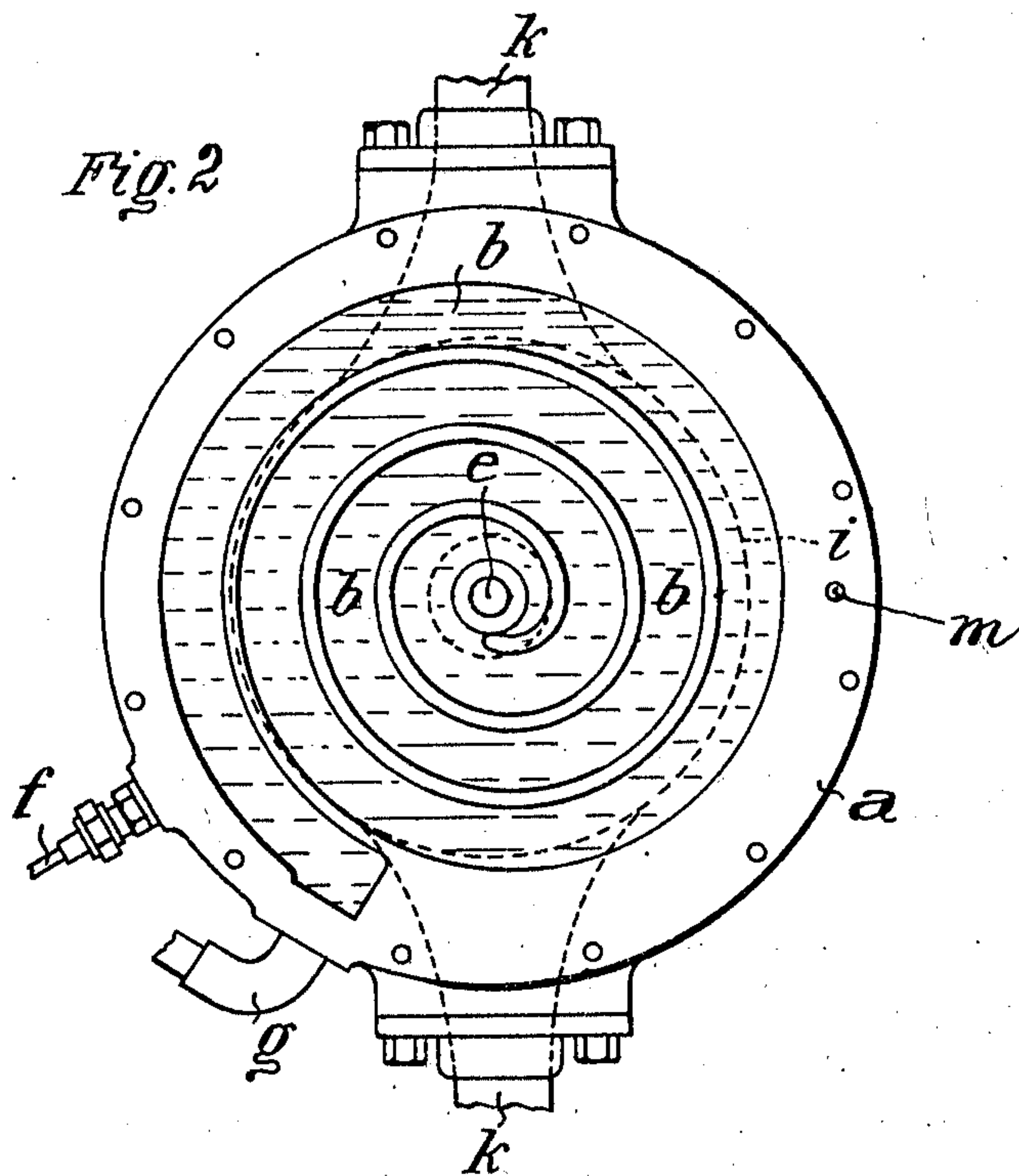
