No. 877,655. PATENTED JAN. 28, 1908.

A. A. LOW.

VENTILATOR FOR MOTOR BOATS.

APPLICATION FILED MAY 4, 1907.

Fig. 1.

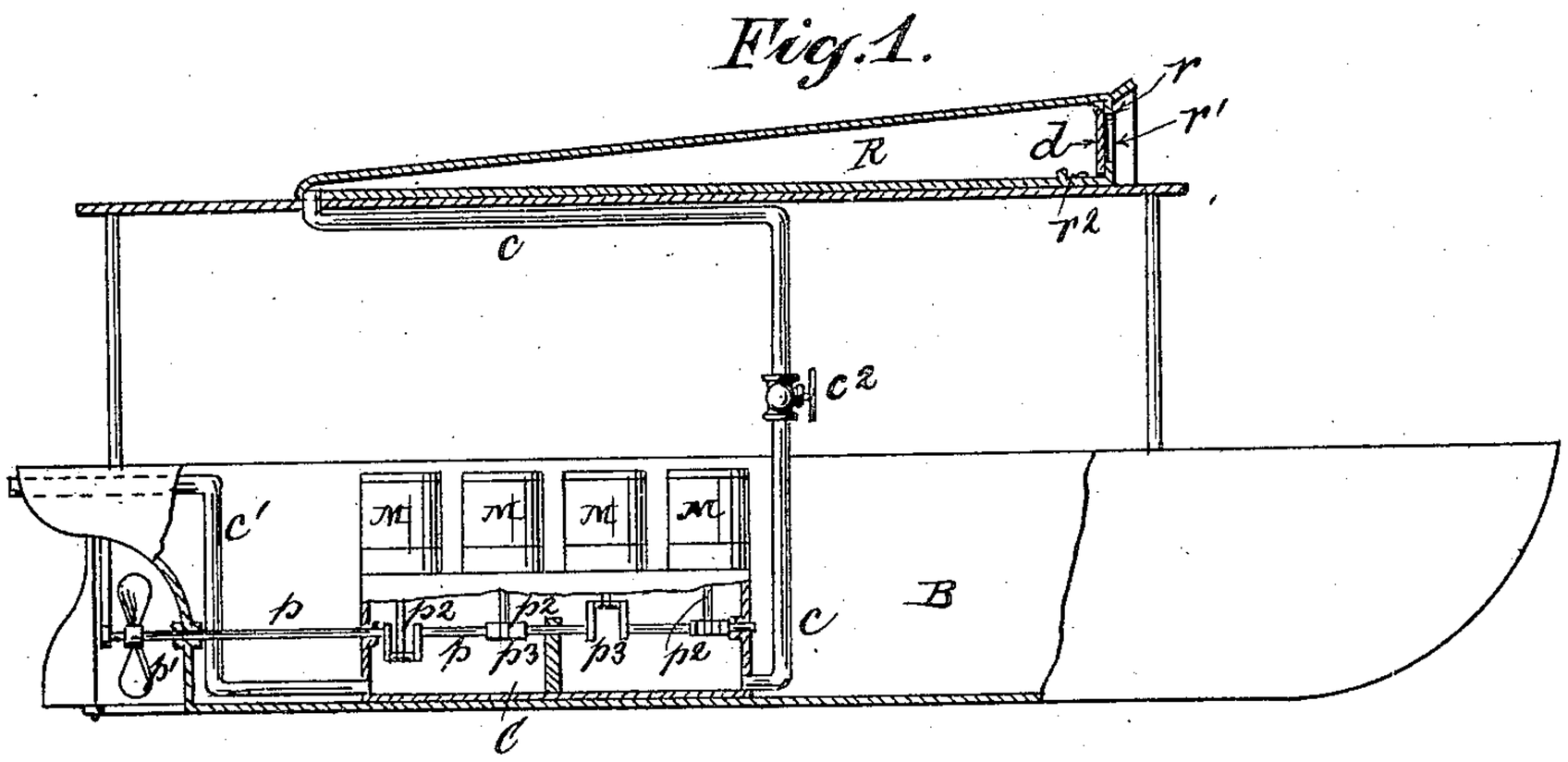


Fig. 2.

