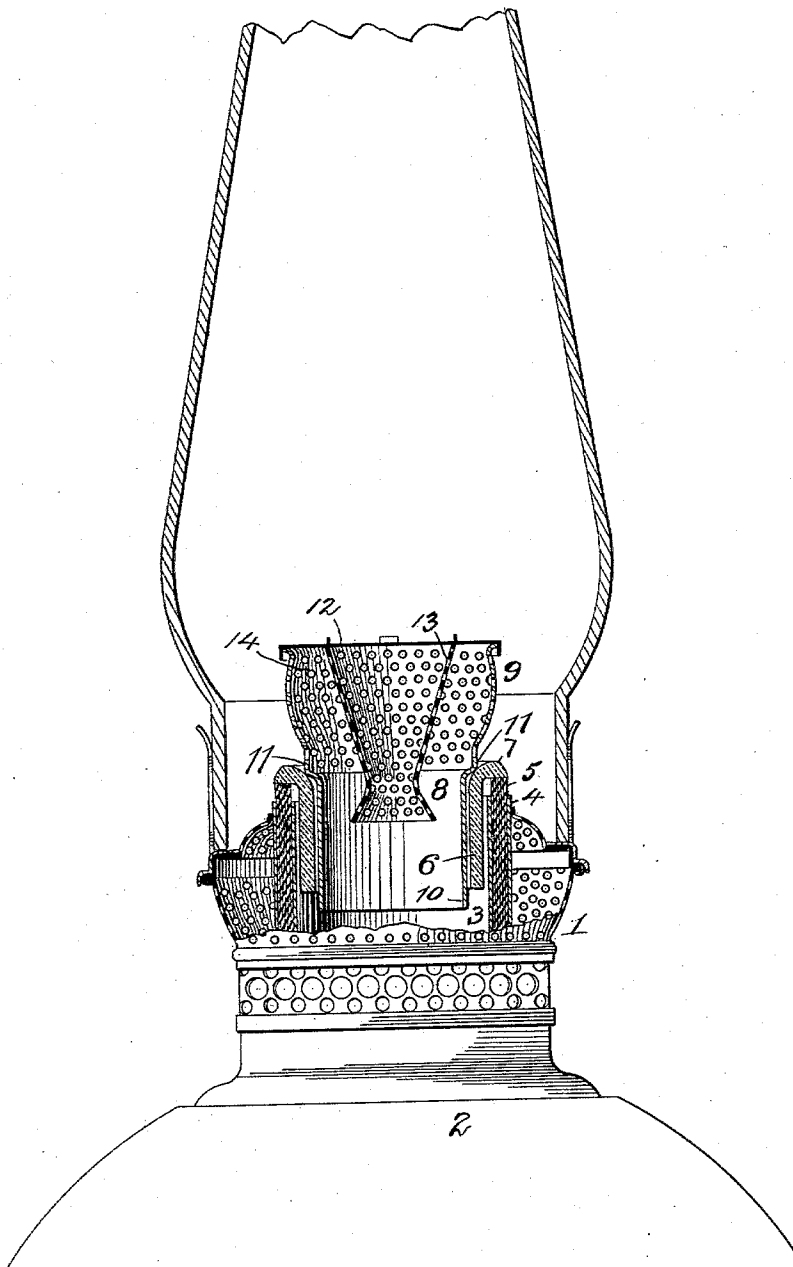


(No Model.)

S. B. MORSS.
LAMP BURNER.

Nó. 569,795.

Patented Oct. 20, 1896.



WITNESSES:

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STEPHEN B. MORSS, OF RAHWAY, NEW JERSEY, ASSIGNOR TO THE SOLAR MANUFACTURING COMPANY, OF NEW JERSEY.

LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 569,795, dated October 20, 1896.

Application filed October 2, 1895. Serial No. 564,366. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN B. MORSS, of Rahway, Union county, New Jersey, have invented certain new and useful Improvements in Lamp-Burners, of which the following is a specification.

The object of my invention is to provide a lamp-burner with a non-combustible wick-tip that will act in conjunction with a fibrous wick in supplying oil to a flame, whereby an even flame will be produced and trimming of the wick will be obviated, said wick-tip likewise serving as an extinguisher when the fibrous wick is turned, extinguishing the light and inclosing the hot vapors and preventing a smell.

The invention consists in the novel details of improvement and the combinations of parts, that will be more fully hereinafter set forth, and then pointed out in the claims.

