

No. 666,483.

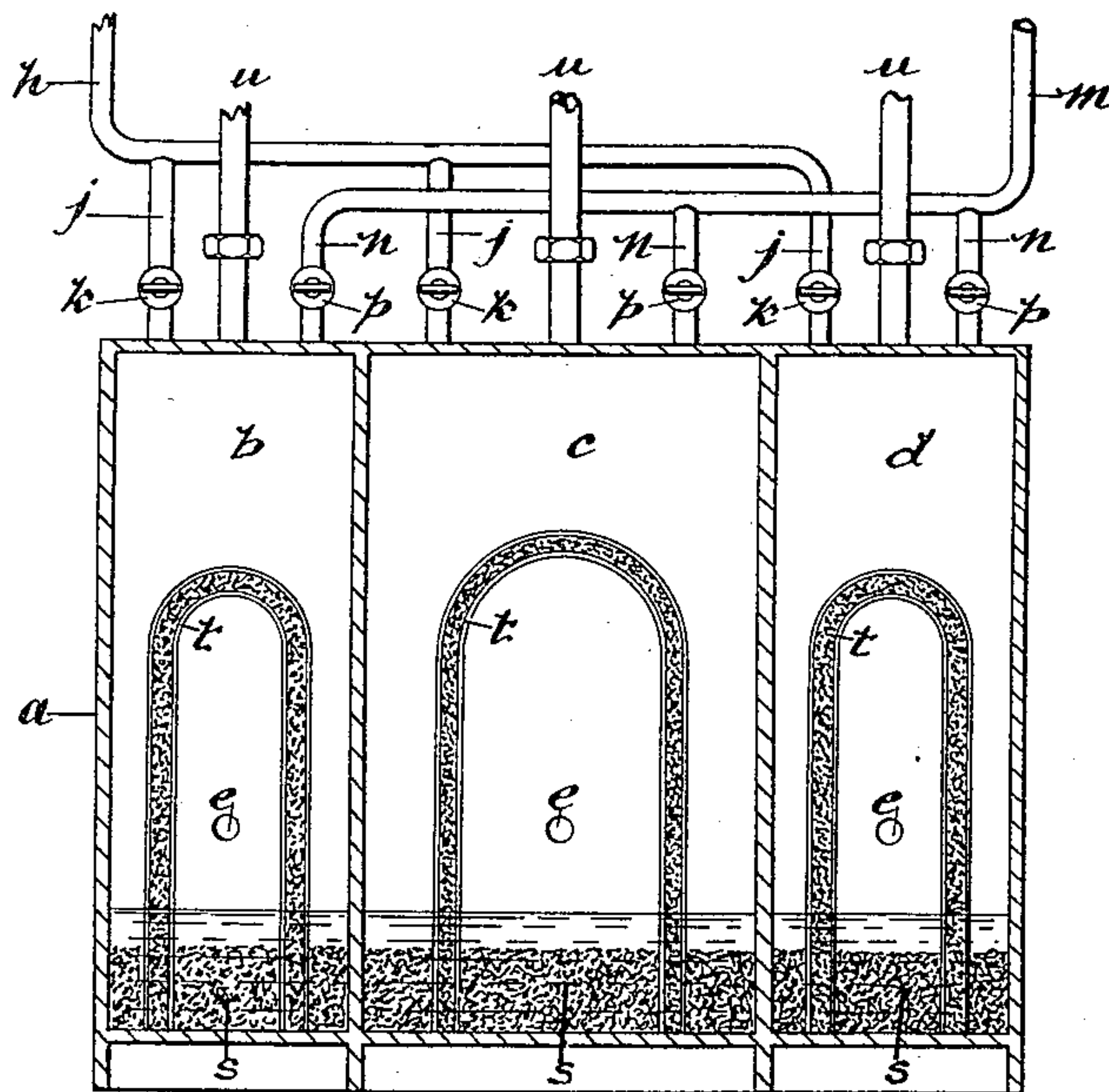
Patented Jan. 22, 1901.

