No. 665,582. Patented Jan. 8, 1901.

H. R. SARGENT.

LAMP SOCKET.

(Application filed Aug. 14, 1900.)

(No Model.)

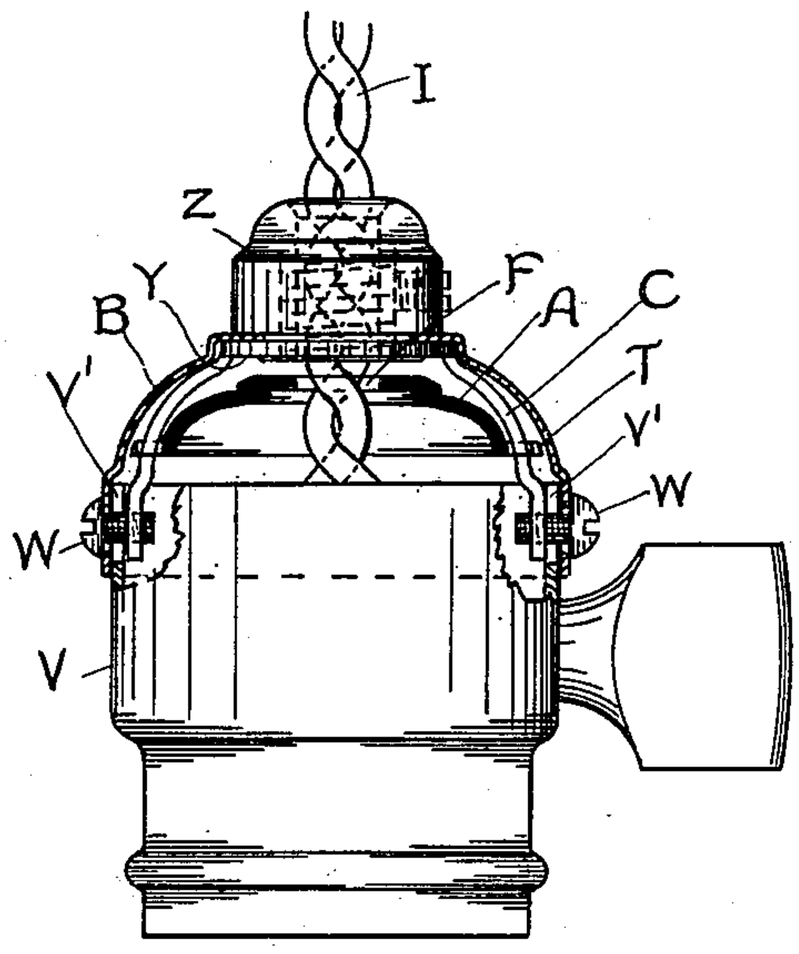

Fig. 1.

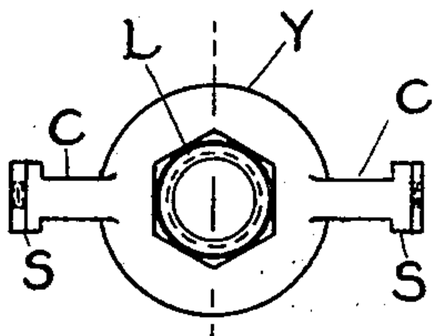

Fig. 3.

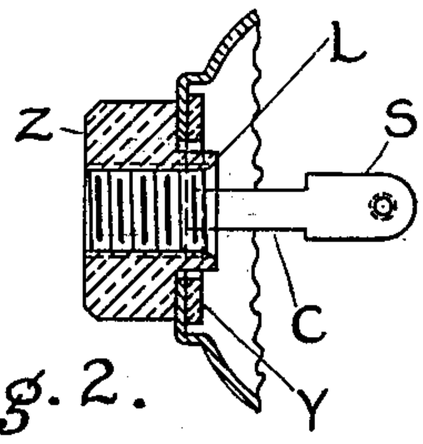

Fig. 2.

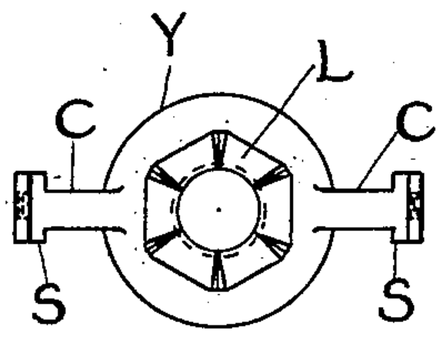

Fig. 4.

