

No. 832,330.

PATENTED OCT. 2, 1906.

V. MORRISON.  
CARBURETER.

APPLICATION FILED DEC. 29, 1905.

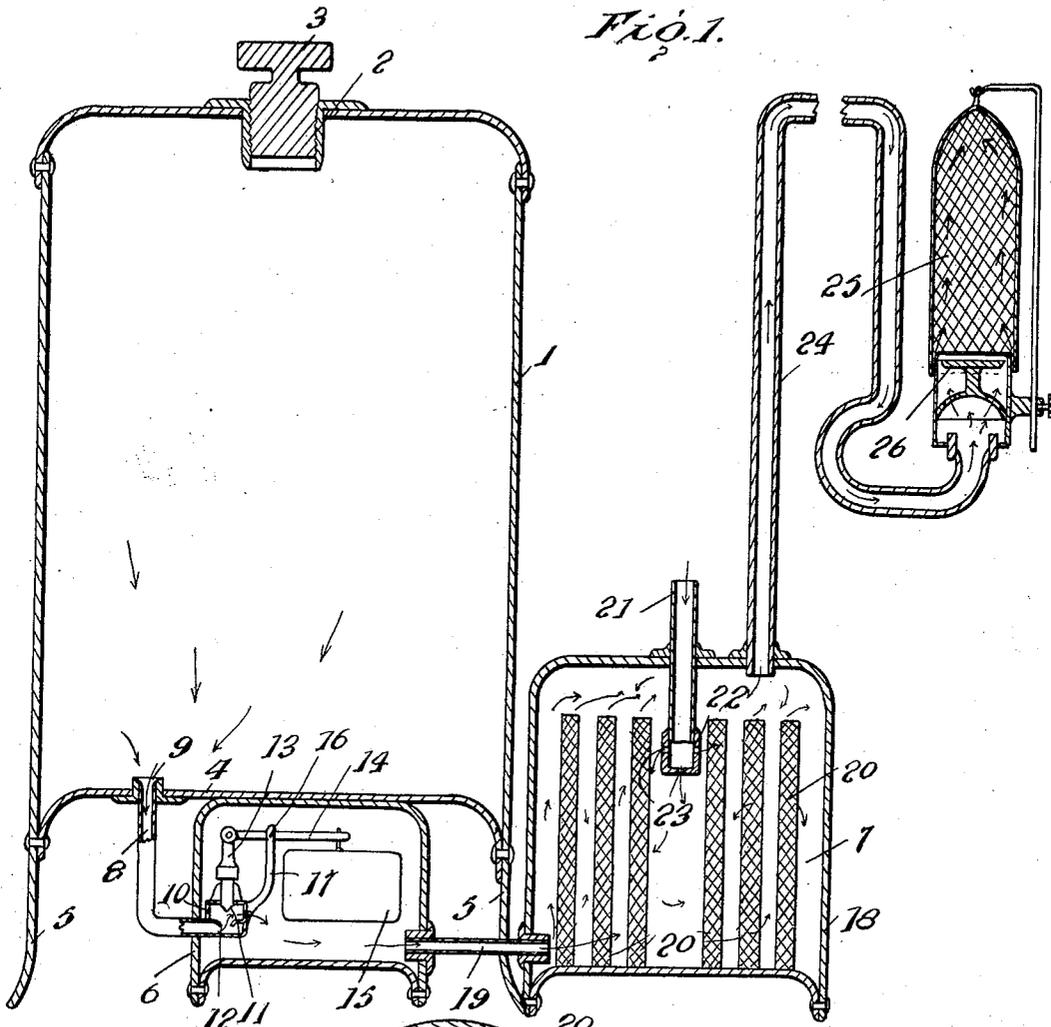


Fig. 1.

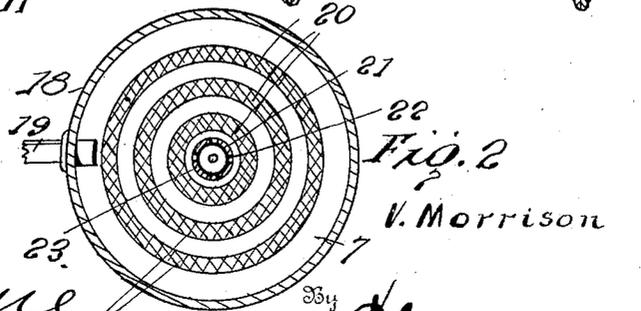


Fig. 2.

Inventor

V. Morrison

Witnesses

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# UNITED STATES PATENT OFFICE.

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## CARBURETER.

No. 832,330.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed December 29, 1905. Serial No. 293,813.

