

A. H. MOLLAM, JR.
 ACETYLENE GAS LAMP.
 APPLICATION FILED DEC. 31, 1910.

1,007,374.

Patented Oct. 31, 1911.

Fig. 1.

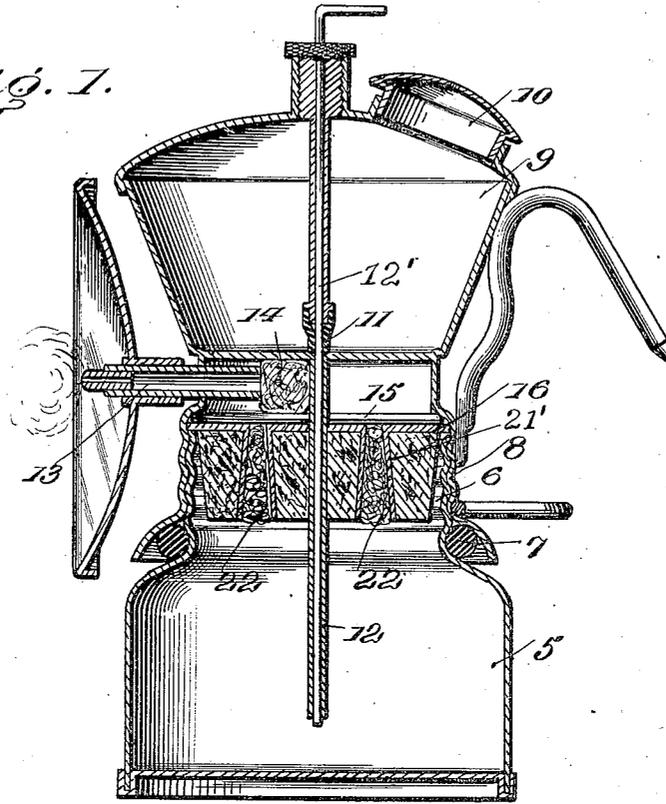


Fig. 2.

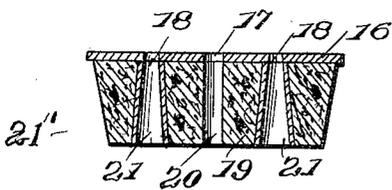
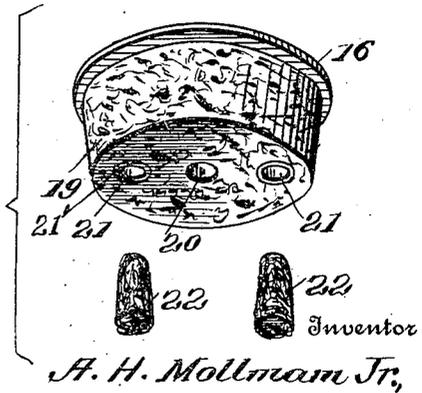


Fig. 3.

Witnesses
W. A. Williams.
H. E. Klein.

By *Brown & Phelps*
 Attorneys

UNITED STATES PATENT OFFICE.

ANTON H. MOLLAM, JR., OF HILLSBORO, ILLINOIS.

ACETYLENE-GAS LAMP.

1.007.374.

Specification of Letters Patent. Patented Oct. 31, 1911.

Application filed December 31, 1910. Serial No. 600,345.

To all whom it may concern:

Be it known that I, ANTON H. MOLLAM, Jr., citizen of the United States, residing at Hillsboro, in the county of Montgomery and State of Illinois, have invented certain new and useful Improvements in Acetylene-Gas Lamps, of which the following is a specification.

My invention relates to certain new and useful improvements in acetylene lamps, and the object of my invention is to so improve the construction as to cause the same to burn longer and steadier than has heretofore been possible on a given charge of calcium carbide, and also to greatly decrease the liability of the lamp becoming clogged.

