No. 897,455. PATENTED SEPT. 1, 1908.

J. H. CALDWELL.

CLUSTER FIXTURE FOR ELECTRIC LIGHTS.

APPLICATION FILED DEC. 21, 1907.

2 SHEETS—SHEET 1.

Fig. 1.

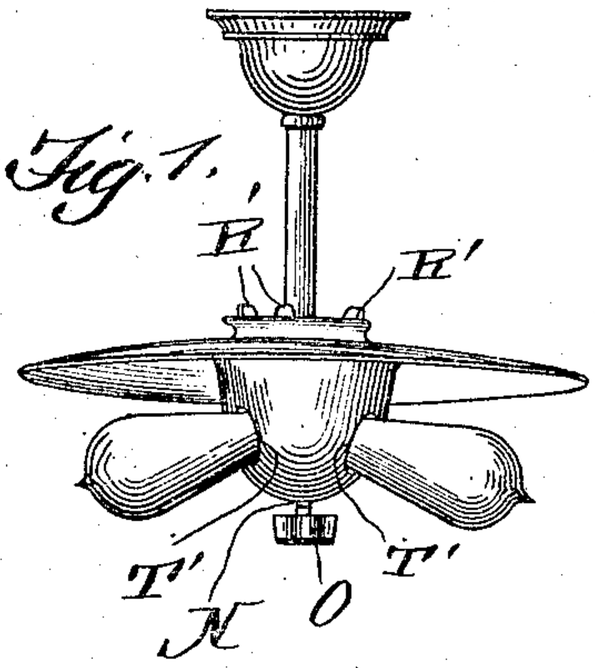
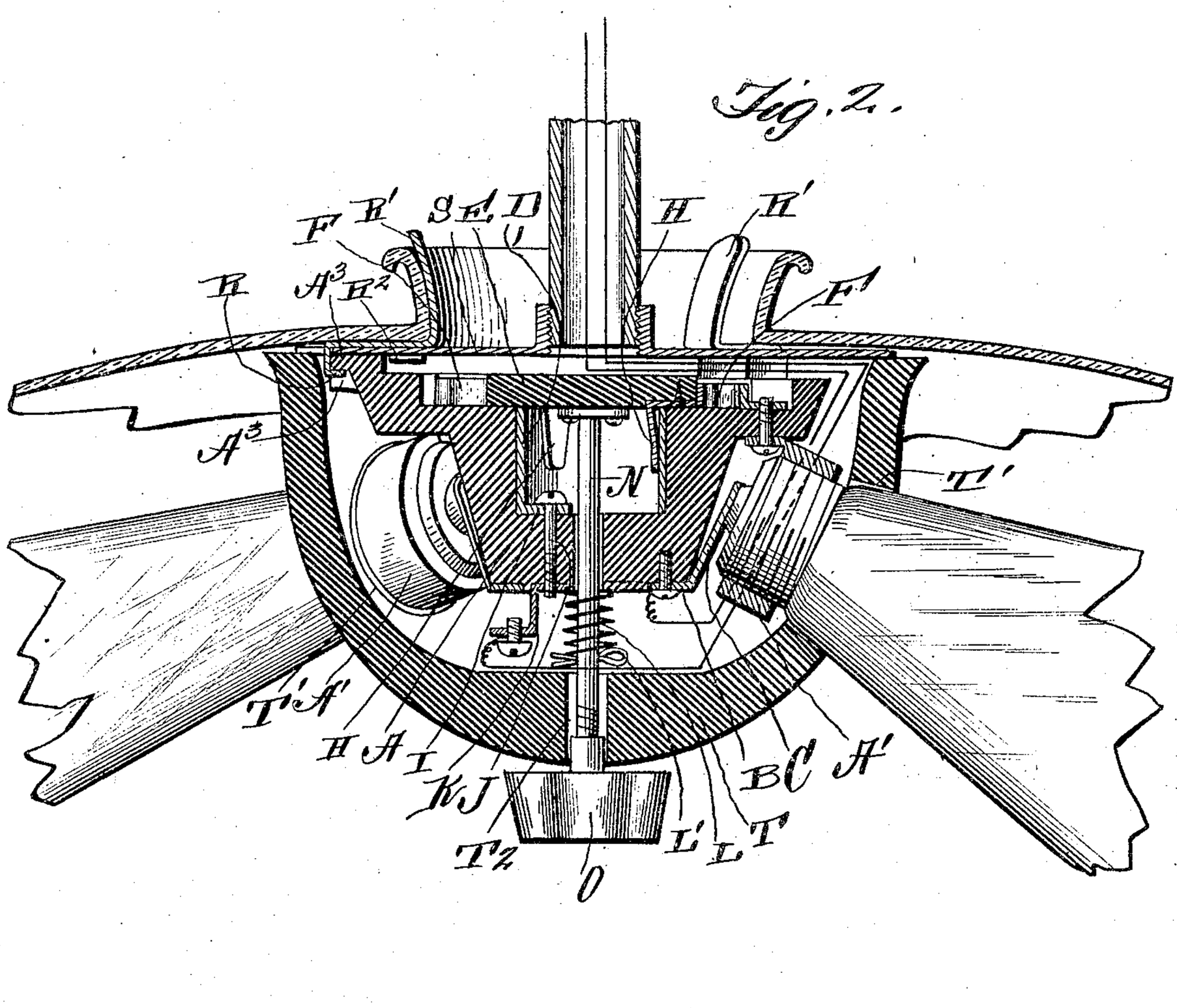


