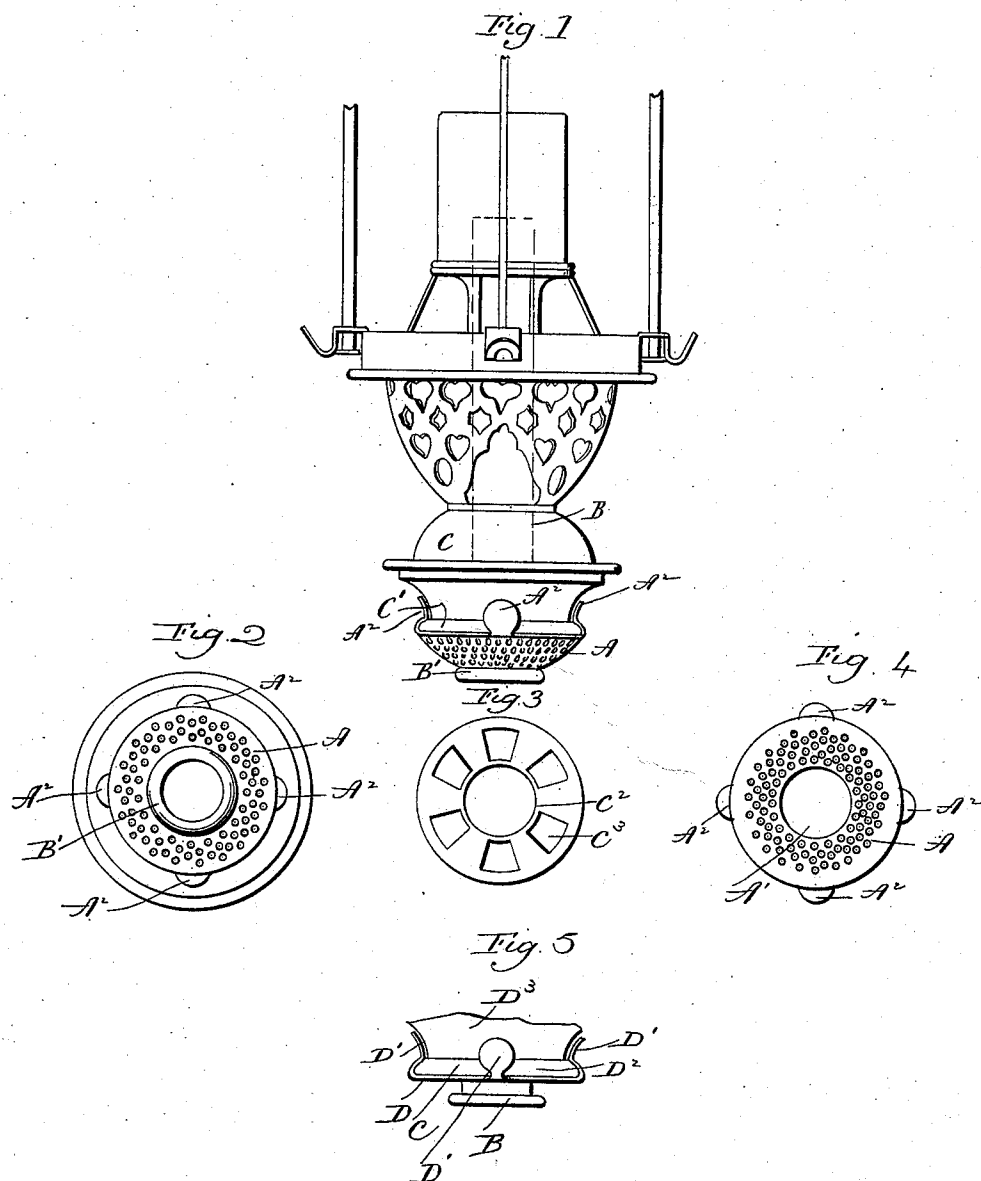


(No Model.)

R. P. ROBINSON.
INSECT GUARD FOR LAMP BURNERS.

No. 576,895.

Patented Feb. 9, 1897.



Witnesses,

J. H. Murray.
Lillian D. Kealey.

Robert P. Robinson
Inventor.

