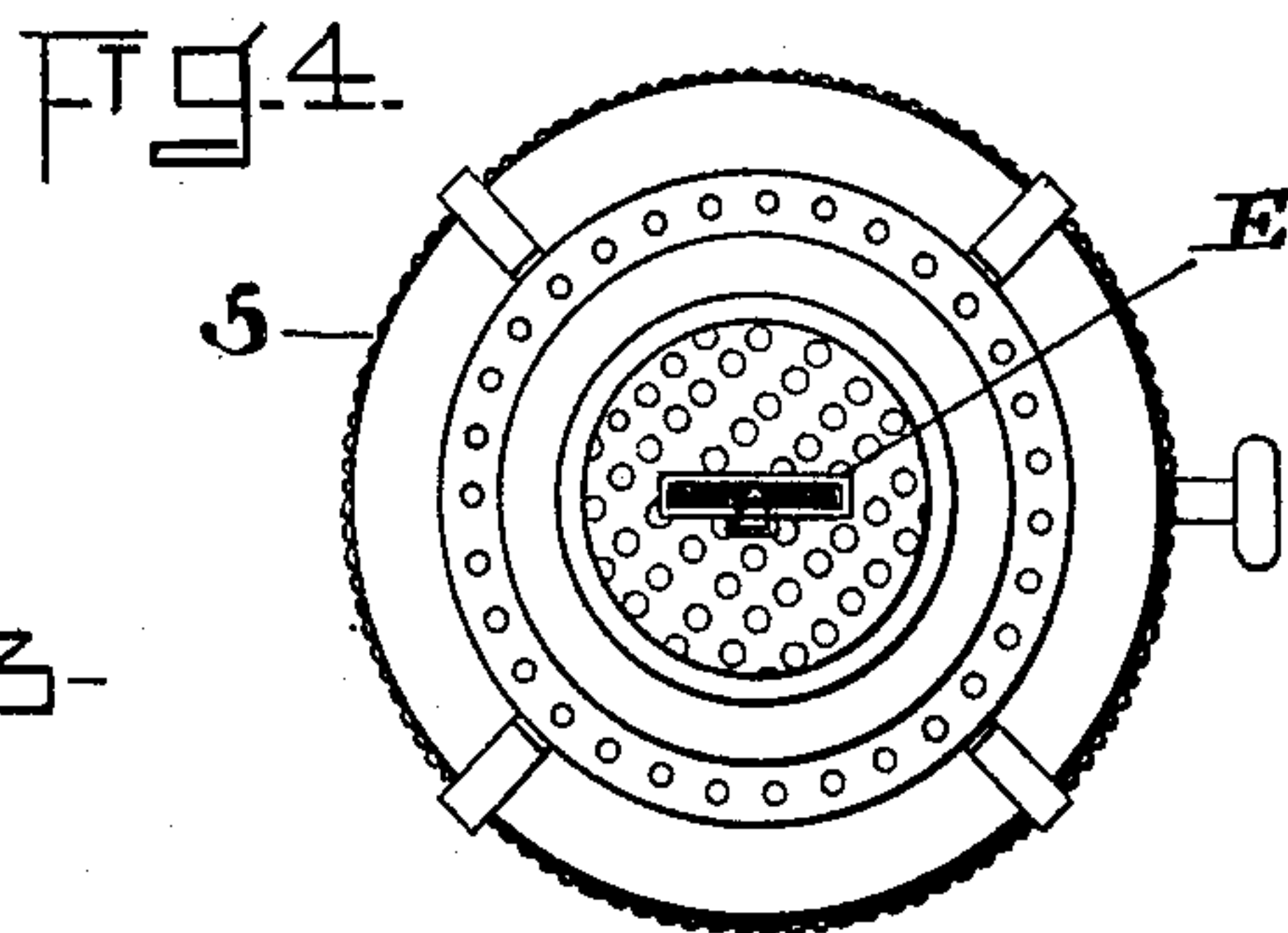
