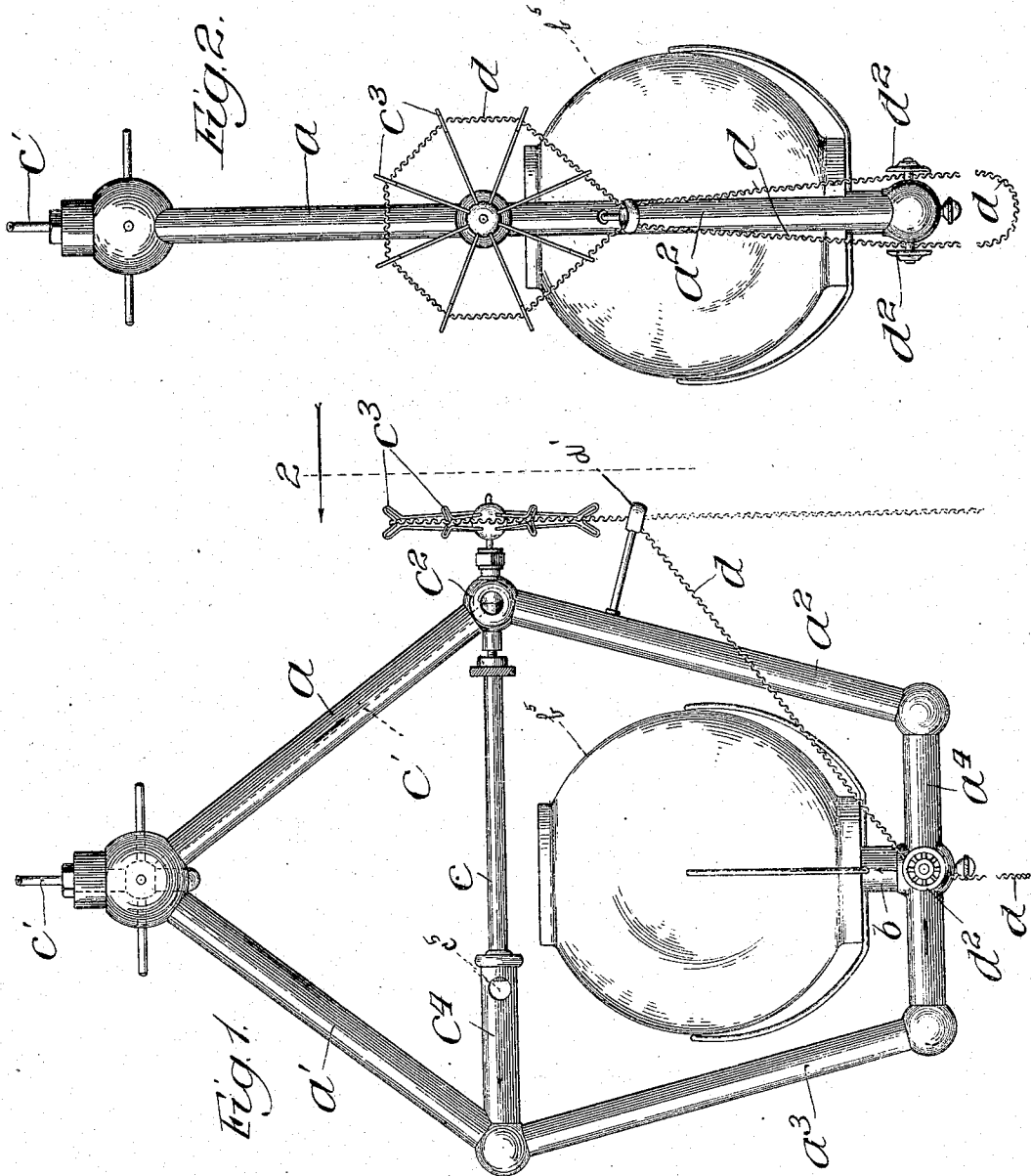


W. H. THAYER.
LAMP.
APPLICATION FILED JUNE 22, 1906.

937,115.

Patented Oct. 19, 1909.



Witnesses:
John Enderes

Inventor:
William H. Thayer
By Dyrenforth, Dyrenforth, Lee & Niles
Attys.

UNITED STATES PATENT OFFICE.

WILLIAM H. THAYER, OF CHICAGO, ILLINOIS.

LAMP.

937,115.

Specification of Letters Patent.

