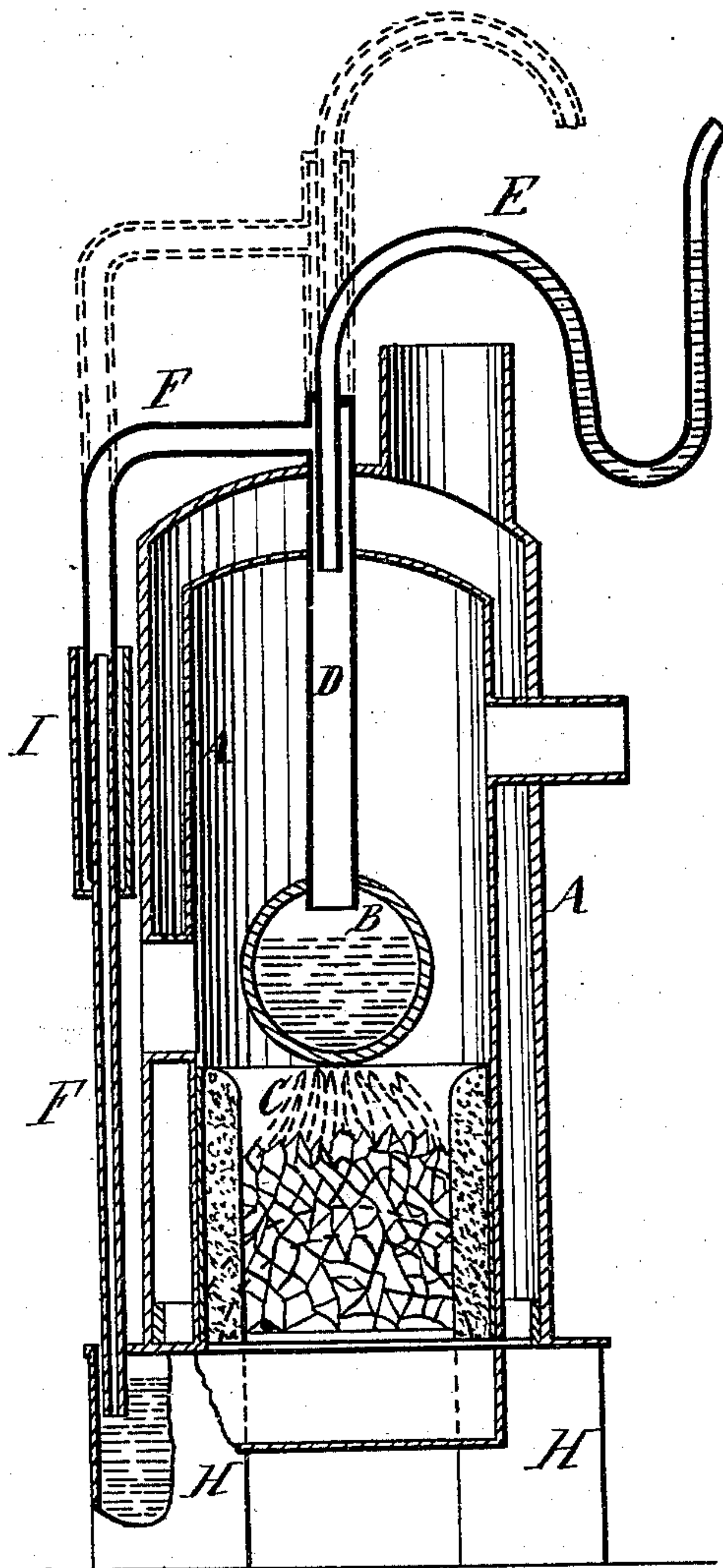


J. C. CLAPP.

Gas Retort.

No. 66,676.

Patented July 16, 1867.



Witnesses:

*Jay Heyatt*  
*Louis Freier*

Inventor:

*John C. Clapp*  
*by J. Fraser & Co*  
*Attys*

# United States Patent Office.

JOHN C. CLAPP, OF HOMER, NEW YORK.

*Letters Patent No. 66,676, dated July 16, 1867.*

## IMPROVED APPARATUS FOR THE MANUFACTURE OF GAS.

The Schedule referred to in these Letters Patent and making part of the same.

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JOHN C. CLAPP, of Homer, in the county of Cortland, and State of New York, have invented certain new and useful improvements in Apparatus for the Manufacture of Gas; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawing, which represents a central vertical section of my improvement.

My invention is designed for use in single families or buildings, whereby gas light can be supplied to all requiring the same, at a trifling expense, however remote they may be from towns which are supplied with it from a general manufactory in the ordinary manner.

The invention consists in the arrangement and use within a common stove of a retort for the distillation of gas, especially that designed for illumination; in the special manner of arranging the same, whereby the retort can be readily elevated to the top and colder portion of the stove when its use is not required; and in combination therewith the arrangement of the purifying vessels under the stove.

In the drawings A represents a stove, which may be of any ordinary construction, and B a retort, arranged therein above the fire-pot C. D is a pipe, ascending from the retort through a suitable opening in the top of the stove. E is the feed pipe, opening into the top of D, as shown, and connecting with the reservoir containing the oil, or other material to be distilled, which may be situated in the same or any other apartment, as most convenient. F is the gas pipe, into which the gas from near the top of pipe D escapes, and by which it is conducted (preferably) to the purifying vessel or vessels H H, constructed and arranged under the base of the stove, and forming a support therefor. These vessels or compartments may be formed at each corner, as shown, with the base of the stove resting thereon, with pipes communicating from one to the other, as shown in dotted lines, so that the gas may pass through two or more of them if required before being conducted to the gasometer. The compartments H are partially filled with any of the ordinary solutions or mixtures that are employed for purification. When the generator B is not required to be used it is elevated to the top of the stove, (shown in red lines,) the pipe D sliding through the opening in the top of the stove, and the gas pipe F, being constructed with a suitable sliding joint, as represented at I, with a liquid packing, or in any other suitable manner that will allow the necessary adjustment of the upper portion of the pipe. This removes the retort to the comparatively cool portion of the stove, where the heat is insufficient for distillation. The retort may be constructed in any suitable manner which may vary to adapt it to the different substances that may be required to be distilled, although it is designed more especially for oils, and it may be provided with any suitable means for removing the residuum therefrom. The apparatus is designed to be connected with a gasometer, in which the gas that is distilled during the day when the stove is in use for the ordinary purposes of warming, &c., may accumulate for consumption during the evening. The use of my improvement makes gas light accessible to all, although they may reside in localities, such, for instance, as the country and small villages, where they could not be supplied with it from a general manufactory, and at a trifling expense compared with that required to manufacture it by means of a furnace designed for the special purpose alone. The amount of gas required for illumination at night can be readily distilled during the day and evening without the use of any additional fuel. The apparatus is simple, and is mostly concealed within the stove. The arrangement of the purifying vessel or vessels under the stove economizes space that is usually unoccupied.

What I claim as my invention, and desire to secure by Letters Patent, is—

The employment of a retort within a common stove for the distillation of gas, substantially as set forth.

I also claim the special combination and arrangement of the retort B, pipes D, E, and F, and sliding joint I, with the stove A, whereby the retort may be elevated to the top of the stove when not required for use, substantially in the manner and for the purpose specified.

I also claim the arrangement of the purifying vessel or vessels H, under the stove, in combination with the retort B, and connecting pipes, substantially as and for the purpose described.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JOHN C. CLAPP.

Witnesses:

JAY HYATT,

ALBERT HAIGHT.