*To all whom it may concern:*

Be it known that I, VAUGHN MORRISON, a citizen of the United States, residing at Coleridge, in the county of Cedar and State of Nebraska, have invented certain new and useful Improvements in Carbureters, of which the following is a specification.

For a full description of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result reference is to be had to the following description and accompanying drawings, in which—

Figure 1 is a view, mainly in section, showing a carbureter embodying the invention and a service-pipe leading therefrom to the light, which is supplied by gas generated by the carbureter. Fig. 2 is a horizontal sectional view through the mixing-chamber to bring out more clearly the arrangement and formation of the parts therein.

Corresponding and like parts are referred to in the following description and indicated in the figures of the drawings by the same reference characters.

This invention embodies novel improvements in carbureters, and the detail construction and advantages thereof will appear more fully as the description proceeds.

In carrying out the invention, and referring to the drawings, the numeral 1 designates a hydrocarbon-supply tank of any suitable size and form and adapted to receive gasoline or other liquid carbon through a suitable inlet 2 at its upper end, a plug 3 normally closing said inlet. The bottom 4 of the tank 1 is elevated from the support upon which the tank may be disposed by means of the provision of legs 5, and arranged beneath the tank is a small float-reservoir 6, in which is located float-regulating means for governing the supply of liquid carbon passing to a mixing-chamber 7 from the supply-tank 1. The arrangement of the reservoir 6 is conducive to compactness and convenience, said reservoir being connected with the tank 1 by means of a supply-pipe 8, the upper end of which communicates with the interior of tank 1 at 9 and the lower end of which extends horizontally into the reservoir 6 through a side of the latter. The lower end portion of the pipe 8 supports a valve-casing

10, and a valve 11, mounted in said casing, is adapted to seat and unseat with reference to a valve-seat 12 adjacent thereto. The valve-stem 13 of the valve 11 is connected with one end of a lever 14, at the opposite end of which is attached a suitable float 15. The lever 14 is pivoted at a point between its ends, as shown at 16, to a bracket 17, which is secured to and projects upwardly from the valve-casing 10. The mixing-chamber 7 comprises a compartment of suitable size for the purposes of the invention, said compartment being obtained by the provision of a receptacle 18 at one side of the tank 1 and connected at its lower portion by a horizontal pipe 19 with the reservoir 6. Located in the mixing-chamber 7 are a plurality of circular wicks 20 of different diameters and arranged concentric with relation to one another. When the machine is in operation, the wicks 20 are partially submerged in the liquid carbon supplied to the mixing-chamber, and those portions thereof which are not submerged absorb the liquid carbon and afford a maximum amount of evaporating-surface to facilitate vaporization or atomization of the hydrocarbon as air under pressure is forced into the mixing-chamber through a vertical air-pipe 21. The air-pipe 21 leads from the top of the receptacle 18 centrally thereof and projects into the same sufficiently far to terminate within the space encircled by the innermost wick 20, a cap 22 being applied to the lower end of pipe 21 and having vertical and lateral apertures 23, through which the air passes and is forced against the wicks 20 in such a way as to thoroughly saturate the air with the gases arising from the liquid carbon to produce thorough vaporization. From the mixing-chamber 7 the vaporized fluid or gas may pass through a suitable service-pipe 24 to various points of utilization, such a point being illustrated by the light 25, which is of the common Welsbach type. If desirable, the gas may be spread at the light 25 by means of a suitable spreader in form of a plate 26.

The operation of the regulator is simple, as it will be seen that a predetermined level of liquid carbon will be maintained in the reservoir 6 and mixing-chamber 7 by the float mechanism 15, and when the float lowers the valve 11 will be opened to permit hydrocar-

bon from the supply-tank 1 to pass into the reservoir 6 and thence into pipe 19 into the mixing-chamber 7.

Having thus described the invention, what is claimed as new is—

In a carbureter, the combination of a hydrocarbon-tank, supporting means for said tank whereby the bottom of the same is spaced from the support from which it is disposed, a small float-reservoir arranged beneath the bottom of the tank and wholly housed thereby, a mixing-chamber arranged at one side of the tank, air-supply means for the mixing-chamber, a pipe connecting the reservoir and the hydrocarbon-tank and projecting laterally through a side of said reservoir, a valve-casing supported by the por-

tion of the pipe aforesaid, which is within the reservoir, and provided with a vertical opening in its top, a valve movable vertically through the opening in the top of the casing, and adapted to seat against the adjacent end of the pipe before mentioned for the purpose set forth, a lever pivotally mounted on the valve-casing, a float pivotally attached to the other end of the lever and disposed in the reservoir, and a pipe connecting the reservoir with the mixing-chamber, as set forth.

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

VAUGHN MORRISON. [L. s.]

Witnesses:

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