

A. A. LOW.
HYDROCARBON MOTOR.
APPLICATION FILED NOV. 5, 1906.

Fig. 1.

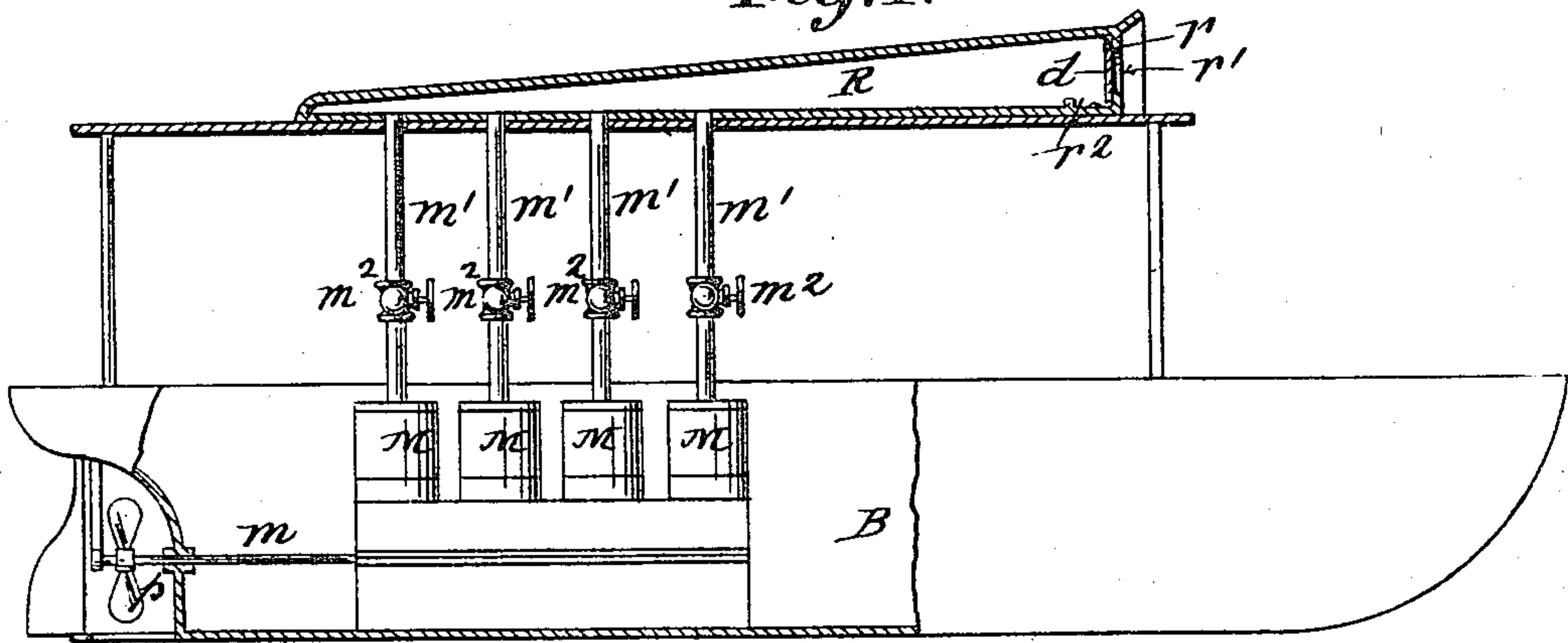


Fig. 2.

