

No. 620,496.

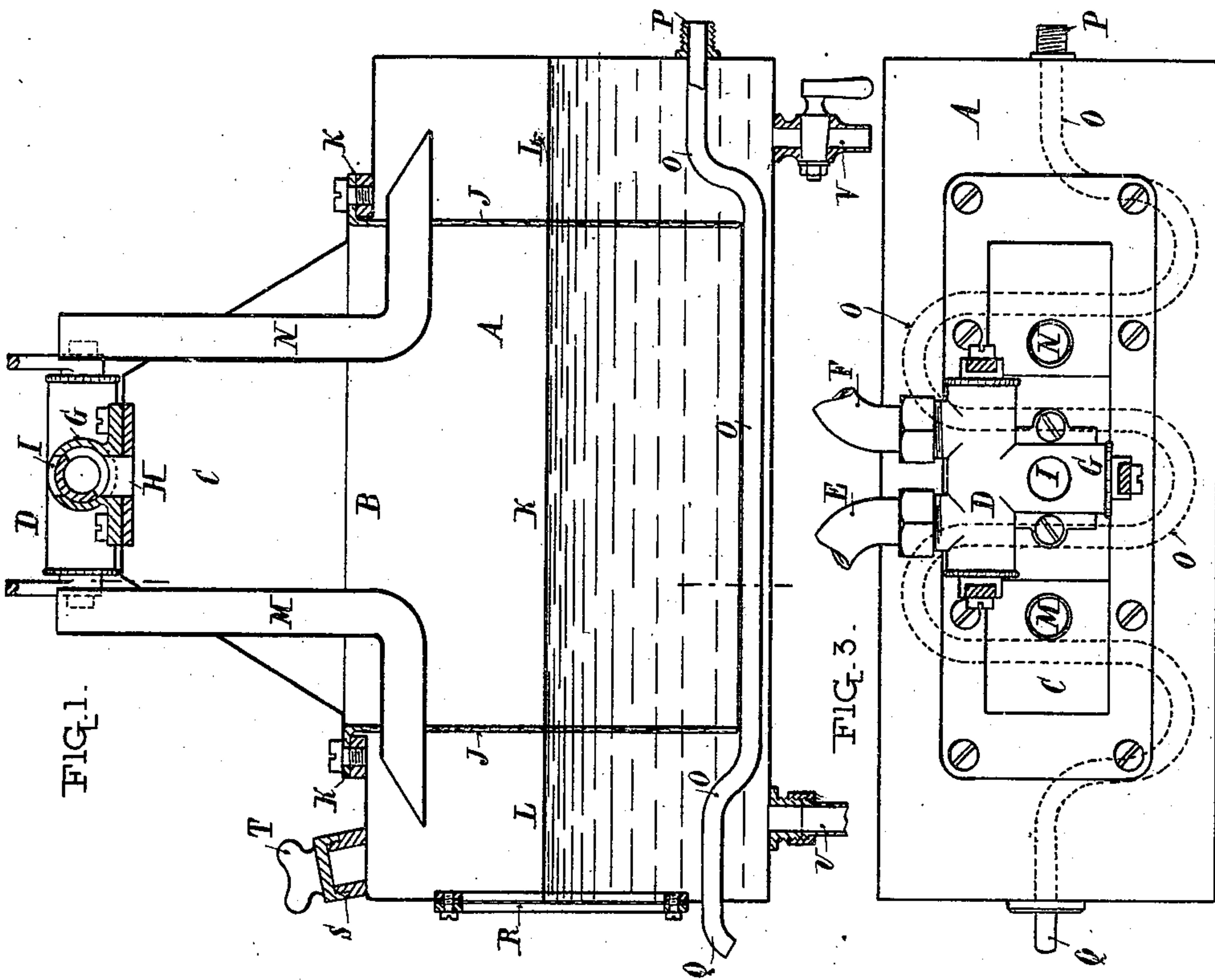
