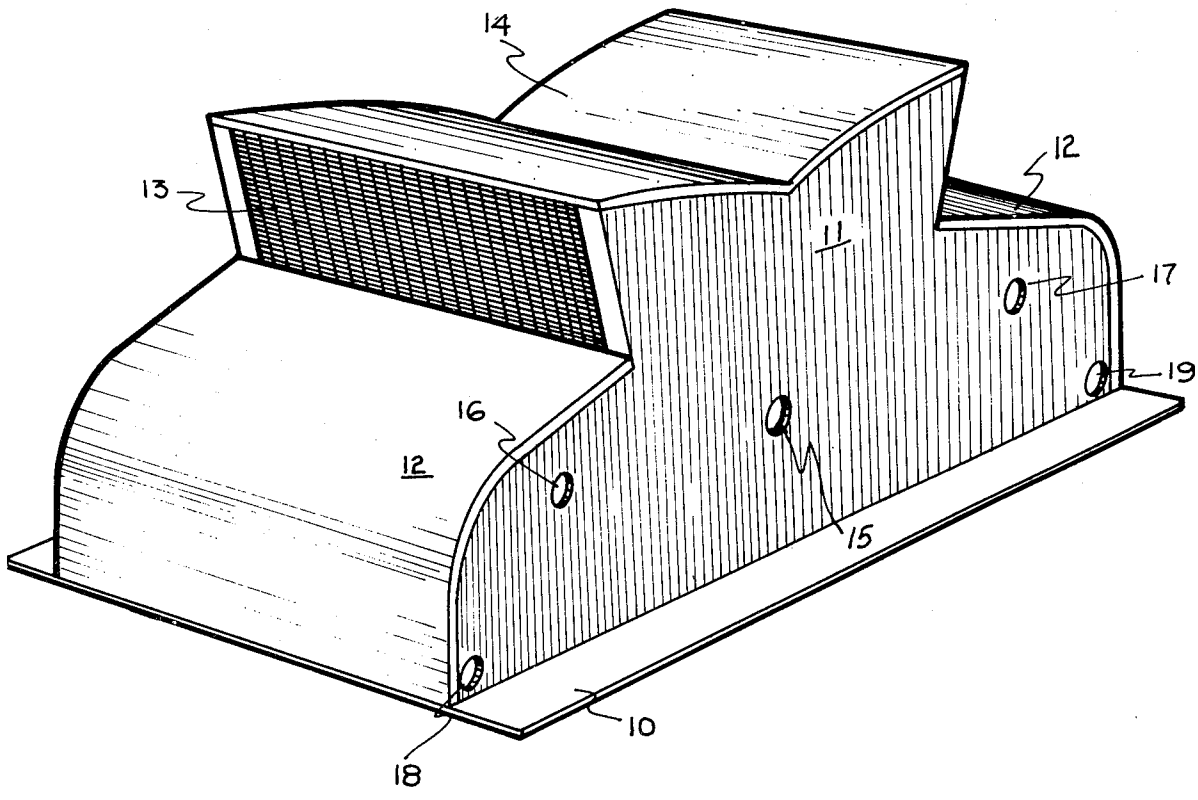
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[57] **ABSTRACT**

A ventilator fixture in the form of a pair of half domes arranged back to back with each half dome having an open screened face surmounting an outwardly curving header and each half dome inwardly having a generally concave member leading inward and downward around the said header to separate ventilating exhaust vents leading into an opening of a vehicle upon which the fixture is attached, the concave members being spaced from each other to provide a well into which moisture is fed from weep holes extending transversely across each said concave member at a location near the bottom of the concavities and a single major weep hole on each side of the said well to discharge accumulation of moisture therefrom externally of the fixture.