Reference is to be had to the accompanying drawing, forming part hereof, which is a partly sectional side elevation of a lamp-burner provided with my improvements.

In the accompanying drawing the numeral 1 indicates the main outer perforated casing of a burner, which may be of suitable construction to fit in or on any desired lamp or fount 2 in well-known manner.

3 is a central air or draft tube, and 4 is an outer concentric tube, and in the space between said tubes the fibrous or cotton tubular wick 5 fits and slides up and down. Any suitable or well-known means may be employed for raising and lowering the wick 5, not necessary to be shown in this application.

6 is a tubular wick-tip having an annular outer flange 7, which is made porous or capillary, and preferably composed of hard-baked clay. The tubular body portion of this tip is smaller in diameter than the tube 3 and fits down in the latter, as shown, and the flange 7 overlies the tube 3 and rests upon the upper edge of the wick 5, as shown. As the wick 5 is raised and lowered it correspondingly raises and lowers the non-combustible wick-tip, and the wick 5 supplies oil to the flange 7, on the upper surface of which the flame burns as the oil passes from the wick 5 through the pores or capillary ducts of the flange 7. By this means the fibrous wicking

5 is protected from the flame, and as it does not consume trimming of the wick is obviated. If the wick 5 should be turned down below the tube 3, the flange 7 of the non-combustible wick will rest upon said tube ready to be again raised by the wick 5, in which position it will act as an extinguisher.

In order to supply the flame with an equal delivery of heated air at all times, whether the flame be high or low, I provide a perforated thimble or air-feeder 8, the upper portion 9 of which is suitably perforated, the lower tubular portion 10 of which thimble fits within the wick-tip 6, as shown. The thimble 8 has a suitable outer shoulder or flange 11, which rests upon the wick-tip 6, whereby the thimble is supported upon said tip so that the wick will raise and lower the thimble equally with it.

The perforations 9 in the thimble or air-feeder 8 are above the top of the wick, so as to supply heated air to the flame. 12 is a cover or cap on the thimble 8 to cause air to issue through the perforations 9. By this means whether the wick be raised or lowered the positions of the air-holes in the thimble will remain the same relatively to the wick, so as to supply the flame with an equal proportion of heated air at all times, whereby perfect combustion is always assured, so that if the wick should be turned low odor will be prevented.

In order to doubly heat the air that issues from the thimble 8 to the flame, I provide an inner perforated wall 13 within the thimble 8, through which part or all of the air passes and receives an initial heating before it issues from the perforations 9. I have shown the wall 13 in the form of a cone depending from the cover 12. The air rising into the tubular part of the thimble 8 passes into this cone, and as it issues from the perforations therein it becomes heated and enters the space or chamber 14 between the cone and the walls of the part 9 of the thimble, and is again heated as it issues through the perforations in the thimble. By this means improved combustion of the flame is produced.

Having now described my invention, what I claim is—

1. A combined wick-tip and extinguisher

comprising a rigid capillary or porous incombustible block or piece adapted to rest upon the top of a fibrous wick and having a greater horizontal cross-section than the wick so as to abut against the top of the wick-casing when the wick is lowered and substantially close the casing to act as an extinguisher, said piece being provided with a guide for directing its vertical movement, substantially as described.

2. The combination, with wick-casing tubes, and a fibrous wick therebetween, of a rigid capillary or porous incombustible wick-tip resting upon said wick when the latter is raised above the casing but arranged to rest upon the casing-tubes and substantially close the casing when the wick is lowered below the same, to act as an extinguisher, said wick-tip being provided with a guide to direct its vertical movement, substantially as described.

3. The combination, with inner and outer wick-casing tubes, and a fibrous wick therebetween, of a rigid capillary or porous incombustible wick-tip resting upon said wick when the latter is raised above the casing but ar-

ranged to rest upon the casing when the wick is lowered below the same, and having, nearer the center than the inner wick-casing tube, an annular shoulder, and a perforated thimble resting upon said shoulder, substantially as described.

4. The combination, with inner and outer wick-casing tubes, and a fibrous wick therebetween, of a rigid capillary or porous incombustible wick-tip resting upon said wick when the latter is raised above the casing but arranged to rest upon the casing when the wick is lowered below the same, and having a cylindrical depending guide within the wick-casing, and a perforated thimble having a cylindrical portion within the guide, an outwardly-extending shoulder above the cylindrical portion supporting the thimble upon the wick-tip, and a perforated portion above the shoulder supplying air to the flame above said tip, substantially as described.

STEPHEN B. MORSS.

Witnesses:

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