J. W. CORSER.

CARBURETER.

APPLICATION FILED AUG. 25, 1913.

1,120,602.

Patented Dec. 8, 1914.

Fig. 1.

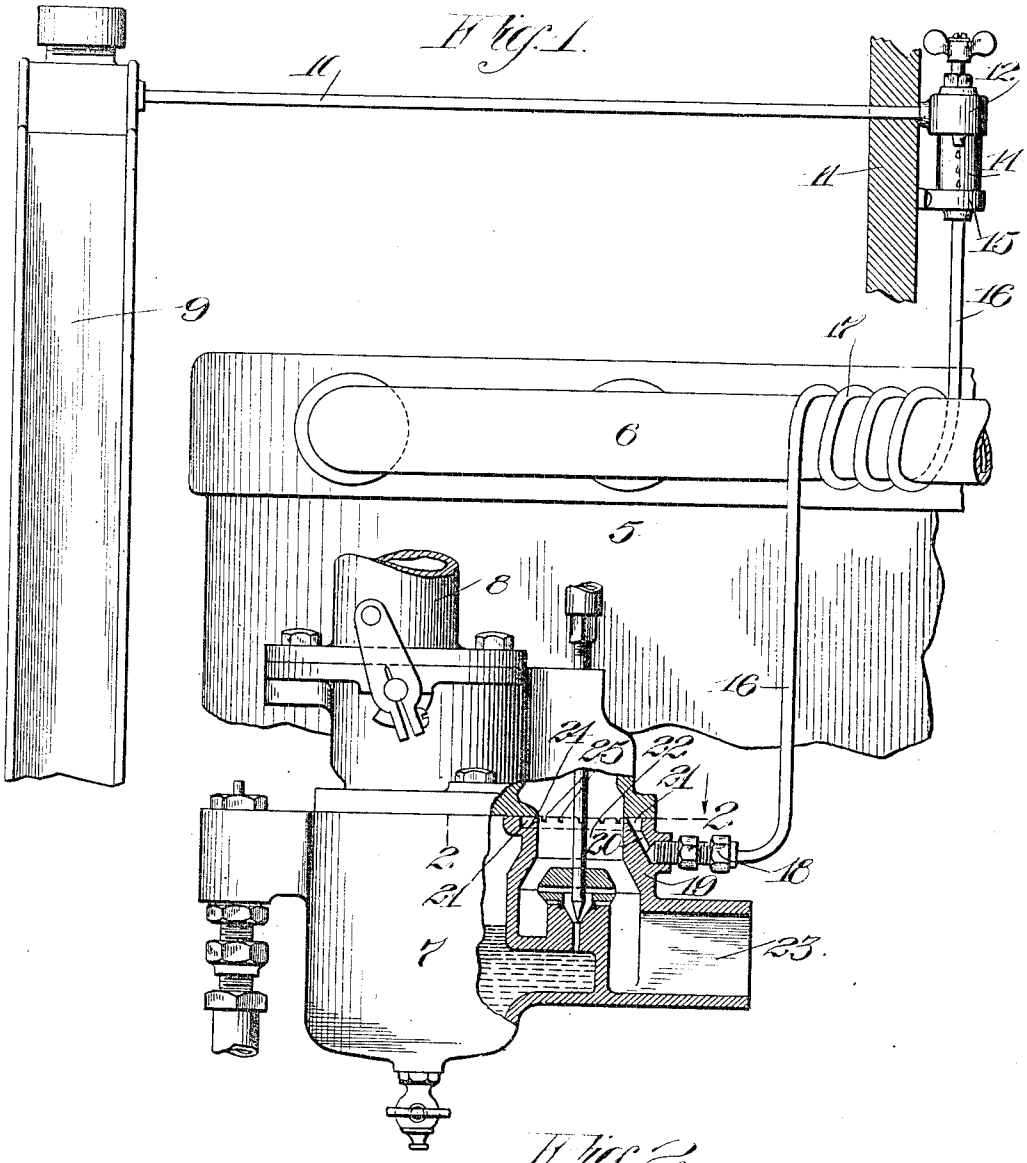
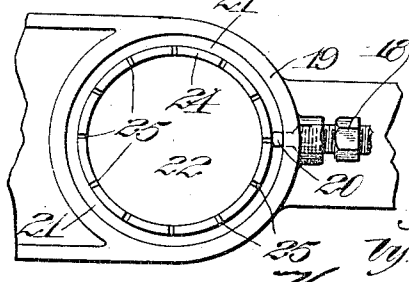


Fig. 2.