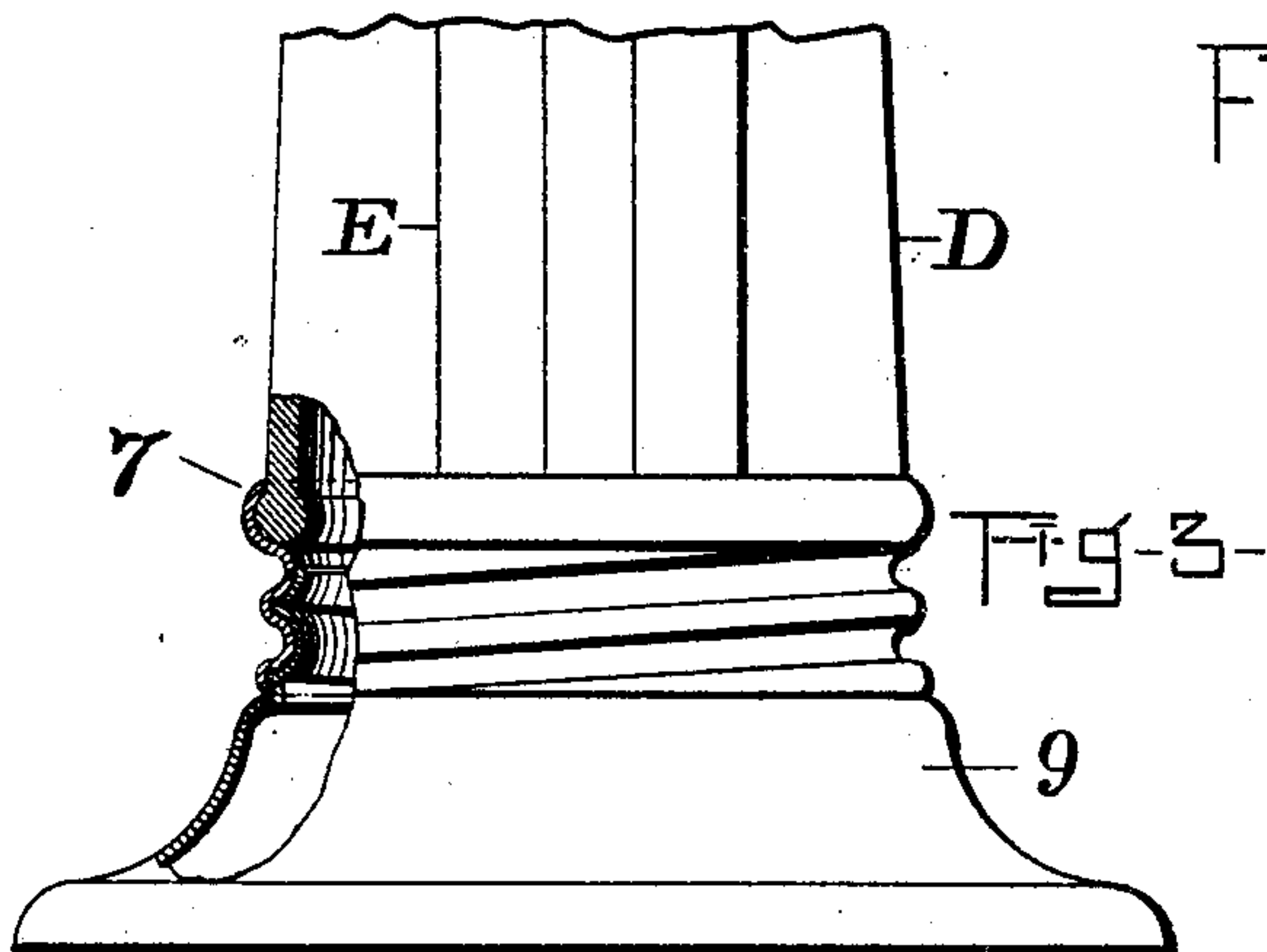
