

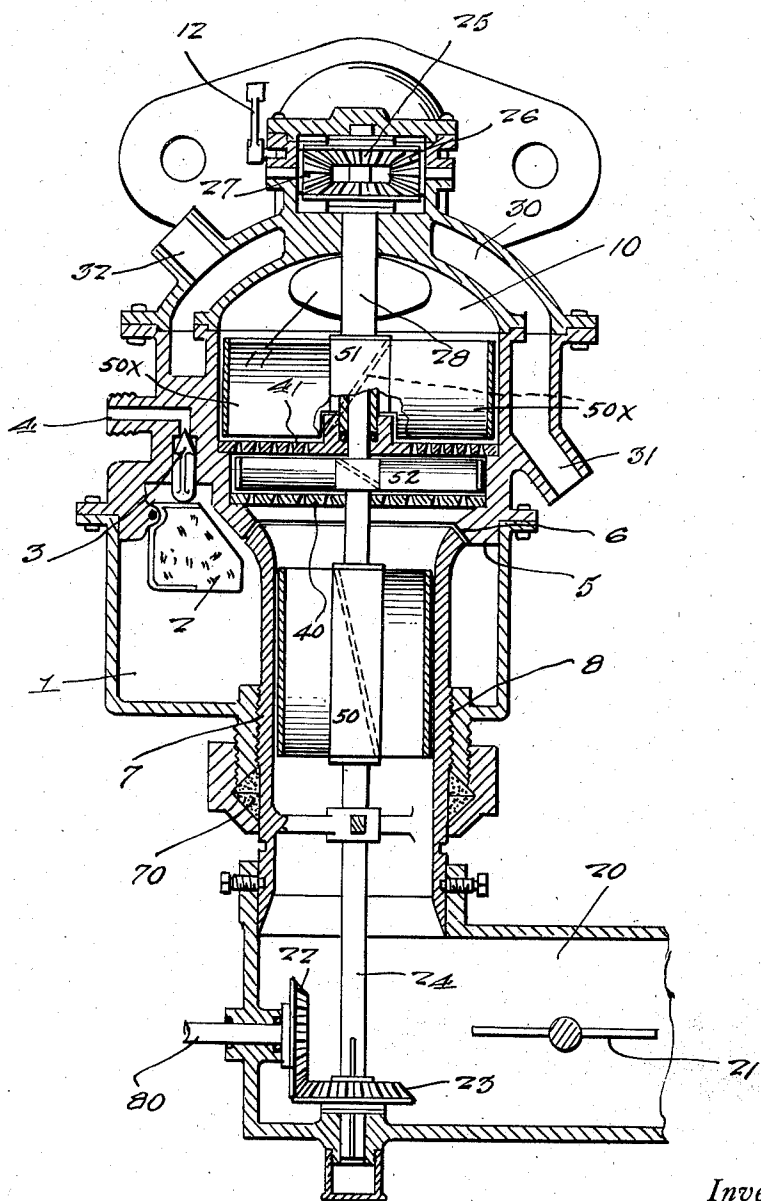
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W. MURRER

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CARBURETOR

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Inventor

W. Murrer

By *Clarence A. O'Brien*

Attorney

UNITED STATES PATENT OFFICE

WILHELM MURRER, OF PITTSBURGH, PENNSYLVANIA

CARBURETOR

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My present invention pertains to carburetors, and has for its general object the provision of a carburetor adapted to bring about the formation of an efficient fuel mixture and also adapted to maintain the supply of an adequate amount of such mixture at all times to the explosion chamber of an internal combustion engine.

Other objects and practical advantages of the invention will be fully understood from the following description and claim when the same are read in connection with the drawing, accompanying and forming part of this specification, in which:—

The figure is a view illustrating in elevation and in section the best practical embodiment of my invention of which I am cognizant.

