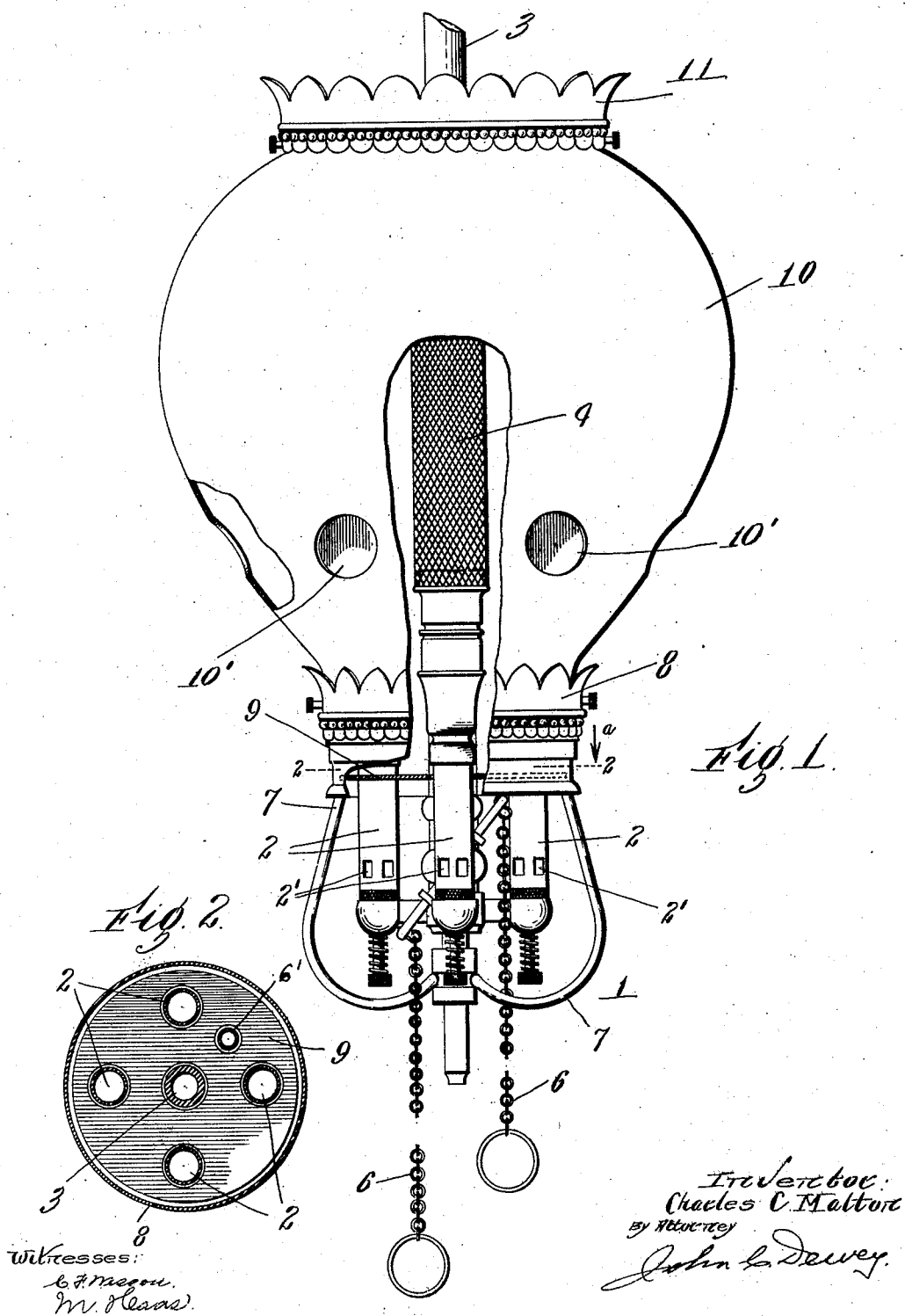


No. 845,963.

PATENTED MAR. 5, 1907.

G. C. MALTON.  
LAMP.

APPLICATION FILED JULY 3, 1905.



# UNITED STATES PATENT OFFICE.

CHARLES C. MALTON, OF WORCESTER, MASSACHUSETTS.

## LAMP.

No. 845,963.

Specification of Letters Patent.

Patented March 5, 1907.

Application filed July 3, 1905. Serial No. 268,050.

*To all whom it may concern:*

Be it known that I, CHARLES C. MALTON, a subject of King Edward VII of England, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Lamps, of which the following is a specification.

My invention relates to a lamp, and more particularly to a gas-lamp of a well-known type having a central gas-supply pipe extending down between the burners, and two or more burners, each burner provided with a mantle, and a globe or shade inclosing the burners and mantles.

