

Feb. 8, 1927.

W. S. JOSEPHSON

1,616,974

FIRE EXTINGUISHING APPARATUS FOR MOTOR VEHICLES

Filed Oct. 3, 1922

2 Sheets-Sheet 1

Fig. 1.

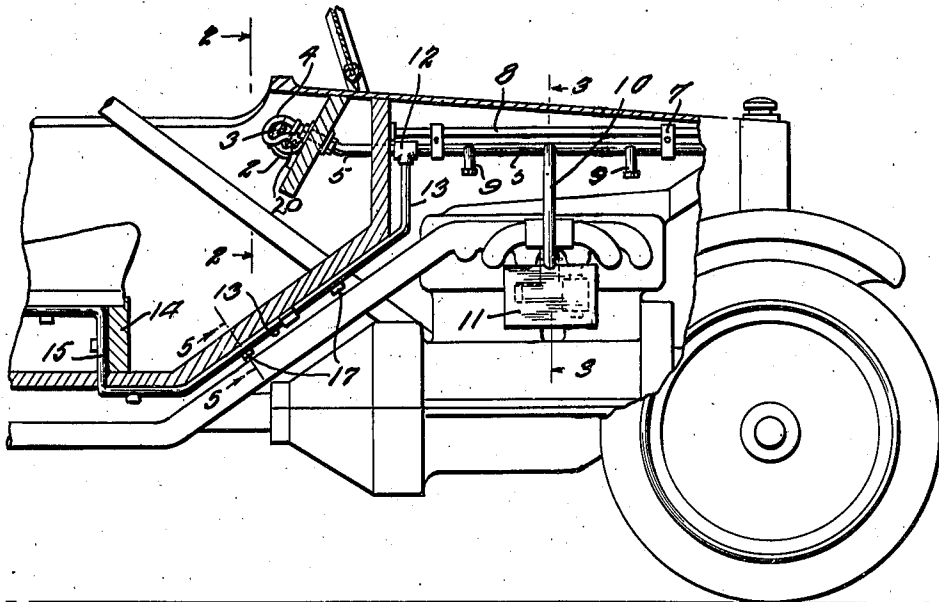
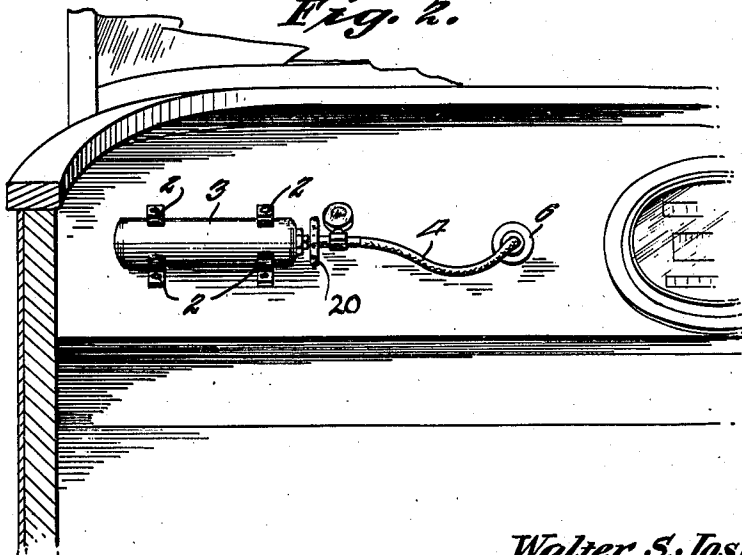


Fig. 2.



Inventor
Walter S. Josephson

By *Robert L. Sargent*

Attorney

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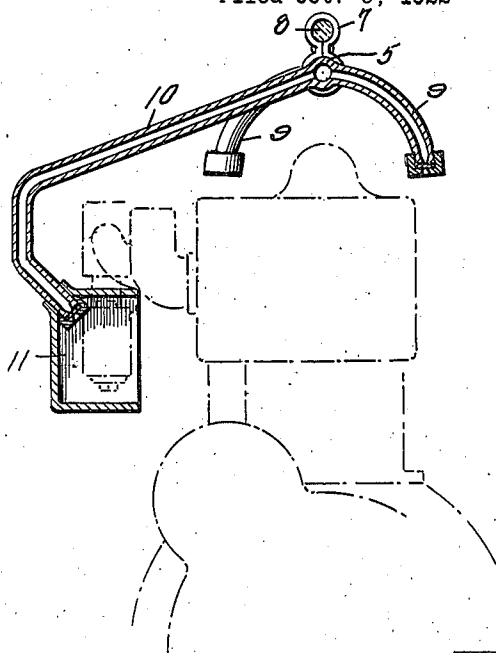


Fig. 3.

Fig. 4.

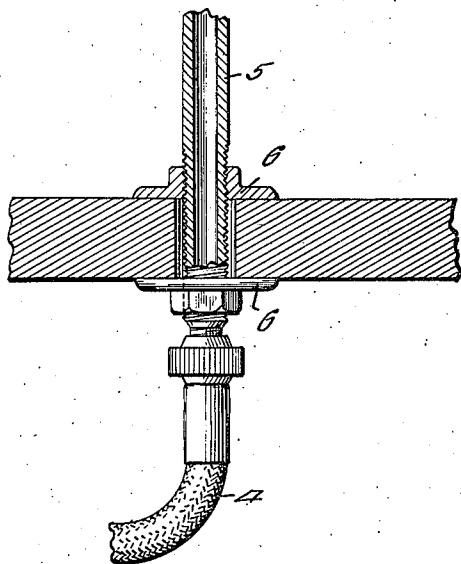


Fig. 5.