**1 Claim, 3 Drawing Figures**



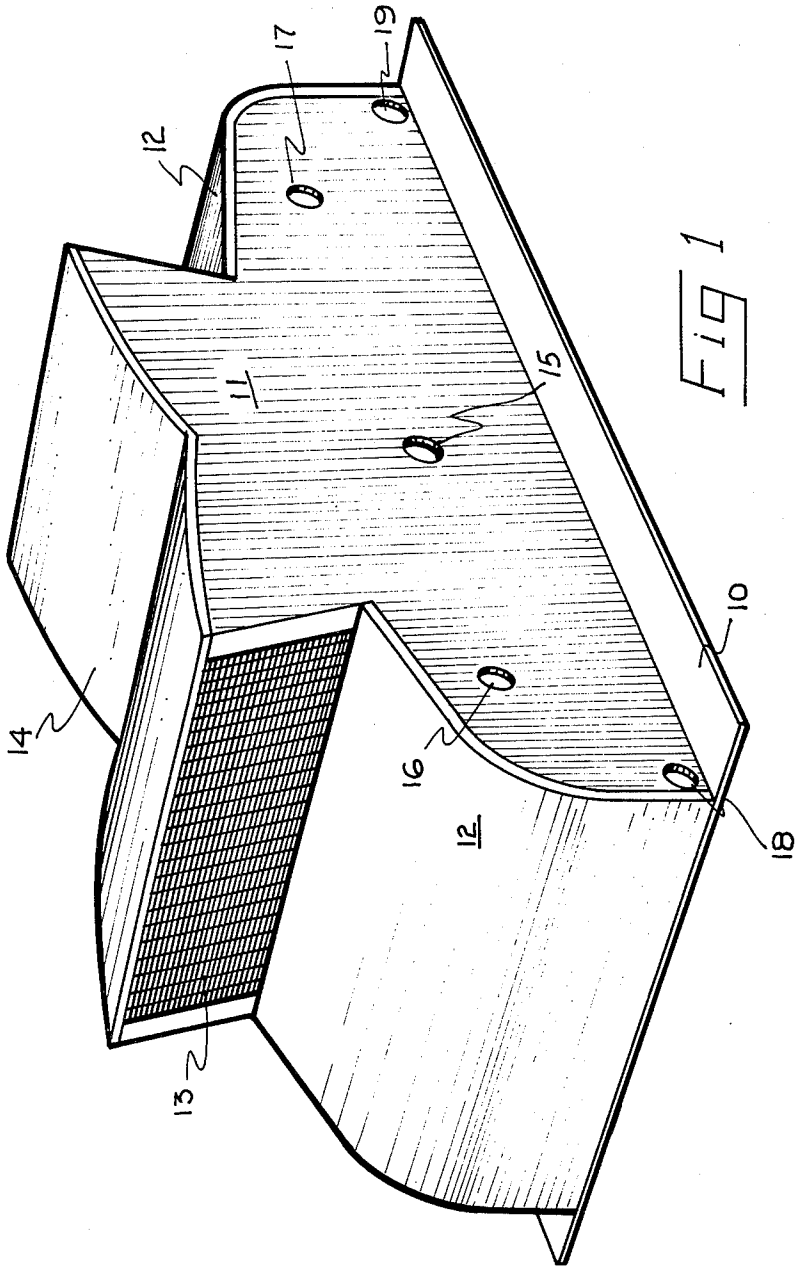



Fig 1

