

No. 640,752.

Patented Jan. 9, 1900.

A. A. COWLES.
INCANDESCENT GAS BURNER.

(Application filed June 22, 1899.)

(No Model.)

Fig. 1,

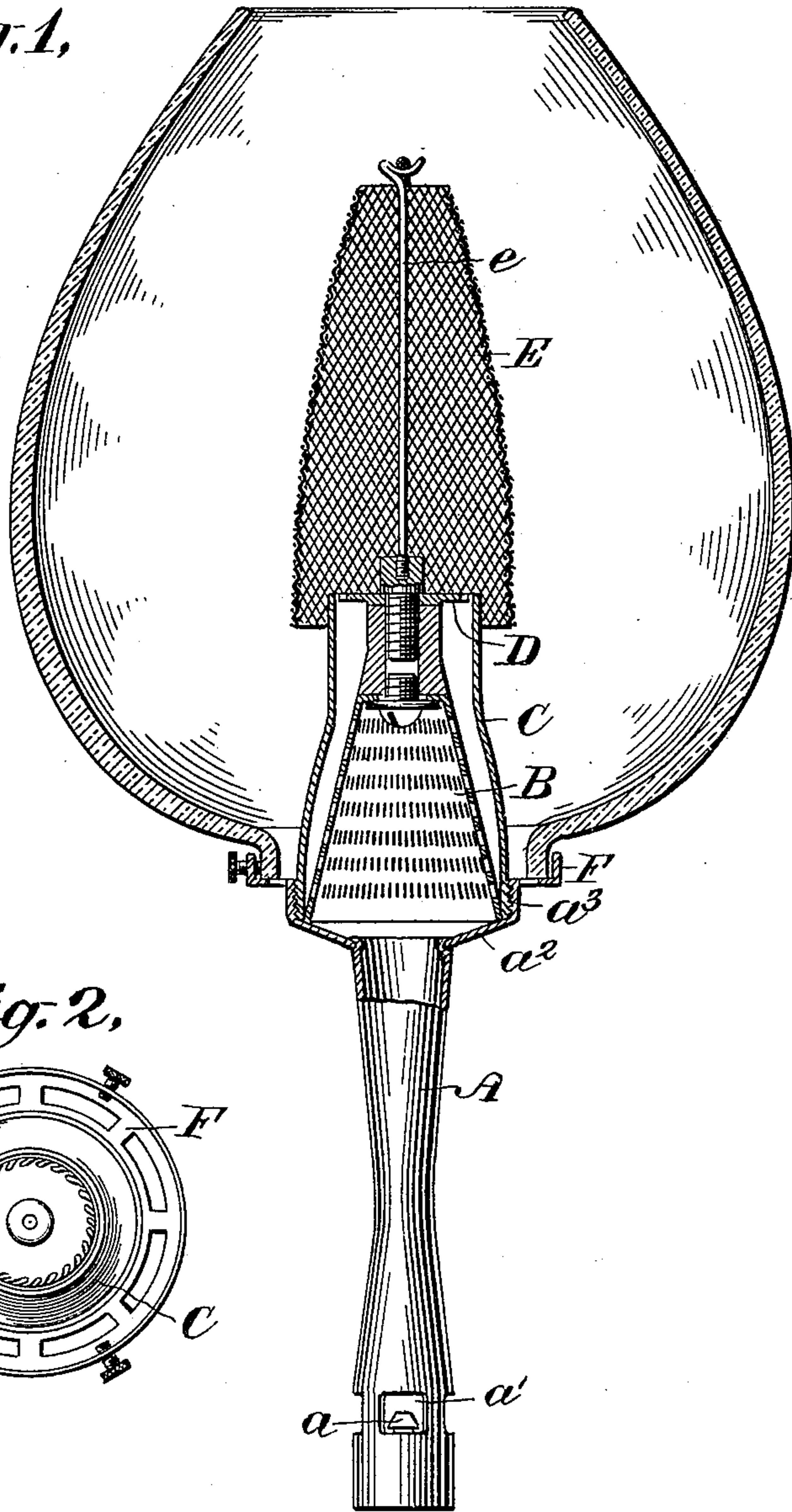
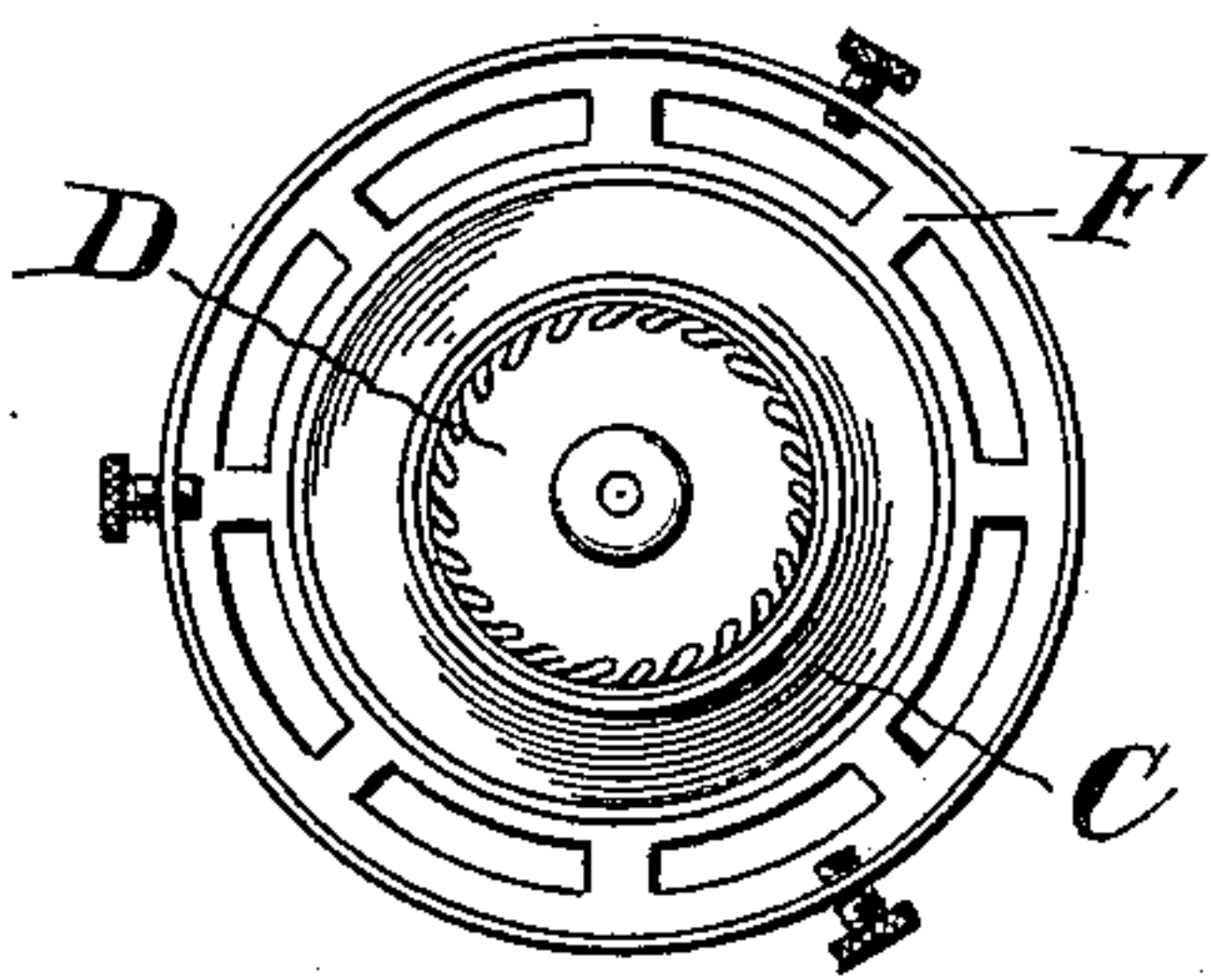


Fig. 2,



WITNESSES:

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ALFRED A. COWLES, OF NEW YORK, N. Y., ASSIGNOR TO THE ANSONIA
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INCANDESCENT GAS-BURNER.

