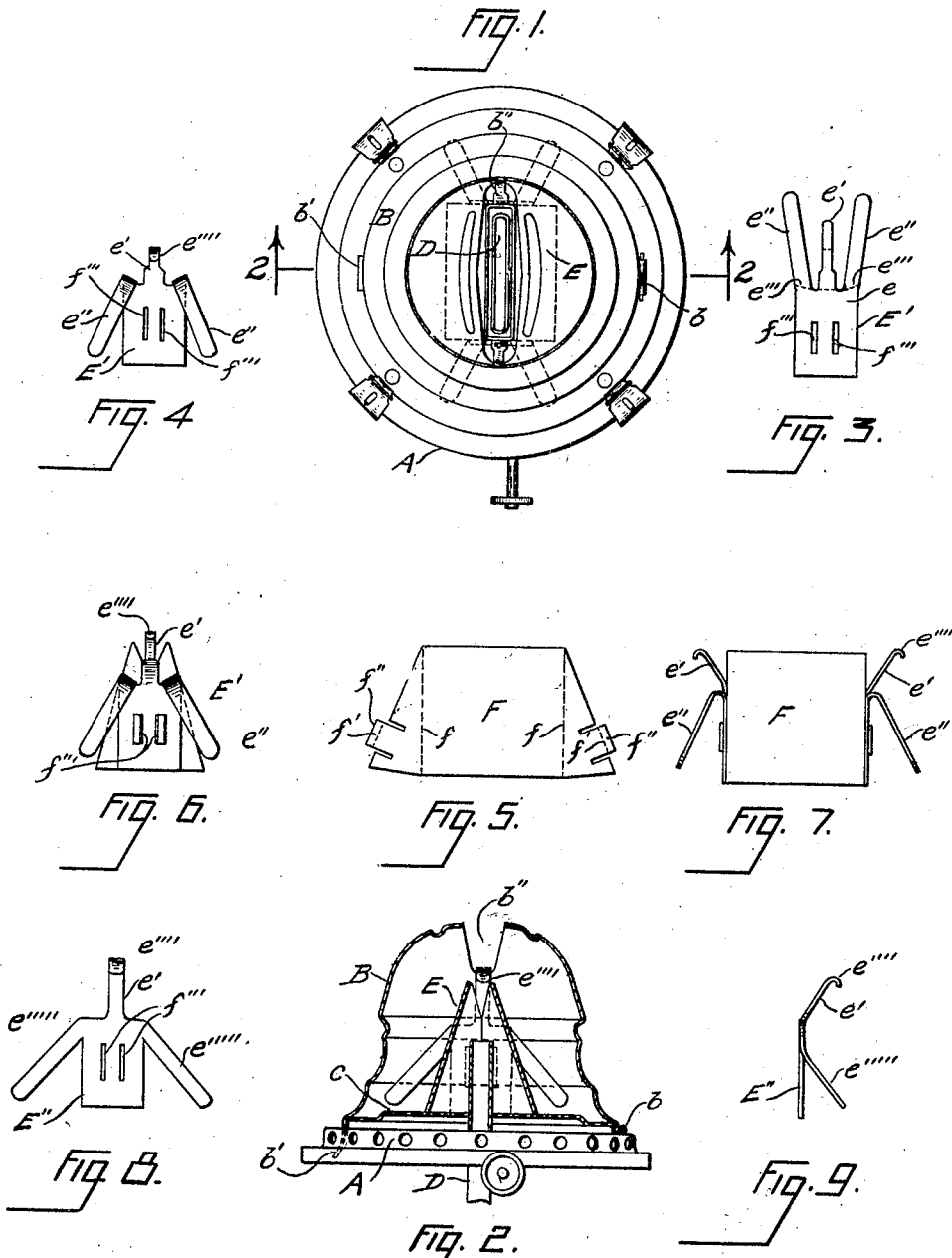


933,162.

Patented Sept. 7, 1909.



WITNESSES:

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FIG. 2.

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LAMP.

933,162.

Specification of Letters Patent.

Patented Sept. 7, 1909.

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To all whom it may concern:

Be it known that I, FREDERIC A. CURTIS, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Lamps, of which the following, when taken in connection with the drawing accompanying and forming a part hereof, is a full and complete description, sufficient to enable those skilled in the art to understand, make, and use the same.

This invention relates to kerosene lamps using domes and chimneys; and the principal objects of the invention are to obtain a lamp by means of which a large flame and one of considerable candle power may be produced and which will require no more attention or care in trimming and lighting than will said lamp when made without the elements embodying this invention.

Another object of the invention is to obtain a lamp of the character named which will be simple in construction, durable, not liable to get out of order, economical and uniform in operation.