Fig. 2.



Witnesses

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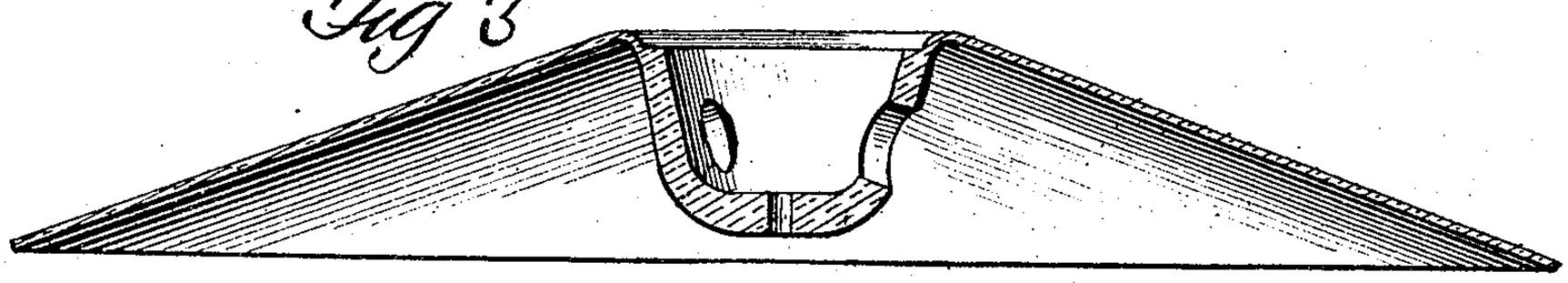
Fig 3



