Jan. 30, 1968 D. W. BECK 3,366,028

BOAT VENTILATOR

Filed June 27, 1966

FIG. 1

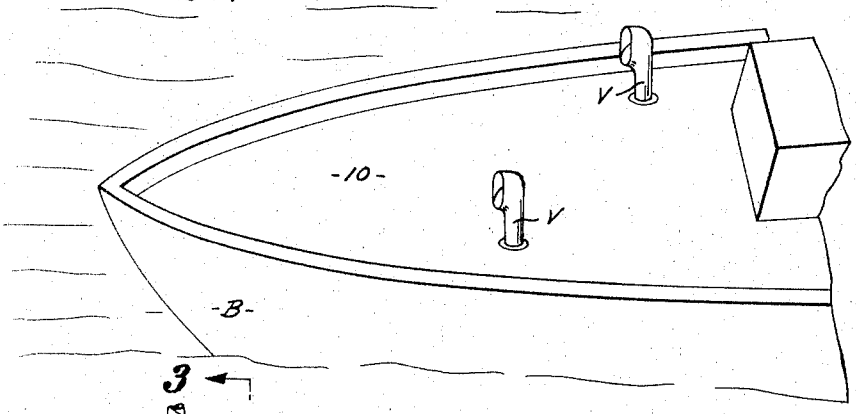
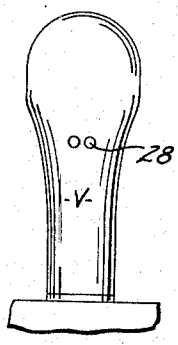


FIG. 4



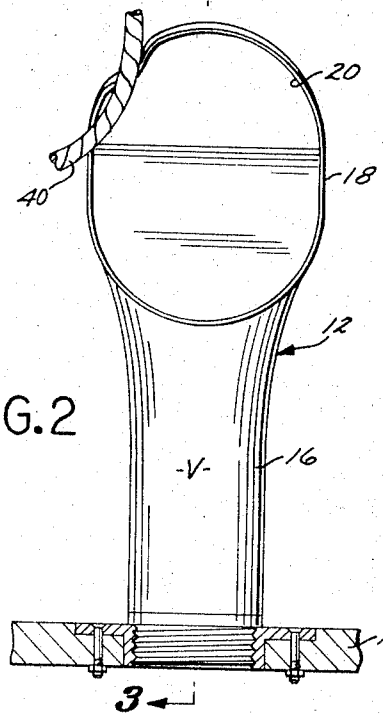


FIG. 2

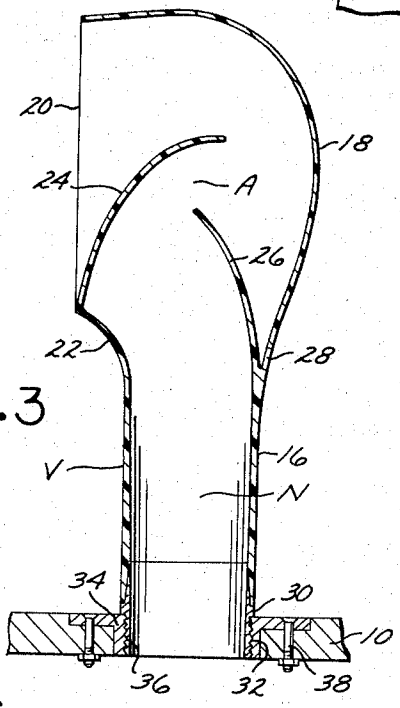


FIG. 3

FIG. 5

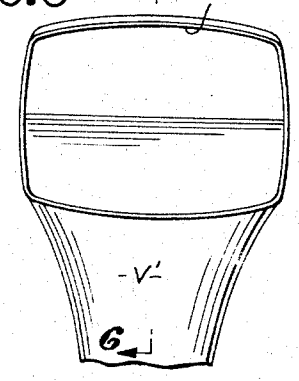


FIG. 6

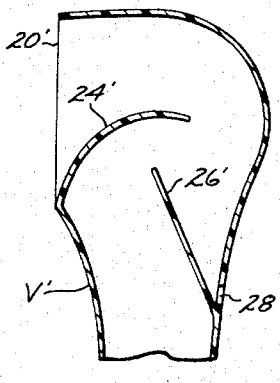
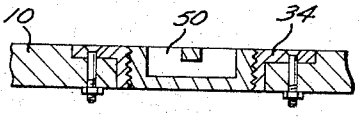


FIG. 7



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BOAT VENTILATOR

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ABSTRACT OF THE DISCLOSURE

A boat ventilator having a forwardly facing head member at its upper end for receiving air, and mounting means at it lower end for attachment to a boat deck. Baffles in the ventilator permit free flow of air but trap water for drainage to the exterior via apertures in the ventilator.