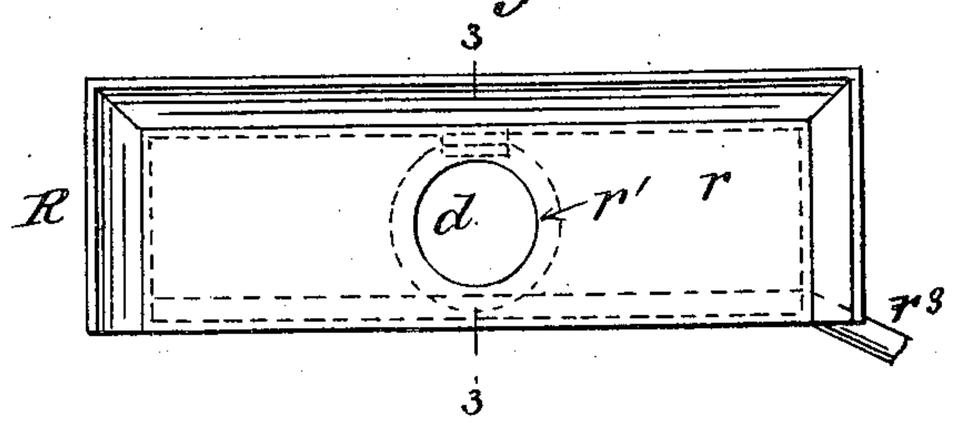
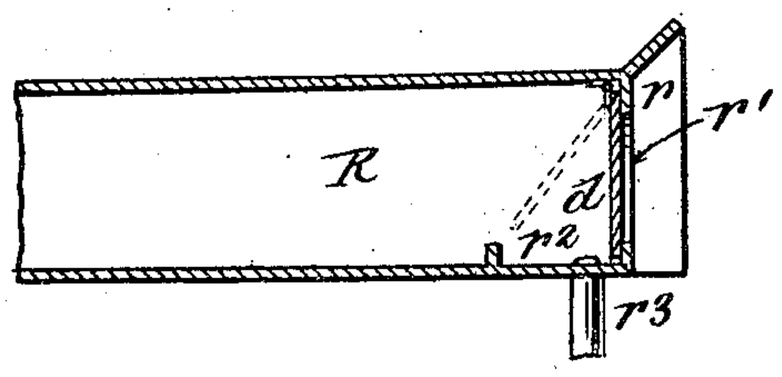


Fig. 3.



Witnesses:
D. W. Gardner
D. Whitehurst

Inventor:
Abbot Augustus Low
By his attorney
Leo. Wm. Neath

UNITED STATES PATENT OFFICE.

ABBOT AUGUSTUS LOW, OF HORSESHOE, NEW YORK.

VENTILATOR FOR MOTOR-BOATS.

No. 877,655. Specification of Letters Patent. Patented Jan. 28, 1908.

Original application filed November 5, 1906, Serial No. 342,002. Divided and this application filed May 4, 1907. Serial No. 371,782.

To all whom it may concern:

Be it known that I, ABBOT AUGUSTUS LOW, a citizen of the United States, residing at Horseshoe, St. Lawrence county, State of New York, have invented certain new and useful Improvements in Ventilators for Motor-Boats, of which the following is a specification.

My invention relates to motor boats propelled by hydro-carbon engines, and is designed to afford a cool heat proof roof or awning which may also be used as a means of collecting and forcing air through the motor crank chamber for the purpose of ventilating and cooling the same and eliminating all objectionable odor therefrom.