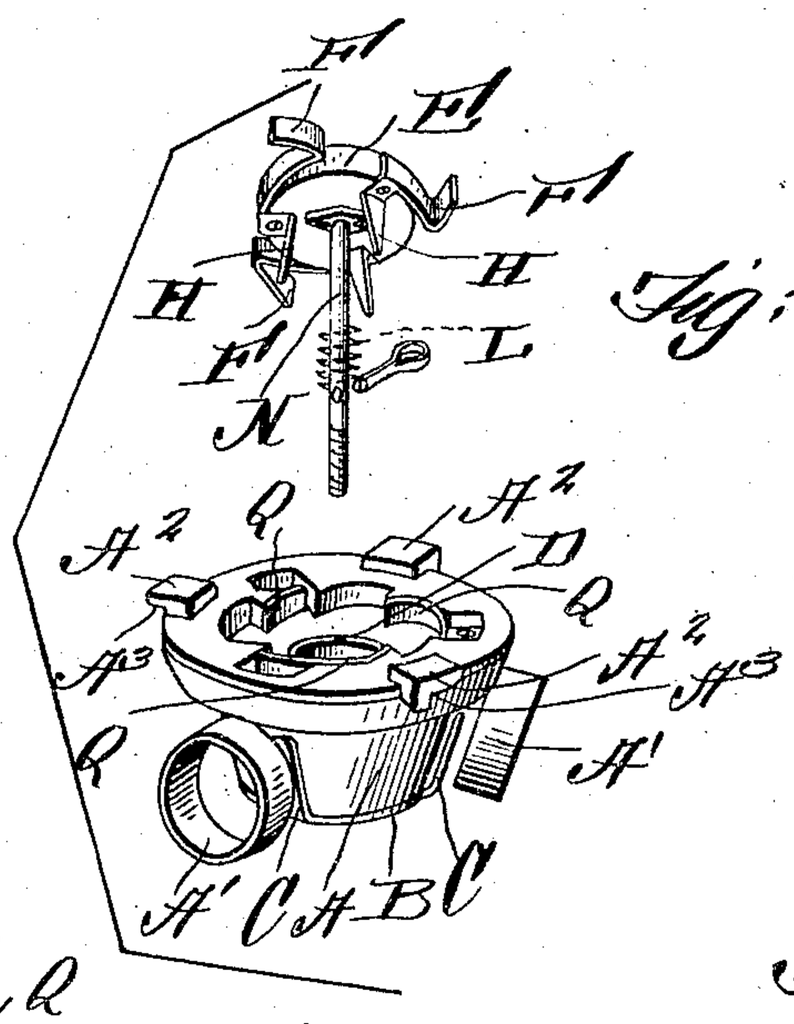


Fig. 4.

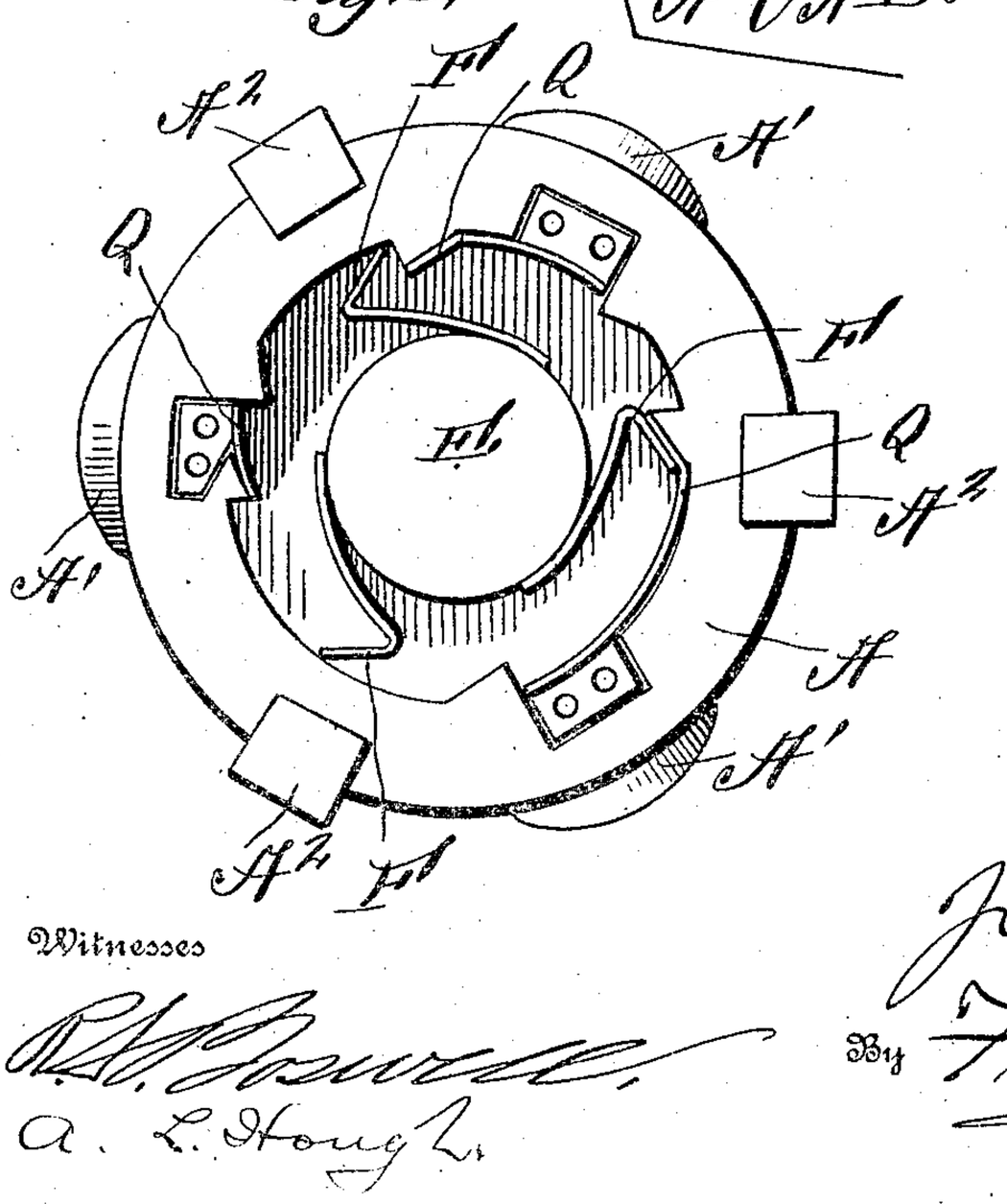


Fig. 6.