The present invention relates generally to boating and more particularly to a new and novel self-contained, water-deflecting ventilator to be mounted upon a boat deck.

It is a major object of the present invention to provide a boat ventilator which will efficiently admit air to the confines of a boat but will effectively exclude water therefrom.

Another object of the present invention is to provide a boat ventilator of the aforedescribed nature which is formed of a flexible synthetic plastic material whereby it will readily undergo temporary deformation when inadvertently contacted by an object such as a line or a crewman.

Yet another object of the present invention is to provide a boat ventilator of the aforedescribed nature which may be readily temporarily removed from its normal operative position so as to clear the deck upon which it is mounted.

An additional object of the present invention is to provide a boat ventilator of the aforedescribed nature which is economical of manufacture.

A further object of the present invention is to provide a boat ventilator of the aforedescribed nature which is simple of design and rugged of construction whereby it may afford a long and trouble-free service life.

These and other objects and advantages of the present invention will become apparent from a consideration of the following description, when taken in conjunction with the appended drawings wherein:

FIGURE 1 is a perspective view showing a boat provided with a preferred form of ventilator embodying the present invention;

FIG. 2 is a front view in enlarged scale of said ventilator;

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

FIG. 4 is a reduced rear elevational view of said ventilator;

FIG. 5 is a broken front elevational view of another form of ventilator embodying the present invention;

FIG. 6 is a vertical sectional view taken on line 6—6 of FIG. 5; and

FIG. 7 is a vertical sectional view showing how a plug may be temporarily substituted for said ventilator.

Referring to the drawings, there is shown in FIG. 1 a conventional boat B having a deck **10** upon which are mounted two ventilators V embodying the present invention. Each ventilator may be considered of like construction.

The details of construction of each ventilator V are shown particularly in FIGS. 2, 3 and 4. As indicated in these figures, the ventilator V includes a scoop member, generally designated **12**, of integral construction. The lower part of the scoop member **12** includes an upright tubular neck **16**. The upper part of neck **16** smoothly merges

into a forwardly-facing head **18**. The head **18** is larger than the neck **16**, and its front end is formed with a generally elliptical, forwardly-facing opening **20**. The lower front and sides of head **18** flare inwardly and downwardly, as indicated at **22**, to merge into the upper part of neck **16**, while the rear portion of head **18** curves upwardly and rearwardly relative to neck **16**.

Disposed within the confines of head **18** is an upper baffle **24**. The upper baffle **24** extends upwardly and rearwardly from the lower edge of head opening **20** to terminate rearwardly of the vertical centerline of the neck **16** as viewed from the side in FIG. 3. The upper baffle **24** extends across the width of the interior of the head **18**. A lower baffle **26** extends upwardly and forwardly from the rear lower edge of head **18** to a point in general alignment with the vertical centerline of the base **14** and neck **16**, as viewed from the side in FIG. 3. The rear of head **18** is formed with one or more drain holes **28** immediately above and to the rear of the lower end of the lower baffle **26**.

Preferably, the open cross-sectional area A between the rear edge of the upper baffle **24** and the front edge of lower baffle **26** will be approximately equal to the open, horizontal cross-sectional area N of neck **16**.

The lower end of the neck **16** is rigidly affixed to a mounting collar **30**, the lower portion of which is externally threaded, as indicated at **32**. The mounting collar **30** is adapted to be removably threaded into a complementary flanged sleeve fitting **34** having external threads **36**. Sleeve fitting **34** is secured to boat deck **10** by bolt and nut combinations **38**.