In the drawing referred to Figure 1 is a top plan view of a lamp embodying the invention, with the chimney removed, and the oil receptacle not shown. Fig. 2 is a side elevation of the burner of a lamp embodying the invention, with the chimney removed. Fig. 3 is a plan view of a blank from which one of the elements of the device is obtained. Fig. 4 is an element, duplicates of which are embodied in the device, such element being formed up from the blank illustrated in Fig. 3. Fig. 5 is a plan view of a blank from which additional elements of the device are obtained. Fig. 6 is an end elevation of the elements of the device embodying the invention, which are obtained from the blanks illustrated in Figs. 3 and 5. Fig. 7 is a side elevation of the elements illustrated in Fig. 6. Fig. 8 is a modification of the blank illustrated in Fig. 3. Fig. 9 is the element obtained by forming up the blank which is illustrated in Fig. 8.

A reference letter applied to designate a given part is used to indicate such part

throughout the several figures of the drawing, wherever the same appears.

A is the base of the burner of the device.

B is the dome and D is the wick-tube of the device.

The base A is provided with foraminations C in the usual way, and the dome B is hinged to the base by hinge *b*. The dome B is held in an operative position on the base A by the spring *b'*, in the ordinary way.

E is an additional air deflector secured in the dome B in position so that when the dome is in operative position as illustrated in Fig. 2, such additional deflector will also be in operative position, with the lower edge thereof close to contact with the foraminated plate of base A. The deflector E is made by me of four pieces, or parts, two of such parts being duplicates of the parts illustrated in Figs. 3 and 4, and the remaining parts being duplicates of the part obtained from the blank illustrated in Fig. 5.

E' is a blank illustrated in Fig. 3, and comprises the body part *e*, the central finger *e'* and the additional fingers *e''*, *e'''*. The fingers *e''*, *e'''*, are bent on line *e'''*, into substantially the position illustrated in Figs. 4, 6 and 7 and when the additional deflector (of which the device formed up from this blank forms a part) is assembled and put into position in dome B such fingers are in substantially the position illustrated in Figs. 1 and 2. The finger *e'* is bent into substantially the position illustrated in Fig. 7 and the upper end thereof is hooked, as at *e''''*, to engage with the end of the aperture *b''* in dome B through which the combustible gases of the lamp flow when the lamp is in use, when the several parts of the device are assembled in operative position.

The blank F illustrated in Fig. 5 is bent on lines *f* and *f'* and the parts *f''* (extending beyond line *f'*), are forced through slits or apertures *f'''*, *f''''*, respectively, in blanks E'. The several parts of the device forming the additional deflector are thus attached together.

The additional air deflector is attached in the dome by forcing it into such dome from below until the part *e''''* engages with the end of the aperture *b''*, at which time the

lower ends of the fingers e'' will be in contact with the inner face of the dome, as is shown in Figs. 1 and 2, and thereby such additional air deflector will be secured in the dome so that the lower edge of the additional air deflector will be close to the foraminated plate C, as hereinbefore stated.

The modification of blank E' which is illustrated in Fig. 8 is lettered E'' . In this modification the finger e' is arranged to engage with the end of aperture b'' in dome B, and the fingers e'''' are substituted for the fingers e'' of blank E' . Blank E'' is provided with the apertures f''' to receive the parts f'' of the blank F, in the same manner such apertures receive such ends in blank F.

When the additional air deflector is mounted in the dome B and such dome is in an operative position the additional air deflector is also in an operative position: that is, in position to deflect air flowing thereunder through those foraminations C which are covered thereby, into the flame produced from the wick in wick tube D. The dome B is in position to direct the air flowing thereunder through the remainder of foraminations C into such flame as such flame passes through aperture b'' . When, for any reason, the dome B is raised, as to trim the wick in tube D, or for other purposes, the additional deflector is raised therewith, thereby exposing the wick tube D and the wick therein, to view.

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

1. In a lamp, a wick tube, a base provided with a foraminated plate, a movable dome provided with an aperture, such dome mounted on the base and arranged to form an air deflector and an additional air deflector also provided with an aperture, mounted in the dome and attached thereto, said aperture in the additional deflector arranged to form a flame opening the side

edges whereof are on both sides of and retracted from the path of a flame extending therethrough, substantially as described.

2. In a lamp, a wick tube, a base provided with a foraminated plate, a movable dome provided with an aperture, such dome mounted on the base and arranged to form an air deflector, and an additional air deflector mounted in the dome; such additional air deflector comprising side pieces and end pieces, the side pieces attached to the end pieces and the end pieces provided with fingers arranged to engage with the dome to maintain such dome and additional deflector in determined relative position.

3. An air deflector comprising side and end pieces, the end pieces respectively formed up from blanks provided with fingers and apertures, and the side pieces formed from blanks provided with parts arranged to enter the apertures in the end pieces and thereby join the side and end pieces together, and the fingers on the end pieces arranged to hold the air deflector in determined relative position to a dome, in combination with a dome; substantially as described.

4. A lamp base provided with a foraminated plate and a wick tube, in combination with a dome provided with an aperture, such dome hinged to the base and arranged to form an air deflector, and an additional air deflector mounted in the dome and attached thereto, such additional air deflector provided with an aperture and arranged to direct air toward such aperture said aperture in the additional deflector arranged to form a flame opening the side edges whereof are on both sides of and retracted from the path of a flame extending therethrough; substantially as described.

FREDERIC A. CURTIS.

In the presence of—

ERNEST W. BOWLES,
C. A. ADAMS.