

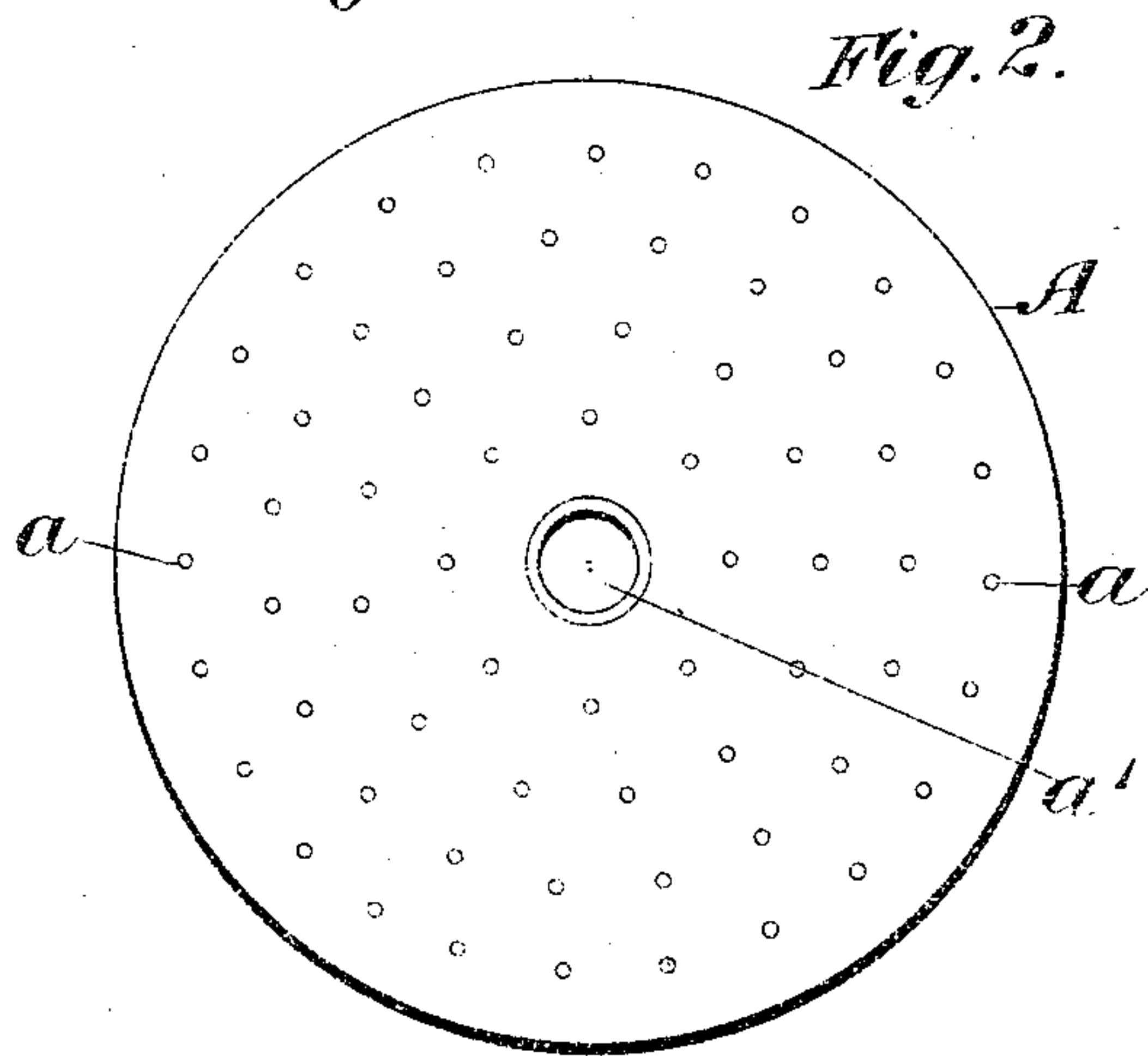
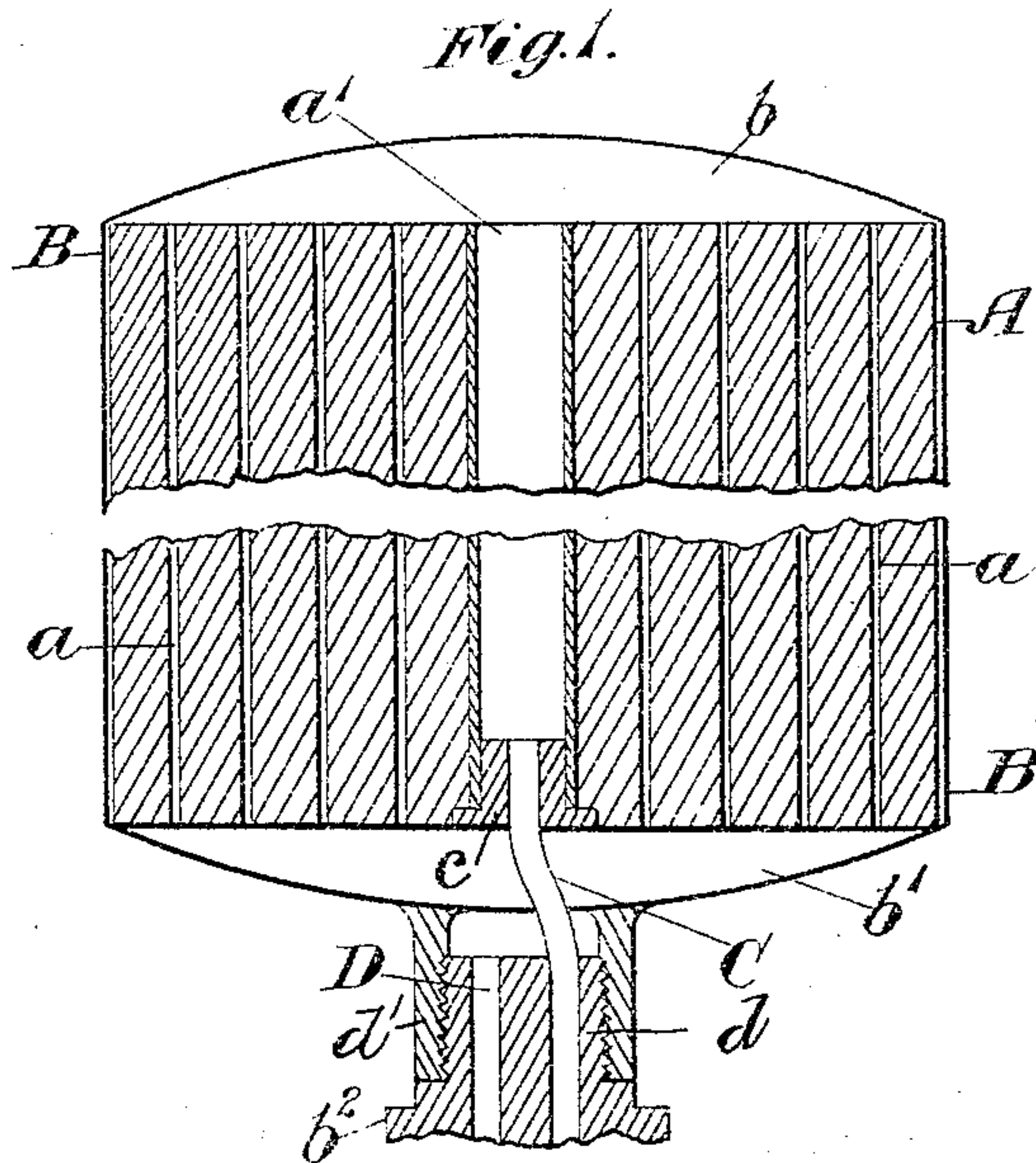
No. 774,486.

