

(No Model.)

D. R. ROSE.
SHIP'S PORT VENTILATOR.

No. 588,480.

Patented Aug. 17, 1897.

Fig. 1.

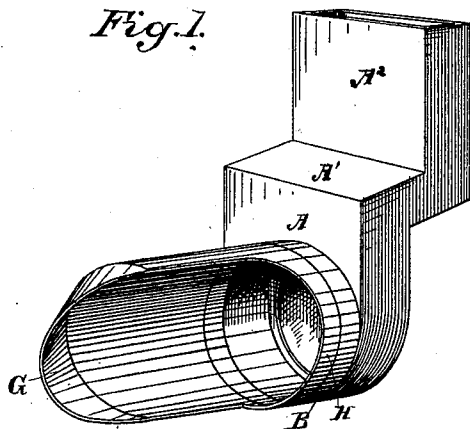
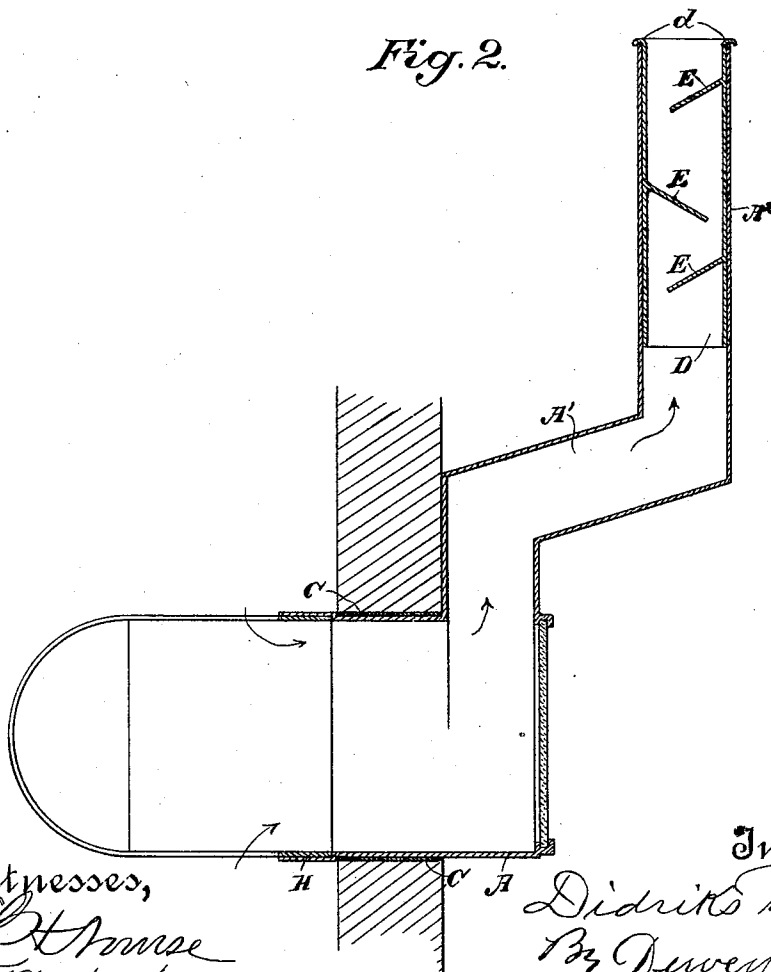


Fig. 2.



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SHIP'S-PORT VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 588,480, dated August 17, 1897.

Application filed May 17, 1897. Serial No. 636,888. (No model.)

To all whom it may concern:

Be it known that I, DIDRIKS R. ROSE, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Ship's-Port Ventilators; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to an attachment for ships which is especially designed for ventilating purposes and to allow the ports to be opened for the admission of air, while preventing the ingress of water during rainy or stormy weather.

It consists in details of construction which will be more fully explained by reference to the accompanying drawings, in which—

Figure 1 is a detached view of my ventilator. Fig. 2 is a vertical section of my device.

The object of my invention is to provide a removable attachment for windows or ports of vessels which, while allowing of a sufficient opening for light and air, is so constructed as to prevent the ingress of water either dashed against the vessel in the form of spray or by waves or rain.

