

(Model.)

G. REZNOR.
AIR CARBURETOR.

No. 259,921.

Patented June 20, 1882.

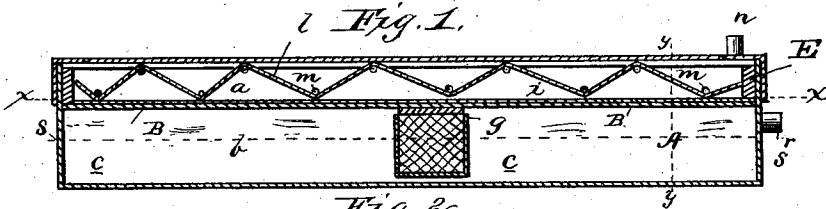


Fig. 2.

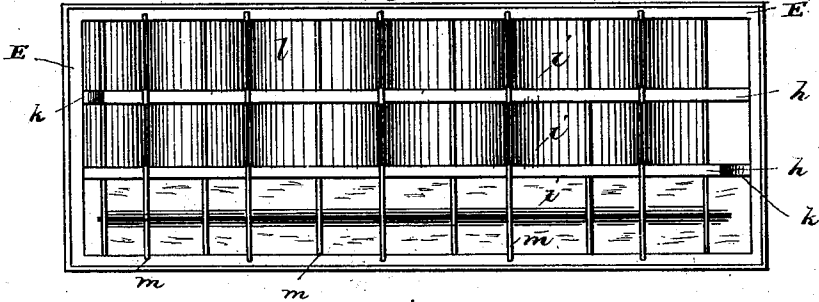


Fig. 3.

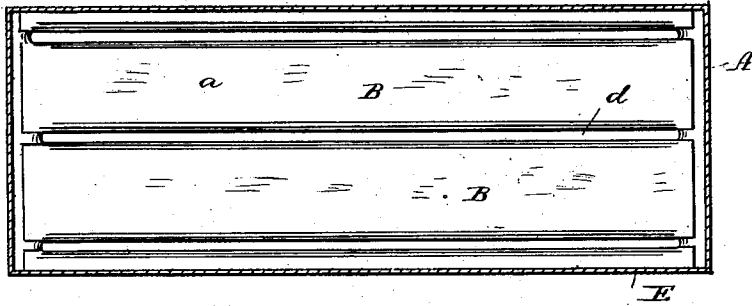
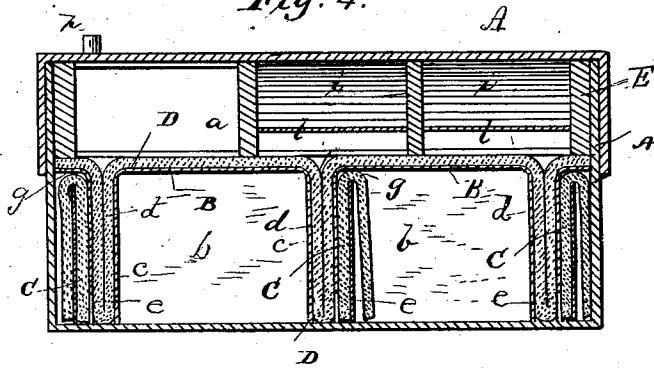


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

GEORGE REZNOR, OF MERCER, PENNSYLVANIA.

AIR-CARBURETOR.

SPECIFICATION forming part of Letters Patent No. 259,921, dated June 20, 1882.

Application filed November 8, 1881. (Model.)

To all whom it may concern:

Be it known that I, GEORGE REZNOR, of Mercer, in the county of Mercer, and in the State of Pennsylvania, have invented certain new and useful Improvements in Air-Carburetors; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

This invention relates to certain improvements in that class of carbureting apparatus in which the hydrocarbon fluid is supplied to the carbureting-chamber by capillary attraction from a reservoir below; and it has for its object to secure a more uniform supply of fluid to the carbureting-chamber, as more fully hereinafter specified. This object I attain by the apparatus illustrated in the accompanying drawings, in which—

Figure 1 represents a longitudinal vertical section of my improved apparatus; Fig. 2, a top view with the cover removed; Fig. 3, a horizontal section on the line *xx* of Fig. 1, and Fig. 4 a transverse vertical section on the line *yy* of Fig. 1.

The letter A indicates a rectangular casing or chamber, divided into two compartments, *a b*, by means of the horizontal partitions B. The said partitions are provided with downwardly-extending flanges *c*, which reach to and rest upon the bottom of the casing or chamber, forming narrow longitudinal compartments *d*, which communicate with the compartment *a* at their tops throughout their entire length. The compartments *d* are closed at their ends, so as to entirely cut off direct communication with the lower compartment, *b*.

The letter C indicates a series of vertical chambers, which communicate with the compartments *d* at their bottoms, as indicated by the letter *e*. The said chambers C communicate with the compartment *b* at their tops, as indicated by the letter *g*.

The letter D indicates a sheet of textile material, which fills the compartments *d* and covers the upper surface of the partition B in the compartment *a*. The chambers C are filled with wicking or other textile material, which extends over their open tops into the chamber *b*, as shown in the drawings.

The upper compartment, *a*, is provided with a frame, E, having a series of transverse rods

or wires, *m*, at the upper and lower edges, alternating, as indicated in the drawings. The frame is provided with longitudinal partitions *h*, dividing it into a series of longitudinal compartments, *i*, which communicate at alternate ends by means of suitable openings, *k*. The compartments thus formed have stretched in them the continuous strips of textile material *l*, which pass in a zigzag course over the wires *m*, as indicated.

The letter *n* indicates the air or gas induction pipe, and *p* the exit-pipe, and *r* the pipe for filling the reservoir, which may be provided with suitable controlling-valves.

The operation of my invention is as follows: The reservoir is charged with hydrocarbon fluid to the level of the dotted line *s*. The wicking in the chambers C carries it over to the textile material in the compartments *d* and *a*. From such textile material it is absorbed by the textile material *l*, and thoroughly subjected to the action of the gas or air, so as to be uniformly taken up thereby and perfectly carburet such gas or air.

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

1. The combination, in a carburetor provided with two horizontal chambers, *a b*, of the longitudinal vertical compartments *d*, communicating with the chamber *a* at their tops throughout their entire length, and the vertical chambers C, communicating with the compartments *d* at their bottoms and with the compartment *b* at their tops, the said compartments *a*, C, *d*, and *b* being provided with textile absorbent material arranged substantially in the manner and for the purpose specified.

2. In a carburetor, the combination of the upper and lower chambers, constructed as described, and packed with textile material arranged substantially as specified, the upper chamber having partitions forming passages which communicate at alternate ends, and the textile absorbent material arranged in a zigzag course therein, substantially as and for the purpose specified.

In testimony whereof I affix my signature, in presence of two witnesses, this 26th day of October, 1881.

GEORGE REZNOR.

Witnesses:

A. H. MCEL RATH,
JNO. W. BELL.