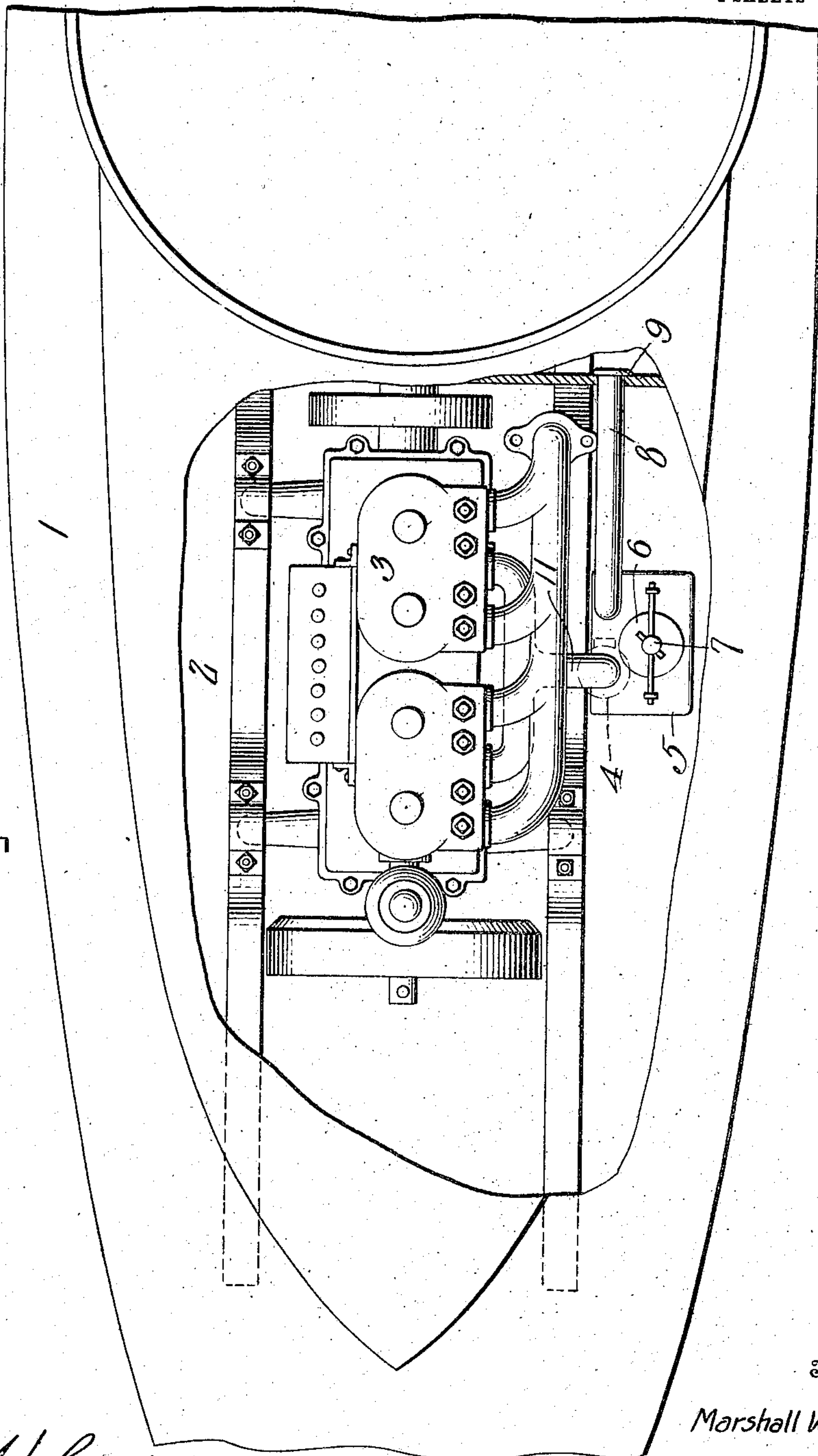


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APPLICATION FILED JAN. 9, 1906.

Patented Aug. 10, 1909.  
2 SHEETS—SHEET 1.

Fig. 1.