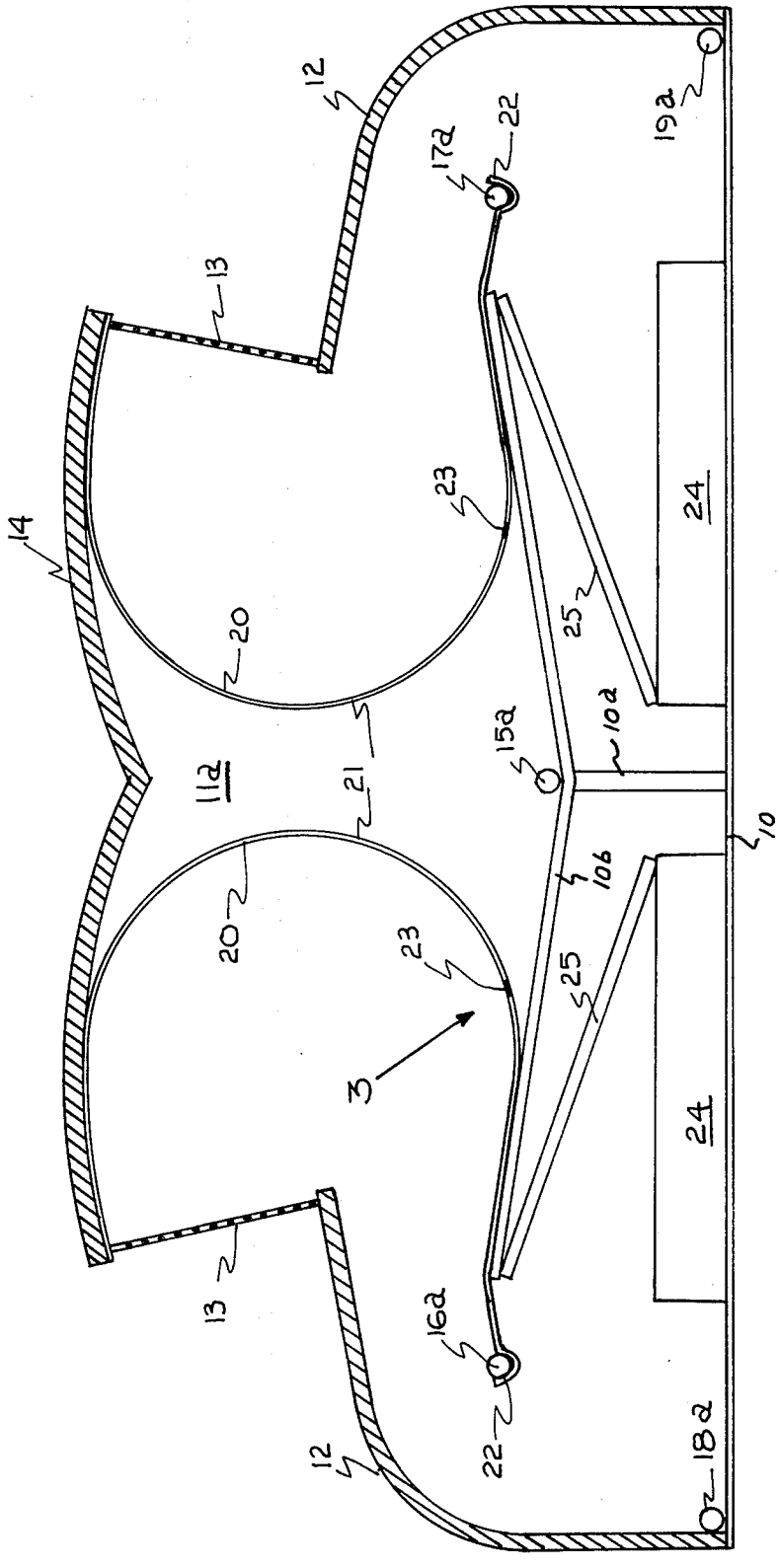
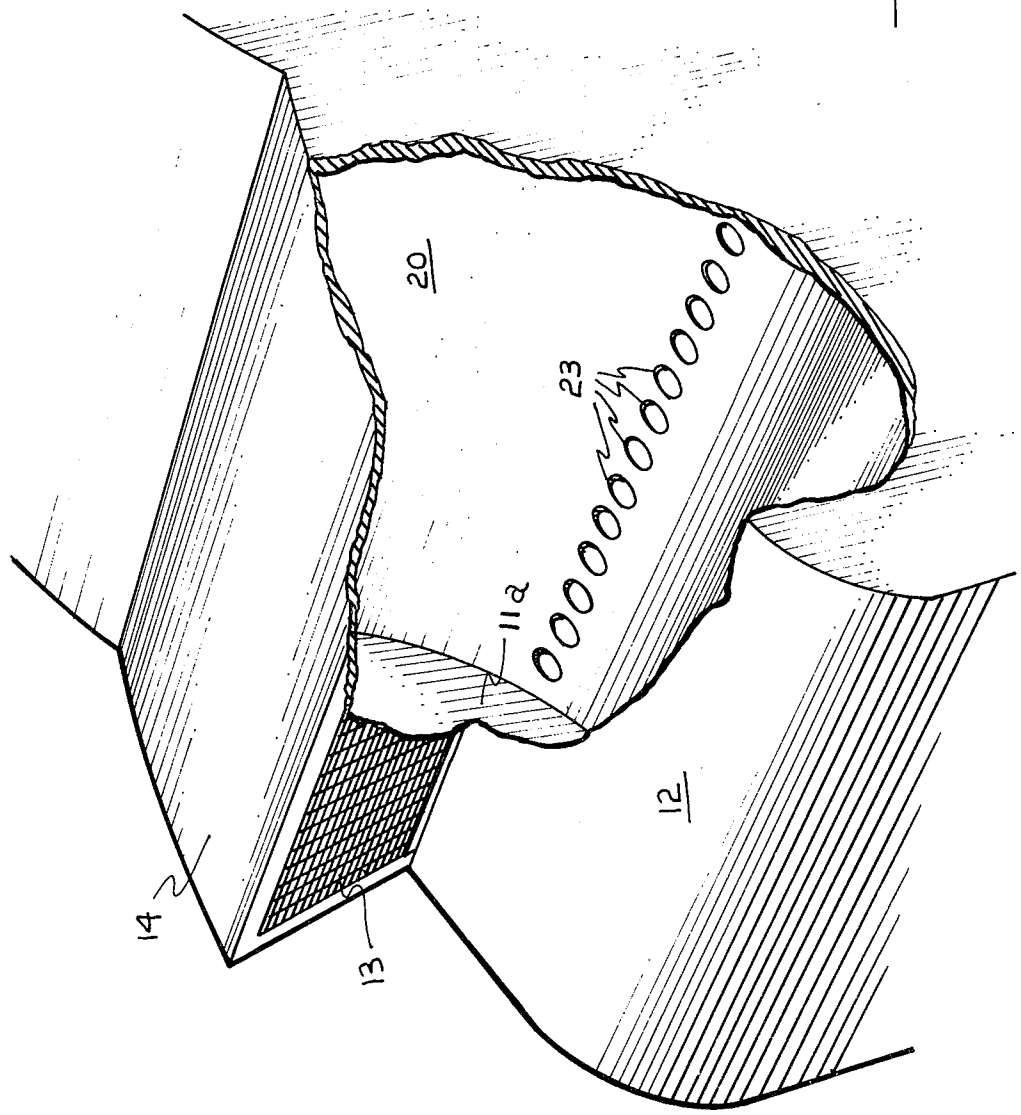



