

(No Model.)

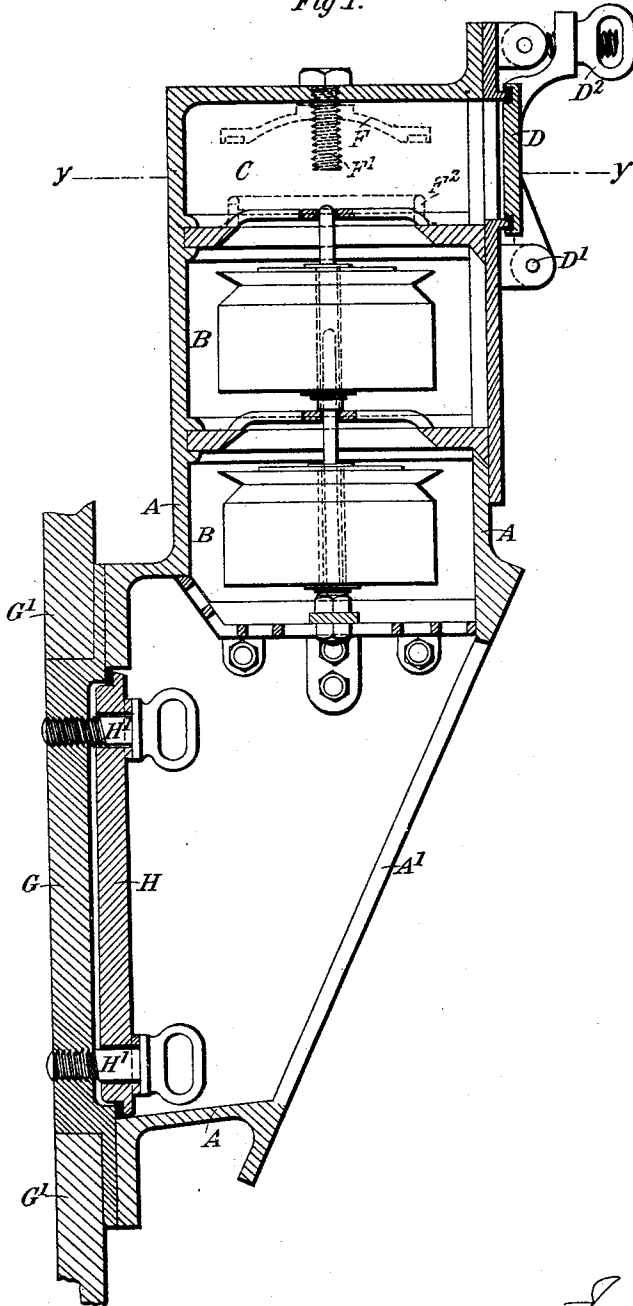
3 Sheets—Sheet 1.

T. UTLEY.
SHIP'S VENTILATOR.

No. 484,348.

Patented Oct. 11, 1892.

Fig 1.



Witnesses:
J. A. Ruthenford
Robert Barrett

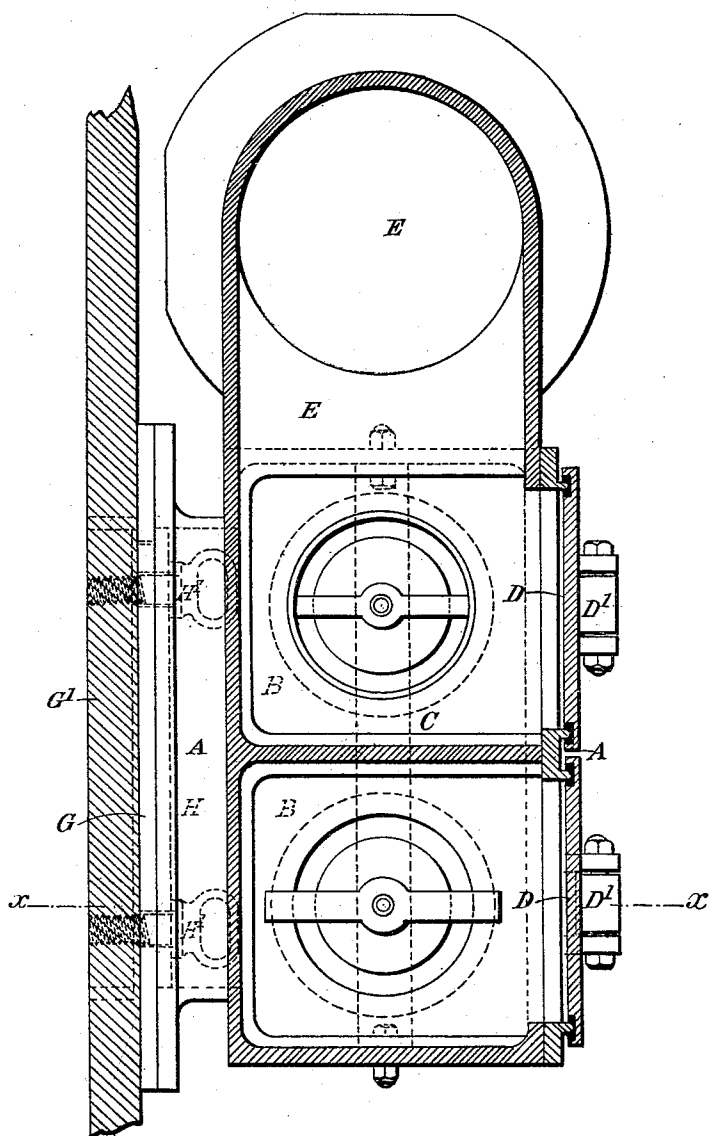
Inventor:
Thomas Utley
By James O. Norris
Attorney.