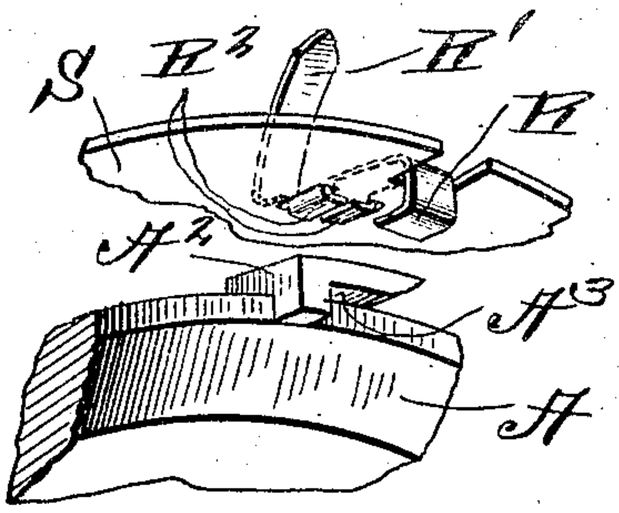


Fig. 5.

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UNITED STATES PATENT OFFICE.

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CLUSTER-FIXTURE FOR ELECTRIC LIGHTS.

No. 897,455. Specification of Letters Patent. Patented Sept. 1, 1908.

Application filed December 21, 1907. Serial No. 407,531.

To all whom it may concern:

Be it known that I, JOHN H. CALDWELL, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Cluster-Fixtures for Electric Lights; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in cluster fixtures for electric lights and the object in view is to produce a device of this nature, made up preferably of detachable parts and so arranged that one or more lights may be turned on separately or simultaneously.

The invention comprises various details of construction and combinations and arrangements of parts which will be hereinafter fully described and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, in which:—

Figure 1 is a perspective view showing my improved cluster fixture. Fig. 2 is a sectional view through the two-part fixture. Fig. 3 is a detail sectional view of the shade. Fig. 4 is a detail perspective view of the parts of the switch member. Fig. 5 is a detail view showing the manner of attaching the shade holder to the switch member, and Fig. 6 is a plan view of the switch member.

Reference now being had to the details of the drawings by letter, A designates the inner switch containing member, made preferably of porcelain or any other suitable material, and has fastened thereto the bulb receiving sockets A′ and upon a raised portion thereof is the contact ring B secured thereto by screws or other connections and is provided with radially disposed contact arms C, one for each bulb socket. Said member A has a recess on the under side of the raised portion, said recess having a metallic lining D, and E is a disk having the resilient contact arms F secured to the circumference thereof, the contact arm having a laterally projecting finger H adapted to frictionally bear against the metallic lining in said recess. Said lining has a lug I projecting therefrom connected by means of the screw J to a bracket arm K seated in the upper end of said raised portion. A pin N rises from said disk and extends through an aperture in said raised portion and its outer end is threaded to receive the turn button O, whereby said disk may be rotated to bring one or another of the contact arms upon said disk into or out of contact with the metallic contact points Q which are seated in said recesses in the face of said member A. About the marginal edge of the member A are the lugs A^2 which are recessed away at A^3 to receive the hooked ends R of the shade supporting fingers R′, which fingers have laterally projecting lugs R^2 which extend through the apertures in the plate S and are clenched about the marginal edges of said apertures, thereby securely holding the shade supporting fingers upon said plate.

T designates the outer section or cover which is of bowl-shape and provided with openings T′ in the circumference thereof which are adapted to register with the sockets for the reception of the bulb. An aperture T^2 is formed in the apex of said bowl-shaped cover and through which said threaded pin is adapted to pass. A spring L is mounted upon said pin and has a bearing between the top of the raised portion and the key L′, which passes through an aperture in said pin, the object of said spring being to normally hold the disk with the contact points thereon in the recess formed in the end of the part A.

When the part A is adjusted in proper position within the cover T with the pin projecting through the aperture in the apex of the cover, the button is mounted upon the threaded end of the pin, thereby holding the parts together.

