Sept. 17, 1963 E. H. STEINER 3,103,870

BOAT VENTILATOR

Filed April 20, 1962

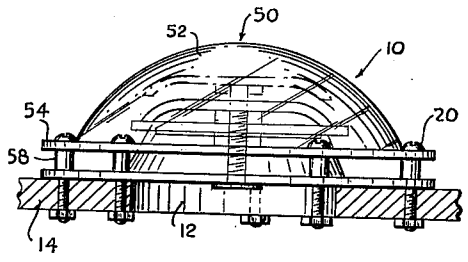


Fig. 1

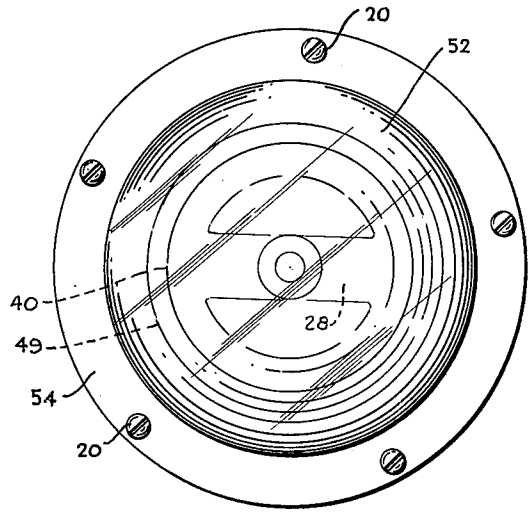


Fig. 2

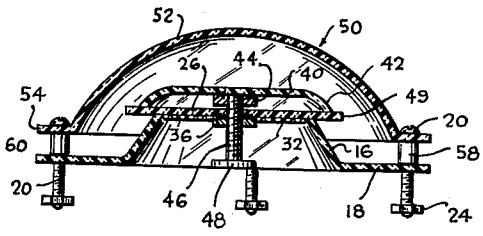


Fig. 3

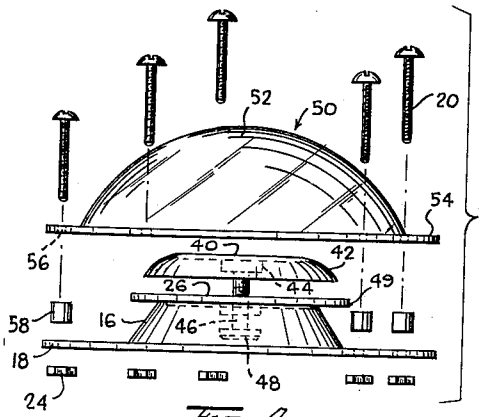


Fig. 4

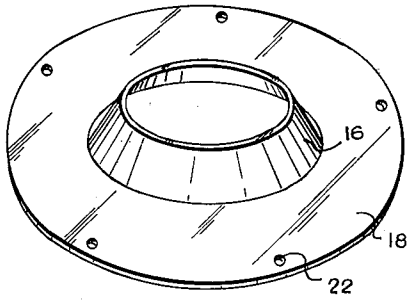


Fig. 5

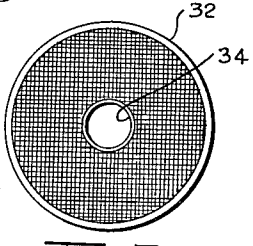


Fig. 7

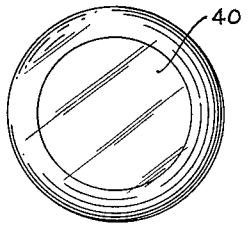


Fig. 8

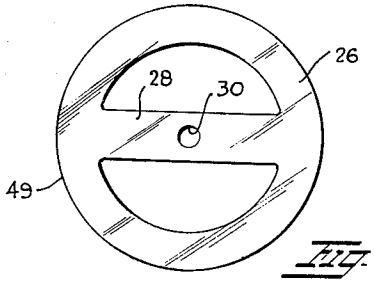


Fig. 6

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BOAT VENTILATOR

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1 Claim. (Cl. 98—42)

This invention relates to new and useful improvements in a boat ventilator adapted to be installed in the outer wall or deck of a boat or the like to provide light at all times and air when desired, in an enclosed room therein, such as the rest room, and this application is a continuation-in-part of my copending application filed July 19, 1960, Serial Number 43,911, now Patent No. 3,031,943.

A principal object of the present invention is to provide a boat ventilator that gives complete ventilation, is rain and spray proof and is fully screened to keep out all foreign matter, insects and the like.

Other objects of the invention are to provide a boat ventilator that can be formed of colored plastic material for protecting the eyes from the sun's rays; and that can be easily manipulated from the inside of the boat.

A further object is to provide a boat ventilator that is simple in construction, economical to manufacture and highly efficient for the purposes intended.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the following description and accompanying drawings, and to the appended claim in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure:

FIG. 1 is a side elevational view of a boat ventilator embodying my invention shown applied to a boat.

FIG. 2 is a top plan view of the boat ventilator.

FIG. 3 is a sectional view taken on the line 3—3 of FIG. 2.

FIG. 4 is a disassembled side elevational view of the boat ventilator.

FIG. 5 is a top perspective view of the body of the ventilator.

FIG. 6 is a plan view of the ring forming part of the invention.

FIG. 7 is a plan view of the screen forming part of the invention.

FIG. 8 is a top plan view of the cover plate forming part of the invention.