SPECIFICATION forming part of Letters Patent No. 640,752, dated January 9, 1900.

Application filed June 22, 1899. Serial No. 721,439. (No model.)

To all whom it may concern:

Be it known that I, ALFRED A. COWLES, of New York, borough of Manhattan, county and State of New York, have invented a new and useful Improvement in Incandescent Lamps, of which the following is a specification.

My improvement relates particularly to a kind of incandescent lamp in the burner of which there is a base extending from a tube supplying a mixture of gas and air, a perforate tube mounted upon the base and delivering the mixture of air and gas therefrom, an outer imperforate shell engaging with the base, passages at the top of the outer shell for the emission of the mixture of gas and air, and a support for an incandescent mantle. This type of incandescent lamp is designed for use without a chimney. Between certain parts of this burner is a detachable joint.

My improvement consists in a shade or globe holder formed in the same piece of metal, with one of two parts secured by a detachable joint and extending from the burner suitably to fulfil its function. I prefer to make the shade or globe holder integral with the said base of the burner or with the outer imperforate shell above mentioned.

In the accompanying drawings, Figure 1 is a semivertical section of a lamp embodying my improvement. Fig. 2 is a top view of the same.

Similar letters of reference designate corresponding parts in both figures.

A designates a tube which at its lower end receives gas from a nozzle a . This nozzle is made in a separate piece from the tube and the two parts are united by a screw-thread. Just above its lower end the tube A is provided with openings a' for the entrance of air. The gas and air pass up the tube together as a mixture. At the upper end the tube is provided with a laterally-extending flange a^2 (here shown as inclining slightly upward) and is provided at its outer circumference with an upturned rim a^3 . This flange constitutes the base of the lamp-burner. Mounted upon this base is a conical or conoidal tube B, which is perforate. The mixture of air and gas escapes from the perforations of this tube. Surrounding this tube is a shell C, which is shown as contracted upwardly. I term it the "outer" shell of the burner. It is mounted upon the base a^2 of the burner. It is shown as engaged

by a screw-thread with the interior of the rim a^3 .

About level with the top of the outer shell Ca disk D is arranged, and this has a serrated edge through which the mixture of air and gas escapes to a mantle E, supported by rod e .

F designates a shade or globe holder, which is here shown as made in the form of a flange extending laterally from the rim a^3 . It is made integral with said rim and in the same piece of metal. It may advantageously be perforated. Indeed it may be made of a skeleton-like structure and notably with a number of arms, as shown. Instead of having it extend from the base of the burner it may extend from the outer shell C.

The flange a^2 is rigidly secured to and extends from the supply-tube, and said flange has a rim a^3 , to which the burner is secured, and the globe-support forms an integral part with said rim.

A shade-holder thus made integral with an essential part of the burner may be made very much smaller than if made separately and provided with some part for attachment to the burner. This is a very great advantage not only because of saving of metal, but because it will minimize shadow. Not only is there a saving in metal, due to the fact of reducing the size of the shade or globe holder, but in the labor and other expenses of manufacture there are incidental savings of an important character. Moreover, a shade-holder when made integral with a part of the burner is mechanically superior to one attachable thereto, because it will be more rigid and will not be liable to displacement under any circumstances, unless by bending.

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

The combination in an incandescent lamp, of a supply-tube having a flange rigidly secured to and extending from the same, said flange having a rim to which the burner is secured, and a globe-support integral with said rim, substantially as described.

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

ALFRED A. COWLES.

Witnesses:

EDWIN H. BROWN,
H. COUTANT.