(No Model.)

W. S. LOWE.

INCANDESCENT ELECTRIC LAMP.

No. 535,838. Patented Mar. 19, 1895.

Fig. 1

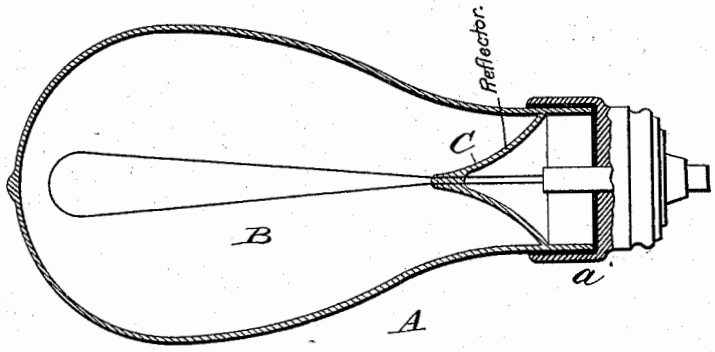
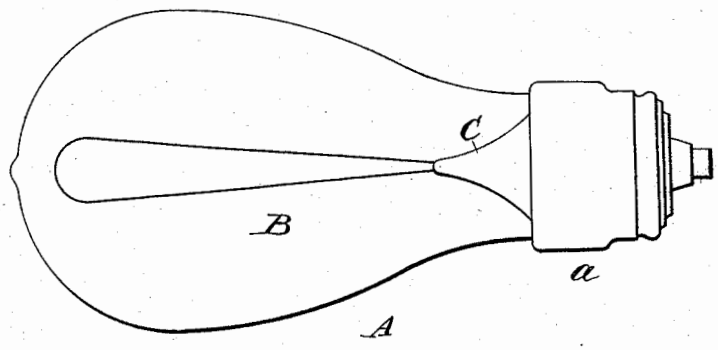


Fig. 2



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UNITED STATES PATENT OFFICE.

WILLIAM S. LOWE, OF LIMA, OHIO.

INCANDESCENT ELECTRIC LAMP.

SPECIFICATION forming part of Letters Patent No. 535,838, dated March 19, 1895.

Application filed October 15, 1892. Serial No. 449,042. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. LOWE, a citizen of the United States, residing at Lima, Ohio, have invented certain new and useful Improvements in Incandescent Electric Lamps, of which the following is a specification.

The object of my invention is to make an incandescent electric lamp with a reflector in the upper portion, so that the greater portion of the light which is now wasted will be saved and utilized; and my invention consists in the features and details of construction hereinafter described and claimed.

In the drawings, Figure 1 is an elevation, partly in section, of my improved incandescent electric lamp; and Fig. 2 is a like elevation of the same.

Heretofore in incandescent electric lamps, the upper portion of the same through which the wire or filament extends is usually made of some material which absorbs light, and, as a consequence, all the light, or the greater portion of the light, striking against it, is absorbed and wasted. In my improvement, I propose to provide means by which this light, or the greater portion of it, will strike against a reflector and be cast or diffused outward, thus utilizing a larger per cent. of the light than is now obtained under the present methods.

In making my improved incandescent lamp, I use an ordinary lamp, A, with the usual bulb, B. In the upper portion I provide, preferably, a conical shaped reflector C, beginning just above where the outside cap *a* ends, and extending downward to a point on stub end through which the wire or filament enters the bulb. This reflector can be made of any desired angle or shape, preferably like the drawings, and is intended to reflect the light which usually goes to waste in the upper portion of the lamp. The reflector can be blown or cast at the same time and integral with the bulb. It is hollow in the top and plated with ordinary silvering solution, or any solution which is used in making looking glass or reflectors. The reflector can be made with a smooth surface, as shown in the drawings, or the surface can be corrugated, laterally or longitudinally as may be desired. Such shapes would tend to hold the silvering solution in place and also present a larger reflecting surface to the light, thus causing the light to become more diffused. After the silvering solution has been applied to the inside of the cone, the cavity is filled with the usual non-conducting material, generally plaster of paris, and the silvering solution must possess the property of withstanding a moderate degree of heat, say about 212° Fahrenheit, or 100° centigrade, to withstand the slight amount of heat generated by the wire or filament.

In all other respects besides those hereinbefore mentioned, the lamp can be made in any of the usual constructions.

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

In incandescent electric lamps, the combination of an incandescent electric lamp, and a conical shaped reflector in the upper portion, the base of the reflector beginning near where the outside cap ends and extending downward to a point at the stub end through which the filament enters the bulb, substantially as described.

WILLIAM S. LOWE.

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