

No. 854,576.

PATENTED MAY 21, 1907.

W. B. GROVER.
LAMP BURNER.

APPLICATION FILED AUG. 11, 1906.

Fig. 1.

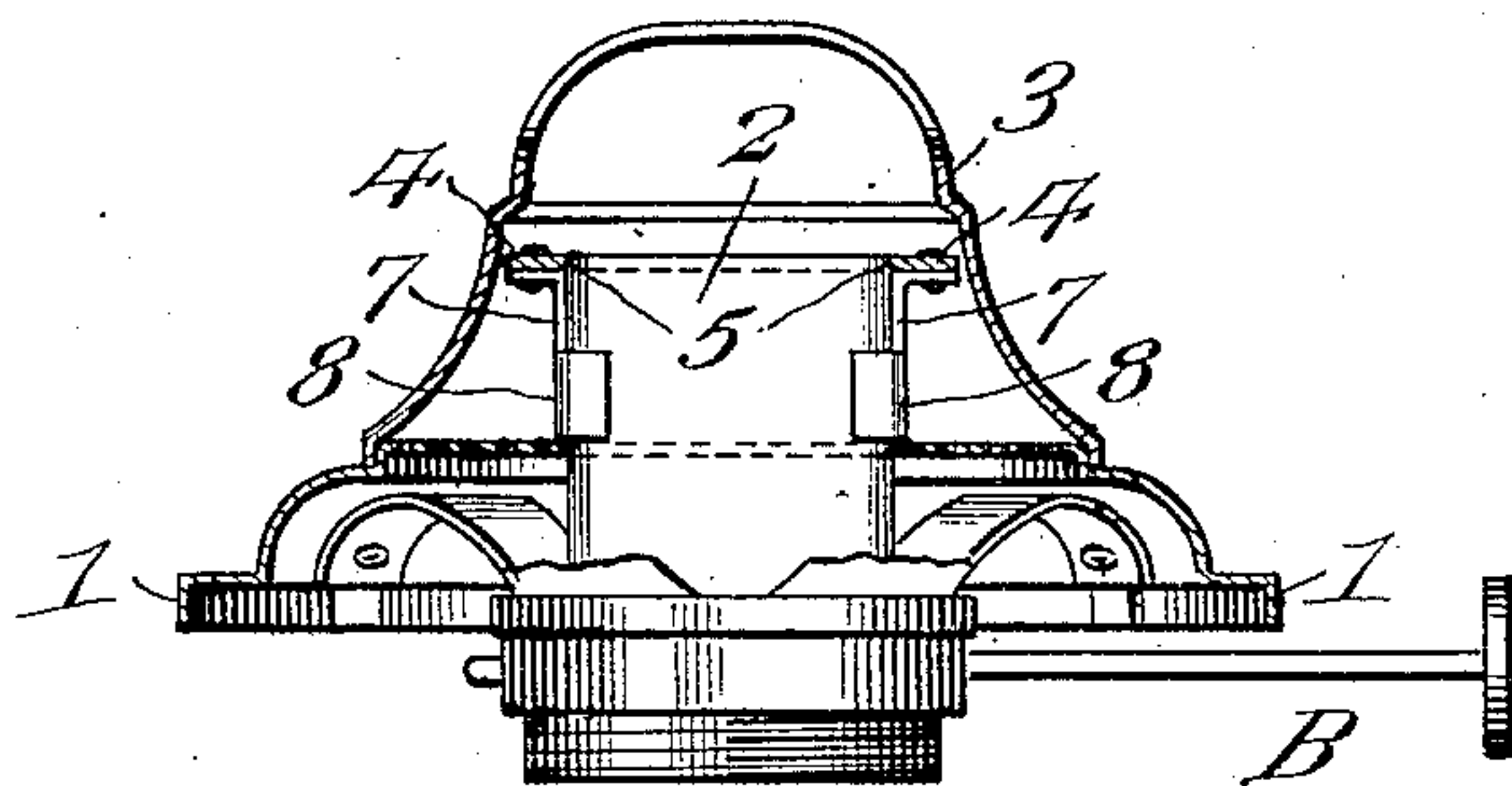


Fig. 2.

