

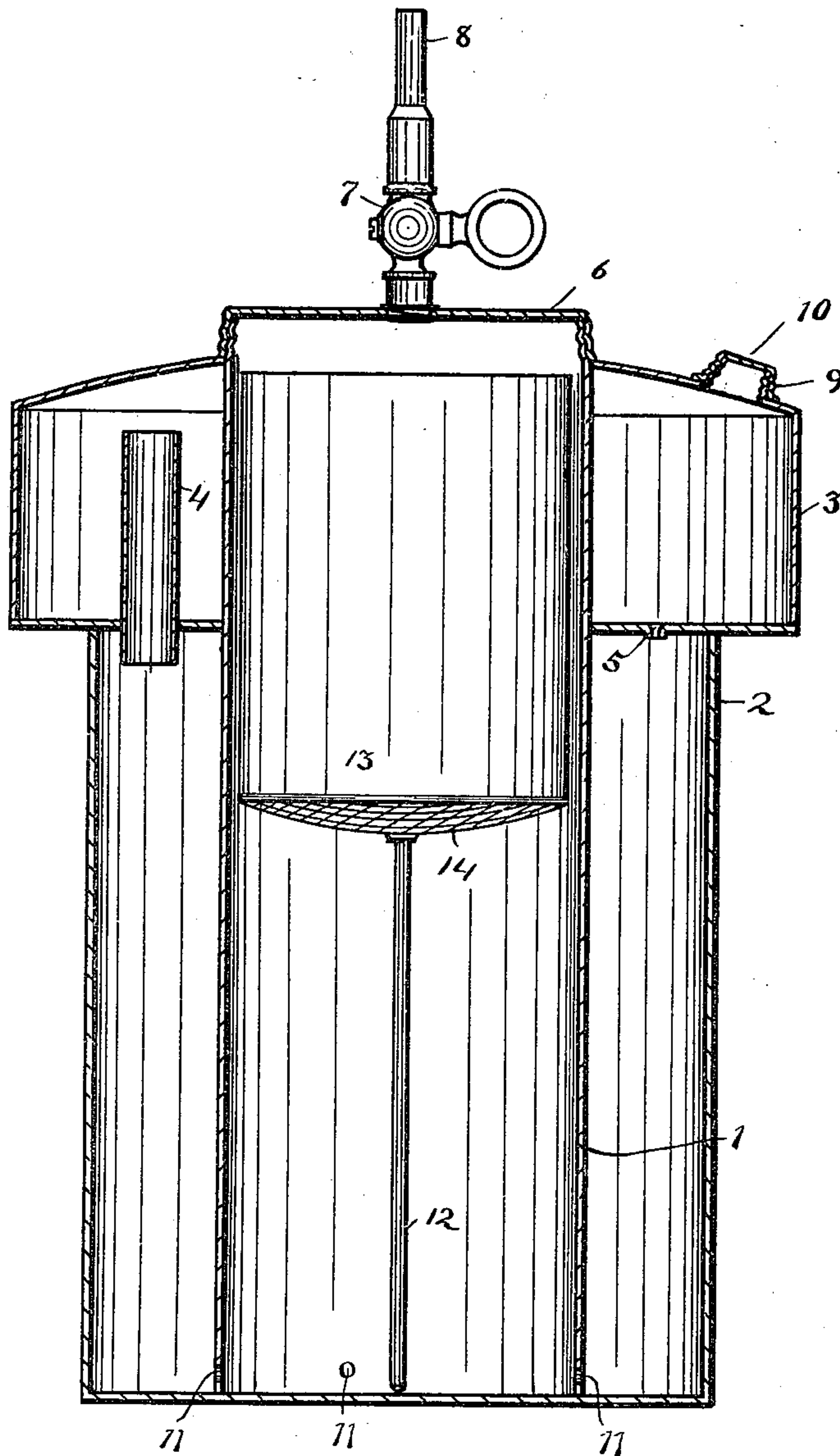
No. 667,774.