J. WILKINSON.  
CARBURETER.

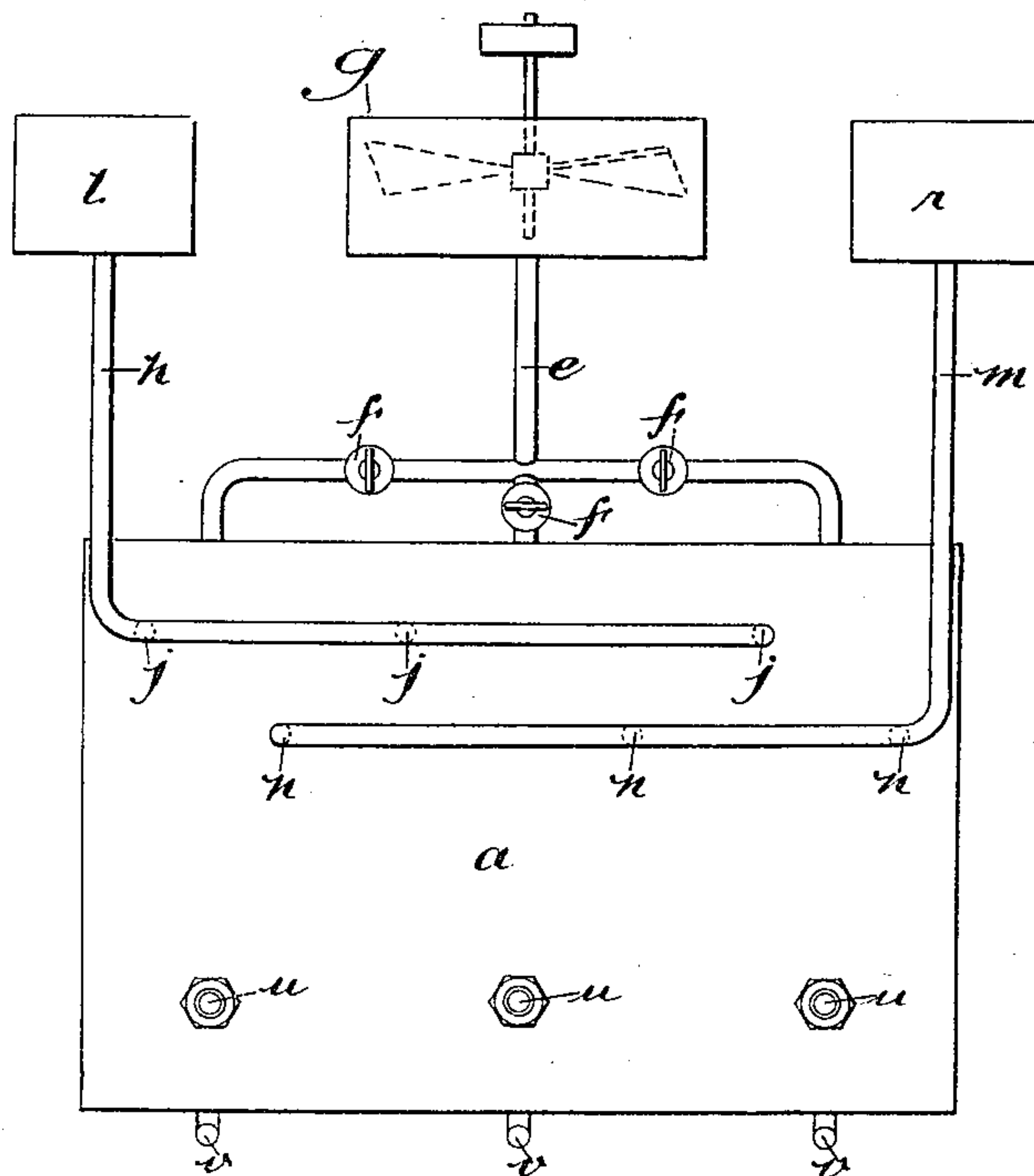
(Application filed May 11, 1900.)