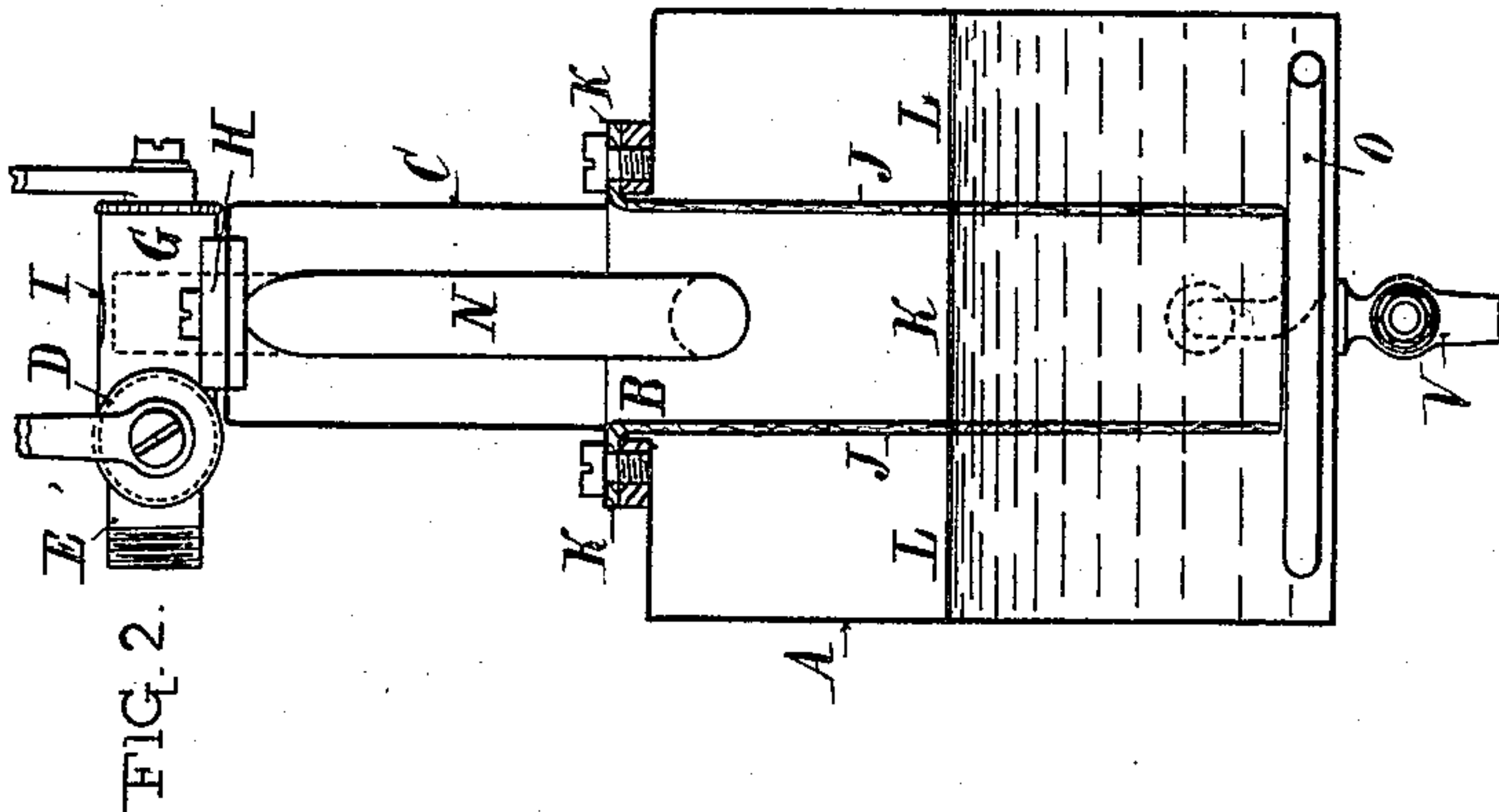
Patented Feb. 28, 1899.