From the foregoing, it will be noted that, by the provision of a cluster switch as shown and described, the lamps may be lighted singly or in sections by causing one contact point upon said disk to be thrown into contact with one of the contact points seated in the recesses in the part A or, by giving a further rotary movement to the disk, two lamps may be thrown into circuit or, by giving a still further movement, all three of the lamps may be lighted. It will also be noted that, by the provision of a fixture as shown and described, the parts are compact, binding screws or wire connections are dispensed

with and a complete and efficient fixture is afforded which may be easily and quickly taken apart and replaced when desired. While I have shown the shade supporter as detachably held upon the device, said support may be made integral if desired.

As the cover T of my fixture is made preferably of an insulating material, socket bushings are dispensed with which are commonly employed upon fixtures of this nature, thereby saving in construction and preventing the cover from becoming electrically charged, besides providing a cover which is neat in appearance.

What I claim to be new is:—

1. A cluster electric fixture comprising a switch holding member with bulb sockets thereon, stationary contact points connected to said socket members, a metallic ring upon said member and having projections adjacent to said sockets, a rotatable disk with resilient contact points thereon, one or more of which is adapted to be thrown against said contact points connected with the sockets as the disk is turned, and a cover for said switch carrying member, as set forth.

2. A cluster electric fixture comprising a switch holding member with bulb sockets thereon, stationary contact points connected to said socket members, a metallic ring upon said member and having projections adjacent to said sockets, a rotatable disk, resilient metallic contact points thereon adapted to be thrown against one or another of the contact points, which are connected to said sockets, as the disk is rotated, the upper surface of said member being recessed and provided with metallic lining, projections upon the resilient contact points bearing against said lining, means for rotating said disk, and a cover for the switch carrying member, as set forth.

3. A cluster electric fixture comprising a switch holding member with bulb sockets thereon, stationary contact points connected to said sockets, a metallic ring upon said member and having projections adjacent to said sockets, a rotatable disk, resilient metallic contact points thereon adapted to be thrown against one or another of the contact points, which are connected to said sockets, as the disk is rotated, the upper surface of said member being recessed and provided with metallic lining, projections upon the resilient contact points bearing against said lining, a pin fixed to said disk and projecting through an aperture in said member and having a threaded end, a cover for said member provided with holes registering with said sockets, said pin projecting through the cover, and a button fitted to the threaded end of the pin, as set forth.

4. A cluster electric fixture comprising a switch holding member with bulb sockets thereon, stationary contact points connected to said socket members, a metallic ring upon said member and having projections adjacent to said sockets, a rotatable disk, resilient metallic contact points thereon adapted to be thrown against one or another of the contact points, which are connected to said sockets, as the disk is rotated, the upper surface of said member being recessed and provided with metallic lining, projections upon the resilient contact points bearing against said lining, a pin fixed to said disk and extending through an aperture in said member, a key passing through an aperture in said pin, a spring bearing between said key and the end of said member, a cover for the switch member and provided with apertures registering with the bulb sockets, and a key upon said pin, as set forth.

5. A cluster electric fixture comprising a switch holding member with bulb sockets thereon, stationary contact points connected to said socket members, a metallic ring upon said member and having projections adjacent to said sockets, a rotatable disk, resilient metallic contact points thereon adapted to be thrown against one or another of the contact points, which are connected to said sockets, as the disk is rotated, the upper surface of said member being recessed and provided with metallic lining, projections upon the resilient contact points bearing against said lining, a pin fixed to said disk and extending through an aperture in said member, a key passing through an aperture in said pin, a spring bearing between said key and the end of said member, a cover for the switch member and provided with apertures registering with the bulb sockets, said member having lugs upon the face thereof, a shade supporting plate having fingers with hooked ends adapted to engage said lugs, as set forth.

6. A cluster fixture for electric lights comprising a member having a recess formed in the face thereof, a metallic lining for said recess, a rotatable disk held against said member, fixed contact points seated in the face of the latter, resilient metallic arms upon said disk adapted to bear against said contact points as the disk is rotated, each of said resilient arms having an angled arm extending within said recess and bearing against said metallic lining, bulb sockets fixed to said member and electrically connected to said contact points, a metallic ring upon said member provided with lugs, one positioned in alinement with each opening in the bulb socket, a cover fitted over said member and provided with openings registering with the socket member, as set forth.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

JOHN H. CALDWELL.

Witnesses:
T. H. MULLIGAN,
R. PLATT.