(No Model.)

*Fig. 1.*



*Fig. 2.*



Witnesses:-

Benjamin Clark

Charles H. Briggs.

Inventor:

Joseph Wilkinson.

per: E. Eaton.

His Attorney.

# UNITED STATES PATENT OFFICE.

JOSEPH WILKINSON, OF BURTON-IN-LONSDALE, ENGLAND, ASSIGNOR TO  
THE ATMOSPHERIC GAS COMPANY, LIMITED, OF LEEDS, ENGLAND.

## CARBURETER.

SPECIFICATION forming part of Letters Patent No. 666,483, dated January 22, 1901.

Application filed May 11, 1900. Serial No. 16,348. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH WILKINSON, a subject of the Queen of Great Britain, and a resident of Burton-in-Lonsdale, in the county of York, England, have invented certain new and useful Improvements in Carbureters, (for which I have applied for a patent in Great Britain, No. 20,690, dated October 16, 1899,) of which the following is a full, clear, and exact specification.

The object of my invention is to provide in one apparatus a means of producing light, heat, or power from mixture of benzoline, paraffin, or other suitable volatile oils. For this purpose I employ a vessel divided vertically into three chambers or compartments, the central one being preferably for the gas used for lighting purposes and the compartments at each side containing, respectively, the gases used for heat and power, which gases require a greater proportion of paraffin.

For purposes of illustration I will now refer to the annexed drawings, in which—

Figure 1 is a sectional elevation of my improved apparatus or gas-generator. Fig. 2 is a plan of same.

*a* is the vessel, divided vertically into three chambers or compartments *b*, *c*, and *d*. A branched pipe *e*, with controlling taps or valves *f f f*, is connected to each chamber from an air-supply fan *g*, and separate pipes are provided for supplying the various oils from their respective cisterns. The pipe *h*, with branches *j j j* and controlling-valves *k k k*, connects each chamber to the paraffin-supply cistern *l*, a similar pipe *m*, with branches *n n n* and valves *p p p*, connecting the chambers to the benzoline-supply cistern *r*, so that each chamber may be kept supplied with oils mixed in any desired proportions. A gage *v* is also provided in each chamber to indicate the height of liquid within the chamber.

Each of the chambers or compartments *b c d* is partially filled by a layer *s* of cotton-wool or other absorbent material and has also a double arch *t* of open wirework, this arch extending the whole length of the chamber and being

also packed or filled with the absorbent material.

An outlet-pipe *u* is provided in each chamber, with suitable regulating taps or valves for delivery of the gas as required.

The air from the fan is delivered within the archway *t* and above the level of the liquid in the chamber, so as to drive or carry along with it through the saturated absorbent arch a sufficient quantity of the oil-vapor. The mixture of air and oil-vapors after passing through the arch is ready for use and passes to the delivery-pipe.

When a greater quantity of gas is required from any particular chamber or from all the chambers, heat may be applied, preferably by a burner or burners placed beneath the vessel *a*, and the speed of the fan *g* may be regulated accordingly.

If desired, the arch *t* may be dispensed with. In this case the air-inlet *e* is placed below the level of the liquid or of the saturated layer *s*.

The gases used for producing heat or power are perfectly smokeless and are applicable for gas-engines, motor-cars, and for general purposes.

The gas produced for heating purposes is particularly applicable for gasing silk and other fibers and also for soldering metals.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

In a carbureter the combination of a chamber divided into several compartments containing an absorbent, suitable supply-tanks for containing paraffin-oil and naphtha, valve connections between the supply-tanks and the several compartments, means for supplying air to the compartments and means for drawing off gas from the compartments.

In testimony that I claim the foregoing I have hereunto set my hand this 25th day of April, 1900.

JOSEPH WILKINSON.

Witnesses:

JAMES FLEMING,  
WILLIAM JOHN WEEKS.