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Patented Oct. 11, 1892.

Fig. 2.



Witnesses: *J. A. Ruthenford* *Robert Emmett* Inventor: *Thomas Utley*
by *James L. Morris*

(No Model.)

3 Sheets—Sheet 3.

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Fig. 3.

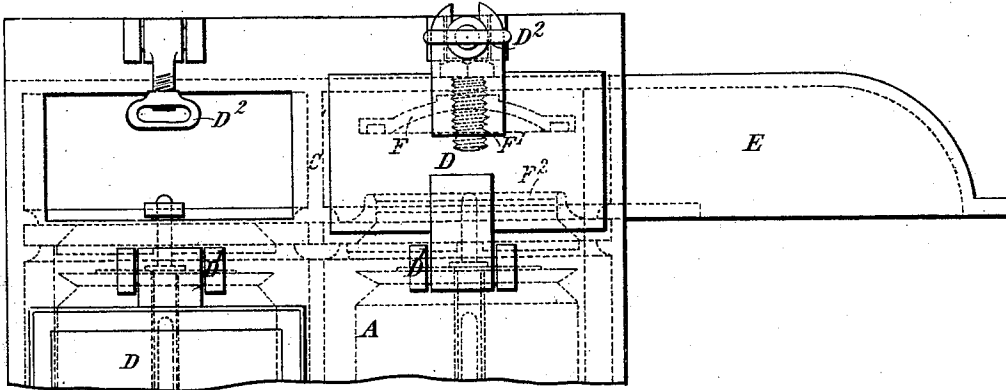
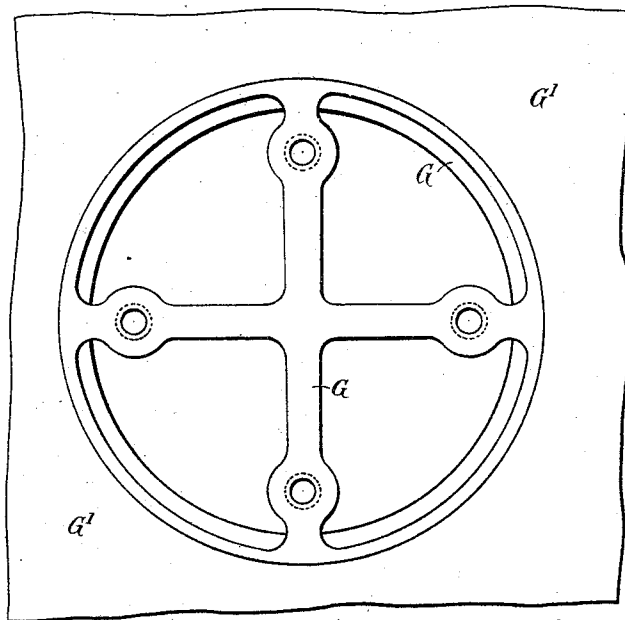


Fig. 4.



Witness:
J. A. Rutledge
Robert Emmett

Inventor:
Thomas Utley,
By James L. Norris,
Attorney.

UNITED STATES PATENT OFFICE.

