

(No Model.)

W. McKENZIE & J. H. MASON.
Carbureter.

No. 238,141.

Patented Feb. 22, 1881.

FIG. 1.

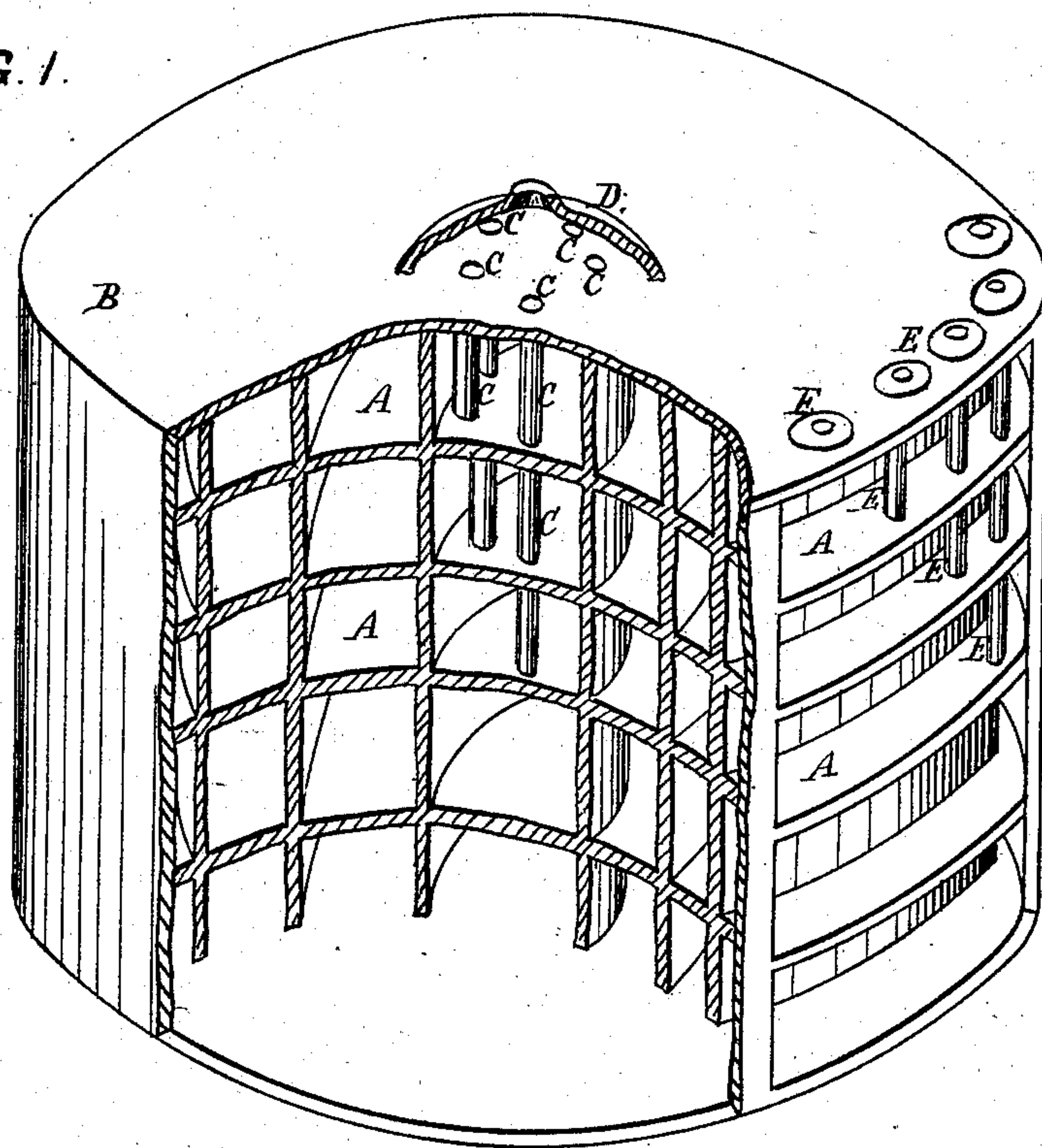
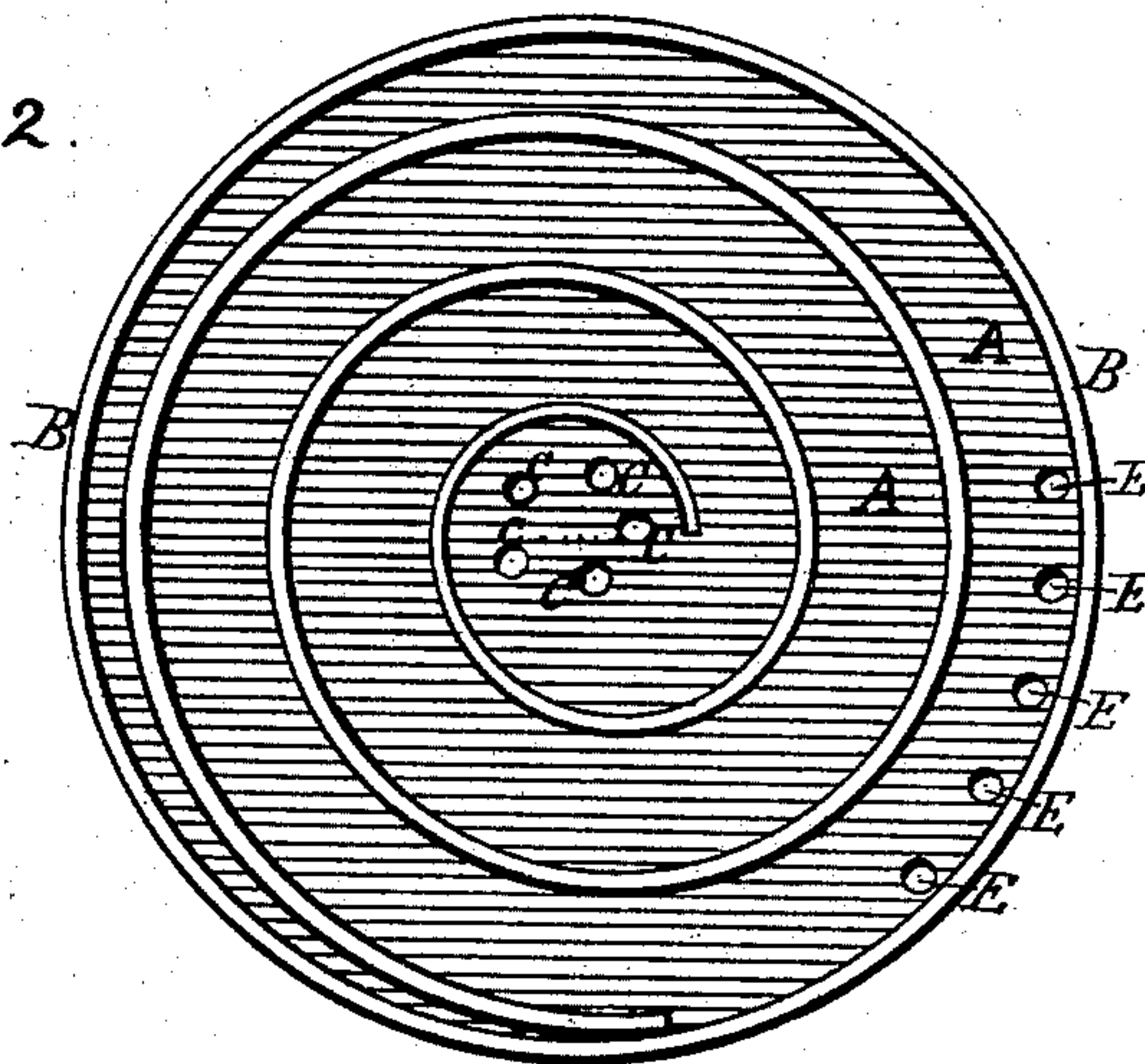