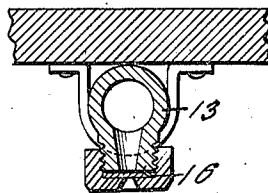
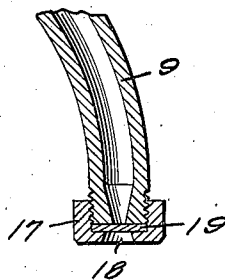


Fig. 6.



Inventor

Walter S. Josephson

By

Robert L. Sargent

Attorney

UNITED STATES PATENT OFFICE.

WALTER S. JOSEPHSON, OF NEW YORK, N. Y., ASSIGNOR, BY MESNE ASSIGNMENTS, TO
DRY ICE CORPORATION OF AMERICA, OF NEW YORK, N. Y., A CORPORATION OF
DELAWARE.

FIRE-EXTINGUISHING APPARATUS FOR MOTOR VEHICLES.

Application filed October 3, 1922. Serial No. 592,073.

The object of my invention is to provide an apparatus for motor vehicles which can be utilized in connection with any suitable fluid fire extinguishing medium for extinguishing a fire in an automobile; to provide means whereby the device will operate automatically; and to provide means for readily connecting the device with a container of fire extinguishing fluid, such as carbonic acid gas; and to provide a device which can be readily and quickly put into operation, and which will not damage the mechanism of the car in any way as a result of the application of the fire extinguishing medium. I attain these and other objects of my invention by the apparatus disclosed in the accompanying drawings, in which—

Figure 1 is a longitudinal section through a portion of an automobile showing my apparatus in side elevation;

Fig. 2 is a transverse section through the automobile on the line 2—2 showing the operation of the appliance containing the fire extinguishing fluid;

Fig. 3 is a transverse section on line 3—3 of Fig. 1, my invention being shown in section and the automobile engine being shown in dotted lines;

Fig. 4 is a detail view, partly in section and partly in elevation, of the joint connection of conduits 5 and 4;

Fig. 5 is a section on line 5—5 of Fig. 1; and

Fig. 6 is an enlarged detail view of the discharge head having the fusible member 19 for automatic operation of the extinguisher.

Like numerals indicate like parts in each of the several views.

Referring to the accompanying drawings, I provide a suitable container 3 of the fire extinguishing fluid, such, for example, as carbonic acid gas, this container being removably mounted between spaced clips 2 and having a flexible discharge tube 4 which is detachably connectible by means of a suitable connection 6 with the threaded end of conduit 5. Conduit 5 is suitably suspended by means of clips 7 which also engage a suitable supporting rod 8 arranged under the

hood and above the engine in an automobile, substantially as shown in Figs. 1 and 3. Conduit 5 is provided with short discharge pipes or nozzles 9. It is also provided with a branch conduit 10 which opens into a suitable casing 11, which engages over, or partly over, the carburetor of the engine, substantially as illustrated in Fig. 3. I also provide a branch conduit 13 in connection with a pipe 5 through connection 12. Branch conduit 13 extends rearwardly under the foot-board and is provided with an upwardly extending portion 15 disposed under the seat of the automobile. Conduit 13 is provided with suitable discharge mouths or plugs 16, as illustrated in Figs. 1 and 5.

In order that the device may operate automatically when a fire occurs in the automobile, I may provide nozzles or discharge pipes 9 with caps 17 which hold a fusible plug 19 over the mouth of nozzle or pipe 9, but which will melt at a predetermined temperature to release the fire extinguishing fluid through the opening 18 in the cap 17. To operate the invention the fire extinguishing gas is released by opening the valve 20 allowing the fire extinguisher to flow through tube 4 into conduit 5, and thence through the discharge nozzles 9 and 16. If, however, it is desired that the operation of the extinguisher shall be controlled automatically when a certain temperature is reached, instead of manually, the several nozzles 16 and 9 will be provided with the caps 17 and fusible plugs 19 which normally hold those nozzles closed but which when the temperature rises to the danger point will melt the fusible plugs and release the fire extinguishing fluid. As the tube 4 is detachably connected with the pipe 5 the contents of the container 3 may be used for other purposes aside from its primary use as a fire extinguishing appliance. The connections are of air-tight character to insure perfect operation of the apparatus.

What I claim is:

A fire extinguishing system for automobiles, including a container of liquid carbon dioxide of considerable length as compared with its cross-section and provided with a

valve controlled outlet, means for detachably supporting said container on the automobile, with its valve in reach of the driver's seat, a conduit detachably connected to the valve controlled outlet of the container and extending within the upper part of the hood above the motor, and provided with gas outlets having fusible closures adjacent the carbureter and said motor, together with a pressure indicator connected in the outlet from the valve, a casing substantially enclosing the carbureter and a conduit opening into said casing and communicating with said first named conduit, for supplying the carbonic acid gas under pressure for fire extinguishing purposes substantially as set forth.

WALTER S. JOSEPHSON.