A. J. SEAMAN.

CARBURETER.

APPLICATION FILED APR. 28, 1913.

1,122,806. Patented Dec. 29, 1914.

Fig. 1.

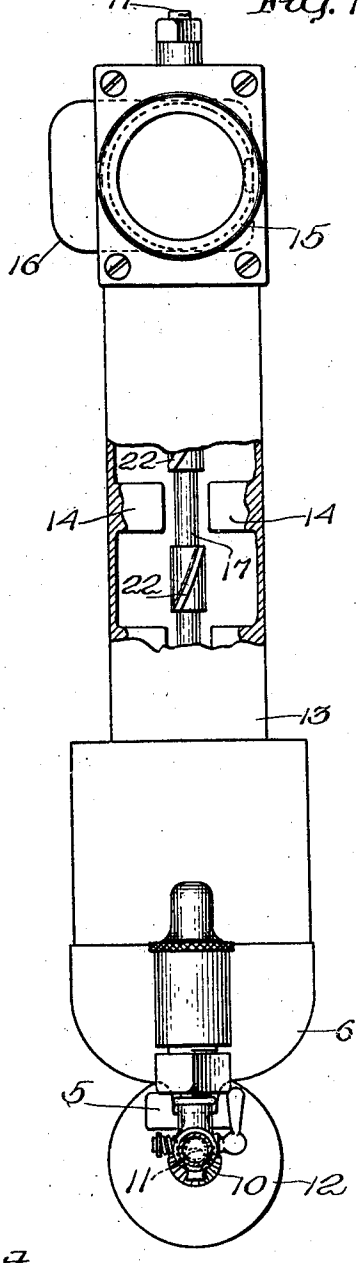
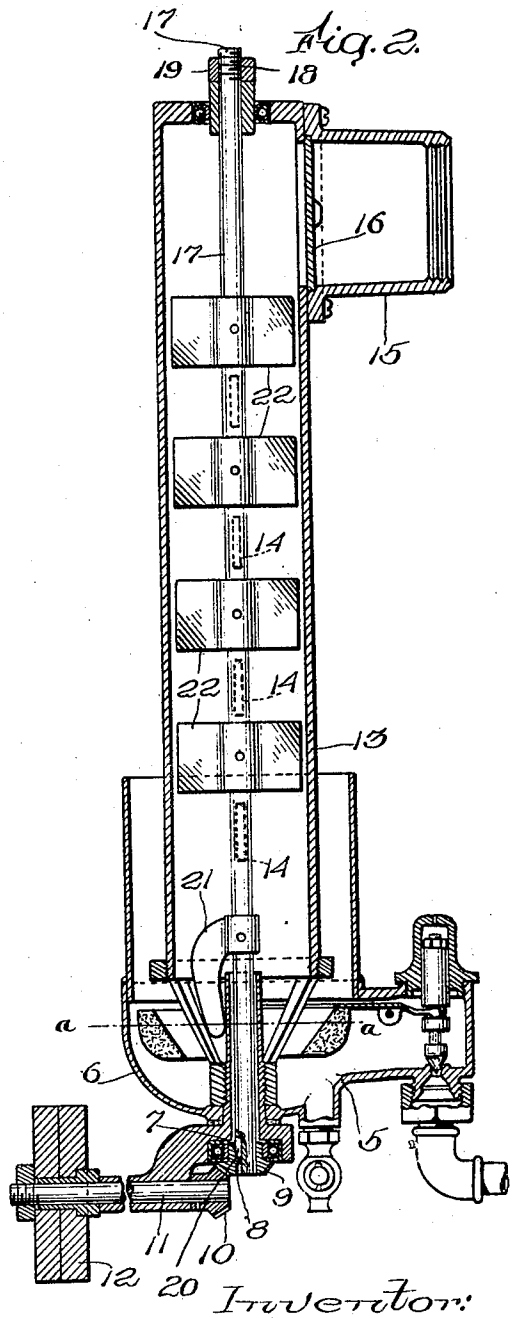


Fig. 2.



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UNITED STATES PATENT OFFICE.

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CARBURETER.

1,122,806. Specification of Letters Patent. Patented Dec. 29, 1914.

Application filed April 28, 1913. Serial No. 763,976.