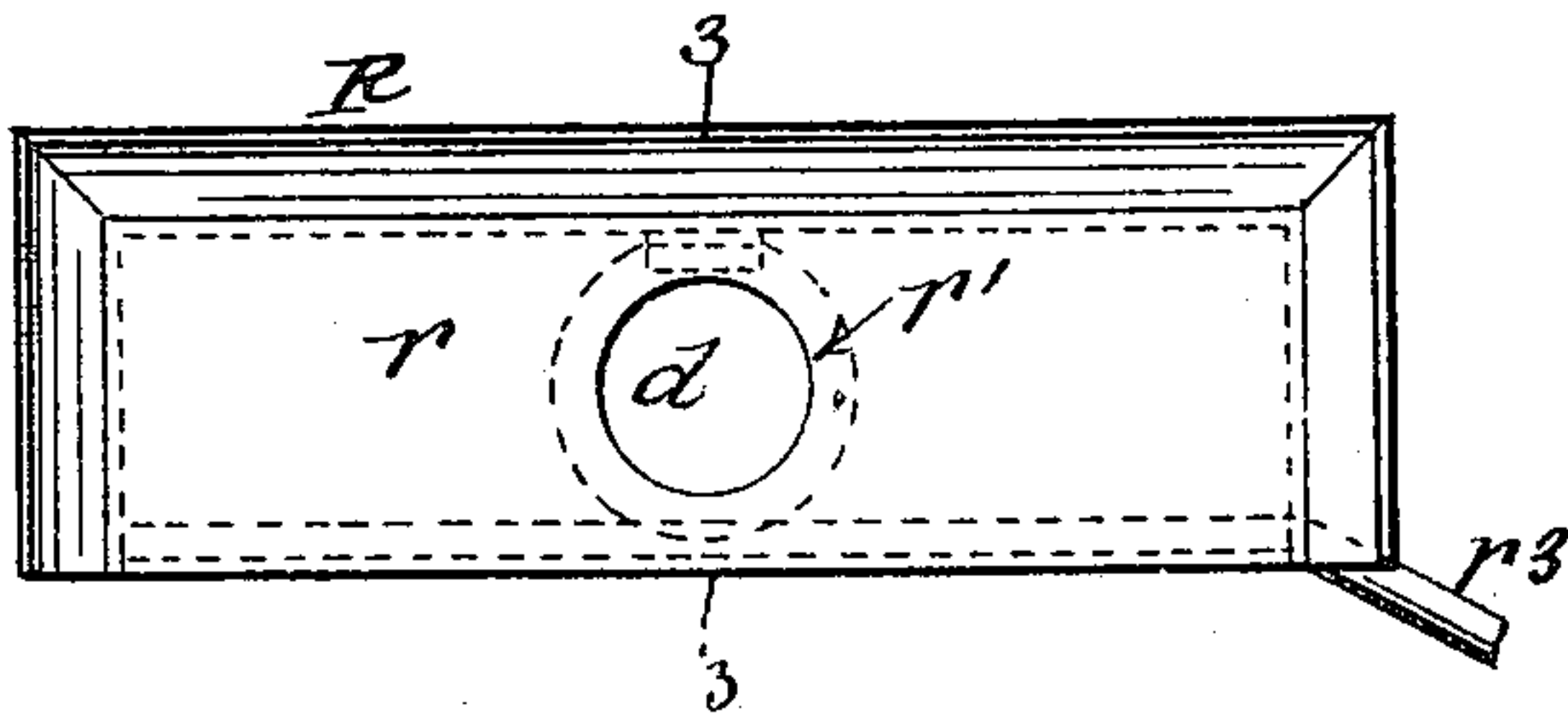
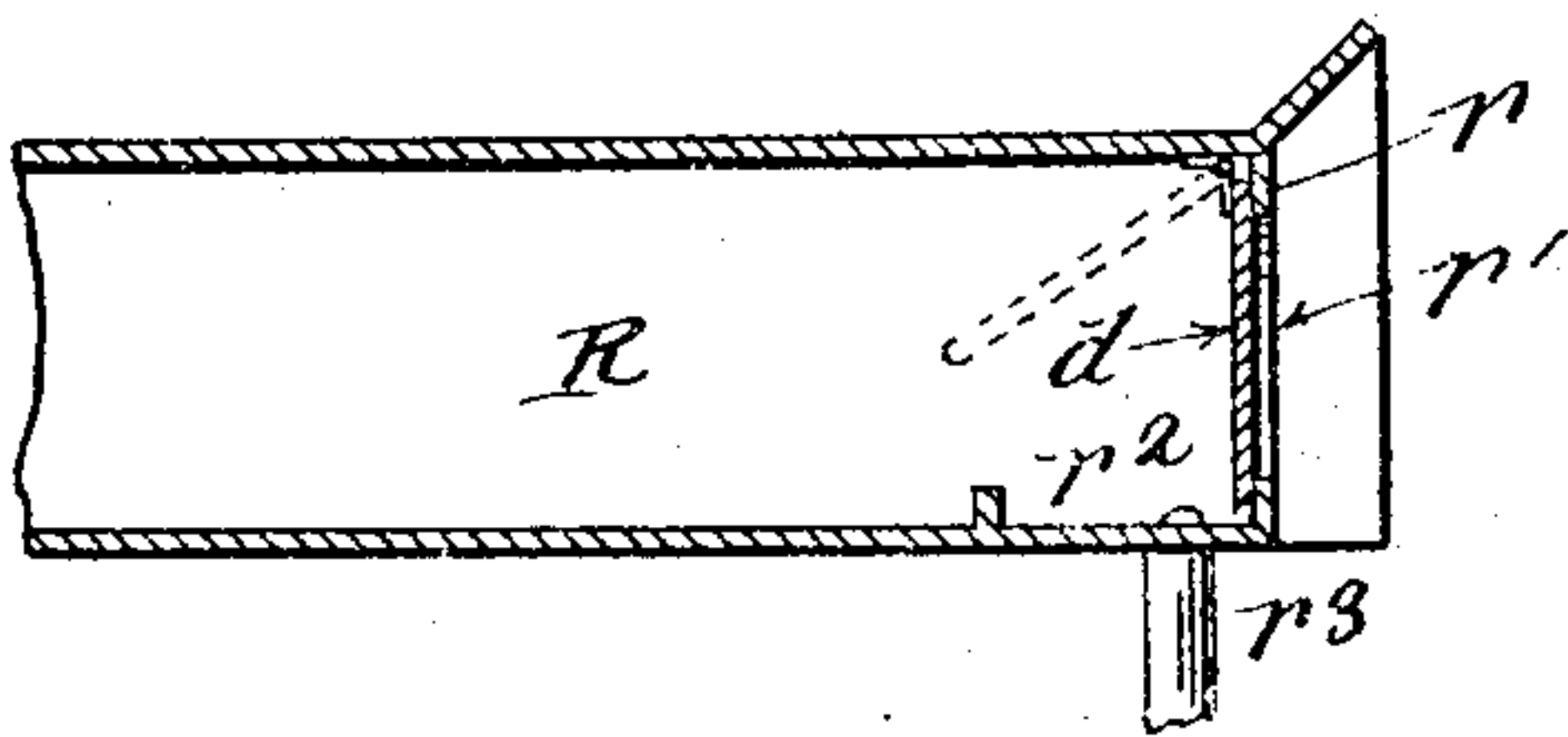


