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1,505,809

J. S. SCHMIDT

GASIFIER

Filed Dec. 8, 1923

Fig. 1.

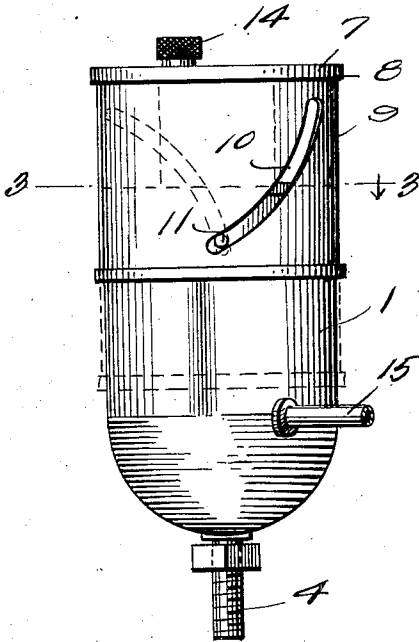


Fig. 2.

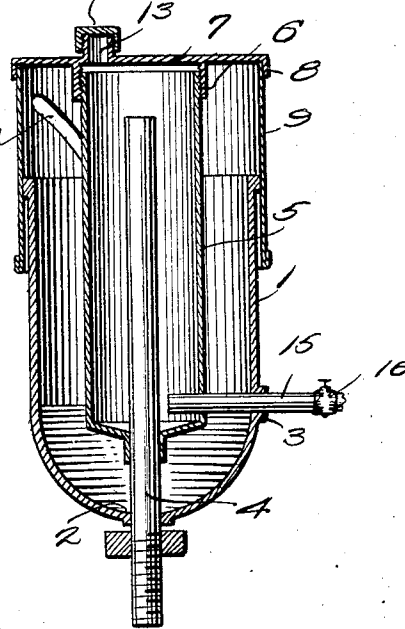
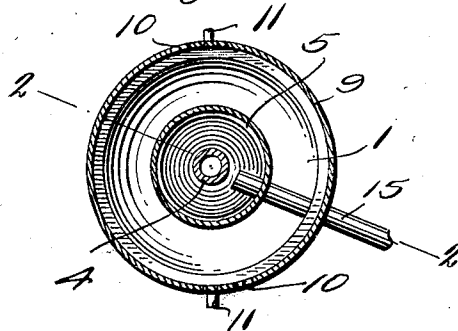


Fig. 3.



WITNESSES

Emory Spring
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GASIFIER.

Application filed December 8, 1923. Serial No. 679,497

To all whom it may concern:

Be it known that I, JULIUS S. SCHMIDT, a citizen of the United States, residing at Bechard, in the Province of Saskatchewan and Dominion of Canada, have invented certain new and useful Improvements in Gasifiers, of which the following is a specification.

The present invention relates to a gasifier and has for its principal object to provide a device capable of changing a liquid fuel into a vapor so as to be utilized in starting an internal combustion engine.

Another important object of the invention is to provide a device of this nature the various parts of which are readily accessible and which embodies a simple construction which is reliable and well adapted for the purpose intended.

With the above and numerous other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction herein-after described and claimed.

In the drawing:

Figure 1 is an elevation of the gasifier embodying my invention;

Figure 2 is a vertical longitudinal section therethrough; and

Figure 3 is a transverse section taken on the line 3—3 of Figure 1 downwardly.

Referring to the drawing in detail it will be seen that the body or shell 1 of the device is substantially cup-shaped being provided with a bottom opening 2 and a side opening 3. A tube 4 extends through the opening 2 terminating a distance above the upper edge thereof. The portion of the tube 4 below the opening 2 exteriorally of the cup-shaped shell 1 is threaded so that it may be engaged with the manifold of an internal combustion engine or the like. A container 5 is disposed within the cup-shaped shell 1 being positioned about the upper portion of the tube 4 and extending thereabove a distance. The upper end of this container 5 is provided with threads for receiving the flanges 6 of a top 7. This top 7 is provided with a peripheral flange 8 for engagement with an extension 9. This extension 9 is in the form of a cylinder adapted to move over the cup-shaped shell 1. This cylindrical member 9 is provided with a pair of curved slots 10 for receiving pins

11 extending from the cup-shaped shell 1 so that by rotating the member 9 it may be raised or lowered so that access may be had to the upper end of the shell when desired. A collar 13 extends from the top 7 in communication with the container 5 and an auxiliary cap 14 is associated therewith. A pipe 15 extends through the opening 3 into the container 5 and a valve 16 is disposed in its length. The valve 16 is closed and gasoline is poured into the container 5 through the collar 13. The member 9 is rotated so as to move downwardly and some gasoline is poured into the cup-shaped shell 1 and lighted. Afterward the member 9 is rotated to its raised position. The lighted gasoline in the shell 1 will heat and vaporize the gasoline in the container 5 so that it will pass through the tube 4 into the manifold of the internal combustion engine. When the engine has sufficient fuel in order that it may run by receiving its fuel from the ordinary carbureter, the gasoline in the container 5 may be drained by opening the valve 16.

It is thought that the operation, construction, and advantages of the invention will be understood without a more detailed description thereof. It is however, desired to point out that numerous changes in the details of construction and in the combination and arrangement of parts may be resorted to without departing from the spirit or sacrificing any of its advantages.

What is claimed is:

1. A gasifier of the class described including a tube, a shell of cup-shaped formation disposed about the tube, a container disposed about the tube within the shell terminating above the shell at one end and at its other end a distance from the bottom of the shell, said container also terminating above the upper end of the tube, a cap disposed on the upper end of the container and including an extension disposed over the open end of the shell, a cylindrical member movable over the shell for closing the space between its upper end and the extension of the cap, said member being provided with curved slots, pins projecting from the shell through said slots whereby the cylindrical member may be rotated for raising and lowering so as to close or open the space between the cap and the upper edge of the shell.

2. A gasifier of the class described in-

cluding a tube, a shell of cup-shaped formation disposed about the tube, a container disposed about the tube within the shell terminating above the shell at one end and at its
5 other end a distance from the bottom of the shell, said container also terminating above the upper end of the tube, a cap disposed on the upper end of the container and including an extension disposed over the open
10 end of the shell, a cylindrical member movable over the shell for closing the space between its upper end and the extension of the cap, said member being provided with curved slots, pins projecting from the shell
15 through said slots whereby the cylindrical member may be rotated for raising and lowering so as to close or open the space between the cap and the upper edge of the shell and a pipe including a valve in its
20 length communicating with the bottom of

the container whereby it may be drained when desired.

3. A gasifier of the class described including a tube, a shell disposed about the tube being substantially cup-shaped in formation, a container disposed about the tube within the shell, the upper end thereof terminating above the tube and above the shell, a member movable over the exterior of the shell, and a cap disposed on the upper
25 end of the container and extending over said member, said member being movable to close the space between the cap and the upper edge of the shell.

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

JULIUS S. SCHMIDT.

Witnesses:

LEWIS ALBER,
MELVEN DICK.