Patented Oct. 19, 1909.

Application filed June 22, 1906. Serial No. 322,852.

To all whom it may concern:

Be it known that I, WILLIAM H. THAYER, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Lamps, of which the following is a specification.

My invention relates particularly to self-generating gas lamps which operate to generate their own gas supply from hydro-carbon and other volatile liquids.

My primary object is to provide improved means for regulating the feed of oil into the retorts of lamps of this character.

The invention is illustrated in its preferred embodiment in the accompanying drawing, in which—

Figure 1 represents an elevational view of a lamp equipped with my improvements; and Fig. 2, a view of the same taken as indicated at line 2 of Fig. 1.

The general construction of the lamp illustrated is well understood. It comprises a frame composed of tubular members a , a^1 , a^2 , a^3 and a^4 ; a burner b supported on the member a^4 and equipped with a globe b^5 ; and a retort c receiving its oil from a pipe c^1 controlled by a valve c^2 , whose stem projects horizontally beyond the frame and is equipped with a vertical wheel c^3 . The members a , a^1 diverge downwardly and are joined to the upper ends of the members a^2 , a^3 which converge somewhat downwardly and have their lower ends connected by the bottom member a^4 . The oil-tube c^1 extends, in the usual manner, through the tubular member a , and connects in a well-known manner with the valve c^2 . The gas, as generated, passes from the retort into a tubular member c^4 , and thence through the member a^3 and a portion of the member a^4 to the burner b , air being drawn in at the opening c^5 of the member c^4 adjacent to the point of injection of the gas.

It will be understood that the valve c^2 may be operated by turning its stem through the medium of the wheel c^3 . The wheel c^3 is equipped with an endless chain d which passes about the wheel, thence through a guide-ring d^1 supported on a stem projecting at right angles to the frame-member a^2 , the members of the chain then separating and passing over guides d^2 projecting laterally from the central portion of the bottom member a^4 of the lamp. It will now be understood that were force to be applied to the chain in a direct line beneath the wheel c^3 a

turning moment would result, tending to swing the lamp-frame in its own plane; and, as it is customary to suspend the lamp through the medium of the vertical portion of the pipe c^1 or a pipe co-axial therewith, the desirability of obviating this difficulty is obvious. In the present construction, it will be understood, any turning moment developed by downward force applied to either member of the chain is counteracted by an opposed turning moment exerted through the guide d^2 , so that equilibrium is maintained. The form of the guides d^2 is unimportant. They have been shown as headed studs projecting laterally from the plane of the lamp-frame, so that channels are afforded between the stud-heads and the member a^4 for the chains to run in. While it is preferred to locate the guides d^2 at the base of and in the plane of the vertical axis of the frame, this is not of vital importance.

What I regard as new, and desire to secure by Letters Patent, is:

1. The combination with a suspended lamp-frame equipped with a valve having a stem, of a flexible member connected with and serving to operate the valve through the medium of said stem, and a guide for said flexible member connected with said frame out of alinement with the connection between said flexible member and said stem and in position to develop a turning moment opposed to the turning moment exerted on the valve-stem, thereby to maintain the equilibrium of the lamp.

2. The combination with a suspended lamp-frame equipped with a valve having a stem projecting from the frame and provided with an actuating member located at a distance from the line of suspension of said frame, of a flexible member connected with said actuating member, and a guide connected with the base-portion of said frame out of alinement with the plane of said actuating member and receiving said flexible member, whereby counteracting turning moments are developed and equilibrium maintained.

3. The combination with a lamp-frame adapted at its upper portion for suspension, and a valve having a stem projecting from the frame in the plane thereof and equipped with a wheel, of a flexible member connected with said wheel, a frame supported guide for said flexible member adjacent to said wheel, and a guide for said flexible member

projecting laterally from the base of the frame near the center thereof, for the purpose set forth.

4. The combination with a lamp-frame, a
5 retort, an oil pipe, a valve controlling the admission of oil to the retort and having a horizontal stem equipped with a wheel, a guide immediately beneath the wheel, a burner supported on the frame beneath the
10 retort, guides projecting laterally from the

plane of the frame at the base of the frame, and a flexible member connected with said wheel and passing through said first-named guide and having its members separated and extending through said second-named guides, 15 for the purpose set forth.

WILLIAM H. THAYER.

Witnesses:

A. U. THORIEN,
J. H. LANDES.