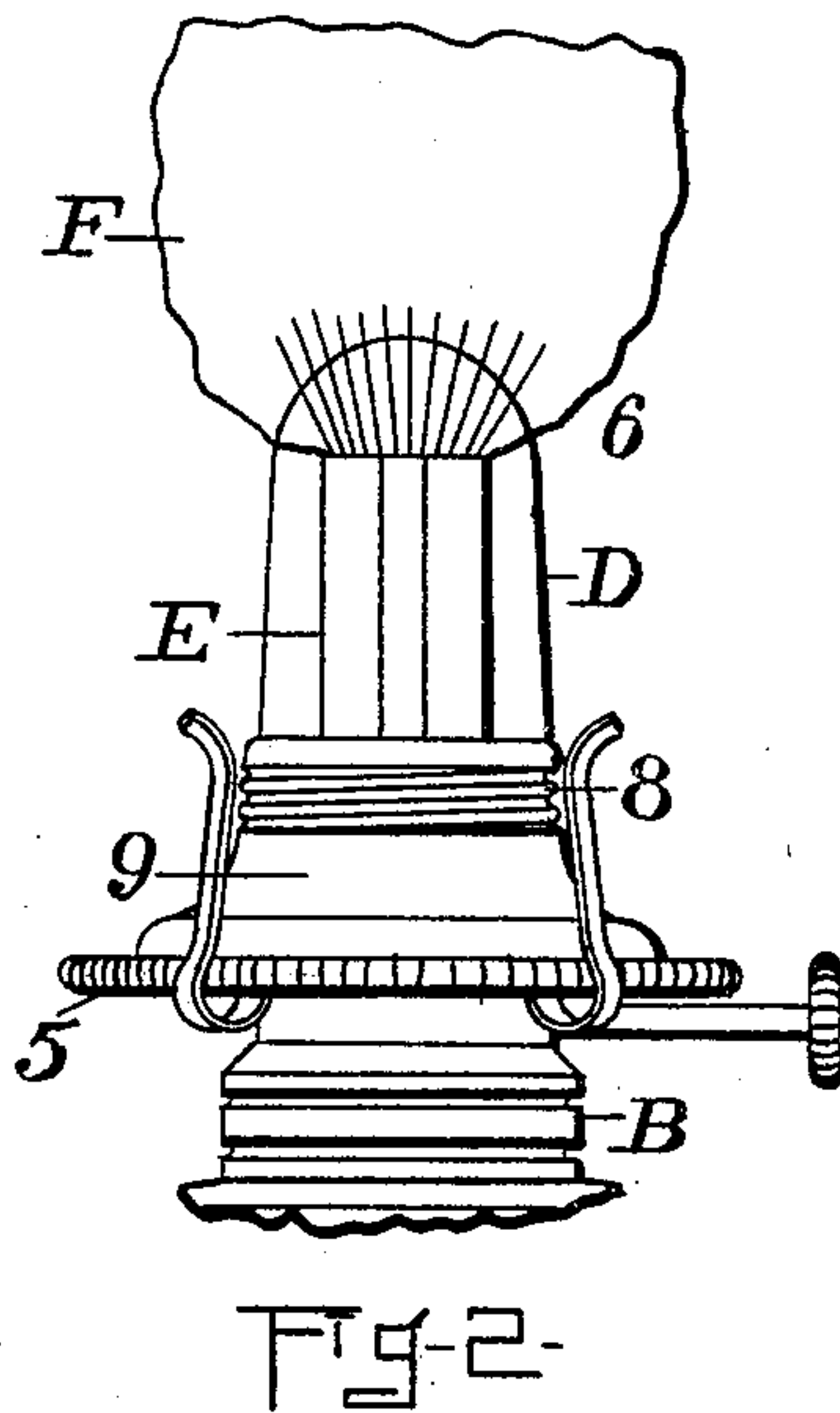