Witnesses

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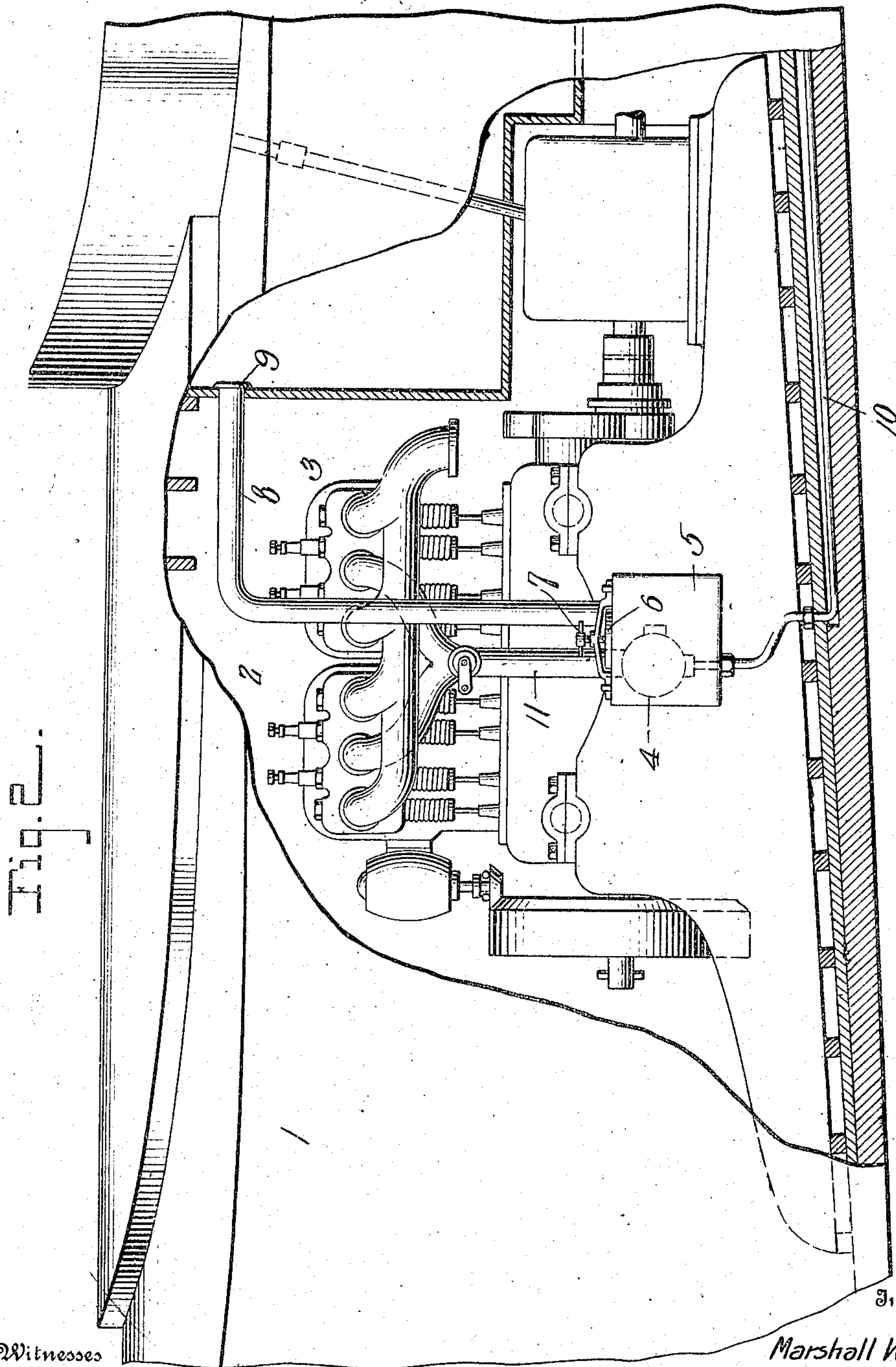
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# UNITED STATES PATENT OFFICE.

MARSHALL WILFRED HANKS, OF MADISON, WISCONSIN.

## CARBURETER JACKET OR CASING.

No. 930,596.

Specification of Letters Patent.

Patented Aug. 10, 1909.

Application filed January 9, 1906. Serial No. 295,270.

