May 3, 1938. S. SHER 2,115,883

LAMP

Filed April 21, 1937

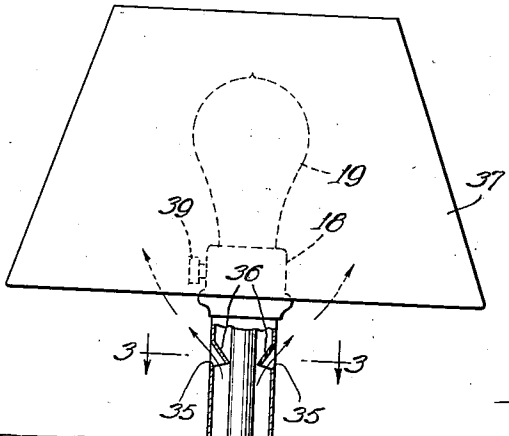


Fig. 1

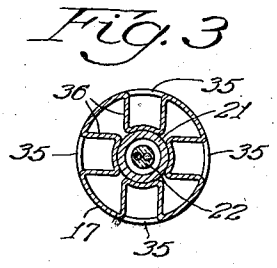


Fig. 3

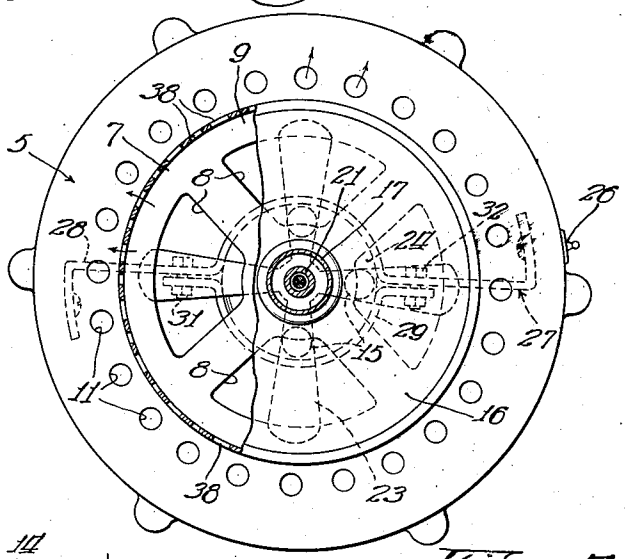
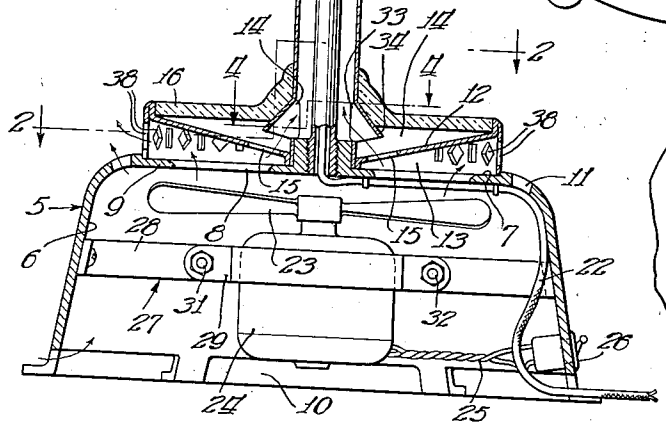


Fig. 2



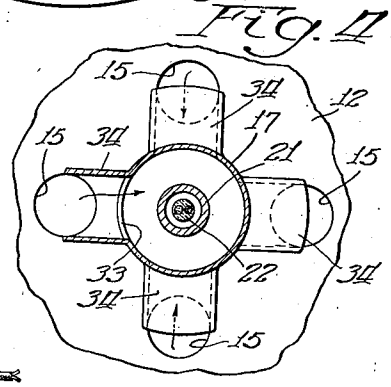


Fig. 4

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Patented May 3, 1938 2,115,883

UNITED STATES PATENT OFFICE

2,115,883

LAMP

Samuel Sher, Chicago, Ill.

Application April 21, 1937, Serial No. 138,222

6 Claims. (Cl. 230—249.5)

This invention relates to lamps and particularly to a novel construction and arrangement for circulating the air adjacent thereto and within a room where lamps so constructed may be positioned.