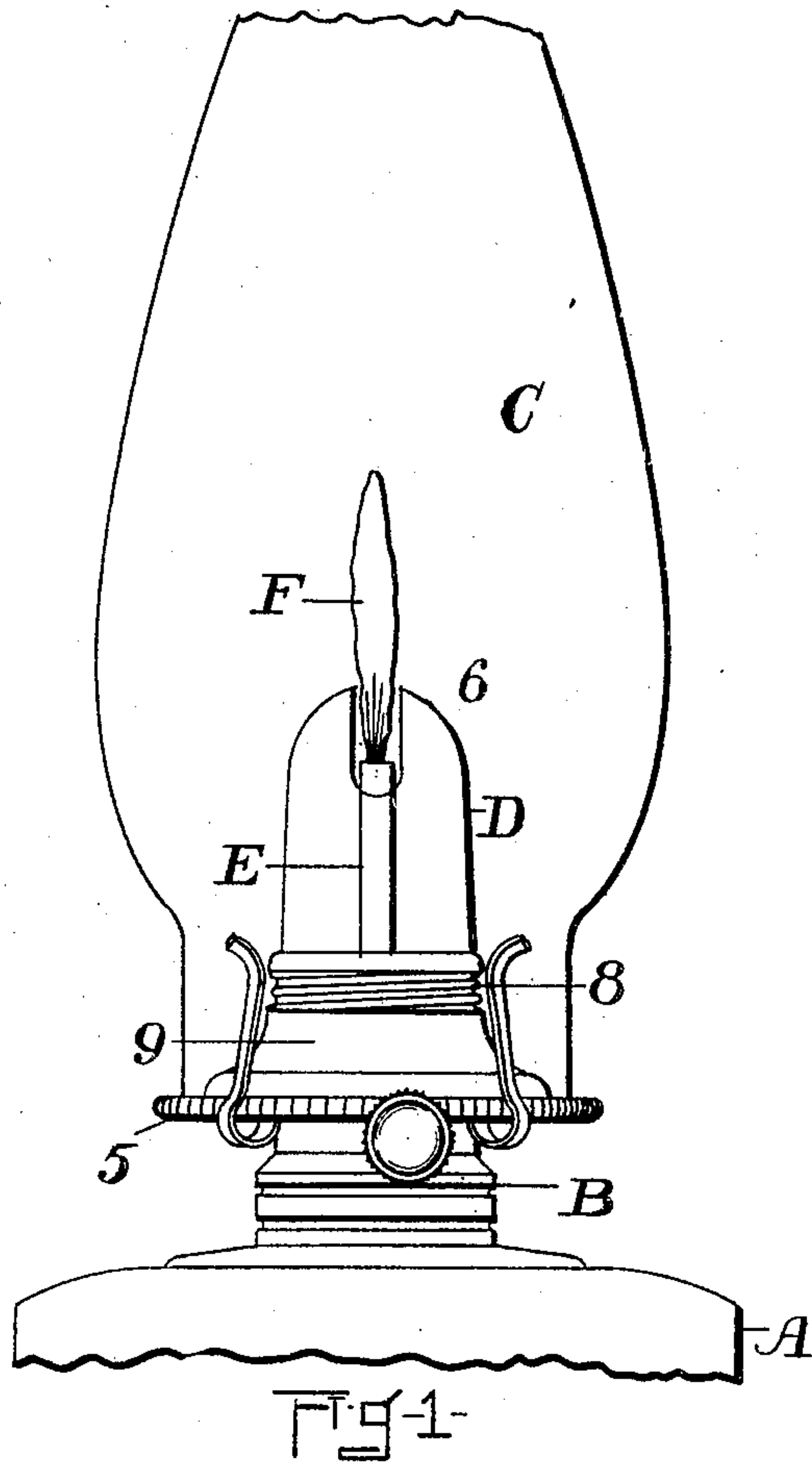