*To all whom it may concern:*

Be it known that I, MARSHALL W. HANKS, citizen of the United States, residing at Madison, in the county of Dane and State of Wisconsin, have invented a certain new and useful Carbureter Jacket or Casing; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

In the equipment of modern launches and other vehicles with gasoline and like engines, there is a marked growing tendency to install the engine in an inclosed room or compartment and thereby relieve the occupants of the vehicle of annoyance from the noise, dirt and fumes derived from the operation of the engine, and obtain a comfortable and quiet running. This modern practice of inclosing the engine presents a very serious drawback, namely, the danger of explosion from possible leakage of the gasoline or fluid from the carbureter or like appliance employed to supply the mixture to the engine, which fluid leakage may accumulate to such an extent as to be readily ignited from the electrical apparatus which is frequently located in the room or compartment occupied by the engine. Very often said apparatus consists of a dynamo, spark-plugs and sometimes the batteries and induction coils, and as the leaking explosive gases drift about the apparatus and engine, serious explosions may easily result.

The object of this invention is to provide means of a simple and yet very effective nature, for preventing the possible leakage or flow of explosive fluid from the carbureter from entering the room or compartment occupied by the engine and electric apparatus, the invention, in its preferred form, consisting of an inclosing fluid-tight casing or jacket for the carbureter or the like, having communication with the air external of the vehicle.

The invention in detail is set forth in the following description and illustrated in the accompanying drawings. Said detailed disclosure is not, however, to be regarded as a limitation, as various changes and modifications may be made in the invention without exceeding the scope of the concluding claims.

In the drawing—Figure 1 is a plan view, partly broken away, of a gasoline or like engine launch equipped with a carbureter

jacket or casing embodying my invention. Fig. 2 is a side elevation, partly broken away, of the same.

As an example of a vehicle in which my invention may be employed, I have illustrated, in the drawings, a launch 1, having a room or compartment 2, in which is mounted a gasoline or like engine 3, and a carbureter or like device 4 for mixing gasoline or other hydrocarbon liquid with air in the proper proportions to deliver to the engine an explosive mixture. The carbureter or like device may be of any of the types well known in the art.

5 is the jacket or casing surrounding or inclosing the carbureter or like device and which is constructed to be fluid-tight. In the top of the jacket or casing is a hand-hole closed by a tightly fitting cover 6, the latter being fastened in place by a clamp 7 of any desired or preferred construction. Preferably in the jacket or casing top is an opening to which is connected, by a fluid-tight joint, one end of a pipe 8 which leads to a point 9 outside of the engine room or compartment, the pipe communicating at its other end with the external atmosphere, whereby pure air is supplied to the carbureter or like device. The provision of this jacket or casing and the pipe or passage 8, prevents any fluid leaking or flowing from the carbureter or like device from entering the room or compartment 2.

A fuel pipe 10, through which gasoline is conveyed to the carbureter or the like from a suitable reservoir, not shown, passes preferably through the bottom of the jacket or casing, the opening to receive said fuel pipe being packed to be fluid-tight.

11 is a pipe connecting the carbureter or the like with the engine, said pipe passing through a fluid-tight packed opening preferably in the top of the jacket or casing.

As above explained, the invention provides for jacketing or inclosing the carbureter or the like, in a manner to obtain, in the event of leakage, the confinement of the explosive fumes and gases entirely within the jacket or casing where such leaking fluid is not in contact with the electrical appliances or devices necessarily carried by the vehicle. The leaking gases are thus prevented from entering the room or compartment occupied by the engine and electrical appliances, and the desirable practice of inclosing the engine and apparatus may



thus be followed without danger of explosion from the described cause.

It will be understood that in the use of the term "fluid-tight" herein as applied to the jacket or casing 5, it is intended to describe a casing so constructed as to prevent the egress therefrom of fumes or gases incident to the use of the hydrocarbon employed; and the escape of which into the outer casing, or that which incloses the engine, would cause danger or liability of explosion, and which danger or liability it is the purpose of my invention to avoid.

I claim—

15 1. The combination with a gasolene or other explosive engine, of a casing inclosing the same, a carbureter or like appliance located within such casing, a jacket or casing inclosing said carbureter, means whereby  
20 air and hydrocarbon are supplied to said carbureter, and a connection between said

carbureter and engine whereby the explosive mixture is fed from the carbureter to the engine.

2. The combination of a gasolene or other explosive engine, a casing inclosing the same, a carbureter or like appliance located within such casing, and a jacket or casing wholly inclosing said carbureter or like appliance, and closed against communication with the outer casing or that inclosing the engine, and provided with passages there-through and through which liquid hydrocarbon and air are fed to the carbureter, as set forth.

In testimony whereof I affix my signature, in presence of two witnesses.

MARSHALL WILFRED HANKS.

Witnesses:

JOHN S. MAIN,

WALTER F. STERNITZ.