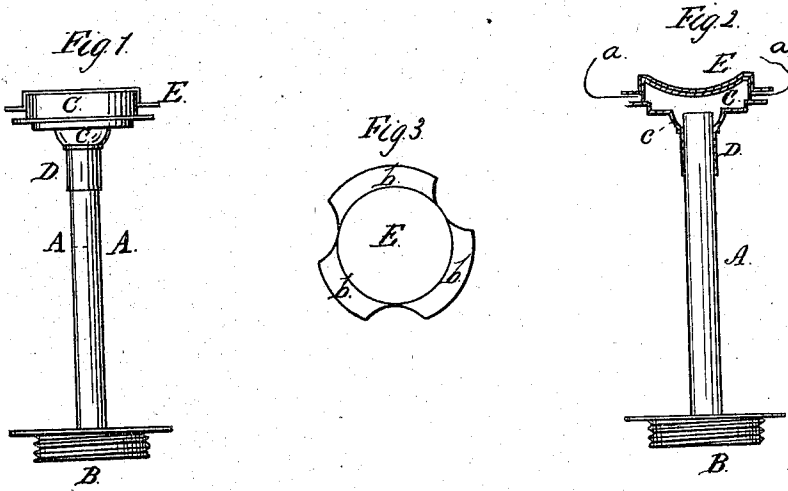


R. W. PARK.
VAPOR BURNER.

No. 106,200.

Patented Aug. 9, 1870.



Witnesses.

Amos J. Kelly
John Yilla

Inventor.

Robert W. Park
by his Attorney Francis D. Pastorius

United States Patent Office.

ROBERT W. PARK, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 106,200, dated August 9, 1870.

IMPROVEMENT IN VAPOR-BURNERS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern :

Be it known that I, ROBERT W. PARK, of the city and county of Philadelphia and State of Pennsylvania, have invented an Improved Gas or Vapor-Burner; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon making part of this specification, in which—

Figure 1 is an external view;

Figure 2 is a sectional view; and

Figure 3 is a top view of the distributing-cap.

Similar letters refer to similar parts in the several views.

A is a wick-tube, which is attached to a suitable lamp or receptacle by means of the screw B.

It extends upwardly into the cylindrical-shaped vapor or fluid-chamber C, through the sleeve D.

It is so arranged with respect to the said sleeve that the vapor or fluid-chamber is adjustable on the wick-tube, and can be raised or lowered, so that the flow of the fluid from the tube can be regulated by advancing or receding the top of the wick-tube to or from the top of the fluid-chamber. The top of the fluid or vapor-chamber is concave, to bring a greater surface of the heated metal in contact with the fluid, and thereby vaporize it, or, in case the chamber is filled with vapor, to prevent it from condensing.

A cap or deflector, E, is fitted over the fluid or vapor-chamber C, reaching to within a suitable distance of the holes or gas-vents *a*, arranged around the base of the vapor-burner. The deflector distributes the

flame, and at the same time has its heat imparted to it, which it imparts to the vapor-chamber, thereby assisting to vaporize the fluid or rarify the contained vapor. The outwardly-projecting wings *b* can be of any size that will not impede the flame or detract from its brilliancy.

The base of the vapor-chamber is secured to its sleeve by means of the fillet *c*, whereby additional strength is imparted to it.

In case it be required, either from necessity or choice, to permanently fasten the several parts of the burner together, it can readily be accomplished by any skilled mechanic by sacrificing its adjustability with respect to the flow of the oil.

The oil passes up the tube A from the lamp, by means of a wick, into the fluid-chamber C, and is ignited at the openings *a*. The flame of the same speedily heats the metal of the chamber and vaporizes the fluid.

What I claim as my invention, and desire to secure by Letters-Patent, is—

The wick-tube A, in combination with the fluid or vapor-chamber C, and the cap or deflector E, substantially as and for the purpose shown and described.

In testimony whereof I hereunto sign my name to this specification in the presence of two subscribing witnesses.

ROBERT W. PARK.

Witnesses:

EZEKIEL HUNN,

FRANCIS D. PASTORIUS.