

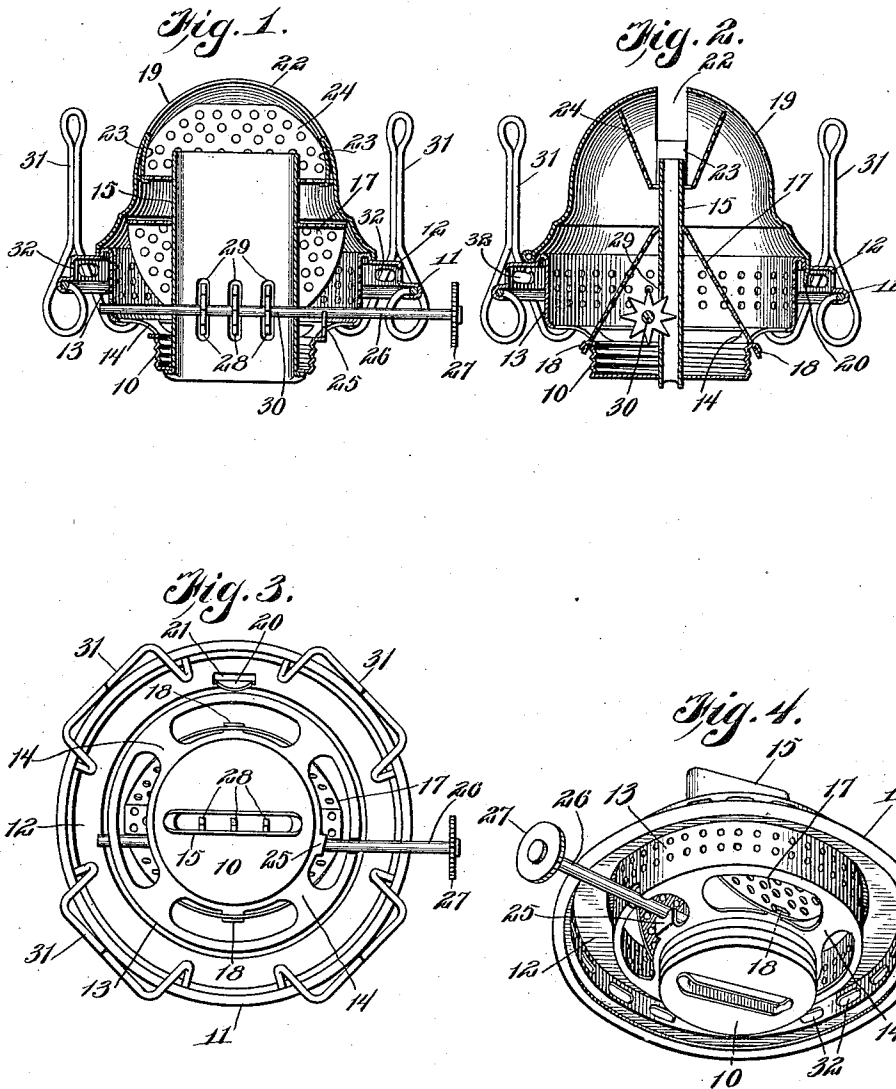
F. E. FENDER.

BURNER.

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1,059,855.

Patented Apr. 22, 1913.



Witnesses

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FRANK E. FENDER, OF LINCOLN, NEBRASKA.

BURNER.

1,059,855.

Specification of Letters Patent.

Patented Apr. 22, 1913.

Application filed July 13, 1912. Serial No. 709,153.

To all whom it may concern:

Be it known that I, FRANK E. FENDER, a citizen of the United States, residing at Lincoln, in the county of Lancaster and State of Nebraska, have invented new and useful Improvements in Burners, of which the following is a specification.

The invention relates to burners, and particularly to lamp burners, and has for an object to provide a burner embodying various improvements over a patent for a burner, granted to me November 23, 1909, No. 941,315, and a patent for a burner granted to me June 21, 1910, No. 962,329.

The improvements consist, more particularly, in a novel construction of the gallery and base of the burner, the said gallery and base being made from a single piece of material.

Further improvements reside in the construction of the dome, the said dome being preferably struck from a single piece of material provided with means for supporting the protecting plate shown in my Patent No. 962,329, in rigid position within the dome.

