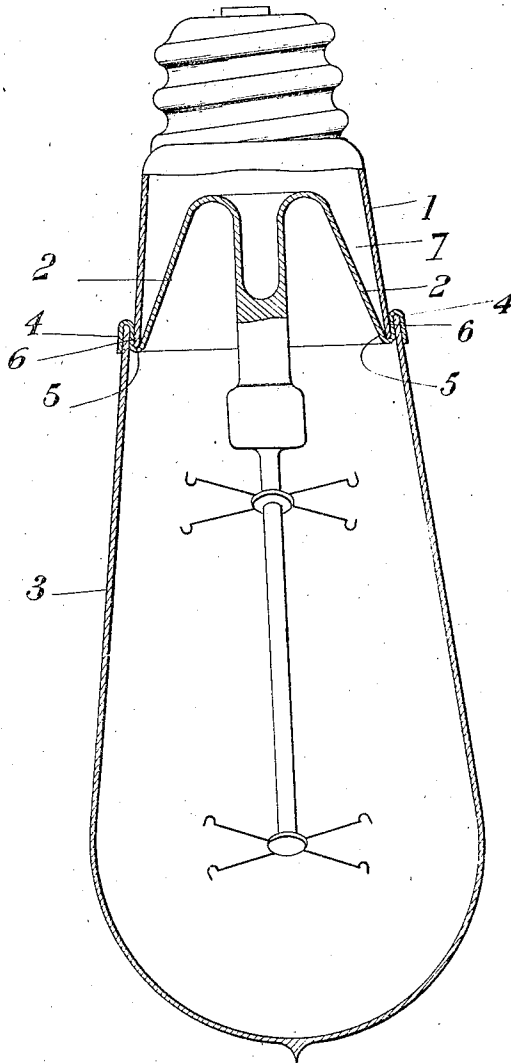


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ELECTRIC INCANDESCENT LAMP WITH BIPARTITE BULB.
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1,046,918.



Witnesses:

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ELECTRIC INCANDESCENT LAMP WITH BIPARTITE BULB.

1,046,918.

Specification of Letters Patent.

Patented Dec. 10, 1912.

Application filed April 1, 1912. Serial No. 687,744.

To all whom it may concern:

Be it known that we, PAUL WEISSE and SIGBERT BLOCH, subjects of the German Emperor, and residents, respectively, of Gronau, Hanover, Germany, and of Charlottenburg, Germany, have invented certain new and useful Improvements in Electric Incandescent Lamps with Bipartite Bulbs, of which the following is a specification.

The present invention relates to incandescent lamps and especially to lamps with metal filaments the glass bulb of which is made bipartite so as to allow of the lamps being repaired after the filaments are burned.

The novelty resides in that in an electric incandescent lamp with bipartite bulb, the connecting of both bulb portions is obtained by means of a soluble cement or jointing compound. Said novelty further lies in that in an electric incandescent lamp, a cap, a glass bulb, open at its upper end, a carrier, the outer circular bent edge of which extends between the adjacent edges of said cap and said bulb, said bent edge forming two oppositely directed adjacent grooves for receiving said adjacent edges of the cap and the bulb and a soluble cement or jointing compound provided in said grooves for firmly and tightly connecting together said adjacent edges of the cap, the bulb and the carrier.

Glass bulbs made in two parts are known, but the lamps of that kind known until today present a serious drawback. While the air is exhausted, the bulbs sometimes burst. Furthermore it is very difficult to tighten the joint between both parts of the bulb to such an extent that the lamp keeps air tight.

The object of the present invention is to eliminate the above drawbacks so as to construct a lamp which, after being repaired, has the same value as a new one while the repairing expenses are much lower than the purchasing cost of a new lamp.

The accompanying drawing shows at an enlarged scale a vertical axial section of a lamp according to the invention.

On the outer edge of the carrier 2 are provided two circular adjacent but oppositely

directed grooves or gutters 5 and 6. While mounting the cap 1 by means of cement, the edge 6 enters the groove 5 of the carrier 2 so that the empty space 7 between the cap 1 and the carrier 2 receives the jointing compound or cement. The cement composition we preferably employ is composed of potassium nitrate K, No. 3, 50 parts; sodium nitrate, N, No. 3, 35 parts; nitrate of lead, Pl. No. 3, 15 parts.

In the outer groove 4 of the carrier 2 is engaged the edge of the glass portion 3 of the bulb and said groove is filled with cement. Owing to this arrangement the edge 6 of the cap 1 is at a lower level than the edge of the bulb portion 3. The junction between the carrier 2 and the bulb 3 is protected by the edge 6 of the cap 1 and consequently the carrier is not exposed to the pressure which is produced on the joint while exhausting. The jointing mass between the bulb 3 and the edge 4 of the carrier provides a firm and tight connection which satisfies every requirement.

The cement or jointing compound may be easily dissolved in water or vinegar, according to its composition, and the repairs may be executed very easily after removing the bulb 3.

Having now fully described our said invention, what we claim and desire to secure by Letters Patent, is:

1. In a lamp of the class described, the combination of a hollow outer cap member, an inner cap member formed at its edges with an inner seat open at its top and an outer seat which is open at its bottom, the lower end of the outer cap member being seated in the inner seat and cemented therein, and a bulb having its upper free end fitted in the outer seat and cemented therein.

2. In a lamp of the character described, the combination of an upper outer cap member, an inner cap member having its lower edge supported on the lower edge of the outer cap member and provided with a central depending post to support the filaments, and a bulb cemented to the lower edge of the inner cap member, outside the vertical plane of the outer cap member.

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3. In a lamp of the character described, the combination of a bulb, of an outer cap member, an inner cap member crimped at its lower end to form two inverted seats in different vertical planes, the outer cap member and the bulb being cemented in said seats.

In testimony whereof we have hereunto set our hands in presence of two witnesses.

PAUL WEISSE.
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Witnesses:

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