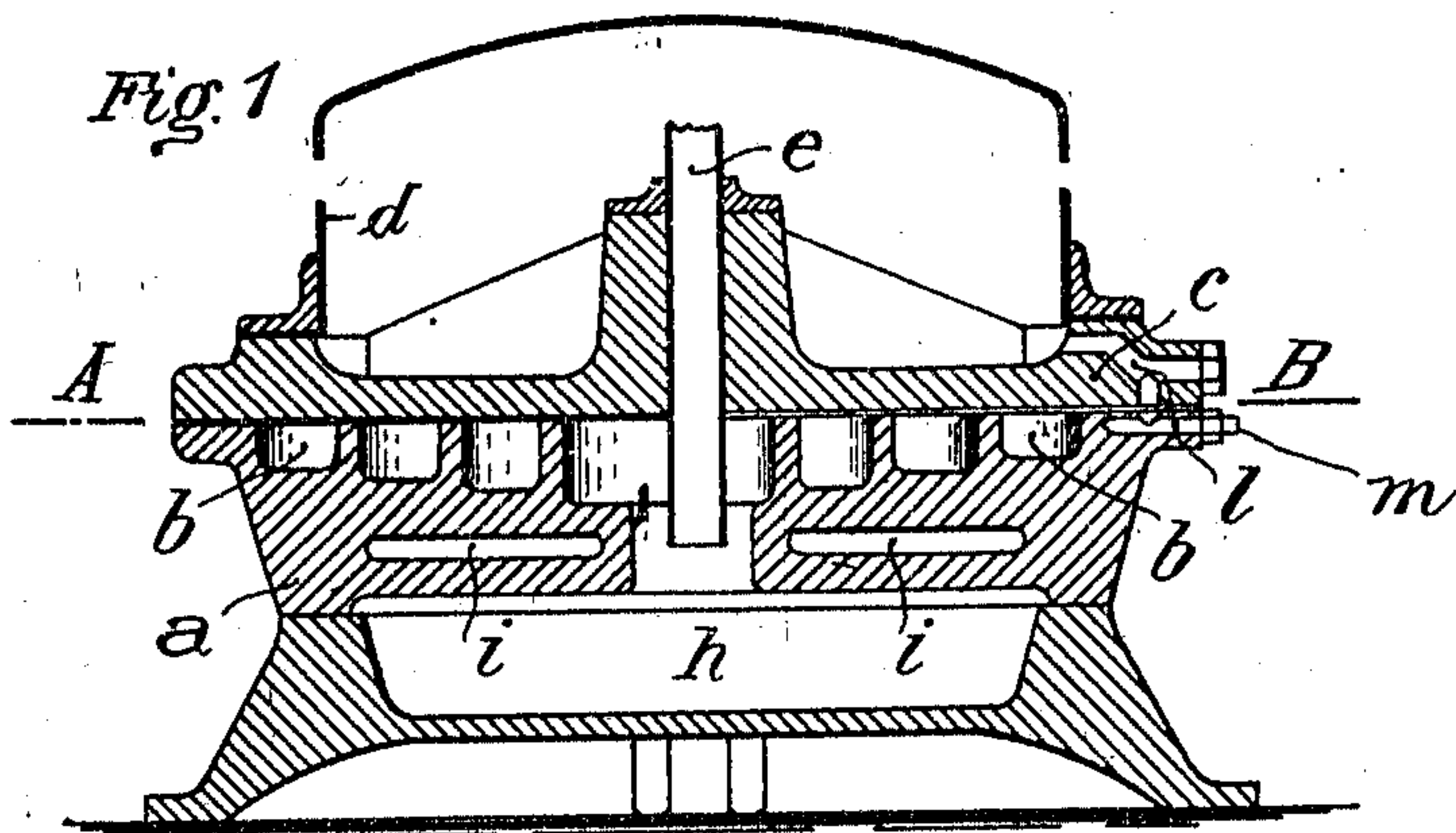