PATENTED NOV. 8, 1904.

H. MARSHALL.
CARBURETER.

APPLICATION FILED JULY 29, 1903.

NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

HUGH MARSHALL, OF EDINBURGH, SCOTLAND.

CARBURETER.

SPECIFICATION forming part of Letters Patent No. 774,486, dated November 8, 1904.

Original application filed August 2, 1902, Serial No. 118,106. Divided and this application filed July 29, 1903. Serial No. 167,436.
(No model.)

To all whom it may concern:

Be it known that I, HUGH MARSHALL, doctor of science, a subject of the King of the United Kingdom of Great Britain and Ireland, residing at 12 Lonsdale Terrace, Edinburgh, in the county of Mid-Lothian, Scotland, have invented a new and useful Improvement in Carbureters, of which the following is a specification.

This invention is a division of that originally described and claimed in my application, Serial No. 118,106, filed August 2, 1902, and relates to an integral absorbent block for absorbing volatile hydrocarbon or other liquid for use in apparatus for carbureting air or gas for lighting, heating, or motive power.

The integral absorbent block is made of plaster-of-paris and other materials and is formed with a number of channels or perforations through it. Air passing through these perforations takes up the volatile hydrocarbon from the block in the state of vapor.

Figure 1 is a section or form of absorbent block and container constructed in accordance with my invention. Fig. 2 is a plan of the absorbent block only.

I construct the absorbent block A with the longitudinal perforations a . The said block is contained within a metal case B and held in place by the end plates thereof, the block and case being preferably cylindrical; but integral absorbent blocks of any shape may be employed. A clear free space b b' is left at top and bottom of the case, respectively. A tube C, connected by a hollow plug c , leads air into a pipe or passage a' , formed in the center of the perforated block for the purpose of leading the air into the upper space b at the top of the perforated block. The air, heavy with absorption of the volatile hydrocarbon with which the block is saturated, descends through the perforations a into the lower space b' to the port D, thence to the

burner, or the air may be admitted by a separate opening at the top of the case B.

I have found from experiments that the following composition for the perforated block gives good results: two parts, by weight, of plaster-of-paris; one part, by weight, of kieselguhr, (infusorial earth;) five parts, by weight, of water, mixed into a paste and molded or cast into blocks with the channels or perforations a , the blocks being then air dried after the paste has set.

The part broken off at b^2 is the supporting connection to the lamp or apparatus and has a reduced end d , through which the air-inlet tube C and outlet-port D extend, receiving the socket or neck d' of the case B.

The channels or perforations a may be made through the block by providing the molding-box with upright wires or rods, which when the paste is set and the block is drawn out of the molding-box leaves the channels or perforations through the block.

I claim—

A carbureter comprising a case having a socket at the bottom thereof, an absorbent block formed with longitudinal perforations and fitted within the case, so as to provide in connection with the latter, clear free bottom and top spaces, a central pipe fitted into the absorbent block through which air is conducted to the top space, a hollow plug fitted into the lower end of the central pipe, a lamp connection provided with a reduced end having an outlet-port in communication with the bottom space of the case and fitting into the socket of the latter, and an air-inlet tube extending through the lamp connection and connected with the hollow plug.

HUGH MARSHALL. [L. s.]

Witnesses:

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