FIG. 2.



WITNESSES:

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WILLIAM McKENZIE AND JAMES H. MASON, OF DETROIT, MICHIGAN, ASSIGNORS TO THE COMBINATION GAS MACHINE COMPANY, OF SAME PLACE.

CARBURETER.

SPECIFICATION forming part of Letters Patent No. 238,141, dated February 22, 1881.

Application filed September 28, 1880. (No model.)

To all whom it may concern:

Be it known that we, WILLIAM McKENZIE and JAMES H. MASON, of Detroit, Wayne county, Michigan, have invented an Improvement in Carbureters, of which the following is a specification.

The nature of this invention relates to certain new and useful improvements in carbureters, through which air is forced through chambers filled or partially filled with naphtha or other hydrocarbons to produce an illuminating-gas.

It frequently occurs that occupants of adjoining buildings join in the purchase of a carbureter and appliances for joint use; and it frequently occurs that some of the occupants become dissatisfied because others use more than their equal share of the gas, while not bearing a proportionate amount of the expense in producing it. To obviate this difficulty an attempt has been made to use the gas-meters of ordinary construction, so that the proportion of the common expense which each is to bear in running the carbureter may be accurately determined. This in practice has been found inefficient, for the reason that the hydrocarbon vapors with which the air is carbureted destroy the diaphragm of the meters and render them useless.

The object of our invention is to meet this difficulty by providing, within a common shell, a series of carbureting-chambers, to each of which the air is fed from a common air-pump or other air-forcing device, and from each there is a separate outlet for the gas—one being designed for each consumer—each being required to keep the carbureting-chamber allotted to him charged with liquid hydrocarbons at his individual expense.

Figure 1 is a perspective view of the improved carbureter with portions of the shell broken out to show the series of carbureting-chambers and the arrangement of gas-pipes leading from the chambers. This view also shows the common air-chamber which is attached to the common air-pump and the arrangement of air-pipes, one of which leads

from said air-chamber (partially broken away) to each of the carbureting cells or chambers. Fig. 2 is a plan view of the same with the top of the shell removed, showing the shape of the preferred carbureting cells or chambers.

In the accompanying drawings, which form a part of this specification, A represents a scroll-shaped cell or carbureting-chamber to receive the liquid hydrocarbons. As many such cells are constructed as desired, and placed within a common shell, B, each cell having no communication with the others. Each cell is provided with an air-pipe, C, its outer end terminating in the common air-chamber D, into which air is forced to find access to the several chambers to each through its appropriate air-pipe. Each of the cells is also provided with an escape-pipe, E, to which proper gas-pipes are attached to convey the gas to the various consumers. These pipes E may also be utilized to fill the cells with the liquid hydrocarbons, and each of the joint users of the common device furnishes to his particular cell such liquid hydrocarbon as he desires to utilize at his own expense.

What we claim as our invention is—

1. A carbureting apparatus consisting of a series of independent carbureting-cells inclosed within a common shell, each cell being provided with a separate air-inlet pipe opening at the outer end into a common chamber, into which air is forced, substantially as and for the purposes set forth.

2. The combination, with a series of independent carbureting-chambers, each inclosed within a common shell and each provided with a separate air-inlet pipe connecting at its outer end with a common air-chamber, of a series of gas-outlet pipes, one communicating with each chamber, substantially as described, and for the purposes set forth.

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Witnesses:

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