No. 777,666. PATENTED DEC. 20, 1904.

J. H. DALE.

CLUSTER SOCKET.

APPLICATION FILED APR. 5, 1904.

NO MODEL.

Fig. 1.

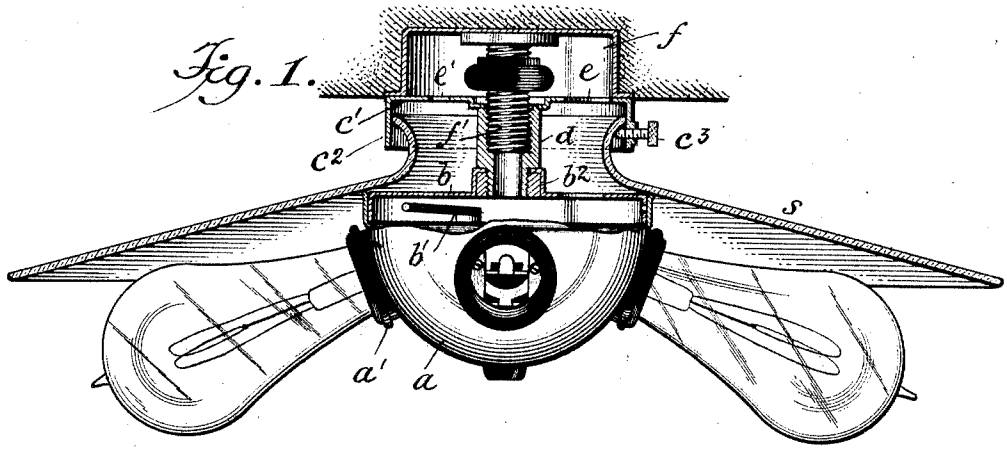



Fig. 2.

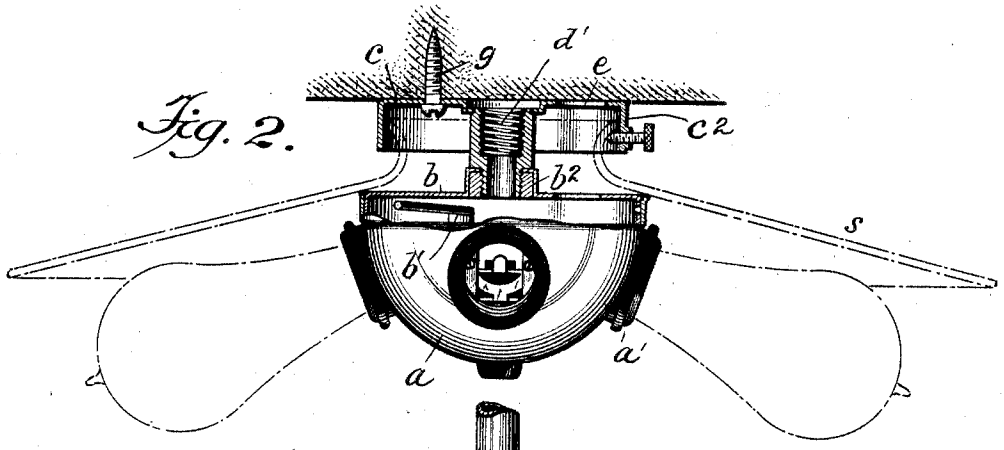
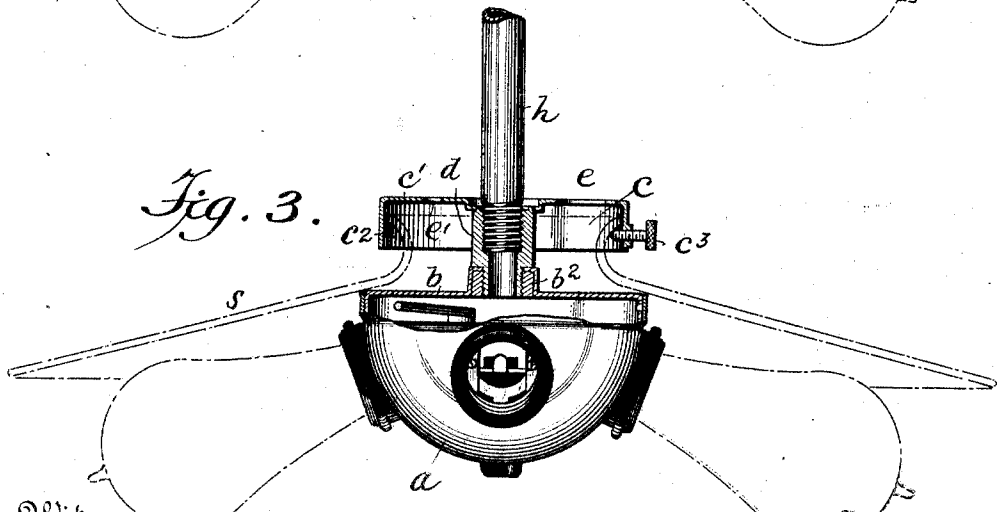



Fig. 3.




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# UNITED STATES PATENT OFFICE.

JOHN H. DALE, OF NEW YORK, N. Y.

