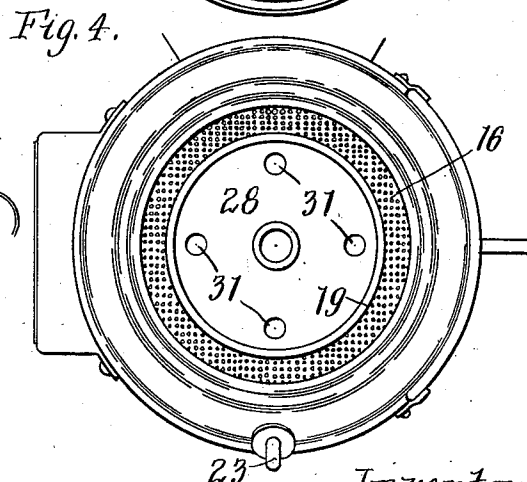
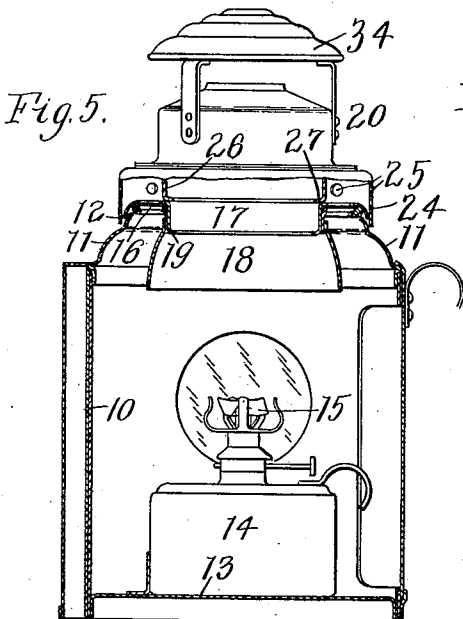
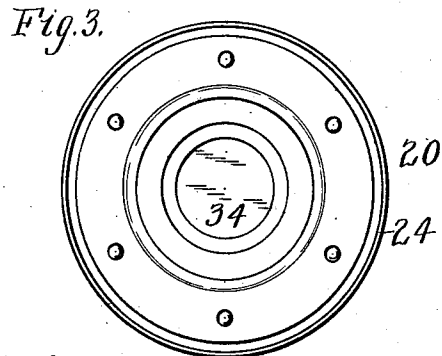
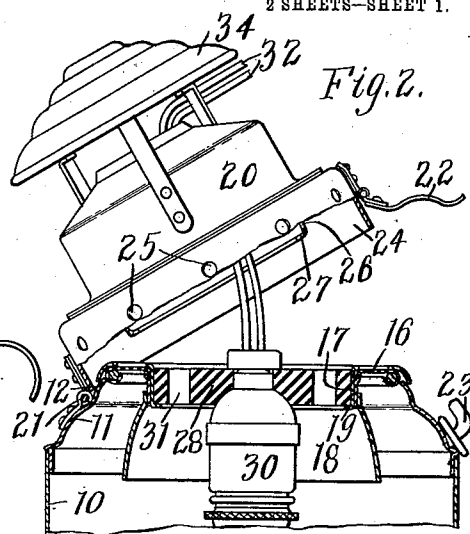
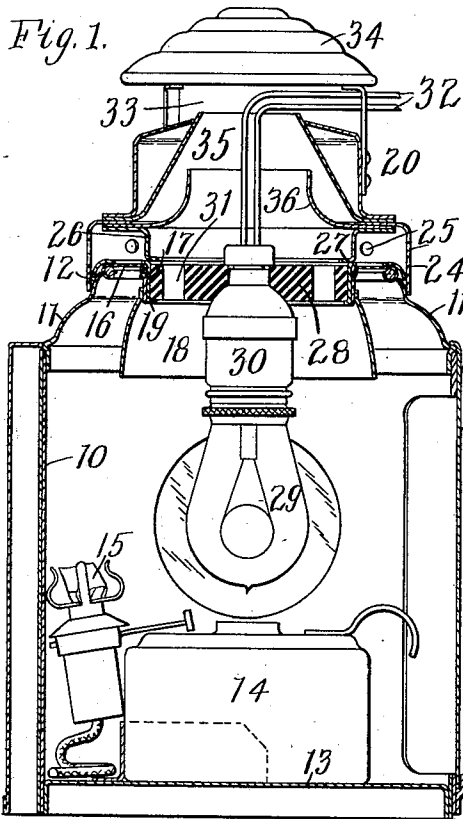


F. D. SPEAR.
 CONVERTIBLE LAMP.
 APPLICATION FILED DEC. 27, 1910.

1,018,017.

Patented Feb. 20, 1912.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

Fig. 6.