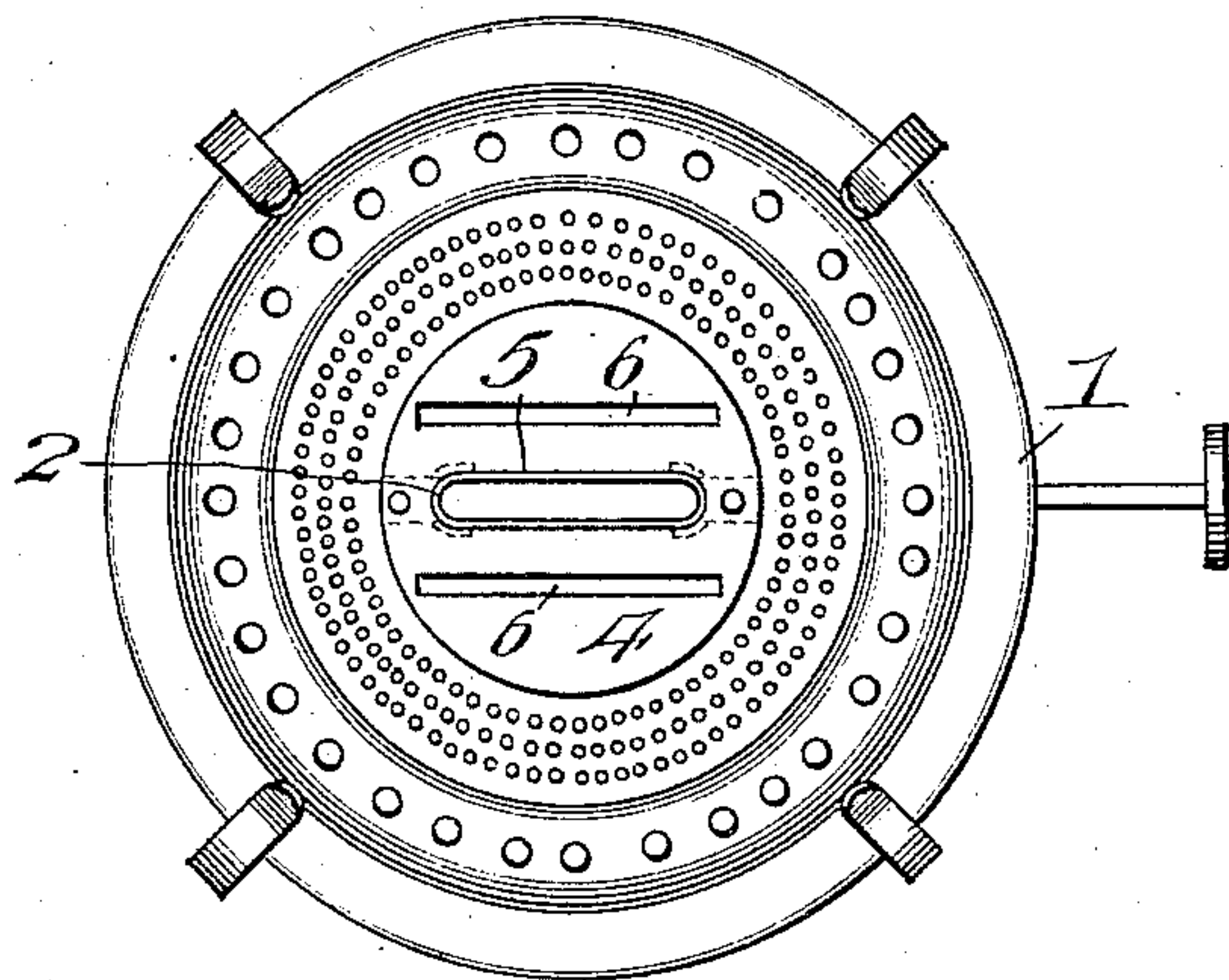
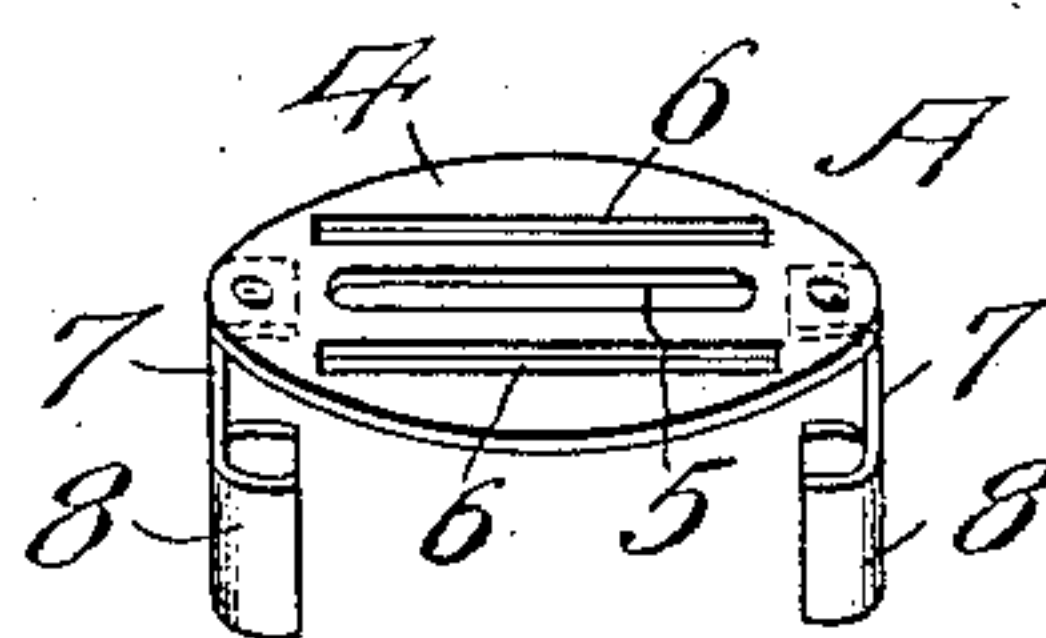


