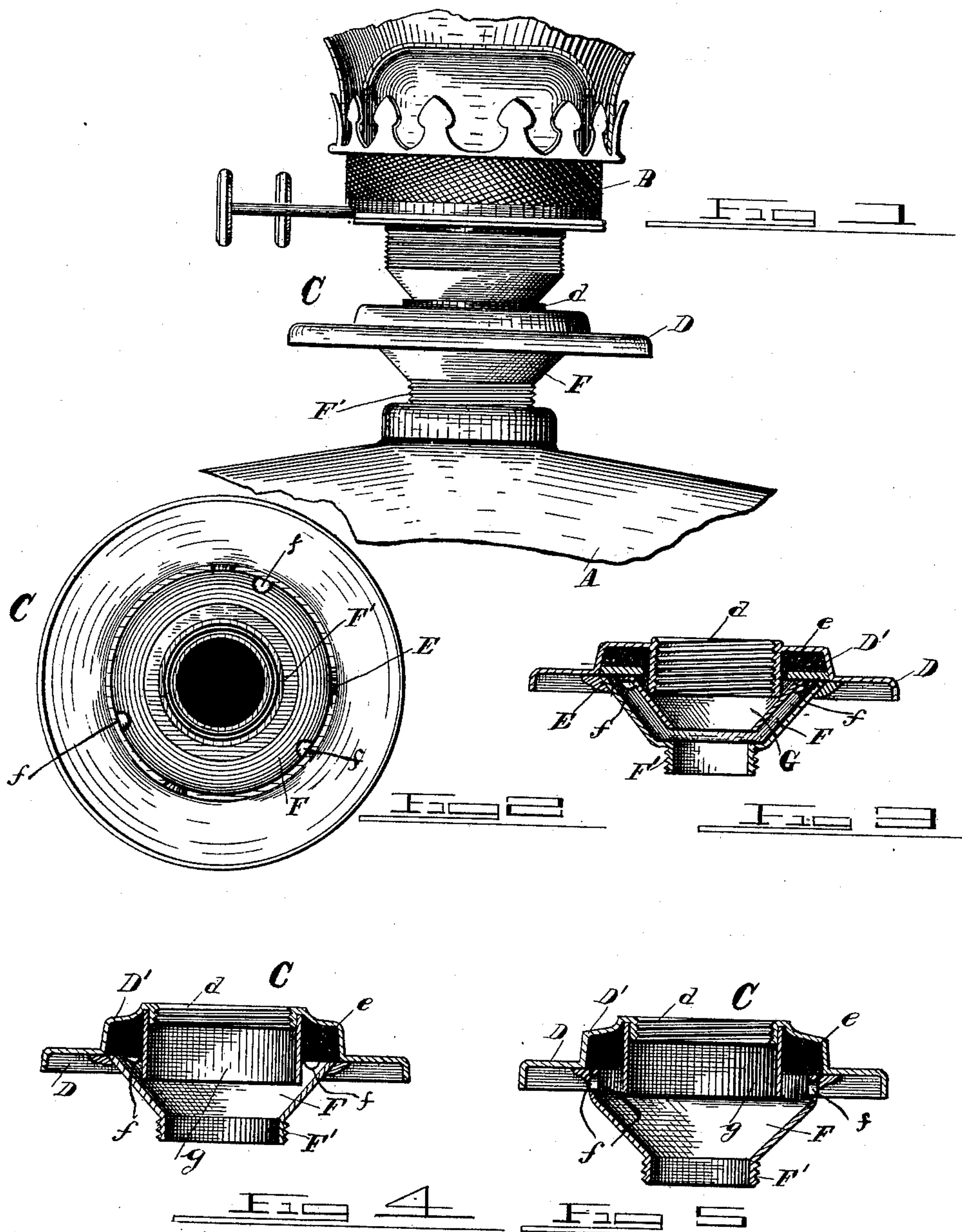


(No Model.)

J. W. BROER & H. J. & G. H. MERRIELL.
LAMP BURNER ATTACHMENT.

No. 466,939.

Patented Jan. 12, 1892.



Witnesses

E. W. Seville
Arthur E. Dowell

By his Attorney

Inventors.
Joseph H. Broer
Henry J. Merriell
George H. Merriell
W. Alexander

UNITED STATES PATENT OFFICE.