THOMAS UTLEY, OF LIVERPOOL, ENGLAND.

SHIP'S VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 484,348, dated October 11, 1892.

Application filed June 7, 1892. Serial No. 435,840. (No model.)

To all whom it may concern:

Be it known that I, THOMAS UTLEY, engineer, a subject of the Queen of Great Britain, and a resident of Stonycroft, Liverpool, England, have invented certain new and useful Improvements in or relating to Ships' Ventilators, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to ships' ventilators, and more especially to ventilators of the kind or class described in the specification of prior Letters Patent granted to me, No. 17,422, A. D. 1888.

15 One feature of my present invention relates to the construction of such ventilators so as to make them applicable for ventilating both bunker or ballast-tank and cabin. My said improved ventilator can, however, be used
20 for the cabin only.

Another feature of my present invention relates to the provision of a closing-down cover in the side of the ship for masking or closing the opening or entrance to the ventilator.

25 In the accompanying drawings, Figure 1 is a vertical section taken through my improved combined cabin and bunker or ballast-tank ventilator, taken on the line *x x*, Fig. 2. Fig. 2 is a horizontal section on the line *y y*, Fig. 30 1. Fig. 3 is a partial front elevation of the said ventilator. Fig. 4 is an elevation of a portion of the ship's side, showing the opening or entrance to the ventilator.

Like letters of reference indicate corresponding parts throughout the drawings.

A is the body of the ventilator.

B B are the air or valve chambers. I have shown a ventilator provided with two sets of valves separated by a partition-wall C.

40 D D are the ventilating-doors, which are hinged at D' D' and provided with ordinary retaining-screw clamps D² D² for securing the same in the closed position.

E is a pipe or communication leading from
45 the bunker or ballast-tank to one of the air or valve chambers B, whereby the apparatus is made to ventilate the bunker or ballast-tank as well as the cabin. For shutting off the lead E when desired—as, for instance, in case
50 the valves get out of order—I provide a screw-down cap or cover F, which works on a bolt

F' or is otherwise suitably arranged, so that it can be screwed down upon a seat F², provided around the valve-opening, and so close that part of the ventilator. When used for
55 ventilating the bunker, the corresponding door D is closed. Upon opening the said door D access is obtained to the cap or cover F for the purpose of raising and lowering the same.

For masking or closing the opening or entrance to the ventilator, when desired, I provide
60 as follows—that is to say: G is a suitable open-metal frame, preferably made of brass or gun-metal to withstand shocks, secured in the ship's side G'. H is a water-tight cover
65 or lid, which can be fixed by bolts H' to the interior of the said frame G, thereby masking or closing the entrance to the ventilator and allowing of the ventilator being shut off in case of accident to the valves or otherwise, or
70 in case the side lights which are fixed in the opening A' of the frame be carried away by heavy seas or otherwise damaged. Where it is desired to ventilate the bunker or ballast-tank only, I dispense with the division-wall C
75 and provide a closing-down cap for both valves or all the valves, if there are more than two sets.

What I claim is—

1. In a combined ship's cabin and bunker
80 or ballast-tank ventilator, the combination, with a casing having an air or valve chamber, a valve mechanism, and a pipe or lead for connecting the valve-chamber with a bunker or ballast-tank ventilator, of a seat arranged
85 in juxtaposition to the valve-opening and a screw-down cap adapted to move upon the seat for closing communication between the pipe or lead and the air or valve chamber, substantially as described.

2. In a combined ship's cabin and bunker
90 or ballast-tank ventilator, the combination, with a casing having an air or valve chamber, a ventilating-door, and a pipe or lead for connecting the valve-chamber with a bunker
95 or ballast-tank, of a seat surrounding the valve-opening between the valve-chamber and the pipe or lead and a screw-down cap adapted to close upon the seat for shutting
100 off communication between the pipe or lead and the air or valve chamber, substantially as described.

3- In a combined ship's cabin and bunker
or ballast-tank ventilator, the combination,
with a casing having an air or valve cham-
ber, a ventilating-door, and a valve mechan-
5 ism located in the air or valve chamber, of a
detachable water-tight lid H for closing the
entrance to the casing through the ship's side,
substantially as described.

In testimony whereof I have hereunto

signed my name in the presence of two sub- 10
scribing witnesses.

THOMAS UTLEY.

Witnesses:

JOHN H. KENION,
Solicitor, Liverpool.
GEO. FOX,
His Clerk.