## CLUSTER-SOCKET.

SPECIFICATION forming part of Letters Patent No. 777,666, dated December 20, 1904.

Original application filed February 18, 1904, Serial No. 194,175. Divided and this application filed April 5, 1904. Serial No. 201,686.

*To all whom it may concern:*

Be it known that I, JOHN H. DALE, a citizen of the United States, residing at the city of New York, in the borough of Manhattan and State of New York, have invented certain new and useful Improvements in Cluster-Sockets, of which the following is a full, clear, and exact description.

This application is a division of application, Serial No. 194,175, filed February 18, 1904.

The invention relates to electric fixtures of the kind known as "cluster-sockets," and it has special reference to the manner of supporting the same and of sustaining a shade.

The object of the invention is to provide a device which will serve the double purpose of a support for the cluster and a shade-holder and which will also render it possible to remove the cluster without disturbing the support or the shade.

A further object is to provide a support for cluster-sockets adapted to be sustained in place in various ways, depending upon the conditions under which the cluster is used and mounted.

With these objects in view my invention consists of a cluster-socket in combination with a detachable base-plate and a combined shade holder and support, the latter being constructed to be secured either to a plain ceiling or to an outlet-box or to a tube dropped from the ceiling.

The invention also consists of other constructions and combinations, which will be fully hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a side elevation of the cluster with parts broken away and the shade and supporting devices in section. Figs. 2 and 3 are similar views of the cluster, showing different methods of supporting the same and the shade, the shade and lamps being shown in dotted lines.

The construction in detail of the cluster-socket is not material to the present invention. It comprises, however, a finishing-cap *a*, having a number of openings in its side corresponding to the number of lamps in the cluster, which openings may or may not be bushed by rings *a'* of insulating material. Inside of the cap are located the usual metallic contacts and terminals with which the lamps engage when they are inserted and supported in the openings to deliver current to them. The top of this cap is closed by a base-plate *b*, from which the cap is readily detachable by means of bayonet-joint connections, (indicated at *b'*,) the base having a downwardly-turned flange which enters the edge of the cap. At the center of the base-plate is an internally-threaded hub or bushing $b^2$.

*c* is a combined support for the cluster-socket and shade-holder. It consists of a disk of metal *c'* having a downwardly-turned flange $c^2$. The latter is provided with a number of radial inwardly-directed screws $c^3$ to engage a flange on the shade *s*, as shown in the several figures. At the center of the disk *c* is a downwardly-directed hub or nipple *d*, having a reduced extremity threaded externally to fit the internal thread on the base *b* and at its opposite end threaded internally, as indicated at *d'*, there being a free passage entirely through it. One or more large openings *e* are provided in the disk *c* for a purpose which will hereinafter be referred to and one or more small openings *e'* for a purpose also to be referred to.

The three figures of the drawings indicate the various ways of mounting the fixture. In Fig. 1 it is connected with an outlet-box, the latter indicated by *f* and seated, as usual, in the plaster of a ceiling and having a centrally-threaded nipple *f'* projecting slightly outward from the surface of the ceiling. The disk *c* may be secured to this nipple by screwing the thread *d'* of the hub over it. This may be done after the shade, the cluster, the base-plate, and shade-holder have all been assembled, as can readily be seen from an inspection of Fig. 1; but usually the disk *c* will first be screwed onto the nipple of the outlet-box, then the shade will be secured by means of the screws $c^2$, then the base-plate *b* will be screwed to the lower end of the hub *d*, and finally the cluster engaged with the base-plate. The electric wires leading to the cluster may pass from the outlet-box either through the nipple

$f'$ and hub $d$ or through one or more of the large openings $e$ in the disk $c$.

Another way of supporting the cluster is illustrated in Fig. 2, wherein it is applied directly to the ceiling, the disk $c$ being held by screws $g$ passing through the small holes $e'$ in the disk $c$ and into the woodwork beyond the plaster. The other connections with the cluster and shade are the same as before described, and the electric wires in this case may be run either through the central passage or the large openings $e$, the plaster being broken out to let them through.

Fig. 3 shows another method of supporting wherein the cluster is placed at the end of a tube or conduit $h$ dropped from the ceiling. The lower end of the tube will have a thread similar to that on the nipple of the outlet-box and the disk $c$ will screw onto it, the other parts being also connected as before. The wires in this case will pass down through the tube and threaded hub $d'$.

Having described my invention, I claim—

1. A cluster-socket comprising a finishing cap or casing provided with a plurality of openings for lamps, and lamp-holding devices and contacts in said cap or casing for engagement with the lamps, in combination with a base-plate adapted to cover the open side of said cap or casing and being detachably connected therewith and wholly independent of the devices within the cap, and a combined shade-holder and support with which said base-plate is connected.

2. The combination with a cluster-socket, of a combined support and shade-holder consisting of a disk having an internally and externally threaded hub and a shade-supporting flange, the cluster-socket having an internal thread adapted to engage the external thread on said hub, substantially as described.

3. The combination with a cluster-socket provided with an internally-threaded supporting-bushing and a combined support and shade-holder consisting of a disk having a hub threaded externally for engagement with said nipple and internally for engagement with a support.

In witness whereof I subscribe my signature in presence of two witnesses.

JOHN H. DALE.

Witnesses:

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