The present illustration shows my device adapted to be applied to the ordinary circular ports which are made in the vessel's sides and are usually closed by heavy glass bull's-eyes, so that light will be admitted, while the rain and wet are kept out, but this also prevents any ingress of air, and the rooms often become close and foul, especially where there are successive days of stormy weather.

In my invention I have shown a tortuous tube or passage A, having at the lower end a tubular flange B, which is adapted to fit into the port-opening and may have a surrounding soft packing-ring, as shown at C, so that when inserted it will fit and make a close joint with the interior surface of the port, the bull's-eye being unscrewed or otherwise removed so as to leave the opening free for the introduction of this flange. This flange opens into the first section of the tube or passage, which is vertical, extending upwardly a short distance, thence an approximately horizontal or diagonal portion A' extends outwardly to the side opposite to that on which the flange B projects, and thence the tube makes another

turn and extends vertically upward, as shown at A². This second portion A² is sufficiently out of line with the part A to prevent any ingress of water which might be dashed into the part A and splashed upwardly, as the top of the diagonal portion A' acts as a stop to prevent the water passing any farther, and it subsides from this point and flows out again through the tubular flange B and the port, while the passage remains open for the ingress of air, so as to give a good ventilation to the apartment.

In some cases where the weather is usually rough and it is still desirable to have the ventilating-opening I employ a supplemental tube D, which is adapted to slip into the part A² and may be supported by lugs or outwardly-turned flanges *d* upon its upper end. Within this tube are fixed diaphragms E, which incline in opposite directions alternately from the sides of the tube, so that in case of any unusual dashing of water into the port which might carry it up into the part A² these diaphragms will serve to stop it and prevent its passing entirely out of the top of this portion of the tube.

The part D being removable can be used or not, as may be desired.

Upon the side of the part A which is in line with and opposite the port and the flange B, I may set in a bull's-eye or glass of sufficient strength, which is hermetically sealed to prevent any passage of water through this portion, but allows the light to enter the cabin in the same way that it will through the usual port bull's-eye. If the movement of the air is faint, and in hot climates, where the movement of the vessel may produce a little draft, I employ a directing device, which consists of a semicircular or other suitably-shaped device G, which is fixed to a ring or flange H, and this ring or flange is adapted to fit into the flange B, so that when the latter is introduced into the port this directing device G will be projected outside of the vessel, and it may be turned with the semicircular or scoop-shaped portion in such a direction that the air will be caught in it and directed and forced in through the port-opening and the passage A, as previously described.

If the wind is from the rear, this scoop-shaped device may be turned with its con-

caved face in that direction; but if the breeze comes from the bow or is produced by the movement of the vessel through the water it will be reversed and turned in the opposite direction.

The whole device is easily inserted or removed at pleasure and is adjustable to suit the character of the weather.

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

1. A ship's-port ventilator consisting of a tubular tortuous passage adapted to project upwardly within the apartment into which the port opens, and a tubular flange projecting therefrom adapted to fit and form a tight joint within the port-opening.

2. A ship's-port ventilator consisting of a tortuous tubular passage having a flange and packing whereby the flange forms a tight joint with the port-opening, and a supplemental extension fitting the tubular flange, projecting exteriorly so as to direct the current of air into the device.

3. A ship's-port ventilator consisting of a

tortuous passage formed by the union of two vertical passages by a diagonal one connecting them out of line with each other, a tubular flange with packing adapted to fit and form a tight joint in the port-opening and a supplemental removable tube fitting the upper portion of the main tube with means for suspending it therein, and diagonally-disposed diaphragms projecting alternately from opposite sides.

4. A ship's-port ventilator consisting of a tortuous passage formed by the union of a plurality of vertical tubes and a diagonal connecting-tube, a tubular flange projecting outwardly from the lowermost section to form a tight joint with the port-opening, and a glazed light-opening formed in the opposite side of the vertical tube in line with the tubular flange.

In witness whereof I have hereunto set my hand.

DIDRIKS R. ROSE.

Witnesses:

S. H. NOURSE,
GEO. H. STRONG.