No. 809,112.

PATENTED JAN. 2, 1906.

D. JOYAL.  
LAMP BURNER.  
APPLICATION FILED JUNE 28, 1905.



Witness  
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# UNITED STATES PATENT OFFICE.

DOLPHIS JOYAL, OF LOWELL, MASSACHUSETTS.

## LAMP-BURNER.

No. 809,112.

Specification of Letters Patent.

Patented Jan. 2, 1906.

Application filed June 28, 1905. Serial No. 267,439.

*To all whom it may concern:*

Be it known that I, DOLPHIS JOYAL, a citizen of Canada, residing at Lowell, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Lamp-Burners, of which the following is a specification.

My invention relates to burners for oil or spirit lamps; and its objects are to utilize more of the light-rays than in former constructions and also to utilize more of the downward rays, which in most lamps are lost in the brasswork and in the oil-receptacle.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is a view of an oil-lamp with the chimney in place looking toward the edge of the wick. Fig. 2 is a view of a lamp-burner without the chimney looking at the flat side of the wick. Fig. 3 is an enlarged view of the transparent tube of my device and its supports in partial section. Fig. 4 is a top view of the perforated platform.

Similar letters and numerals designate corresponding parts in the several views.

A is the oil-receptacle.

B is the neck, which supports the wick and chimney.

C is the usual glass chimney of such lamps.

D is the transparent tube of my invention.

E is the wick-tube, and F is the flame.

Such lamps are usually made with a perforated platform 5, through which the air passes upward through the chimney to feed the flame and thence out through the top of the chimney. My platform 5 is also perforated for the same purpose.

For the purpose of directing the air which rises through platform 5 to and against the flame in such manner that the flame will burn more freely and brightly I use the tube D, of glass or other transparent substance. This tube should be substantially cylindrical or slightly conical, with its lower end open and its upper end of hemispherical shape, with a deep transverse slot 6 therein. It should be higher than the hinged brass cones usually employed, as it is my purpose to utilize the downward rays from the flame. The object of using a transparent tube is to permit these rays to pass through and downward and also to utilize the rays from the lower part of the flame, which are usually lost inside the brass cone.

My transparent tube D is made with a transverse slot 6, through which part of the

air-current passes and out of which the flame F comes from the wick. The edges of this slot are preferably somewhat rounded to better resist the heat of the flame. The bottom of my tube D is beaded, as shown at 7, and it is supported by the metal collar 8, the top rim of which is bent over to embrace the beaded bottom 7 of the tube D.

The perforated platform 5 rises in its center into a cone 9, which is screw-threaded to correspond with screw-threads on the bottom of collar 8 and is flat and perforated on its top. To put the tube D in place, its collar 8 is screwed on this cone 9, and it is removed by unscrewing.

The wick-tube E must be lengthened to correspond with the height of the slot 6 of tube D, and its outer surface should be plated with some bright metal which is not easily tarnished, as nickel, to form a reflecting-surface for the purpose of reflecting any light-rays which strike it either directly from the flame or from the inner surface of tube D.

The advantages of my device are that as the tube D is of such height it acts as a chimney and causes a powerful air-draft up to and about the flame, thus making it burn more brightly and steadily. As tube D and wick-tube E are so much elevated with reference to platform 5, more of the rays of light from the flame pass downward and by the platform than would be the case with a lower tube and the rays from the bottom of the flame pass through the tube D. Moreover, most of the rays which rise from the bottom of the flame strike the concave inside surface of the top of tube D and are reflected downward, as from a concave mirror, besides which the reflecting-surface of wick-tube E helps to throw the rays of light outward; also, when the wick is turned down the smaller flame created is in full view and few of the rays are lost.

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

1. In a lamp-burner, a perforated horizontal platform, comprising a central cone having a screw-threaded upper rim, a metal collar adapted to screw on said cone, an extended transparent tube formed with a transverse slot at its top, and an extended wick-tube as described.

2. In a lamp-burner, a perforated horizontal platform, comprising a central cone having a screw-threaded upper rim, a metal collar adapted to screw on said cone, an extend-

ed transparent tube beaded at its bottom  
rim to form a gripping edge for said collar  
and hemispherical at its top with a transverse  
slot with rounded edges, and an elongated  
5 wick-tube as described.

3. In a lamp-burner, a perforated horizon-  
tal platform, comprising a central cone hav-  
ing a screw-threaded upper rim, a metal col-  
lar adapted to screw on said cone, an extend-  
10 ed transparent tube beaded at its bottom  
rim to form a gripping edge for said collar

and hemispherical at its top with a transverse  
slot with rounded edges, and an elongated  
wick-tube, the outer surface of which is  
adapted to reflect light, as described. 15

In testimony whereof I affix my signature  
in presence of two witnesses.

DOLPHIS JOYAL.

Witnesses:

JOHN A. GATELY,  
EDWARD W. CLARK.