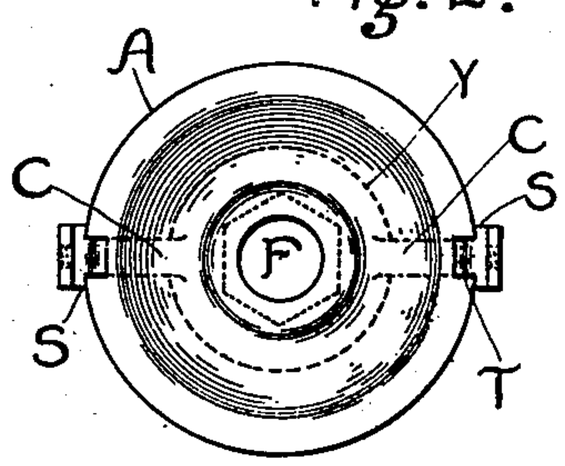

Fig. 5.

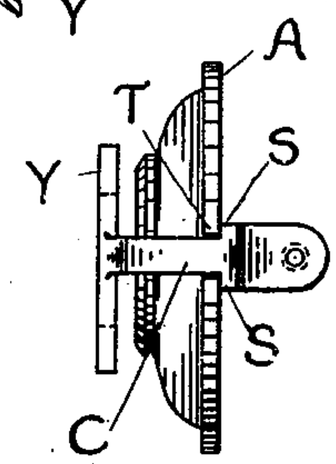

Fig. 6.

Witnesses.
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Inventor
Howard R. Sargent.
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UNITED STATES PATENT OFFICE.

HOWARD R. SARGENT, OF SCHENECTADY, NEW YORK, ASSIGNOR TO THE GENERAL ELECTRIC COMPANY, OF NEW YORK.

LAMP-SOCKET.

SPECIFICATION forming part of Letters Patent No. 665,582, dated January 8, 1901.

Application filed August 14, 1900. Serial No. 26,838. (No model.)

To all whom it may concern:

Be it known that I, HOWARD R. SARGENT, a citizen of the United States, residing at Schenectady, county of Schenectady, State of New York, have invented certain new and useful Improvements in Lamp-Sockets, (Case No. 1,615,) of which the following is a specification.

This invention relates to improvements in lamp-sockets or similar articles.

Figure 1 is an elevation, partly broken away, of a lamp-socket embodying my invention. Fig. 2 is a sectional view of the upper portion thereof. Figs. 3 and 4 are plan views of said portion; and Figs. 5 and 6 are a plan and elevation, respectively, of said upper portion embodied with my improvements.

As shown in Fig. 1, V is a metallic shell surrounding the insulating-base and lamp-retaining member of the socket, which base supports the contacts. The usual switch-key projects from the insulating-base through the shell V, and the base is suspended from the wires I, which are connected to the line-terminals on the base. A metallic cap B, having an opening for the passage of the line-wires, is secured to the shell V by screws W, which are supported in arms or projections C, which extend from the crown of the cap.

A lining A of insulating material, such as ordinary insulating-fiber, and having an opening F registering with the opening in the cap, is interposed between the metallic cap B and the upper portion of the insulating-base of the socket to prevent current from flowing from any of the interior contacts or wires to and through the metallic cap, whereby danger of fire or of persons receiving shocks therefrom is avoided. The use of this lining A does not interfere in any manner with the use of the lining of the shell V, well known to those skilled in art. The difficulty of properly securing the lining A in position is due to the fact that ordinary securing means would pass through the cap and lining and would defeat the very object for which the lining is interposed. This difficulty has been overcome in the following manner: As shown in Figs. 1 and 3, the arms C are formed integral with a yoke Y, which is located within the interior of the crown of the cap. As shown in Fig. 2, nozzle Z is provided with an interior perforation for the passage of the wires I, which is the opening in the cap above referred to, and on one end is a sleeve L, of reduced thickness, which fits in the central perforation of the yoke Y. As shown in Fig. 2, after the yoke Y has been placed within the interior of the crown of the cap B the sleeve of the nozzle Z is inserted in the holes in the cap and yoke, respectively.

Fig. 4 shows how the sleeve L is bent or riveted over the yoke to hold the yoke, the cap, and the nozzle together as they are assembled in Fig. 2, the cap being omitted in Fig. 4 for the sake of clearness. The arms C now extend down substantially parallel with the cap B and are threaded for the reception of screws W, which engage in bayonet-joints V′ in the shell V, to hold the shell and cap together. This has been the customary mode of securing the parts together.