Fig. 3.



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UNITED STATES PATENT OFFICE.

WILLIAM B. GROVER, OF VINELAND, NEW JERSEY.

LAMP-BURNER.

No. 854,576.

Specification of Letters Patent.

Patented May 21, 1907.

Application filed August 11, 1906. Serial No. 330,173.

To all whom it may concern:

Be it known that I, WILLIAM B. GROVER, a citizen of the United States, residing at Vineland, in the county of Cumberland and State of New Jersey, have invented new and useful Improvements in Lamp-Burners, of which the following is a specification.

This invention relates to lamp burners, and the principal object of the invention is to regulate and control the supply of oxygen to the flame with a view of increasing the illuminating power of the burner.

A further object of the invention is to avoid overheating of the burner, thus lessening the danger of explosion.

Still further objects of the invention are to simplify and improve the construction and operation of this class of devices.

With these and other ends in view which will readily appear as the nature of the invention is better understood, the same consists in the improved construction and novel arrangement and combination of parts which will be hereinafter fully described and particularly pointed out in the claims.

In the accompanying drawings has been illustrated a simple and preferred form of the invention, it being, however, understood that no limitation is necessarily made to the precise structural details therein exhibited, but that changes, alterations and modifications within the scope of the invention may be resorted to when desired.

In the drawings: Figure 1 is a sectional elevation of a lamp burner having the invention applied thereto. Fig. 2 is a top plan view of the same, the dome or cap having been removed. Fig. 3 is a perspective view of the device constituting the invention detached from the burner.

Corresponding parts in the several figures are denoted by like characters of reference.

B designates an ordinary lamp burner of which 1 represents the base, 2 the wick tube and 3 the dome or cap which latter, in the customary manner is hingedly connected with the base.

A designates the improved attachment which consists of a plate or diaphragm 4 having a slot 5 adapted for engagement with the wick tube; the plate or diaphragm 4 is

provided with additional slots 6, 6 disposed on opposite sides of the central slot 5. Upon the under side of the plate 4, adjacent to the ends of the slot 5, are secured springs 7 having downturned ends or arms which are provided with lugs 8 adapted to engage the wick tube, as clearly shown in Fig. 1 of the drawings, thus serving to support the plate or diaphragm 4 adjustably in position upon the wick tube. The plate 4 is preferably disposed slightly below the upper extremity of the wick tube, as seen in Fig. 1, but it is obvious that it may be supported adjustably in various positions above or below the upper extremity of the wick tube, as may be found preferable.

The atmospheric air admitted into the burner through the perforated or apertured base 1 for the purpose of supporting combustion, will surround the wick tube beneath the plate or diaphragm 4 and will escape through the slots 6 of the latter to feed the flame. The amount of air supplied to the flame will be determined by the dimensions of the slots 6, the sizes of which will be suitably proportioned to the dimensions of the wick tube; by positioning the plate or diaphragm 4 suitably close to the upper extremity of the wick tube, the inflammable gases or vapors formed by the vaporization of the liquid fuel will rise some distance above the upper extremity of the wick tube before mingling with the atmospheric air to form an illuminating gas. The flame will thus be supported some distance above the upper extremity of the wick tube which latter is thus kept comparatively cool; and the atmospheric air will mingle with the gaseous vapors to form an illuminating gas that will burn with a flame of a brightness and intensity which greatly exceeds that produced in ordinary burners.

The improved device is simple in construction and may be produced at a very moderate expense; it is capable of being advantageously used in connection with any burner of ordinary construction.

Having thus described the invention what is claimed is:

The herein described lamp burner attachment consisting of a circular diaphragm of a size to fit the inner walls of the dome, said

diaphragm having a wick tube engaging slot
disposed centrally therein, and slots, one
upon each side of said wick tube engaging
slot, for the passage of air through said dia-
5 phragm, springs secured at opposite sides of
said diaphragm and extending downward
therefrom, said springs being provided with
inwardly extending U-shaped lugs for engag-

ing the wick tube adjustably, substantially
as described.

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

WILLIAM B. GROVER.

Witnesses:

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