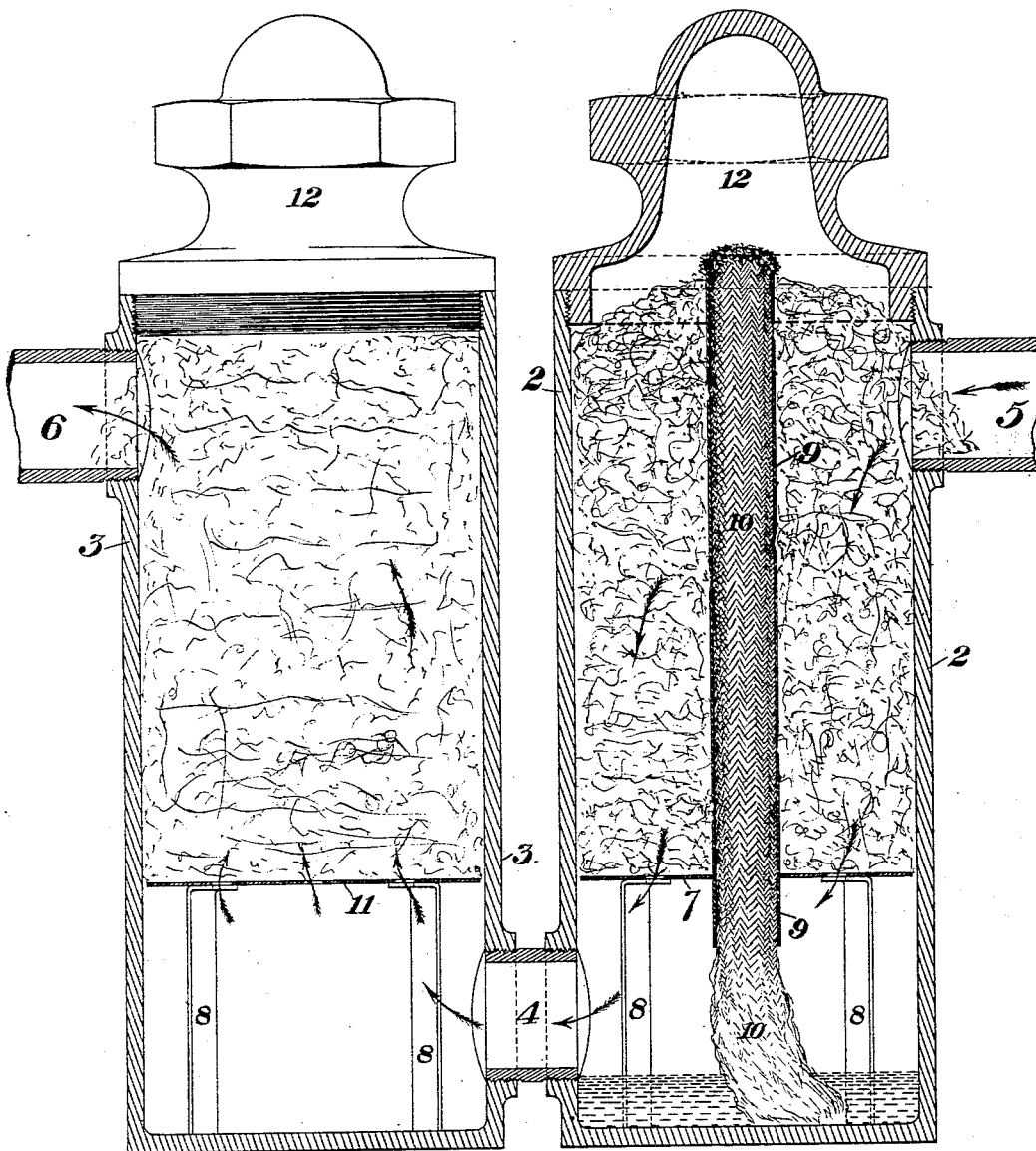


(No Model.)

