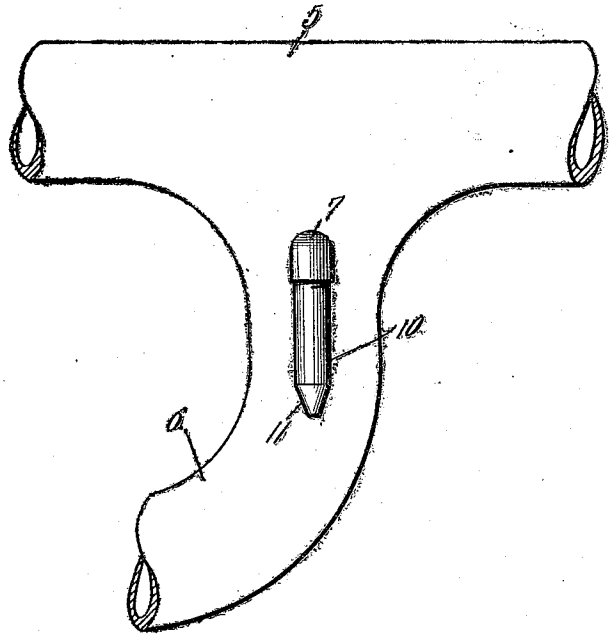
May 6, 1924. 1,493,410

C. H. WOLCOTT

VAPORIZER

Filed April 20, 1923

Fig. 1.



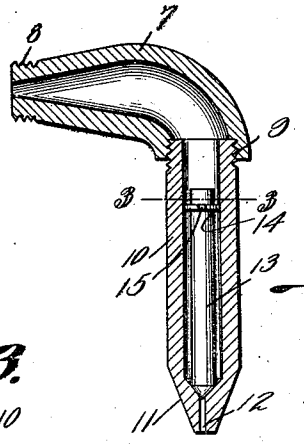
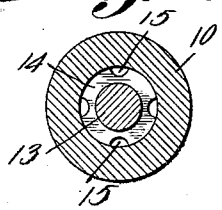


Fig. 2.

Fig. 3.



C. H. Wolcott, Inventor

By Cachow & Co.

Attorneys

Patented May 6, 1924. 1,493,410

UNITED STATES PATENT OFFICE.

CHARLES H. WOLCOTT, OF THOMASTON, GEORGIA.

VAPORIZER.

Application filed April 20, 1923. Serial No. 633,568.

To all whom it may concern:

Be it known that I, CHARLES H. WOLCOTT, a citizen of the United States, residing at Thomaston, in the county of Upson and State of Georgia, have invented a new and useful Vaporizer, of which the following is a specification.

This invention relates to internal combustion engines and aims to provide novel means in the form of an attachment, to be positioned in the intake manifold of the engine, to supply air thereto, and induce vaporization of the fuel passing through the manifold.

An object of the invention is to provide a structure of this character which will automatically control the volume of air entering the manifold through the attachment, to insure the proper amount of air entering the manifold, according to the speed of the engine.

With the foregoing and 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 hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawing:

Figure 1 is an elevational view of a section of a manifold disclosing the attachment as installed.

Figure 2 is a longitudinal sectional view through the attachment.

Figure 3 is a sectional view taken on line 3—3 of Figure 2.

Referring to the drawing in detail, the reference character 5 designates a portion of an intake manifold of an internal combustion engine, the pipe 6 thereof constituting the means for providing communication between the manifold and carburetor not shown.

The attachment forming the essence of the invention includes a connecting pipe 7 which is threaded as at 8 to be positioned in a suitable threaded opening in the pipe 6, the opposite end of the pipe 7 being provided with internal threads 9.

The body portion of the device is indicated at 10 and is tubular in formation, the lower end of the body portion tapering as at 11, the tapered end being provided with an intake opening 12. Operating within the tubular body portion 10 is an elongated valve 13 which is suction-controlled and as shown is of a weight to normally close the opening 12 and exclude air from the body portion when the engine to which the device is attached, is idling.

At the upper end of the valve 13 is a disk 14 which is formed with openings 15 to permit the passage of air by the upper end of the valve 13, the disk 14 at the same time, being sensitive to the volume of air passing through the body portion, to cause the valve 13 to unseat and admit air.

Thus it will be seen that as the pistons of an engine equipped with an attachment of this character are moving slowly in their cylinders, the valve will remain in its inactive position, but when the engine speeds up, the increased suction caused by the movement of the pistons will result in the valve 13 unseating as before described.

It might be further stated, that for the efficient operation of all engines, the weight and diameter of valve 13 should be regulated accordingly.

What is claimed as new is:—

In an attachment of the class described, a tubular body portion having a tapered lower extremity and having a tapered inner end wall providing a valve seat, an elongated valve member fitted in the body portion and being of a diameter less than the interior diameter of the tubular body portion, a disk secured to the upper end of the valve member and having openings formed in the edge thereof to allow air to pass therethrough, and said disk adapted to hold the valve member against lateral movement.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

CHARLES H. WOLCOTT.

Witnesses:
G. F. MOORE.
W. C. STEPHENS.