By Atty. Earl Heyman

UNITED STATES PATENT OFFICE.

ROBERT P. ROBINSON, OF WATERBURY, CONNECTICUT, ASSIGNOR TO THE
SCOVILL MANUFACTURING COMPANY, OF SAME PLACE.

INSECT-GUARD FOR LAMP-BURNERS.

SPECIFICATION forming part of Letters Patent No. 576,895, dated February 9, 1897.

Application filed August 31, 1896. Serial No. 604,406. (No model.)

To all whom it may concern:

Be it known that I, ROBERT P. ROBINSON, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new Improvement in Insect-Guards for Lamp-Burners; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a broken view, in side elevation, of a burner constructed in accordance with my invention; Fig. 2, a reverse plan view of the air-chamber thereof; Fig. 3, a reverse plan view of the bottom of the air-chamber with the insect-guard removed; Fig. 4, a detached plan view of the insect-guard; Fig. 5, a broken view, in side elevation, showing one of the modified forms which the guard may assume.

My invention relates to an improvement in insect-guards for lamp-burners, and more particularly to burners of the Welsbach type, in which the light is produced by raising a fragile "mantle," so called, to incandescence, the object being to provide a simple, durable, convenient, and effective means for preventing the access of insects, however small, to the interior of the burner, and consequently guarding the exceedingly delicate mantle from their intrusion and avoiding the necessity of dismembering the burner to get rid of them.

With these ends in view my invention consists in the combination, with the air-chamber of a Welsbach burner, of a perforated insect-guard applied to the exterior of the bottom of the said chamber, having a central opening for the passage of the gas-supply tube upward through it and formed with upwardly-extending retaining-fingers, which clasp the lower portion of the chamber for holding it in place.

My invention further consists in certain details of construction and combinations of parts, as will be hereinafter described, and particularly recited in the claims.

In carrying out my invention, as shown, I employ a circular or cup-like insect-guard A,

formed of sheet metal filled with fine perforations and constructed with a central circular opening A' for the upward passage through it of the gas-supply tube B of the burner. The said tube is formed at its lower end with a bead B', which engages with the central portion of the insect-guard and assists in holding the guard in place, the guard being interposed between the said bead and the flat bottom or lower face of the air-chamber C. The said guard is also formed with four integral upwardly-extending bowed retaining-fingers A², which clasp the outwardly-projecting knurled annular bead C, formed at the lower end of the air-chamber C', which may be of any approved construction. The bottom of the air-chamber is made flat and constructed with a series of radially-arranged ports C³ for the inlet of air.

This insect-guard not only effectually prevents insects from gaining an entrance into the burner, but also modifies abnormal conditions of current or draft and reduces to the minimum its detrimental effect upon the action of the burner.

In the modified construction shown by Fig. 5 the insect-guard D is made flat and furnished with integral upwardly-extending retaining-fingers D', which clasp an annular bead D², formed at the lower end of the mixing-chamber D³. It will be understood, of course, that this guard is perforated in the same manner as the guard previously described, which, however, on account of its form, has a greater area for the location of perforations.

I would have it understood that I do not limit myself to the exact construction and arrangement of parts shown, but hold myself at liberty to make such changes therein as fairly fall within the spirit and scope of my invention.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination with a Welsbach lamp-burner having an air-chamber, of a sheet-metal insect-guard conforming in diameter to the diameter of the said air-chamber to which it is applied, having a central opening for the passage upward through it of the gas-supply

tube of the burner, and formed at its upper edge with upwardly-extending retaining-fingers which clasp the lower portion of the chamber for holding it in place, and which
5 permit its ready removal therefrom when desired.

2. The combination with a Welsbach lamp-burner having its air-chamber formed with an annular bead, of a cup-like sheet-metal in-
10 sect-guard applied to the bottom of the said chamber, and provided with upwardly-ex-

tending retaining-fingers clasp the said bead whereby the guard is removably secured to the air-chamber.

In testimony whereof I have signed this 15 specification in the presence of two subscribing witnesses.

ROBERT P. ROBINSON.

Witnesses:

HENRY FEHL,
GEO. F. HODGES.