Patented Feb. 12, 1901.

J. J. HENDLER.
ACETYLENE LAMP.

(Application filed Oct. 2, 1899. Renewed July 11, 1900.)

(No Model.)



WITNESSES:

John J. Hendler INVENTOR

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UNITED STATES PATENT OFFICE.

JOHN J. HENDLER, OF FORT WAYNE, INDIANA, ASSIGNOR OF ONE-HALF
TO EDWARD KING REEVES, OF KANSAS CITY, MISSOURI.

ACETYLENE-LAMP.

SPECIFICATION forming part of Letters Patent No. 667,774, dated February 12, 1901.

Application filed October 2, 1899. Renewed July 11, 1900. Serial No. 23,263. (No model.)

To all whom it may concern:

Be it known that I, JOHN J. HENDLER, a citizen of the United States, residing at Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Acetylene-Lamps; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing, and to the figures of reference marked thereon, which forms a part of this specification.

My invention relates to improvements in acetylene-gas lamps wherein the generating fluid is driven from contact with the charge of carbid by the gas-pressure within the generating-chamber; and the object of my improvement is to afford automatic means for regulating the generation of gas.

I accomplish my object by the construction illustrated in the accompanying drawing, which is a vertical central section of my generator.

The generating-compartment consists of a vertical cylinder 1, which is closed at its top by a removable screw-cover 6 and has a number of small openings 11 11 at its bottom. The lower portion of the cylinder 1 is contained within the vertical tank 2, the bottom of which closes the end of said cylinder.

Upon the top of the tank 2 and encircling the upper portion of the cylinder 1 is the reservoir 3. A tube 4 of ample dimensions extends upward within the reservoir 3 and protrudes through its bottom and enters the tank 2. A small opening 5 leads from the bottom of the reservoir into the top of the tank 2. The reservoir 3 has a screw-cap 9 mounted upon its top, which cap is provided with a vent 10. The screw-cover 6 is surmounted by a gas-cock 7 and burner 8, which forms the outlet for the generating-compartment.

Within the upper portion of the cylinder 1 is arranged the carbid-containing basket 13, which is provided with a gauze bottom 14. The said basket may be held in place by various means; but I have shown the basket supported upon a vertical standard 12, which is secured to said basket and rests its lower end upon the bottom of the tank 2.

In operation the basket is charged with cal-

cium carbid, and a quantity of water is placed in the reservoir 3 by removing the cap 9. The water passes from the reservoir through the small opening 5 into the tank 2 and from thence into the cylinder 1 until the water rises and submerges the lower end of the basket 13 and the carbid contained therein. The resulting formation of gas causes pressure within the cylinder 1, which forces the water to descend in said cylinder and pass upward in the tank 2, from whence it is discharged through the tube 4 into the reservoir 3. As the gas in the cylinder is discharged through the cock 7 and burner 8 the water gravitates gradually through the opening 5, and the operation is repeated until the charge of carbid is exhausted.

The utility of this device is obvious. By employing lamps of this construction the use of the customary piping is obviated.

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

1. In an acetylene-lamp, a fluid-containing tank arranged about the lower part of a generating-compartment; communicating openings leading from the lower end of said compartment into said tank; a reservoir arranged about the upper part of said compartment; an open tube leading from the upper part of said tank, and opening into the upper part of said reservoir; a small opening 5 leading from the bottom of said reservoir into the top of said tank; and a carbid-containing basket supported within said generating-compartment, substantially as shown and described.

2. In an acetylene-lamp, a reservoir arranged over a tank; a tube leading from said tank and opening into said reservoir near its top, and through which the fluid overflowing said tank may enter said reservoir; and an opening, smaller than the opening of said tube, leading from the bottom of said reservoir, and through which the fluid in said reservoir may gravitate into said tank, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN J. HENDLER.

Witnesses:

GEO. A. STEWART,
JOSEPH J. DONEGAN.