S. OLSEN.
CARBURETER.

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990,159.

Patented Apr. 18, 1911.



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CARBURETER.

990,159.

Specification of Letters Patent.

Patented Apr. 18, 1911.

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To all whom it may concern:

Be it known that I, SVEND OLSEN, a subject of the King of Denmark, residing at Halle, German Empire, have invented certain new and useful Improvements in Carbureters, of which the following is a specification.

My invention relates to carbureters wherein liquid fuel is transformed into a vaporous mixture, which is then fed to the place where the gas is required for use; and the invention has reference in particular to that type in which, for the purpose of securing ample surface for evaporation of the carbureting liquid, a vaporizing passage of tortuous form, is located in a relatively flat structure furnished with a cover. A defect attaching to this construction is that in the process of preparing the gas certain residual products collect in the vaporizing channel and in the course of time choke up the passage. To remove the obstruction the entire apparatus has to be taken apart, which is not only exceedingly troublesome, but necessitates complete stoppage of work for a considerable period.

The present invention contemplates the removal of these drawbacks by so organizing the parts that access can be had to the vaporizing passage for cleaning purposes without the inlet and outlet pipes having to be disconnected.

A practical embodiment of my invention is illustrated in the accompanying drawing, in which—

Figure 1 is a vertical section, and Fig. 2 a horizontal section on the line A—B, Fig. 1.

The carbureter comprises two main sections, viz. a lower flat-shaped part *a* in which the vaporizing passage *b* is formed, and a superposed part *c* constituting a detachable cover.

I prefer to give the vaporizing passage a spiral instead of the usual zig-zag shape, as there is then, for the same cross sectional area, less resistance offered to the air. The passage may be advantageously constructed in such manner that the base gradually descends as it approaches the center of the apparatus.

The cover *c* is furnished with a dome or cap *d*, which constitutes a mixing chamber, and the two sections *a* and *c* communicate through a mixing pipe *e*. *f* is the inlet pipe for the supply of fuel, while air is admitted

through the pipe *g*. *m* is the exit through which the gaseous mixture is fed to the place of consumption.

To enable ready access to the vaporizing passage *b* for the purpose of cleaning it, I provide the inlets *f* and *g* and the outlet *m* in the lower section *a* of the carbureter, the communication between the cap *d* and the outlet *m* being effected by means of a channel *l*.

The fuel in the passage *b* and the gaseous mixture in the cap *d* may be subjected to heat with the aid of an annular chamber *i*, having connecting pipes *k*, located in the section *a*, and heated by any suitable source, for instance, in the case of motors, by the exhaust gases.

The lower part *a*, with the passage *b* and chamber *i*, may suitably be a casting, as the rough inner walls promote evaporation.

A collector *h* may be furnished for the residual products.

Having thus described my invention, I declare that what I claim as new and desire to secure by Letters Patent of the United States is—

1. A carbureter, comprising a flat-shaped section presenting a tortuous vaporizing-passage, fuel and air inlets, and a gas outlet; a superposed detachable section having a mixing-cap, and a passage communicating with said gas outlet; and a pipe conducting from the lower section into said cap; substantially as described.

2. A carbureter, comprising a flat-shaped section presenting a spiral vaporizing-passage, fuel and air inlets, and a gas outlet; a superposed detachable section having a mixing-cap, and a passage communicating with said gas outlet; and a pipe conducting from the lower section into said cap; substantially as described.

3. A carbureter, comprising a flat-shaped section presenting a tortuous vaporizing-passage, fuel and air inlets, and a gas outlet, and having an annular heating-chamber below said vaporizing-passage; a superposed detachable section having a mixing-cap, and a passage communicating with said gas outlet; and a pipe conducting from the lower section into said cap; substantially as described.

4. A carbureter, comprising a flat-shaped section presenting a tortuous vaporizing-passage, fuel and air inlets, and a gas outlet; a

superposed detachable section having a mixing-cap, and a passage communicating with said gas outlet; a pipe conducting from the lower section into said cap; and a collector
5 for residual products located beneath said flat-shaped section; substantially as described.

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

SVEND OLSEN.

Witnesses:

RUDOLPH FRICKE,
SOUTHARD P. WARNER.