To all whom it may concern:

Be it known that I, ALBERT J. SEAMAN, a citizen of the United States, and a resident of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Carbureters, of which the following is a specification, reference being had to the accompanying drawings, forming part thereof.

This invention has reference to improvements in carbureters for gas engines and relates to the construction of the carbureter and its fluid delivery pipe.

One object of the invention is to facilitate the transmission of the gaseous fluid from the carbureter.

Other objects of the invention will appear from the following description.

The invention consists in providing a carbureter with mechanical means for moving forward the gaseous fluid from the carbureter.

The invention also consists in such other novel features of construction and combination of parts as shall hereinafter be more fully described and pointed out in the claims.

Figure 1, represents a side elevation of the improved carbureter, parts of the same being broken away. Fig. 2, represents a vertical sectional view of the same.

Similar characters of reference designate corresponding parts throughout.

Under conditions of low temperature the quality and condition of the air and gas or gasolene combined in the carbureter the gaseous fluid through lack of sufficient expansion often clogs the carbureter. At times also the mixture of air and gas in the carbureter is not sufficiently homogeneous to afford the necessary degree of expansion, and it is the main purpose of this invention to mechanically mix said fluid and to move the same forward toward the point of use.

In carrying this invention into practice I take a carbureter 5, preferably of the float feed type herein shown and provide the chamber 6 thereof with the rotary collar 7 having the key 8 inside and the bevel pinion 9 outside. Meshing with this pinion 9 is the pinion 10 of the rotatable shaft 11 which shaft has the pulley 12 adapted to be operated by any suitable means.

Mounted above the chamber 6 is the pipe 13, having the inwardly extending blades 14, 14, which may be and preferably is the intake pipe of a gas engine manifold on a pipe leading to the gas engine connected with the neck 15 having the slidable valve 16. Journaled in a bearing of the pipe 13 is the fan shaft 17 having at one end the screw threaded portion 18 provided with the adjusting nut 19, and at the other end the key seat 20 which is slidably engaged with the key 8 of the collar 7 so that shaft 17 readily may be engaged with said collar 7. Fixed to said shaft 17 is the agitator blade 21 and the fan blades 22, 22; agitator blade 21 extends into the carbureting chamber preferably to a point at or slightly below the level of fluid therein indicated on Fig. 2 by line *a*—*a*.

In operation the fan shaft 17 may be adjusted somewhat by nut 19, so that its fan blades 22 clear the blades 14 of pipe 13 while the agitator blade 21 extends into the carbureter 6 and acts on the fluid in said chamber 6. By rotating pulley 12 shafts 11 and pinion 9 will be caused to rotate and the rotation of pinion 9 will be transmitted by the key 8 to the agitator blade shaft 17 whereupon fan 21 will act to thoroughly mix the fluid in chamber 6, to drive the gaseous fluid forward into pipe 13, whereby gaseous fluid is constantly supplied to said pipe 13 where it is further mixed by the action thereon of the fan blades 22, 22 and the baffles 14, 14 and is driven by said fan blades toward the outlet 15.

While I have herein shown and described the fan shaft 17 as driven by the collar 7, through shaft 11, it is not my intention thereby to limit my invention except as herein claimed.

Having thus described my invention I claim as new and desire to secure by Letters Patent—

1. A carbureter having a rotary shaft, an extension fan chamber mounted on said carbureter, a fan having a shaft rotatably mounted in said chamber and in slidable engagement with said carbureter shaft, an agitator operated by said fan shaft and extending into said carbureter, and means for adjusting said fan shaft longitudinally.

2. A carbureter having a rotary shaft, an extension chamber mounted on said carbureter, a fan shaft journaled in said fan cham-

ber and having a screw thread, an adjusting nut engaging said shaft, said fan shaft slidably engaged with said carbureter shaft, a series of fan blades on said fan shaft, and an agitator blade mounted on said fan shaft within said extension chamber and extending into the carbureter.

3. A carbureter having a rotary member, an extension fan chamber carried by said carbureter and having radially extending baffles, a fan shaft rotatable in said fan chamber and in engagement with said rotary member, said shaft having fans operating between said baffles, and an agitator blade mounted on said shaft and operating in said carbureter.

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