Fig. 2

Fig. 3



# TWIN VENTILATOR FIXTURE

## BACKGROUND OF THE INVENTION

Ventilation of vehicles and the like wherein no artificial or powered air cooling and circulating is installed has become a modern requirement in commercial vehicles particularly. The perishability of cargoes and the comfort and safety of passenger-operators is of foremost concern in these types of vehicles, and many ventilating arrangements have been introduced; however, most of these arrangements are complicated and costly.

## SUMMARY OF THE INVENTION

The subject invention is directed to a ventilator of simple construction having no moving parts wherein circulation of air and the discharge of water condensate and the like are controlled automatically by the construction of the invention. A unique feature of the invention is its adaptability to install upon a railroad car wherein ventilation of the vehicle is provided by its motion in either direction upon a track.

## DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of the ventilating fixture showing both halves of the structure as it appears externally.

FIG. 2 is a sectional view of the fixture taken along a line at right angles to the direction of motion of the ventilator fixture when it is attached to a moving vehicle.

FIG. 3 is a perspective view of a portion of FIG. 1 showing the interior of one half of the fixture and the line of weep holes in the concavity of the deflecting member.

## DETAILED DESCRIPTION OF THE INVENTION

Referring to FIG. 1 a base **10** carries side plates **11** and **11***a* (not shown), together with the outwardly curving headers **12** at each end of the base **10** and the dihedral top **14** and the screened openings **13** (only one of which is shown) to form the twin ventilator fixture. Weep hole **15** is provided for discharging water from a well **21** (later explained herein) to the exterior of the fixture, and further weep holes **16, 17, 18** and **19** are also similarly provided in the side plate **11.** Similar weep holes **15***a*, **16***a*, **17***a* and **18***a* and **19***a* are provided on the other side plate **11***a* (not shown).

Now referring to FIG. 2 a supporting member **10***a* across the width of the fixture is attached to the base **10** and in turn supports a troughlike plate **10***b* extending across the width of the fixture. Attached at each end of



the juncture of the top **14** and the top of the screened opening **13** is a curved member **20,** which extends inward and downward around and spaced from header **12;** forming an irregular ogee curve therewith, terminating in a lip **22** and extending across the width of the fixture. The base **10** has extended openings **24** through which ventilation is carried into the vehicle upon which the twin ventilator fixture is mounted,each opening **24** being provided with a cut off **25** — these forming no part of the subject invention.

Referring again to FIGS. **1** and **2** the plate **10***b*, side plates **11** and **11***a* and the convex sides of the curved members **20** together form a well into which water blown in through the screened openings **13** or condensed from the air passing through these openings may accumulate by dripping through holes **23** (See also FIG. **3**) in the members **20,** the aforesaid well **21** discharging through the weep holes **15** (See FIG. **1**) and **15***a* (See FIG. **2**). Water accumulating in the lips **22** of the members **20** may also be discharged from the weep holes **16** and **17** in side plate **11** and from weep holes **16***a* and **17***a* of side plate **11a.** Further provision of weep holes **18** and **19** of side plate **11** and **18***a* and **19***a* of side plate **11a** affords discharge of moisture that might otherwise enter the vehicle carrying the twin ventilating fixture through the openings **24.**

Normally the above described fixture is mounted upon the top or roof of a vehicle, the fixture being oriented so that the screened openings **13** face the direction of travel of the vehicle. Consequently, when both cut off's **25** are open air will be forced in through one screened opening **13** (the opening facing the direction of motion of the vehicle) down through the member **20's** concave surface around the lip **22** and through an opening **24** into the vehicle, thereafter the exhaust will be upwards through the other opening **24** into the other member **20's** concave surface and out through the other screened opening **13.**

What is claimed is:

**1.** A twin ventilator fixture having a pair of back to back air inlets spaced a predetermined distance from one another, a pair of air exhausts, one for each inlet, positioned below and offset therefrom, a curved duct from each said inlet to each said exhaust, a trough supporting said ducts and forming therewith a reservoir for collecting moisture, weep holes arranged in a line across the lower extremeties of each said duct for discharging water accumulated by the said ducts into said reservoir, and means comprising a pair of weep holes for discharging water from said reservoir.

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