It is a well-known fact that when seated alongside of a lamp as, for example, a floor or table lamp, one may be very uncomfortable, especially in warm weather, due to the heat generated by the light bulb or bulbs in the lamp.

An object, therefore, of the present invention is to provide a novel construction and arrangement whereby the air adjacent the lamp may be circulated in a manner to dissipate the heat generated thereby.

Another object of the invention is to provide a novel arrangement whereby air adjacent the base of the lamp may be circulated and directed toward a person near the lamp to produce a cooling effect.

Another object of the invention is to provide a novel construction and arrangement for circulating a portion of the air through a portion of the lamp body or support and direct it upwardly past a light bulb or bulbs mounted thereon and away from a person or persons seated alongside the lamp.

A further object of the invention is to provide a structure whereby air may be circulated in either an upwardly or downwardly direction as may be desired.

A still further object of the invention is to improve devices of the character described in sundry details hereinafter referred to and particularly pointed out in the appended claims.

One embodiment of the present invention is shown for illustrative purposes in the accompanying drawing, in which:

Fig. 1 is a sectional elevational view through a lamp structure and base therefor embodying features of the present invention;

Fig. 2 is a plan view partly in section of the base portion of the lamp illustrated in Fig. 1, and taken substantially as indicated by the line 2—2 thereof;

Fig. 3 is an enlarged plan sectional view taken substantially as indicated by line 3—3 of Fig. 1; and

Fig. 4 is an enlarged plan view partly in section of the portion of the base illustrated in Fig. 1, and taken substantially as indicated by the line 4—4 thereof.

The illustrative embodiment of the present invention shown in the drawing comprises a base member indicated, as a whole, by the numeral 5 of hollow form to provide a main chamber 6, the upper portion of the base member 5 having a chamber 7 formed therein communicating with the main chamber 6, preferably, through a plurality of apertures 8 formed in the upper wall portion 9 of the chamber 6, the base member 5 being provided also with an air inlet 10 adjacent its lower portion and with discharge openings 11 communicating with the atmosphere outside the base.

Positioned in the chamber 7 is an upwardly and outwardly inclined baffle plate 12 forming lower and upper compartments 13 and 14, respectively, within the chamber 7, the baffle plate 12 being provided with a plurality of apertures 15 for providing communication between the respective compartments 13 and 14.

Mounted on the base 5 and extending upwardly through the upper wall portion 16 of the chamber 7 and compartment 14 is a vertically disposed hollow elongated lamp supporting column 17 having a lamp socket 18 mounted adjacent its upper end portion adapted to receive a lamp 19 shown, in the present instance, as an electric bulb and extending upwardly through the column 17 is a conduit 21 for carrying the electrical conductors to the lamp socket 18, the conduit 21 being of substantially less diameter than the inner diameter of the column 17 for providing a substantial space or air passage within the column.

Removably mounted within the main chamber 6 of the base member 5 is a fan 23 adapted to be driven by an electric motor 24 having suitable electrical connections 25 operatively connected through a switch 26 with a suitable source of electrical energy by which the lamp 19 is operated, the fan 23 and motor 24 being shown, in the present instance, as mounted in a bracket indicated, as a whole, by the numeral 27 and formed of oppositely disposed portions 28 and 29 adapted to be clamped together by means of bolts 31 and 32 for removably securing the motor 24 and fan 23 in suitable position within the chamber 6.

As clearly illustrated in Figs. 1 and 2, the lower end portion of the lamp supporting column 17 is provided with a plurality of apertures 33 communicating with the compartment 14 and provided with upwardly and inwardly inclined deflectors 34 positioned above the apertures 15 of the baffle plate 12 in a manner to receive air therefrom and direct it into the interior of the column 17 and into the space between the inner surface thereof and the conduit 21.

The column 17 is also provided, adjacent its upper end portion, with a plurality of apertures 35 having a plurality of upwardly and outwardly inclined deflectors 36 associated therewith for directing the air from within the column outwardly and upwardly past the lamp socket 18 and bulb 19 in a manner to carry the heat generated by the bulb upwardly as, for example, through a shade member 37, and away from a person sitting adjacent the lamp.

As illustrated in Fig. 1, the outer annular wall of the chamber 7 and compartment 13 is provided with a plurality of openings 38 adapted to communicate with the atmosphere surrounding that portion of the base member 5.