In gas-lamps of the type referred to the gas-supply pipe passes down through the central portion of the lamp to the lower end of the burners. The globe inclosing the burners and the mantles is of uniform oval or rounded or pear shape and is supported at its lower end on a metal rim attached to the frame of the lamp and has an opening therethrough for the passage of air into and through the lower end of the globe and out of the upper end, which also has an opening therethrough. In gas-lamps of the type referred to there are no openings through the sides of the globe or above the lower end thereof.

The object of my invention is to improve upon the construction of gas-lamps of the type referred to and to obtain better and more satisfactory light and use less gas.

In my improved construction I provide a disk or plate at the lower end of the globe which has only perforations or holes therethrough for the burners and for the central gas-supply pipe. I also provide a series of holes through the globe itself, above the lower end thereof, and preferably in substantially the same horizontal plane as the lower ends of the mantles.

In my improved construction the air passing up through the burners within the mantles is mixed with the air passing onto the outer surface of the mantles through the openings in the globe, thus obtaining more perfect combustion and a better light.

My invention consists in certain novel features of construction of my improvements, as will be hereinafter fully described.

Referring to the drawing, Figure 1 shows a gas-lamp of the type referred to, partially in section and some parts broken away; and Fig. 2 is a cross-section taken at a point in-

dicated by line 2 2, Fig. 1, looking in the direction of arrow *a*, same figure.

In the accompanying drawings, 1 is a gas-lamp of a well-known type, having in this instance four burners 2, surrounding the central gas-supply pipe 3, and each burner provided with a mantle 4. There is a lighting-cock of ordinary construction operated by chains 6, and also a pilot-light burner 6'. The burners 2 are suitably supported on a metal frame 7, and upon the upper part of said frame 7 is mounted a metal rim 8 for the globe.

All of the above parts may be of the usual and well-known construction in gas-lamps of the type referred to.

I will now describe my improvements.

Extending within the globe-holding rim 8, at the lower part thereof, is a metal disk or plate 9, which only has perforations or holes therethrough for the burners 2 and 6' and the central gas-supply pipe 3. The disk or plate 9 extends just below the lower open end of the globe 10 and acts to close the lower open end of said globe. The globe 10, in this instance shown of oval or pear shape, is made of porcelain, glass, or other suitable material. Extending through the sides of the globe at the lower part thereof are a series of holes or perforations 10', which are preferably in substantially the same horizontal plane as the lower ends of the mantles 4. Upon the upper open end of the globe 10 in this instance is supported a metal ornamental rim 11.

By means of the plate or disk 9 the air is prevented from entering through the lower open end of the globe 10, and by means of the openings or perforations 10' in the globe 10 the air is allowed to enter through the globe itself and to circulate around the mantles 4. The air which enters through the openings or perforations 10' in the globe 10 is mixed with the air which enters through the openings 2' in the lower ends of the burners 2, and passes up within the mantles 4, and this mixture of air and the circulating of the air within and on the outside of the mantles 4 produces more perfect combustion and furnishes a better light.

It will be understood that the details of construction of my improvements may be varied, if desired. The same may be used in connection with lamps having mantles where kerosene is used instead of gas, and globes of different shape may be used.

Having thus described my invention, what

I claim as new, and desire to secure by Letters Patent, is—

1. In a lamp of the class described, the combination with two or more burners having mantles thereon, and a supply-pipe extending between the burners, of a globe or shade inclosing the mantles and having openings or perforations through the body thereof, a holding rim or collar for said shade and a disk or plate within said rim and so placed as to exclude air from the lower open end of said shade.

2. In a lamp of the class described, the combination with two or more burners having mantles thereon, and a supply-pipe extending between the burners, of a globe or shade inclosing the mantles and having openings or perforations through the body thereof, a holding rim or collar for said shade, said rim being adapted to receive within its upper end the lower end of the said shade, whereby said shade is supported, a metallic disk through which the aforesaid burners and supply-pipe pass, said disk being supported within said holding-rim below the lower end

of the said globe and in such position as to exclude air from the open lower end of the said shade.

3. In a lamp of the class described, the combination with two or more burners having mantles thereon, and a supply-pipe extending between the burners, of a globe or shade inclosing the mantles and having perforations or openings through the body thereof in substantially the same plane as the lower ends of the mantles, a holding-rim adapted to support the said shade, a suitable frame for supporting said rim, and a disk mounted within said holding-rim, and at a point below the open end of said globe in such position as to prevent air from entering the lower open end of the said globe, said disk having openings therethrough adapted for the insertion of the aforesaid burner and supply-pipes.

CHARLES C. MALTON.

Witnesses:

J. C. DEWEY,  
M. HAAS.