April 28, 1925.

1,535,486

J. W. LUNDY

ELECTRIC LAMP BULB

Filed Aug. 28, 1922

Fig. 1.

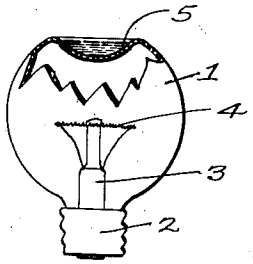


Fig. 2.

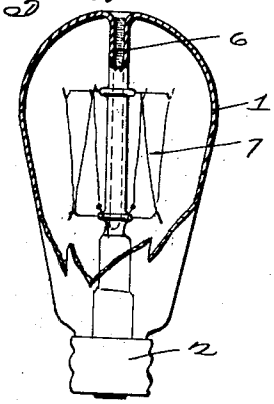


Fig. 3.

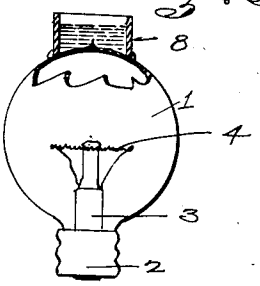


Fig. 4.

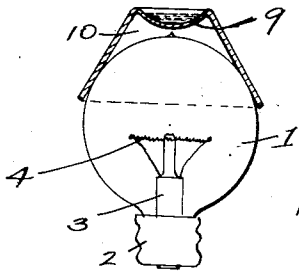


Fig. 5.

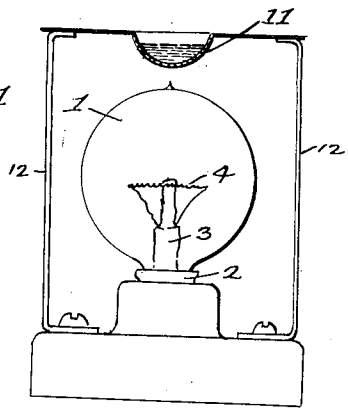
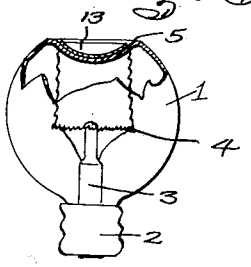


Fig. 6.



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UNITED STATES PATENT OFFICE.

JAMES W. LUNDY, OF SAN FRANCISCO, CALIFORNIA.

ELECTRIC-LAMP BULB.

Application filed August 28, 1922. Serial No. 584,839.

To all whom it may concern:

Be it known that I, JAMES W. LUNDY, a citizen of the United States, and a resident of the city and county of San Francisco, State of California, have made a new and useful invention, to wit, Improvements in Electric-Lamp Bulbs; and I do hereby declare the following to be a full, clear, concise, and exact description of the same.

This invention relates particularly to electric lamp bulbs of a new and novel design having heating or illuminating filaments therein.

An object of the invention is to form an electric lamp bulb of conventional design provided with an article-containing receptacle either integrally therewith or independently thereof, so arranged that any articles contained in said receptacle will be placed in the path of and subjected to the rays of heat directed from the lamp bulb filament.

A further object of the invention is to provide an electric lamp bulb formed with a depression or cavity therein and adapted to contain a fluid or the like, said bulb having a filament therein connecting with an auxiliary heating element arranged within the depression or cavity on said bulb.

A still further object of the invention is to provide a device that will be superior in point of simplicity, inexpensiveness of construction, positiveness of operation and facility and convenience in use and general efficiency. Other objects and advantages will appear as this description progresses.

In this specification and the annexed drawings, the invention is illustrated in the form considered to be the best, but it is to be understood that the invention is not limited to such form, because it may be embodied in other forms; and it is also to be understood that in and by the claim following the description, it is desired to cover the invention in whatsoever form it may be embodied.

In the accompanying one sheet of drawings,

Fig. 1 represents a side elevation, partly in section, of an electric lamp bulb constructed in accordance with my invention.

Fig. 2 is a side elevation of an electric lamp bulb, partly in section, and arranged with a modified construction of my invention.

Fig. 3 is a view of a lamp bulb having a modified form of the invention applied thereto.

Fig. 4 is a view of a lamp bulb having a modified form of the invention applied thereto.

Fig. 5 is a diagrammatic side elevation of a lamp bulb receptacle comprised and arranged in accordance with my invention.

