E. J. DASCHBACH.

Carbureters.

No. 166,508. Patented Aug. 10, 1875.

Fig. 1.

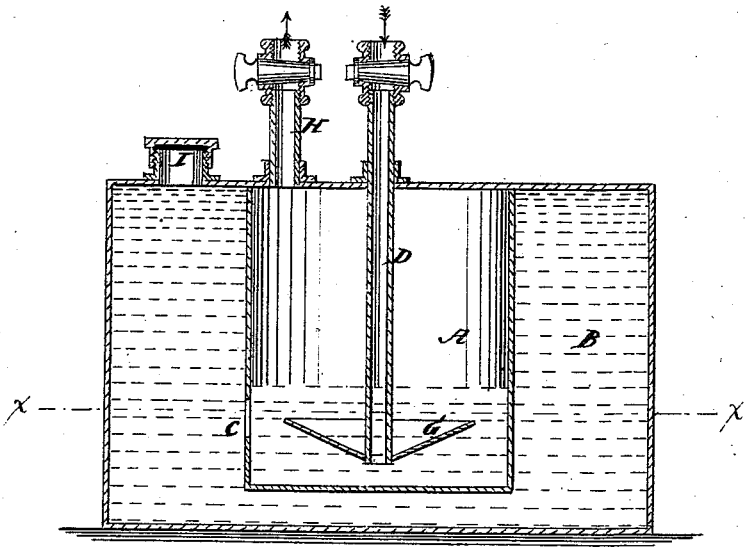
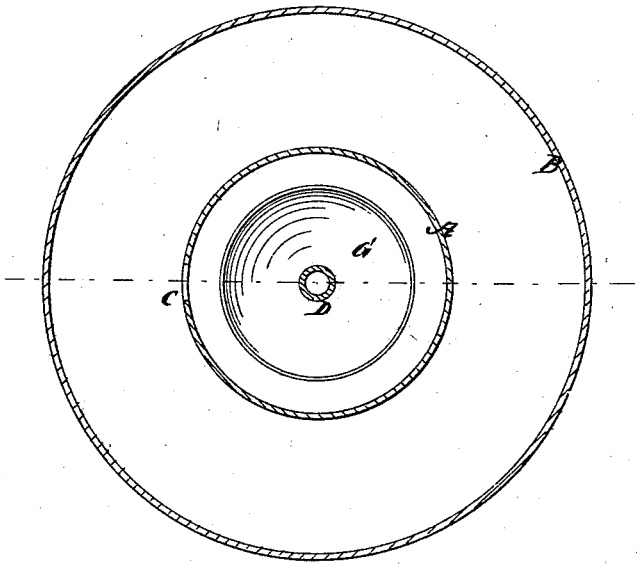


Fig. 2.



WITNESSES:

E. Wolff

A. F. Terry

INVENTOR:

E. J. Daschbach

BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

EDWARD J. DASCHBACH, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN CARBURETERS.

Specification forming part of Letters Patent No. **166,508**, dated August 10, 1875; application filed June 26, 1875.

To all whom it may concern:

Be it known that I, EDWARD J. DASCHBACH, of Pittsburg, Allegheny county, Pennsylvania, have invented a new and Improved Carbureter, of which the following is a specification:

My invention consists of a carbureting-chamber surrounded by a feed-tank, in which the gasoline or other hydrocarbon substance is maintained above the feed-passage into the carbureter by atmospheric pressure, so that a regular automatic feed is obtained by the oil in the carbureter, and the carbureter is provided with an inlet-pipe projecting below the oil-inlet.

Figure 1 is a sectional elevation of my improved carbureter; and Fig. 2 is a horizontal section taken on the line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the carbureter, which is immersed to the top in the supply-tank B, and has an opening at C, through which to be fed from B. D is the air-inlet pipe, extending below the oil-inlet, and having an air-spreader, G, at the bottom. H is the gas-pipe, and I the filler for the tank B. When the tank B is filled, the air in it being forced through feed-orifice C into the carbureter, the oil will be limited as to the height it will rise therein by the compressed air. The filler I being then closed, the oil in the tank B will be held back by the vacuum, while the oil in the carbureter is taken up by the air through the gas-pipe H to the burner, until the oil is reduced to the level of the passage C, so that oil will flow through from B, and air from A will take its place, rising to the top and allowing the oil to flow till it rises high enough to shut the passage. When the tension of the air in A is reduced to atmospheric pressure, or slightly below, by the exhaust to the burners, fresh air will flow in through pipe D, passing down into the oil a little, and spreading out in it under the spreader G, so as to mix thoroughly. When the machine is to be filled the cocks in pipes D H are closed, and the fluid poured through inlet I, so as to rise in both vessels to the top of opening C. It then ceases to rise in vessel A on account of the pressure of air not able to escape, and thus seals A, but continues to rise in vessel B until that is full. In operating the machine, the fluid in vessel A is evaporated until below top of opening C, when gas will escape from vessel A, ascend to top of vessel B, and balance the pressure in A, thus enabling the fluid to again flow into vessel A until the top of opening C is reached. This will be automatically repeated until the fluid has been nearly or quite exhausted in vessel B below the opening C. Thus the fluid stands always at the same, or nearly the same, level in vessel B, and gives a uniform quantity regularly undergoing the process of evaporation, and producing a steady, unvarying light.

What I claim is—

The fluid-tank B, having inlet I, combined with inclosed carbureter A, having hole C and cocked pipes D H, as and for the purpose specified.

EDWARD J. DASCHBACH.

Witnesses:
J. C. MERCER,
JOHN WILER.