G. W. WEAVER.
CARBURETOR AND PURIFIER.

No. 476,709.

Patented June 7, 1892.



WITNESSES

J. M. Corwin
A. L. Gill

INVENTOR

George W. Weaver
by W. Randall & Sons
his Attorneys

UNITED STATES PATENT OFFICE.

GEORGE W. WEAVER, OF GREENSBURG, PENNSYLVANIA.

CARBURETOR AND PURIFIER.

SPECIFICATION forming part of Letters Patent No. 476,709, dated June 7, 1892.

Application filed June 1, 1891. Serial No. 394,695. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. WEAVER, of Greensburg, in the county of Westmoreland and State of Pennsylvania, have invented a new and useful Improvement in Carburetors and Purifiers, of which the following is a full, clear, and exact description.

The object of my invention is to provide means for removing impurities from illuminating or natural gas before it is delivered to the burner; and it consists in a device which can be put in the line of a gas-service pipe on either side of the meter, or between the gas producer and the gasometer, and is constructed so that the gas passing through the same shall deposit its impurities and shall be better fitted for use.

The invention is illustrated in the accompanying drawing, which shows in vertical central section what I regard as the best form of my device.

In the drawing, 2 3 are two chambers set side by side, connected at one end by a connecting-pipe 4. The chamber 2 is provided with a pipe 5 for the inlet of gas, and the chamber 3 has a gas-outlet pipe 6. The chamber 2 is provided with a perforated disk 7, upheld a short distance from the bottom thereof by feet 8 and provided with a vertical tube 9, having lateral perforations, as shown. The part of the chamber 2 below the disk 7 is charged with oil, preferably refined petroleum oil, or alcohol, benzine, or any cleaning agent, and a wick 10 extends through the tube 9 into said oil. Above the disk 7 and around the tube 9 the chamber 2 is charged with material—such as cotton, wool, sawdust, lime, or any fibrous material—set in the chamber sufficiently loose to permit the passage of gas through it. The chamber 3 has a perforated diaphragm 11 above the pipe 4, and above said diaphragm is charged with loose material in like manner as the chamber 2. Each of the chambers is closed by a suitable cap 12. The apparatus so constructed is set in the line of the service-pipe, which is coupled to the pipes 5 and 6. Gas enters through the pipe 5, passes down through the loose material in the chamber 2, thence through the pipe

4 into the chamber 3, and up through the loose material in the chamber 3 to the pipe 6. The function of the wick in the tube 7 is to keep the contents of the chamber 2 constantly charged with oil, which is drawn by capillary action of the wick up through the tube 9 and escapes from such tube through the perforations or at the top. The gas in passing through this oil-charged material and through the material in the chamber 3 is deprived of its greasy impurities which it carries in suspension, and which otherwise would tend to clog the meter or burners.

The device is susceptible of modification in various ways by the skilled mechanic. It may be applied to the gas-pipe on either side of the meter, but is preferably applied thereto so that the gas shall pass through it before passing through the meter.

I claim—

1. A gas carbureting and purifying device comprising a chamber adapted to contain and containing a liquid carbureting and cleaning agent in the lower part thereof, a body of loose material above the cleaning agent, a tube having perforations in its sides and extending upwardly from the chamber into the loose material, a wick located in said tube extending down into the liquid agent, and a gas-inlet and a gas-outlet pipe, substantially as and for the purposes described.

2. A gas carbureting and purifying device comprising a chamber adapted to contain and containing a liquid carbureting and cleaning agent in the lower part thereof, a body of loose material above the cleaning agent, a wick extending up from the cleaning agent into said loose material, a second chamber containing loose material and connected with the first-named chamber, a gas-inlet pipe entering one of said chambers, and a gas-outlet pipe leading from the other chamber, substantially as and for the purposes described.

In testimony whereof I have hereunto set my hand this 16th day of May, A. D. 1891.

GEO. W. WEAVER.

Witnesses:

W. B. CORWIN,
H. M. CORWIN.