For the purpose of this invention the arms C are provided with shoulders S near their lower ends, and, as shown in Figs. 5 and 6, (from which the cap B is omitted,) the insulating-lining A is cut away at T, so as to fit the arms above these shoulders. As the lining will yield slightly under pressure, it is inserted in the cap by forcing it over the lower shouldered portion of the arms C until its cut-away portions T engage the smaller portions of the arms. In this position it is absolutely rigid, as the curvature of the cap B prevents its being moved farther toward the crown, the engagement of the recess portions T with the smaller portion of the arms prevents it from rotation, and the engagement of its portions adjoining the recess portions with the shoulders S of the arms prevents it from falling from the cap.

What I claim as new, and desire to secure by Letters Patent of the United States, is—

1. In an article of substantially the character described, the combination with a cap provided with interior retaining means, of an insulating-lining made yieldable so that it can be forced over the retaining means, which lining is held thereby in the interior of the cap.

2. In an article of substantially the character described, the combination with a metallic cap for covering the insulating-base, of a

yoke secured in the crown of the cap, and provided with arms extending within the interior of the cap, and an insulating-lining for protecting the metallic cap from live contacts and retained by the arms within the cap.

3. In an article of substantially the character described, the combination with a metallic cap for covering the end of the insulating-base and having an opening for the circuit-wires in its crown, of an annular yoke secured in the crown of the cap beneath the opening, and provided with arms extending within the interior of the cap, and an insulating-lining for protecting the cap from live contacts and retained by the arms within the cap and provided with a hole for the circuit-wires.

4. In an article of substantially the character described, the combination with a metallic cap for covering the end of the insulating-base, of arms extending from the crown of the cap within the interior of the cap, and a lining of insulating material between the end of the insulating-base and the cap, said lining being retained within the cap by the arms.

5. In an article of substantially the character described, the combination with a metallic cap for covering the end of the insulating-base, of arms extending in the interior thereof, and having shoulders formed thereon, and an insulating-lining for protecting the metallic cap from live contacts and held within the cap by said shoulders.

6. In an article of substantially the character described, the combination with a metallic cap for covering the end of the insulating-base, of retaining means secured to the interior of the crown of the cap, and an insulating-lining for protecting the metallic cap from live contacts and held inside the cap by said means.

7. In an article of substantially the character described, the combination with a metallic cap for covering the end of the insulating-base, of a nozzle secured in the crown of the cap, retaining means held by said nozzle within the interior of the cap, and an insulating-lining for protecting the metallic cap from live contacts and held within the cap by said retaining means.

8. In an article of substantially the character described, the combination with the metallic cap V for covering the end of the insulating-base, of the nozzle Z, the yoke Y, and the insulating-lining A for protecting the metallic cap from live contacts and held within the cap by the yoke.

9. In an article of substantially the character described, the combination with a metallic cap for covering the end of the insulating-base, of parts secured within the interior of the cap, and provided with shoulders, and an insulating-lining for protecting the cap from live contacts and held within the cap by the shoulders.

10. In an article of substantially the character described, the combination with a cap, of arms extending from the crown of the cap, each having enlarged shoulders, and an insulating-lining adapted to be sprung over said shoulders, said lining being cut away to receive the portions of the arms between the shoulders and the crown.

11. In an article of substantially the character described, the combination with a cap, of projections extending in the interior thereof, and an insulating-lining adapted to be sprung over said projections, said lining being held by said projections within the cap.

12. In an article of substantially the character described, the combination with a cap, of projections extending in the interior thereof, and having small and enlarged portions, and an insulating-lining cut away at its sides to fit the small portions of said projections, and adapted to be sprung over the enlarged portions of said projections, said lining being held within the cap by the said enlarged portions, and held from movement within the cap by the engagement of its cut-away portions with the small portions of the projections.

13. In an article of substantially the character described, the combination with a metallic cap for covering the end of the insulating-base and having an opening in its crown, of a nozzle extending through the opening, an annular yoke resting against the inner portion of the crown of the cap, and surrounding the opening in the crown and the nozzle, the nozzle being riveted over the yoke to hold the parts together, the yoke being provided with arms, and an insulating-lining for protecting the metallic cap from live contacts and held by the arms within the cap.

14. In an article of substantially the character described, the combination with a cap, of projections extending in the interior thereof, and an insulating-lining adapted to be sprung over said projection, said lining being held by said projections within the cap.

15. In an article of substantially the character described, the combination with a cap, having a hole in its crown for the passage of the wires leading to the lamp, of projections extending in the interior of the cap, and an insulating-lining having a hole registering with the hole in the cap, said lining being held by said projections within the cap.

In witness whereof I have hereunto set my hand this 13th day of August, 1900.

HOWARD R. SARGENT.

Witnesses:
BENJAMIN B. HULL,
MARGARET E. WOOLLEY.