Fig. 3.



Witnesses:
O. W. Gardner.
E. Whitehurst

Inventor:
Abbot Augustus Low
By his Attor-
ney, W. H. H. H.

UNITED STATES PATENT OFFICE.

ABBOT AUGUSTUS LOW, OF HORSESHOE, NEW YORK.

HYDROCARBON-MOTOR.

No. 883,412.

Specification of Letters Patent.

Patented March 31, 1908.

Application filed November 5, 1906. Serial No. 342,002.

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, and State of New York, have invented certain new and useful Improvements in Hydrocarbon-Motors, of which the following is a specification.

My invention relates to motor boats in which one or more hydro-carbon motors are used to effect the propulsion of the vessel. It is desired to afford a constant supply of fresh air for the motors for effecting the combustion of the hydro-carbon therein; to divide or muffle the sound of the induction of air by the motors; to exclude rain, snow &c. from the air supply and to afford a cool, heat proof awning or roof for the cabin.

The invention consists primarily of an overhead air receiving chamber or compartment extending longitudinally of the boat open forward and closed aft, connected by vertical air conducting pipes with the several motors. Incidental features are the provision of means for intercepting rain or snow and collecting and disposing of the resultant water or drip, and other features hereinafter described and claimed specifically.

In the accompanying drawings, Figure 1, is a central longitudinal sectional elevation of a motor boat showing the practical adaptation of my improvements; Fig. 2, is a front elevation of my air receiver; Fig. 3, a section on plane of line 3—3—Fig. 2.

B, represents a motor boat or vessel of any ordinary or desired form and construction, provided with a series of kerosene or other hydro-carbon motors M, having a common crank shaft *m*, and actuating the propeller *p*, in the usual way.

R is my air receiving and storage chamber or compartment supported over head with relation to the motors M, and extending longitudinally with relation to the keel or axis of the boat B. Its top is preferably though not necessarily convergent, as shown in Figs. 1 and 3, its rear being closed, and its front or bow end closed in part by an end or dash board *r*, in which is an inlet aperture *r'*, of any desired shape, preferably round, as shown in the drawings,—this inlet aperture being closed 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 *r*, 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 resultant 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 from the rear of the receiver R. Each motor M, is connected by an air feed pipe *m'*, with the rear portion of the air receiver R, the supply of air to the motors being regulated by means of valves *m*². The air thus fed to the motors to effect the combustion of the charges of hydro-carbon therein in the usual and well known manner is free from moisture and in the most favorable condition to combine with and oxidize the hydro-carbon in the combustion chambers of the motors. Furthermore the air being drawn by the motors from an inclosed chamber or receiver, the noise of induction is practically obviated or muffled in so far as the external atmosphere is concerned.

Not the least important feature of my invention is the maintenance of a supply or surplus of absolutely fresh pure air from which to feed the combustion chambers of the motors,—a desideratum in connection with motors of this class in order to insure the best results therefrom.

Incidentally my air receiver R affords an effective awning or protection against heat since the passage of air thereto will keep it cool; and the vertical air pipes *m'*, afford convenient hold by which to steady the person in a rolling sea.

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

1. In a motor boat, the combination with a hydro-carbon motor, of an over head awning or roof consisting of a compartment formed with a forward air receiving aperture, an inwardly swinging flap door arranged in conjunction with said aperture, a draining gutter within the compartment and under said flap door, and a conduit connecting the compartment with the combustion chamber of the motor, for the purpose described.

2. In a motor boat the combination with a plurality of hydro-carbon motors, of an over head awning or roof consisting of a compartment formed with a forward air receiving
5 aperture, an inwardly swinging flap door arranged in conjunction with said aperture, a draining gutter within the compartment and under said flap door, and conduits connect- ing the compartment with the combustion chambers of the motors, for the purpose de- 10 scribed.

ABBOT AUGUSTUS LOW.

Witnesses:

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