L. W. RAVENÈZ.

CARBURETER.

(Application filed Mar. 4, 1898.)

(No Model.)



Witnesses:  
W. S. Boulter  
A. C. Boulter

Inventor:  
Louis W. Ravenèz.  
By W. S. Boulter,  
attorney



# UNITED STATES PATENT OFFICE.

LOUIS WOLDEMARE RAVENÈZ, OF PARIS, FRANCE, ASSIGNOR TO THE SOCIÉTÉ NOUVELLE DES ÉTABLISSEMENTS, DECAUVILLE AÎNÉ, OF SAME PLACE.

## CARBURETER.

SPECIFICATION forming part of Letters Patent No. 620,496, dated February 28, 1899.

Application filed March 4, 1898. Serial No. 672,586. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS WOLDEMARE RAVENÈZ, a citizen of the Republic of France, residing at Paris, France, have invented certain new and useful Improvements in or Relating to Carbureters for Internal-Combustion Engines, of which the following is a specification.

The carbureter forming the subject of the present invention is destined to supply internal-combustion engines used for any purpose, but more particularly for the purposes of propelling road-carriages, with the explosive mixture necessary for their working.

A carbureter according to the present invention is illustrated, by way of example, in the accompanying drawings, in which—

Figure 1 is a longitudinal section; Fig. 2, a vertical cross-section, and Fig. 3 a plan corresponding to Fig. 1.

The carbureter is chiefly constituted by a rectangular or other shaped receptacle A, the upper wall of which, open at B, is surmounted by a cap or cover C, supporting a cock D, controlling the admission-pipes E F, connected with the motor-cylinders, the number of said admission-pipes of course varying with the number of motor-cylinders to be fed. This cock D is combined with another cock G, communicating with the interior of the carbureter through a branch or passage H and can also be put in communication with the atmosphere by means of an air-inlet I, with which it is provided, so that by regulating the position of its valve the quality of explosive mixture admitted to the distributing-cock D is also regulated.

In the receptacle A is suspended a wick J of such height as to reach from its point of attachment K at the joint C and the receptacle A nearly down to the bottom of the latter, passing through the liquid—say, petroleum—contained therein. This wick J is arranged so as to form in the receptacle A a wall dividing said receptacle into two compartments K L, one compartment being in the center of the apparatus and the other surrounding it and being separated from it by the wick J and by the layer of liquid which it absorbs. Two suitably-arranged air-inlets M N, supported by the cap C, place the outer com-

partment L in communication with the atmosphere, so that the suction produced through the passage H above the compartment K draws the air entering the compartment L through the air-inlets M N through the wick J, which is thoroughly and entirely impregnated by capillarity with the liquid into which said wick dips, and thus in passing through the wick the air becomes sufficiently carburated and is ready to be drawn in by the motor with which the carbureter is connected.

At the bottom of the receptacle A there is arranged a coil or bent tube O, destined to receive from the motor or preferably from a silencer combined with the motor, through a tube P, the combustion-gases, which in their passage heat the coil O, and thereby the liquid in the receptacle A, in which said tube is arranged. The volatilization of the liquid is thus assisted. At the end opposite to that connected with the tube P the coiled tube O is provided with a nozzle Q or opening projecting beyond the receptacle, through which nozzle the combustion-gases escape into the atmosphere.

One of the vertical walls of the receptacle A is preferably provided with a window R to enable the level of the liquid to be observed. The liquid may be supplied to the receptacle A directly through an upper branch S, provided with a plug T, or it may be continuously supplied through a lower branch U, connected to a supply-tank.

A cock V at the bottom enables the carbureter to be completely emptied for cleaning or other purposes.

I claim—

1. A carbureter for internal-combustion engines comprising a reservoir, a wick depending within the same and having its lower end in proximity to the bottom of the reservoir, and dividing the latter into two compartments K, L, air-inlet pipes one end of each of which communicates with the outer air and the other end communicating with the compartment L, a cock carried by the reservoir, a second cock combined with the first and having a regulating-valve and a passage communicating with the compartment K, said second cock adapted to control the admission of carburated air from compartment K to the first



cock, and means for heating the liquid in the reservoir.

2. A carbureter for internal-combustion engines comprising a reservoir, a wick depending within the same and having its lower end in proximity to the bottom of the reservoir and dividing the latter into two compartments K, L, air-inlet pipes one end of each of which communicates with the outer air and the other end communicating with the compartment L, a cock carried by the reservoir, a second cock combined with the first and having a regulating-valve and a passage communicating with the compartment K, and a second passage communicating with the outer air, said second cock adapted to control the admission of carbureted air from compartment K to the first cock, and means for heating the liquid in the reservoir.

3. A carbureter for internal-combustion engines comprising a reservoir having an opening at its upper end, a conical top detachably secured to the reservoir over said opening, a wick secured at its upper end between the edge of the top and the reservoir around the

opening and depending within the said reservoir and having its lower end in proximity to the bottom of the reservoir and dividing the latter into two compartments K, L, a heating-pipe arranged upon the bottom of the reservoir below the wick, air-inlet pipes passing down through the top of the reservoir one end of each of which pipes communicates with the outer air and the other end communicating with the compartment L, a cock carried by the top of the reservoir, a second cock combined with the first and having a regulating-valve and a passage communicating with the compartment K and a second passage communicating with the outer air said second cock adapted to control the admission of carbureted air from compartment K to the first cock.

In witness whereof I hereto set my hand in the presence of the two subscribing witnesses.

LOUIS WOLDEMAR RAVENÈZ.

Witnesses:

LOUIS SULLIGER,  
EDWARD P. MACLEAN.