By reference to the drawing it will be understood that my novel carburetor comprises a gasoline tank 1, in which is a float 2 for controlling a needle valve 3, the said needle valve 3, in turn, being adapted to control a gasoline inlet 4. In the upper portion of the tank 1 is an annular member 5 with an inclined edge 6, and opposed to the said edge 6 is the inclined end of an adjustable tube 7, screwed at 8 in the bottom wall of the tank 1 as illustrated. The intervening space between the end of the tube 7 and the said edge 6 is for the passage of gasoline, and by virtue of the tube 7 being adjustable the size of the intervening space or gasoline passage may be readily regulated as different conditions demand.

The carburetor also comprises a mixing chamber 10, the outlet of which is designated by 11.

In communication with the end of the tube 7 remote from the inclined edge 6 is an air tube 20 in which is a butterfly or other appropriate valve 21 for regulation of the air supply to the carburetor.

At 22 is a starting gear designed to be driven in any approved manner, and meshed with the said starting gear 22 is a miter gear 23, feathered on a shaft 24 which shaft 24 extends through the center of the tube 7 and is provided at its upper end with a miter gear 25 connected through the medium of gears

26 with a miter gear 27 on a sleeve 28 which surrounds the shaft 24 and is driven in reverse direction to the said shaft 24 when the latter is rotated as before mentioned.

Arranged in close proximity to the mixing chamber 10 is a heating jacket 30 with an outlet 31 and an inlet 32, the latter being designed to be connected with the exhaust port of the internal combustion engine.

Arranged in the casing of the carburetor and disposed between the tube 7 and the mixing chamber 10 are spaced foraminous disks 40 and 41, the disk 40 having foraminations or apertures larger than the apertures of the disk 41 in about the proportion illustrated. Carried by the shaft 24 and disposed in the tube 7 is a fan 50 rotatable with the shaft 24, and arranged in the mixing chamber 10 is a fan 51 fixed to and rotatable through the medium of the sleeve 28. Disposed in the space intervening the disks 40 and 41 is a fan 52 which like the fan 50 is fixed to the shaft 24. Each of the three fans alluded to is provided with wings 50*, and the said wings are inclined and are enclosed in cylinders 60 as illustrated.

Appropriate packing designated by 70 is arranged in the casing of the carburetor and about the said tube 7.

Connected to the gear 22 is a flexible shaft 80 designed to be connected in any approved manner with the ring gear of the fly wheel of the internal combustion engine. Through the medium of this connection the shaft 24 is rotated counter clockwise for the rotation of the fans 50 and 51. The fan 50 has for its function to draw air through the tube 20 past the valve 21, and the said fan 50 also operates to force air under pressure through the foraminations in the disk 40. The fan 50 agitates the incoming air, and the fans 52 and 51 in conjunction with the foraminous disks 40 and 41 assure the provision of a fine mixture of fuel and air.

The provision of the intervening space between the upper end of the tube 7 and the edge 6 of the annular member 5 will prevent forcing of the fuel out of the float chamber.

I have specifically described the construction and relative arrangement of the parts

embraced in the present and preferred embodiment of my invention in order to impart a full, clear and exact understanding of the said embodiment. I do not desire, however, to be understood as restricting myself to the construction and relative arrangement of the elements as disclosed, my invention being defined by my appended claim within the scope of which changes in structure and relative arrangement may be made without departure from my invention.

Having described my invention, what I claim and desire to secure by Letters Patent, is:—

15 A carburetor including a conduit for the passage of air, a tank for gasoline in communication with the conduit at an intermediate point in the length of the latter, spaced apertured discs disposed in the conduit, a fan arranged in the conduit below the lowermost of said discs, a fan arranged in the space between the discs, a chamber disposed at the opposite side of the apertured discs with reference to the first named fan and having an outlet adapted to be connected with the manifold intake of an internal combustion engine, a fan disposed in said chamber, a shaft carrying the fan in the air conduit and the fan in the space between the foraminous discs, and a driving connection between said shaft and the fan in the chamber for driving the latter fan in reversed direction to the other fans.

25 In testimony whereof I affix my signature.
WILHELM MURRER.

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