In the further disclosure of the invention reference is to be had to the accompanying drawings constituting a part of this specification, in which similar characters of reference denote corresponding parts in all the views, and in which:

Figure 1 is a vertical central sectional view of the burner; Fig. 2 is a similar view of the same on a plane at right angles to that of Fig. 1; Fig. 3 is a bottom plan view; and Fig. 4 is a perspective view of the gallery and base.

Referring more particularly to the views, I provide a base 10 formed with a gallery 11, said gallery consisting, more specifically, of a circular member 12 having a circular perforated depending curtain 13 formed therewith, a series of spaced supporting members 14 being formed with the curtain 13 and extending diametrically to terminate in the base 10, thus supporting the base relatively to the gallery 11, it being understood that the base 10, the gallery 11 and the curtain 13, together with the supporting members 14, are struck or formed from a single piece of material.

A wick tube 15 extends through an elongated opening 16 in the base 10 and has rigid connection with the base, the said wick tube being arranged to extend vertically through a perforated plate 17, bent in a V-

shaped form, with the sides thereof extending downwardly and provided with openings through which are passed lugs 18 formed with the base 10, thus securing the plate 17 rigidly on the base and within the curtain 13, the mentioned plate 17 being also adapted to aid in supporting the wick tube 15 which is extended through the plate 17, as mentioned heretofore.

Mounted to swing on the gallery 11 is a dome 19 having formed therewith a suitable spring-like catch 20 adapted to pass through an opening 21 in the gallery 11 for the purpose of retaining the dome in locked position on the gallery, the dome being provided with an elongated slot 22 through which the wick of the wick tube 15 is adapted to pass, a plurality of supporting members 23 being formed with the dome 19 by those portions of the dome that are struck therefrom to form the slot 22 in the dome, the said supporting members being bent inwardly and downwardly to pass through openings in a perforated U-shaped protecting plate 24, mounted within the dome and supported by the mentioned supporting members 23 in rigid position in the dome, the mentioned protecting plate 24 being also provided with an elongated opening through which the wick of the wick tube 15 passes so that the said wick will project beyond the upper end of the wick tube.

A notched bearing member 25 is formed with the base 10 and extends upwardly to receive and support a rod 26 having an end thereof journaled in the curtain 13, the other end of the said rod being adapted to extend outwardly beyond the periphery of the gallery 11 and having a suitable knob 27 thereon for rotating the rod 26, a series of toothed wheels 28 being keyed to the rod 26 to turn therewith and arranged in vertical slots 29 in the wick tube 15, the said wheels being adapted to extend within the wick tube and constituting the usual wick raiser 30, the teeth on the wheels 28 being adapted to engage the wick when the same is passed through the wick tube for the purpose of lowering or raising the wick relatively to the wick tube when the knob 27 is turned, as will be readily understood. Spring-like gripping arms 31 of the usual construction are secured to the under side of the gallery 11 and extend upwardly to grip and support the usual lamp chimney, the base of the lamp chimney being adapted to

repose upon the gallery 11, said gallery being provided with a series of perforations 32 for facilitating the draft to the lamp at the head end of the wick.

5 From the foregoing description, taken in consideration with the two patents mentioned in the earlier part of this specification, it will be seen that in my new device I have in general improved the construction
10 of the base 10 and gallery 11, the construction of the dome 19 being also improved in order that the supporting members 23 can be formed with the dome to support the protecting plate 24 therein, the base 10, gallery 11, curtain 13 and supporting members
15 14 for the base 10, being formed or struck from a single piece of material, as mentioned heretofore.

20 Having thus described my invention, I claim:

1. In a burner, the combination with a gallery, of a circular perforated depending curtain formed with the said gallery, spaced
25 supporting members extending diametrically from the said curtain, a base formed with the said gallery and the said supporting members and supported on the inner ends of the supporting members, a plurality of

lugs formed with the base, a wick tube mounted on the base and extending vertically therethrough, a perforated V-shaped plate engaged by the lugs on the said base and having the said wick passed there-
30 through, a dome mounted to swing on the said gallery, a protecting plate in the said dome, supporting members formed with the dome and engaging the protecting plate to support the same rigidly therein, means for elevating or lowering a wick in the said wick
35 tube, and a spring-like catch formed with the dome and adapted for removable engagement with the said gallery.
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2. In a burner, the combination with the burner proper, of a dome mounted thereon and formed of a single piece of material,
45 supporting members struck from the said dome and depending within the same, and a protecting plate mounted within the said dome and supported by the said supporting
50 members.

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

FRANK E. FENDER.

Witnesses:

E. R. BLACK,

ROSE M. FOSTER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."