It will be observed from the foregoing description that through the operation of a suitably connected switch 39 the light bulb 19 may be turned "on" and "off", and, if desired, through the operation of the switch 26 controlling the motor 24 and fan 23, air currents may be drawn from the lower side of the base 5 and circulated upwardly and outwardly through the openings 11 formed therein and through the apertures 8 into the compartment 13, from which a portion of the air currents will be directed upwardly and outwardly by the baffle plate 12 and through the openings 38 into the atmosphere adjacent the lamp, and the air currents passing through the apertures 15 of the baffle plate into the chamber 14 will be directed by the deflectors 34 through the apertures 33 formed in the column 17 and into the interior thereof, and thence upwardly through the column to be directed upwardly and outwardly therefrom by the deflectors 36 through the apertures 35 in a manner to carry the heated air adjacent the bulb 19 upwardly through the top of the shade member 37 and away from a person seated adjacent the lamp, thereby providing a comfortable atmosphere surrounding the lamp, and a cooling effect produced on the air above and adjacent the openings 11 and 38 by the air currents directed therethrough.

Obviously, the present invention is not limited to the precise construction and arrangement shown and described as the same may be variously modified. Moreover, all the features of the invention need not be used conjointly as the same may be used to advantage in variously different combinations and subcombinations.

What I claim as new and desire to secure by Letters Patent is:

1. A device of the class described and in combination, a base member having a plurality of chambers formed therein, a hollow lamp supporting column mounted on said base, said column having apertures therein adjacent its lower and upper end portions, respectively, and a fan mounted in said base for circulating air through said chambers, column and apertures.

2. A device of the class described and in combination, a base member having a plurality of communicating chambers formed therein, a hollow lamp supporting column mounted on said base, said column having intake and discharge apertures therein adjacent its lower and upper end portions, respectively, and a fan mounted in one of said chambers for circulating air through other of said chambers, column and apertures.

3. A device of the class described and in combination, a base member having a plurality of communicating chambers formed therein and having an air inlet and discharge openings communicating with certain of said chambers, a hollow lamp supporting column mounted on said base, said column having apertures therein adjacent its lower end portion communicating with one of said chambers and having means adjacent said apertures for directing air into the column, said column having discharge apertures adjacent its upper end portion and having means adjacent said last-mentioned apertures for directing air outwardly from said column, and a fan in one of the chambers of said base below said discharge openings for circulating air therethrough and said chambers, column and apertures.

4. A device of the class described and in combination, a base member having a plurality of communicating chambers formed therein and having an air inlet and discharge openings communicating with certain of said chambers, a hollow elongated lamp supporting column mounted on said base, said column having apertures therein adjacent its lower end portion communicating with one of said chambers and having deflectors adjacent said apertures for directing air into the column, said column having discharge apertures adjacent its upper end portion and having deflectors adjacent said last-mentioned apertures for directing air outwardly and upwardly from said column, and a fan in one of the chambers of said base between said air inlet and discharge openings for circulating air therethrough and through said chambers, column and apertures.

5. A device of the class described and in combination, a base member having a plurality of communicating chambers formed therein and having an air inlet and discharge openings communicating with certain of said chambers, a hollow elongated lamp supporting column mounted on said base and having a lamp socket adjacent the upper end of the column, said column having apertures therein adjacent its lower end portion communicating with one of said chambers and having deflectors adjacent said apertures for directing air into the column, said column having discharge apertures adjacent its upper end portion below said socket and having deflectors adjacent said last-mentioned apertures for directing air outwardly and upwardly from said column past said socket, and a fan in one of the chambers of said base between said air inlet and discharge openings for circulating air therethrough and through said chambers, column and apertures.

6. A device of the class described and in combination, a base member having a main chamber and an air inlet and discharge openings formed therein, said base having a second chamber communicating with said main chamber, a baffle plate in the said second chamber forming upper and lower communicating compartments, said base having discharge openings communicating with said lower compartment, a hollow elongated lamp supporting column mounted on said base and having a plurality of apertures adjacent its lower end portion communicating with said upper compartment and having a plurality of apertures adjacent its upper end portion, and a fan removably mounted in said main chamber for circulating air therethrough and through said compartments, column, openings and apertures.

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