The present application is a sub-division of that filed November 5, 1906 Serial No. 342,002, and the invention consists in the construction and arrangement of parts hereinafter described and claimed specifically, the distinguishing feature being a combined over-head air scoop or receiving compartment, open at the forward end of the boat and closed at the rear, said air scoop or receiving compartment being connected by a suitable conduit with the motor crank chamber, which latter is in turn provided with a discharge conduit, whereby a circulation of air may be maintained through said roof or awning and through said motor crank chamber when the boat is propelled forward. As a result not only the roof or awning is kept cool, but the motor crank chamber also, so that my device performs a double function affording result which are new and advantageous, since they add materially to the comfort of the occupants of the boat.

In the accompanying drawings, Figure 1, is a central longitudinal sectional elevation of a motor boat showing the practical application of my invention; Fig. 2, a front elevation on a larger scale of the air scoop; Fig. 3, a section upon plane of line 3—3—Fig. 2.

The motor boat or vessel B is of any ordinary or desired form and construction, and is provided with one or more, preferably a series of kerosene or hydro-carbon motors, M, having a common crank shaft p, carrying the propeller p', in the usual manner,—the piston pitmen p^2, being pivotally connected directly with the cranks p^3, on said propeller shaft p, as indicated in Fig. 1, and the cranks being inclosed in a common chamber C. This crank chamber C incasing the lower parts of the motors M is sealed except where the inlet conduit c, and the discharge conduit c', communicate therewith.

The inlet conduit c, connects the crank chamber C with the rear portion of the air scoop or receiving chamber R, consisting of an over-head compartment suitably supported, and extending longitudinally with relation to the keel of the boat as well as transversely across the latter. Its top is preferably though not necessarily convergent, as shown in Fig. 1, its rear being closed and its front or bow end being closed in part by a dash board r, in which is formed an inlet aperture r', of any desired shape, preferably circular as shown in Fig. 2 of the drawings,—this inlet aperture r', being closed except when the boat is propelled forward by a flapper or door d, hinged to swing inward as indicated by dotted lines in Fig. 3.

Parallel to the dash board r, and extending across the floor of the air receiver R behind said dash board, is a gutter r^2, with which is connected a drain pipe r^3. This is for the purpose of collecting and disposing of any water resulting from rain or snow admitted through the opening r',—the flap door d, deflecting the rain and snow into said gutter r^2, and eliminating it from the air taken in, so that that taken from the rear of the receiver R will be comparatively clean and dry.

The inlet pipe or conduit c is provided with a valve c^2, for regulating the flow of air to the crank chamber C.

It will be readily understood that when the vessel is propelled forward at any considerable rate of speed, if the valve c^2, is open, or partly so, a current of air will pass in through the aperture r', through the receiving chamber, through the conduit c, through the crank chamber C, and out through the discharge conduit c', thereby cooling and ventilating said chamber as well as the air scoop or receiving chamber R. By thus providing for the regulating and cooling of the crank chamber C, I eliminate the objectionable smell ordinarily arising therefrom by carrying off the vapors that would otherwise collect in and escape from the crank chamber.

Incidentally my air scoop or receiver affords an effective awning for protection against solar heat as well as from the inclemencies of the weather.

What I claim as my invention and desire to secure by Letters Patent is,

1. In a motor boat, the combination of an

over-head awning or roof consisting of a compartment formed with a forward air receiving aperture, a flap arranged in conjunction with said air receiving aperture, a conduit connecting said air compartment with the crank shaft chamber of one or more hydro-carbon motors, said motor or motors, and a discharge conduit connected with said crank shaft chamber, for the purpose described.

2. In a motor boat, the combination of an over-head awning or roof consisting of a compartment formed with a forward air receiving aperture, a flap arranged in conjunction with said air receiving aperture, a draining gutter under said flap, a conduit connecting said air compartment with the crank shaft chamber of one or more hydro-carbon motors, said motor or motors, and a discharge conduit connected with said crank shaft chamber, for the purpose described.

ABBOT AUGUSTUS LOW.

Witnesses:
GEO. WM. MIATT,
D. W. GARDNER.