JOSEPH W. BROER, HENRY J. MERRIELL, AND GEORGE H. MERRIELL, OF
CHICAGO, ILLINOIS.

LAMP-BURNER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 466,939, dated January 12, 1892.

Application filed May 2, 1891. Serial No. 391,965. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH W. BROER, HENRY J. MERRIELL, and GEORGE H. MERRIELL, of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Lamp-Burner Attachments; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a side view of our improved lamp-burner attachment as applied to a lamp and burner. Fig. 2 is a plan view of the burner detached. Fig. 3 is a central transverse vertical section through the same. Figs. 4 and 5 are similar sectional views showing slight modifications of the same.

This invention is an improved lamp attachment, and it is designed to prevent radiation or transmission of heat from the burner to the lamp-body; to permit entrance of air into the lamp-body and escape of gas therefrom beneath the burner, and to enable odd sizes of burners to be attached to lamps; and it consists in the novel construction and combination of parts, as will be hereinafter clearly described and claimed.

Referring to the drawings by letters, A designates an oil-lamp, and B the burner, of ordinary or any desired construction.

C designates my attachment, which is interposed between the lamp and burner and connects the same. This attachment consists of a disk D, which may be flat or dished upwardly or downwardly, and it has a central opening provided with an internal screw-threaded collar *d*, which receives the threaded collar on the bottom of the burner, thus connecting the burner and attachment, and around this opening is an annular recess or shoulder D' in disk D, in which is placed a packing *e*, of asbestos or other fire-proof non-heat-conducting material, which is confined therein by an annular plate, which is in turn confined by an exterior inverted conical piece F, the upper larger end of which is connected to the disk, as shown, or in any suitable manner, so as to leave air or gas passages

f between its upper edge and the disk or plate. The lower end of piece F is provided with a screw-threaded flange F', which is adapted to screw into the collar on the mouth of the lamp, as shown in Fig. 1, thereby securing the attachment and connected burner to the lamp like the burner is ordinarily connected thereto.

Within piece F is a smaller shorter inverted conical ring, which may be connected to the disk, collar *d*, ring E, or piece F, provided that an air-space is left between it and piece F, so that air can pass between the same from the lamp into the lamp-body, or gas pass between the same from the lamp into the atmosphere. Any gas escaping therethrough is deflected under plate D and away from the burner, avoiding danger of ignition thereof. By this arrangement the burner is elevated above the lamp.

A double air-space above and below disk D is formed between the burner and lamp, thus obstructing radiation of heat, and free circulation of air is had between the interior of the lamp and the atmosphere below the disk and burner, and by reason of this air-circulation the conduction of heat from the burner to the lamp is greatly obstructed, as the heat is transfused through disk D, and owing to the large surface of the latter is readily absorbed by the air circulating around the same.

Instead of conical ring G and the plate E, a straight ring *g* may be employed, which will leave a large air-space within the piece F; and the plate E might be omitted, the piece F securing the packing in place.

Having described our invention, what we claim as new, and desire to secure by Letters Patent thereon, is—

1. In a lamp-burner attachment of the character described, the combination of a disk having a central collared and screw-threaded opening and an annular recess around this opening, a non-heat-conducting packing in this recess, an inverted conical piece connected to the under surface of the disk, leaving air-passages between its upper edge and disk, and a ring secured within said piece forming an annular air-space between it and the piece and disk, all substantially as herein specified.

2. The combination, with the lamp and burner, of the interposed attachment consisting of a disk having a screw-threaded central opening receiving the burner-threads, an annular recess around the opening, non-heat-conducting packing fitted therein, a plate securing said packing, an inverted conical piece secured to the disk and inclosing said plate and packing, and a ring within said
5 piece and below the plate, an air-space being
10 formed between the piece and ring, and air-

passages left at top of piece, all substantially as specified.

In testimony that we claim the foregoing as our own we affix our signatures in presence 15 of two witnesses.

JOSEPH W. BROER.
HENRY J. MERRIELL.
GEORGE H. MERRIELL.

Witnesses:

ERNST SCHÜRMANN,
FRANK WELLS.