Preferably, the scoop member **12** will be formed of a synthetic plastic material that is both resilient and capable of withstanding prolonged exposure to the elements. A suitable material for this purpose is polyvinyl chloride. The mounting collar **30** is preferably formed of a suitable noncorrosive metal, such as brass, although a material such as synthetic plastic may alternatively be utilized. The mounting collar **30** is preferably bonded within the lower portion of the neck **16**. The sleeve fitting **14** may be formed of the same material as mounting collar **30**.

In the use of the aforedescribed ventilator, the mounting collar **30** will be threaded into the sleeve fitting **34**. It should be noted that this arrangement permits the scoop member **12** to be swiveled into a desired position with respect to the boat deck **10**, i.e., the scoop member **12** may be arranged with the head opening **20** facing forwardly, rearwardly, or any angle therebetween with respect to the boat B.

The upper and lower baffles **24** and **26** will permit air to flow freely through the scoop member **12** since the areas A and N are generally equal. Should any water enter head opening **20**, however, the overlapping arrangement of the upper edge of upper baffle **24** with respect to the upper edge of lower baffle **26** will prevent such water from entering the neck **16**. Instead, such water will drop off the upper end of upper baffle **24** and flow downwardly onto the upper surface of the lower baffle **26**, such water then flowing out of the drain holes **28**.

Referring now to FIG. 2, it will be observed that because of the resilient nature of the synthetic plastic material from which the scoop member **12** is formed, if a line **40** or the like should contact such scoop member, the line will readily temporarily deform the scoop member thereby avoiding damage thereto. If a crew member should inadvertently contact the ventilator V, the material of the scoop member **12** would again deform thereby preventing injury to such crew member.

Referring now to FIGS. 5 and 6, there is shown a second form of ventilator V′ embodying the present invention. This second form of ventilator V′ is seen to be generally similar in construction to the aforedescribed ven-

tilator V with the exception that the head opening 20' is of a width greater than its depth. Additionally, the lower baffle 26' is straight rather than being curved as in the case of lower baffle 26 of ventilator V.

Referring now to FIG. 7, should it become desirable to temporarily clear the deck 10, the ventilator V or V' may be readily unscrewed from sleeve fitting 34. Thereafter, an externally-threaded plug 50 is screwed into the sleeve fitting 34 so as to close the hole defined thereby. Generally, the ventilator will be removed when there is danger that the boat might capsize or it is desired to race the boat.

It should be particularly noted that the vertical spacing above deck 10 of the opening 20 of the aforedescribed ventilator insures a free flow of air therethrough. This would not be true if such opening was placed close to the boat deck. Despite such free air flow through the ventilator, water is restrained from passing downwardly through the ventilator. Preferably, the lower edge of opening 20 will be spaced above deck 10 a vertical distance at least substantially equal to the vertical height of said opening.

Various modifications and changes may be made with respect to the foregoing detailed description without departing from the spirit of the present invention or the scope of the following claims.

I claim:

1. A self-contained water-deflecting ventilator for mounting on a boat deck, comprising:

a scoop member having an upstanding tubular neck the upper part of which smoothly merges into a head larger than said neck, the front end of said head being formed with a forwardly-facing opening;

a single upper baffle disposed within said head and extending upwardly and rearwardly from the lower edge of said opening to a point rearwardly of the vertical centerline of said neck;

a single lower baffle disposed within said head below said upper baffle and extending upwardly and forwardly from the rear lower edge of said head, and the upper part of said neck, to a point forwardly of the rear end of said upper baffle, with the open cross-sectional area between the rear edge of said upper baffle and the front edge of said lower baffle being approximately equal to the open horizontal cross-sectional area of said neck;

drain hole means formed in said head immediately above the lower end of said lower baffle and to the rear of said lower baffle; and

mounting means on the lower end of said neck for attaching said ventilator to said deck.

2. A ventilator as set forth in claim 1 wherein said scoop member is formed of a resilient synthetic plastic material.

3. A ventilator as set forth in claim 1 wherein said mounting means includes an externally-threaded collar removably screwed into an internally-threaded sleeve fitting adapted to be secured to said deck.

4. A ventilator as set forth in claim 1 wherein the lower edge of said forwardly facing opening is vertically spaced above said mounting means a distance at least substantially equal to the vertical height of said opening.

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