Fig. 6 is a side elevation of a lamp bulb partly in section, illustrating a still further modified form of my invention.

In detail, the construction illustrated in the drawings consists of a conventional type of electric lamp consisting of a glass bulb 1, of any of many shapes and designs, mounted on a metal plug 2 adapted to be arranged in an electric lamp socket, (not shown), which said plug has a filament support 3 therein for supporting the filament 4 within the interior of the bulb 1.

In Fig. 1, the heating filament 4 is adapted to lie horizontally within the bulb so that the rays of heat will rise substantially vertically toward the upper end of the said bulb, for the purpose to be hereinafter described in detail. The contour and arrangement of the bulb 1 differs from the standard and usual type of bulb in that the glass 1 at the upper or top end thereof is molded or formed with an article-containing cavity or depression 5 therein. The depression 5 forms a receptacle or reservoir, within which articles, such as incense, perfumes, disinfectants or deodorants, either of a fluid, paste or powder form, may be arranged, said cavity being positioned directly over the filament 4 and in the path of the rays of heat directed therefrom. Fluids or other articles placed within the depression 5 and heated by the lamp filament do not interfere with the illuminating propensities of the bulb nor have any tendency to shorten the life of the said bulb. The heat rays from the filament, striking the under face of the material forming the depression 5, heat the same and by conduction this heat is transferred to the articles contained within the said cavity. Incense, perfumes, disinfectants and deodorants when thus heated give off fumes in greater volume and strength than through normal evaporation. Bulbs of this character, with incense or perfumes therein, may be thus placed in rooms, theaters, hospitals and the like to scent the air, make the same fragrant, and to eliminate

disagreeable and obnoxious odors—while for fumigating and other purposes, disinfectants and deodorants may be rapidly evaporated in an effective and efficient manner. In either case, after the article has been dissipated from the cavity 5, due to the heat, the lamp filament continues to remain lighted.

The form of bulb illustrated in Fig. 2 differs from that shown in Fig. 1 in that the filament support consists of a hollow shaft 6 arranged centrally within the bulb and open to the atmosphere at its upper end, whereby an article may be contained within the hollow interior of said filament support and efficiently heated by the vertically arranged filament wires 7 to give off its fumes.

In Fig. 3, a bulb of substantially the same type as that shown in Fig. 1 would be utilized, but with the difference that instead of forming a depression or cavity integrally with the bulb, a reservoir or receptacle would be arranged on the exterior of a standard bulb by fixedly securing a glass or other ring-shaped receptacle 8 to the exterior of the bulb. In either of the constructions shown in Figs. 1, 2 or 3, the article-containing receptacle is arranged and designed to be a substantial part of the bulb.

In Fig. 4, an article-containing receptacle 9 is adapted to be removably positioned on the bulb 1, whereby a substantially closed air chamber 10 is formed between the under side of the receptacle 9 and bulb 1, to prevent the escape of heat units.

The construction shown in Fig. 5 is similar to that illustrated in Fig. 4 with the difference that the bulb 1 is arranged adjacent an article-containing receptacle 11 and spaced therefrom, said bulb 1 and receptacle 11 being supported either by the same or independent frames 12. This construction provides an air cavity between the bulb and receptacle with no means for confining or directing the flow of the heat units, materially lowering the heating efficiency.

In Fig. 6, a bulb of the same type as that shown in Fig. 1 is formed with a cavity 5 on the upper side thereof, in which is arranged a heating element 13, consisting of suitable resistance wire embedded in a non-conductor. The terminals of the heating element 13 extend through the bulb 1 and are connected to the terminals of the filament 4, whereby said resistance wire will become heated during the same period that current is directed through the filament 4. The auxiliary heating element will thus raise the temperature of any articles contained within the cavity 5 in a much shorter period of time than in the form of bulb where said auxiliary element would not be used.

Having thus described this invention, what I claim and desire to secure by Letters Patent is:—

A device such as described, comprising an electric lamp bulb; an illuminating filament arranged horizontally within said bulb; an attaching plug on said bulb supporting said filament; and a depression formed integrally with said bulb of substantially the same diameter as said filament and arranged in spaced relation relative to said filament so that the heat of illumination is concentrated on said depression.

In testimony whereof, I have hereunto set my hand at San Francisco, California, this 21st day of August, 1922.

JAMES W. LUNDY.

In presence of—

LINCOLN V. JOHNSON.