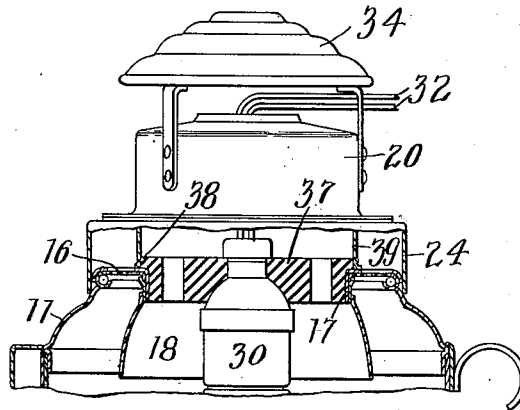
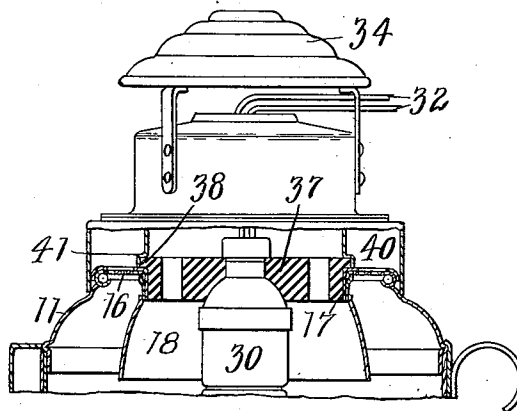


Fig. 7.



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UNITED STATES PATENT OFFICE.

FURMAN D. SPEAR, OF NEW YORK, N. Y., ASSIGNOR TO ARMSPEAR MANUFACTURING COMPANY, OF NEW YORK, N. Y.

CONVERTIBLE LAMP.

1,018,017.

Specification of Letters Patent.

Patented Feb. 20, 1912.

Application filed December 27, 1910. Serial No. 599,368.

To all whom it may concern:

Be it known that I, FURMAN D. SPEAR, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a new and useful Improvement in Convertible Lamps, of which the following is a specification.

This invention relates to that class of signal lamps which are so constructed that an electric light or an oil lamp can be used interchangeably as illuminating means, and the invention has the object to construct the upper portion of the lamp in such manner that simple, efficient and convenient means are provided for holding the electric light removably in position in the lamp and that air is properly supplied to the oil lamp for supporting combustion.

In the accompanying drawings, consisting of two sheets: Figure 1 is a sectional elevation showing the lamp with the electric light in position in the same. Fig. 2 is a sectional elevation of the upper portion of the lamp with the hinged top partly raised. Fig. 3 is a bottom plan view of the hinged top. Fig. 4 is a top plan view of the body of the lamp. Fig. 5 is a sectional elevation showing the electric light removed and the oil lamp arranged for use. Figs. 6 and 7 are sectional elevations of the upper portions of lamps containing modified embodiments of the invention.

Like reference characters refer to like parts in the several figures.

Referring to Figs. 1-5, 10 represents the upright wall of the body of the lamp and 11 the breast extending upwardly and inwardly from this wall and carrying at its upper end a cylindrical collar 12. The bottom 13 of the body supports the oil pot 14 from which the burner 15 is removed when the electric light is used, as represented in Fig. 1. 16 represents a perforated annular plate which is arranged horizontally or transversely upon the top collar 12 of the body and is provided with a cylindrical wall 17 extending downwardly from the inner edge of the annular plate and with a downwardly flaring curtain 18 depending from the wall 17. The latter is provided at its lower end with an inwardly projecting ledge, shoulder or flange 19. The outer edge of the annular plate 16 is bent down-

wardly to engage the upwardly and inwardly bent upper edge of the body collar 12 for holding this plate against lateral displacement. 20 represents the top of the lamp which is movably attached to the lamp body, preferably on one side by a hinge 21 and on the other side by a hasp or latch 22 60 and turn button 23. The skirt 24 of the top fits around the collar 12 of the body and is provided with air inlet openings 25. The hinged top is further provided in its lower portion with an internal retaining collar 26 65 which extends downwardly from the upper and inner portion of the skirt 24 and bears upon or stands over the perforated plate 16 and has at its lower end a flange 27 which projects inwardly beyond the inner edge of 70 the annular plate. 28 represents a circular base plate for supporting an electric light bulb 29 which depends from the under side of the plate and is secured thereto by a socket 30. This base plate is preferably 75 provided with openings 31 for ventilation. 32 represents the conducting wires which may pass through the opening 33 underneath the cap 34 of the hinged top or be arranged in any other suitable manner. The 80 base plate 28 is of such size that it fits within the cylindrical wall 17 attached to the perforated plate 16 and rests upon the supporting flange 19 at the lower end thereof, as represented in Figs. 1 and 2. The cylin- 85 drical wall 17 and its supporting flange 19 form a seat for the base plate 28 on which the latter is removably held by the retaining collar of the hinged lamp top.