With these and other objects in view my invention consists in certain constructions, combinations and arrangements of parts, the preferred form of which will be first described in connection with the accompanying drawings, and then the invention particularly pointed out in the appended claims.

Referring to the drawings wherein the same part is designated by the same reference numeral wherever it occurs, Figure 1 is a central longitudinal section of an acetylene lamp in which my improvements are embodied; Fig. 2 is a perspective view of my improvement detached from the lamp, and Fig. 3 is a central cross section of Fig. 2.

5 designates a receptacle for containing calcium carbide which, in the form of my invention shown, is provided with a screw-threaded neck 6 surrounded by a rubber gasket 7 adapted to screw into a cap 8, on which is mounted the water reservoir 9, having a filler opening 10 and a water controlling valve 11, adapted to control the flow of water from the water reservoir to the carbide receptacle.

12 is a pipe extending from the water reservoir into the carbide receptacle and through which the water passes to the bottom of the receptacle and 12' is a rod loosely extending through the valve 11 and pipe 12 by means of which the carbide may be agitated.

13 is the burner which extends out from the top of the cap 8, and the inner end of the burner pipe is covered by a block of felt, or similar substance 14, held in place by a cross wire 15.

All these parts so far described are of a general form of burner, and consequently form no part of my invention.

In the use of a lamp of the above-referred to type it has been found that after a few days' use the felt 14 covering the end of the burner tube would become wet and clogged, thus preventing the flow of gas and rendering the lamp inoperative. Furthermore the particles of carbide will coat the felt and work in around the inner end of the burner tube, which increases the tendency of the tube to clog up. By my invention I obviate this difficulty and cause a lamp of the character thus described to burn continuously without clogging.

16 designates a metal plate provided with a central perforation 17, through which the water pipe 12 extends. The plate is also provided with the perforations 18.

19 designates a section of cork secured to the under side of the plate 16, said cork being provided with the central perforation 20 in line with the perforation 17 of the plate, and the perforations 21 in line with the perforations 18. Preferably and as shown the perforations 21 are conical and provided with a bushing 21' which may be either integral with the plate 16, as shown in Fig. 1, or separate therefrom, as shown in Fig. 3, and in the perforations 21 I place a mass of cotton, or the like 22, so that gas passing up to the burner must pass through the mass of cotton. The cork fits snugly into the mouth of the carbide receptacle and closes the same. It prevents dampness passing up to the felt and consequently the felt cannot become clogged. Should the small masses of cotton in the openings 21 become clogged they can be easily and quickly removed and replaced. It is found in practice, however, that these small masses of cotton do not clog up the way the block of felt in front of the gas tube does when a lamp is not provided with my invention.

I realize that considerable variation is possible in the details of construction and arrangement of parts without departing from the spirit of my invention, and I therefore do not intend to limit myself to the specific form shown and described.

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

1. The combination with an acetylene

lamp which comprises a carbid reservoir, a cap for the reservoir, a water receptacle mounted on the cap, a burner extending from the cap and a block of fibrous material covering the inner end of the burner, of a metallic plate, a section of cork secured to the under side of the plate and adapted to close the opening of the carbid reservoir with the plate resting upon the edge of the opening of the reservoir, a plurality of conical openings through the cork and plate for the passage of gas from the reservoir to the burner and fibrous material loosely packed in said openings.

2. The combination with an acetylene lamp which comprises a carbid reservoir, a cap for the reservoir, a water receptacle mounted on the cap, a burner extending

from the cap and a block of fibrous material covering the inner end of the burner, of a metallic plate, a section of cork secured to the under side of the plate and adapted to close the opening of the carbid reservoir with the plate resting upon the edge of the opening of the reservoir, a plurality of conical openings through the cork and plate for the passage of gas from the reservoir to the burner, bushings in said conical openings and fibrous material loosely packed in said openings.

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

ANTON H. MOLLAM, JR.

Witnesses:

DAVID ARCHIBALD,
JOHN MOLLAM.