Referring in detail to the drawings, a boat ventilator embodying the invention is shown in FIG. 1 and designated generally by the reference numeral **10**. The ventilator **10** is shown mounted over a circular opening **12** in the hood **14** of a boat.

The ventilator comprises a hollow cylindrical tapering body **16**, open top and bottom, with an integral flange **18** around the base thereof. The body **16** is shown disposed over the opening **12** in the boat with the flange **18** secured in position on the hood **14** by means of plastic screws **20** passing through holes **22** in the flange **18** and plastic nuts **24**. The body **16** is formed of transparent plastic material.

In accordance with the invention, means is provided for selectively and adjustably closing and opening the top opening in the body **16**. For this purpose, a transparent plastic ring **26** having a flat crosspiece **28** with a central hole **30** therein is secured to the top edge of the body **16** by adhesive or the like. A circular screen **32** with a central opening **34** therein is fastened to the bottom surface of the ring as seen in FIGS. 3 and 4. A threaded nut **36** is welded to the undersurface of the ring **26** and is disposed around the hole **30** therein. A movable transparent plastic cover plate **40** having a downwardly curved peripheral edge **42** is placed over the ring **26**. A threaded

nut **44** is suitably secured to the undersurface of plate **40** at its center.

A headed screw **46** extends through the nut **36**, the opening **34** in screen **32**, hole **30** in ring **26** and through nut **44** with its free end jammed against the undersurface of cover plate **40**. The head **48** of the screw is accessible through the bottom opening of body **16**.

In operation of the ventilator, by turning the head **48** of the screw **46** in one direction, clockwise as viewed in FIG. 3 for example, the cover plate **40** will be moved away from the top surface of the ring **26**, permitting air to enter over the protruding peripheral edge **49** of the ring **26** and the cover plate **40**, through the ring **26**, screen **32**, hollow body **16** and opening **12** in the hood **14** of the boat to the interior room in the boat for ventilating the room. The air passes through the screen **32** so that all foreign matter such as dirt, insects, etc., is kept out of the room.

By turning the head **48** of the screw **46** in the opposite direction, that is counterclockwise as viewed in FIG. 3, the cover plate **40** will be moved toward the ring **26** and seated on the ring forming a seal at this point thereby preventing passage of air into the room.

An important feature of the invention is the protruding peripheral edge **49** of the ring **26** beyond the top edge of the body **16**. By reason of this protruding edge, any moisture, water and the like drawn in by the air will lash against this protruding edge and will be thrown back thereby preventing its entry into the room.

The invention also contemplates protecting the body **16** and cover plate **40** from the weather and rough seas and for this purpose a transparent colored plastic dome-shaped cover **50** is provided. The dome-shaped cover has a semi-elliptical body **52** terminating at its periphery in a flat annular flange **54**. The flange **54** is provided with spaced holes **56** spaced similarly to the spacing of the holes **22** in the flange **18** of the body **16**. When the dome-shaped cover **50** is in operative position over the body **16** and plate **40**, the holes **56** and **22** are in alignment and the screws **20** are passed through the aligned holes, spacing sleeves **58** of plastic having first been sleeved over the screws between the flange **54** of the dome-shaped cover **50** and the flange **18** of the body **16** to space the flange of the dome-shaped cover away from the flange of the body to provide a passage **60** for the air to enter and circulate. The screws **20** fasten the dome-shaped cover **50** and body **16** in position on the hood **12**.

When the dome-shaped cover is in position as shown in FIG. 1, the air enters passage **60** between the flange **18** of body **16** and the dome-shaped cover **50** and circulates around the tapering body **16** and when the cover plate **40** is in open position, the air enters underneath the plate and inwardly through the ring **26**, screen **32**, body **16** and opening **12** in the hood **14** into the room in the boat. The transparent colored dome-shaped cover **50** permits light rays to enter into the room to illuminate the room but protects the eyes of the occupants from danger from the sun's rays.

While I have illustrated and described the preferred embodiment of my invention, it is to be understood that I do not limit myself to the precise construction herein disclosed and that various changes and modifications may be made within the scope of the invention as defined in the appended claim.

Having thus described my invention, what I claim as new, and desire to secure by United States Letters Patent is:

A boat ventilator comprising a hollow cylindrical transparent plastic body, open top and bottom, tapering outwardly from top to bottom, adapted to be secured to the hood of a boat over an opening in said hood, a ring secured to the open top edge of said hollow cylindrical

body, said ring having a crosspiece thereacross with a central hole therein, a nut welded to the undersurface of the crosspiece of said ring, an imperforate movable cover plate adapted to seat on the ring, a nut on the undersurface of said cover plate at its center, said nut serving as a bearing member, a headed screw member extending through the nut on said crosspiece, the hole in said crosspiece and having its free end secured to the bearing member on the undersurface of said cover plate whereby turning of said screw member in one direction moves the cover plate away from the ring and turning in the opposite direction moves the cover plate toward and onto the ring, a screen secured to the undersurface of the ring and across the top opening in the hollow cylindrical body, said hollow cylindrical body having a peripheral flange

therearound, a dome-shaped body of colored plastic surrounding the cover plate, ring, screen and upper portion of the hollow cylindrical body, an annular flange on the dome-shaped body disposed over the flange on said hollow cylindrical body in spaced relation thereto, and screw means for fastening the flanges together in spaced relation.

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