Witnesses.
Thos. Casstevens
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his Atty.

UNITED STATES PATENT OFFICE.

JOHN W. CORSER, OF LOS ANGELES, CALIFORNIA, ASSIGNOR, BY MESNE ASSIGNMENTS, TO CORSER CARBURETOR COMPANY, A CORPORATION OF CALIFORNIA.

CARBURETER.

1,120,602. Specification of Letters Patent. Patented Dec. 8, 1914.

Application filed August 25, 1913. Serial No. 786,418.

To all whom it may concern:

Be it known that I, JOHN W. CORSER, a citizen of the United States, residing at Los Angeles, in the county of Los Angeles, State of California, have invented new and useful Improvements in Carbureters, of which the following is a specification.

This invention relates to carbureters, and the principal object is to provide a carbureter with means for supplying an auxiliary vapor thereto.

It is also an object to provide a carbureter with means for heating the auxiliary mixture introduced into the mixing chamber of the carbureter.

It is also an object to provide a carbureter with an auxiliary vapor which will cool the valves and eliminates the deposit of carbon by forming a more complete combustion.

It is also an object to provide means for regulating the amount of vaporizable fluid adapted to be introduced into a vaporized hydrocarbon fuel to form an auxiliary mixture.

It is a further object to provide a carbureter with means for conveying water from a source of supply used to cool the cylinders of the explosive motor to a sight feed device from which point the water is conveyed into a coil carried around the exhaust from the motor and conveyed to an annular chamber in the form of steam having orifices opening into the mixing chamber.

In the drawings accompanying this specification and forming therewith the application for Letters Patent: Figure 1 shows a carbureter with the attachment applied thereto, the radiator and the source of water supply and the intermediate attachments being shown diagrammatically. Fig. 2 is a section on the line 2—2 of Fig. 1, viewed in the direction indicated by the arrows.

More specifically in the drawings, 5 designates a portion of an internal combustion engine having an exhaust pipe 6 connected therewith, the carbureter 7 also being shown as connected to the intake 8 which is broken away. In proximity to the motor is shown the radiator 9 leading from the upper portion of which is a supply pipe 10 which is preferably carried under the head of the machine when the latter is applied to an automobile and led to a convenient point upon the dashboard 11 where it is fitted within the valved end 12 of the sight feed device having the glass 14. The lower cup 15 of this sight feed device is connected to a pipe 16 which is preferably carried or coiled a few times, shown at 17, around the exhaust pipe 6. The oppositely disposed end of this pipe 16 is preferably connected by a union 18, the opposite end of which is secured in the wall 19 of the carbureter.

From the threaded bore in the wall 19 adapted to receive the union 18 a bore 20 is formed to supply a channel to the annular groove 21 preferably carried completely around the mixing chamber 22 of the carbureter, the hydrocarbon preferably entering and being vaporized below this point, air being admitted adjacent the throttle valve through the air inlet 23. This annular channel is formed inside of one of the separable faces of the carbureter and the inner edge is preferably inclined so that a tapered or feather edge is formed adjacent the contact point 24, which is preferably serrated or notched by a plurality of notches 25 formed therein, these notches being preferably of triangular form having an apex dependent so that the steam generated within the headed coil 17 is impinged at right angles into the normal flow of the mixture formed by the gas and air through the mixing chamber. An independent tank may be used instead of the radiator 12, and other variations in the structure may be used without departing from the spirit of the invention.

What I claim is:

1. In a carbureter, a casing formed of abutting parts having a mixing chamber extending through both of the carbureter parts, one of the parts having an annular channel formed in its separable face adapted to be closed on one side by the contiguous face of the other carbureter part, said channel having a plurality of notches formed in its outer wall comprising communications between the channel and the mixing chamber, and means for delivering steam to said channel through the carbureter walls.

2. In a carbureter, a casing formed of abutting parts through which a mixing chamber extends, one of said parts formed with an annular channel on its separable face encircling the mixing chamber and adapted to be closed on one side by the contiguous face of the other part of the carbureter casing, said channel formed with a

tapered wall on the side separating it from the mixing chamber to form a feather edge at its juncture with the contiguous face of the other part, said wall being formed with a plurality of triangular shaped notches arranged with their apexes dependent, and means for directing steam into the annular channel through the carbureter walls.

In witness that I claim the foregoing I have hereunto subscribed my name this 13th day of August, 1913.

J. W. CORSER.

Witnesses:
M. HAMMOND,
MARIE BATTEY.