When the hinged top is closed, as represented in Fig. 1, the flange 27 at the lower end of the retaining collar 26 stands over the perforated plate 16 and over the marginal portion of the base plate 28 and holds these plates securely in position. Upon 95 raising the hinged top from the body, as indicated in Fig. 2, the base plate 28 and the electric light attached thereto can be removed and the oil lamp can be employed for illumination, as represented in Fig. 5. 100

The air entering through the openings 25 in the skirt of the hinged top passes downwardly through the transverse perforated plate 16 and through the annular passage between the breast 11 of the body and the 105 inner depending curtain 18 and so reaches

the interior of the lamp body and supports the flame of the oil lamp, when the latter is used. When the electric light is in use the heated air escapes from the lamp body through the openings 31 in the base plate 28 and passes through the hinged top from which it escapes in the usual way. When the oil lamp is in use the space within the cylindrical wall 17 is unobstructed, as represented in Fig. 5, and the heated air and products of combustion pass upwardly through this space into the top and escape from the latter underneath the cap thereof. The top is provided with an upwardly tapering chimney or draft tube 35 and an internal deflecting collar 36, both extending upwardly from the retaining collar 26. These parts form in connection with the retaining collar 26, cylindrical wall 17 and curtain 18, an ascending escape passage which is divided at the level of the perforated plate 16 and base plate 28 for permitting the introduction and removal of the base plate.

In the construction represented in Fig. 6, the base plate 37 of the electric light is provided with an external flange 38 by which it rests upon the transverse plate 16 and the retaining collar 39 of the top stands over the transverse plate outside of this flange. In this construction the base plate is not positively held against displacement in an upward direction, and this is not necessary in lamps which are not subjected to violent movements.

In the construction represented in Fig. 7, the base plate 37 is constructed and supported as in Fig. 6, but the retaining collar 40 of the top stands not only over the transverse plate but is provided with an offset or shoulder 41 which projects inwardly over the base plate and secures the latter against upward movement.

In the several forms of this improved lamp herein shown the outlet passage for the products of combustion is divided approximately at the level of the transverse air-inlet plate, and the base plate for the electric light, when used, rests removably in or on the seat formed or supported by this plate.

I claim as my invention:

1. The combination with a lamp body, of a perforated annular plate supported transversely in the upper portion of the body and provided with a seat for the base plate of an electric light, a base plate resting on said seat and provided with means for carrying an electric light, and a movable lamp top which is movable toward and from said perforated plate, substantially as set forth.

2. The combination with a lamp body, of an annular perforated plate supported

transversely in the upper portion thereof and provided with a seat for the base plate of an electric light, and a curtain depending below said plate and surrounded by a passage through which the air passes downwardly from said perforated plate, a base plate for an electric light resting on said seat, and a movable lamp top which is movable toward and from said perforated plate, substantially as set forth.

3. The combination with a lamp body and a lamp top movably connected therewith, of an annular perforated plate supported on said body and provided with a seat for the base plate of an electric light, an escape passage formed in said body and top and divided approximately at the level of said perforated plate, said passage comprising a portion arranged in and carried by said body below said perforated plate and a portion arranged in said top above said plate, said top being movable toward and from said perforated plate, and a base plate for an electric light arranged removably on said seat, substantially as set forth.

4. The combination with a lamp body provided in its upper portion with an annular perforated plate and an inner upright wall which is provided with an inwardly projecting supporting shoulder, of a base plate arranged within said wall and resting upon said shoulder, said base plate being provided with means for carrying an electric light, and a movable lamp top, substantially as set forth.

5. The combination with a lamp body provided in its upper portion with an annular perforated plate having an inner upright wall which is provided with an inwardly projecting supporting shoulder, of a base plate arranged within said wall and resting upon said shoulder, said base plate being provided with means for carrying an electric light, and a movable lamp top provided with a lower portion which stands over said base plate when the top is closed and prevents displacement thereof, substantially as set forth.

6. The combination with a lamp body provided in its upper portion with a depressed seat for supporting the base plate of an electric light, of a base plate resting in said seat and having means for carrying an electric light, and a movable top having a downwardly extending retaining collar which stands over said base plate when the top is closed, substantially as set forth.

7. The combination with a lamp body provided in its upper portion with an annular perforated plate having an inner upright wall which is provided with an inwardly projecting supporting shoulder, of a base plate arranged within said wall and

resting upon said shoulder, said base plate
being provided with means for carrying an
electric light, and a movable lamp top pro-
vided with a downwardly extending retain-
5 ing collar which stands over said perforated
plate and said base plate when the top is
closed, substantially as set forth.

Witness my hand in the presence of two
subscribing witnesses.

FURMAN D. SPEAR.

Witnesses:

J. STANTON,
CH. FREEMAN.

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