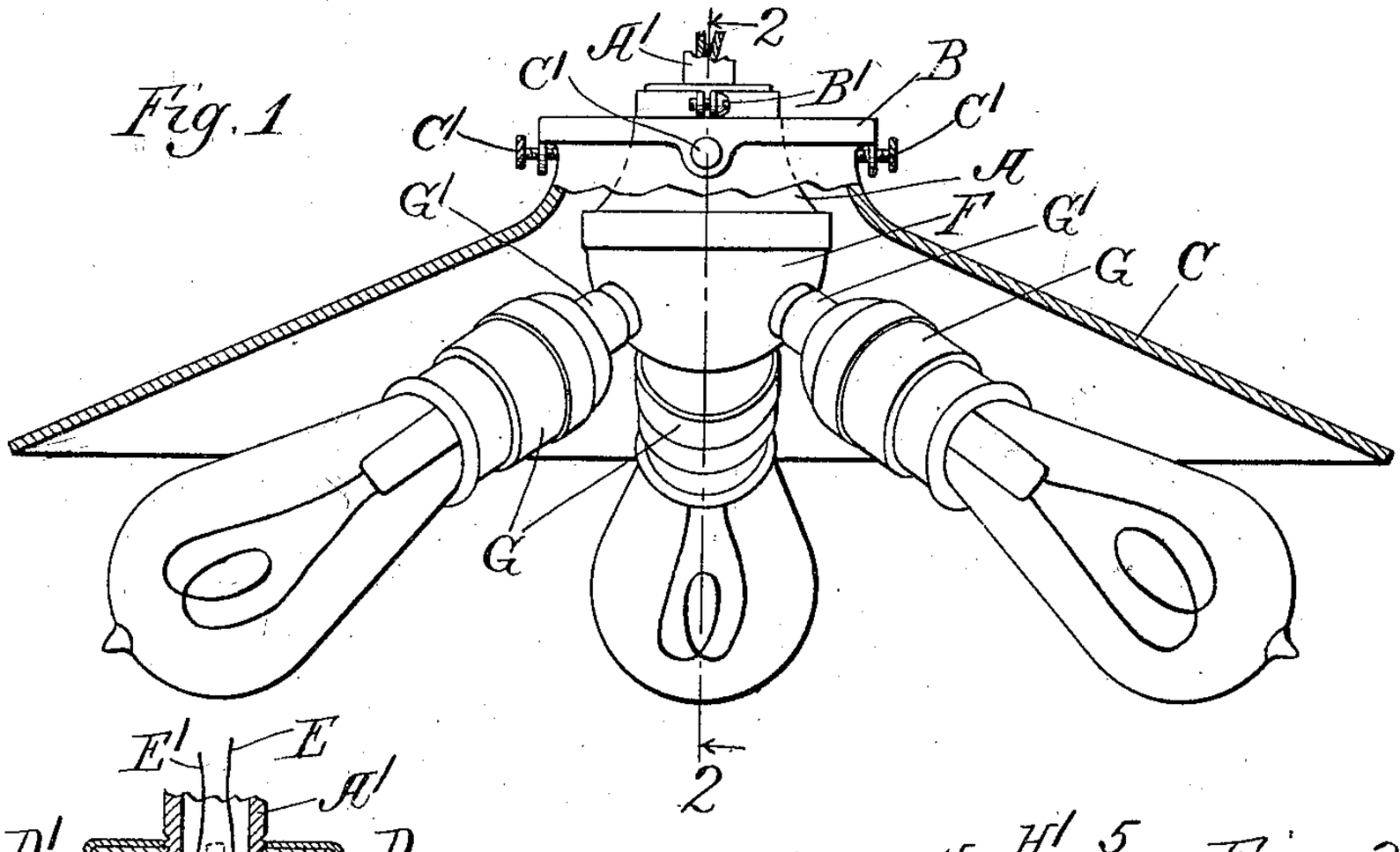
No. 862,397. PATENTED AUG. 6, 1907.

L. HRUSKA.

ELECTRIC LIGHT CLUSTER.

APPLICATION FILED MAR. 27, 1906.

Fig. 1



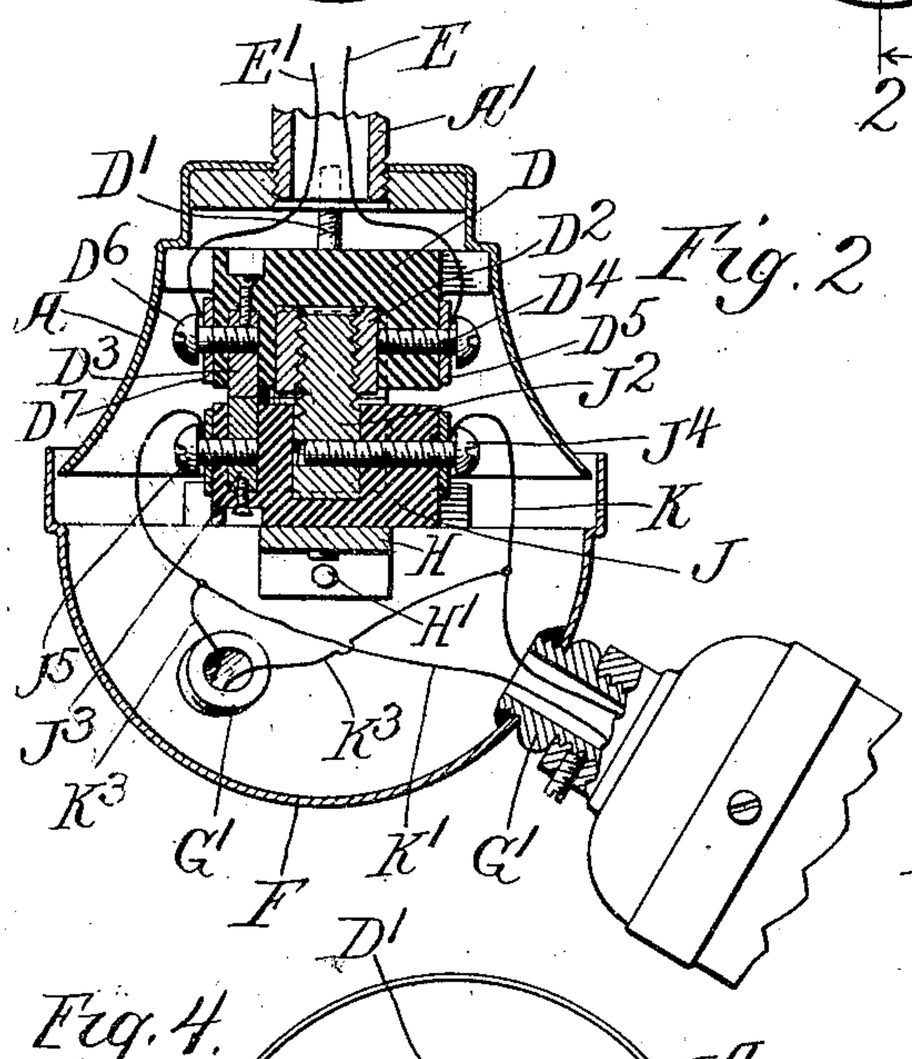


Fig. 2.

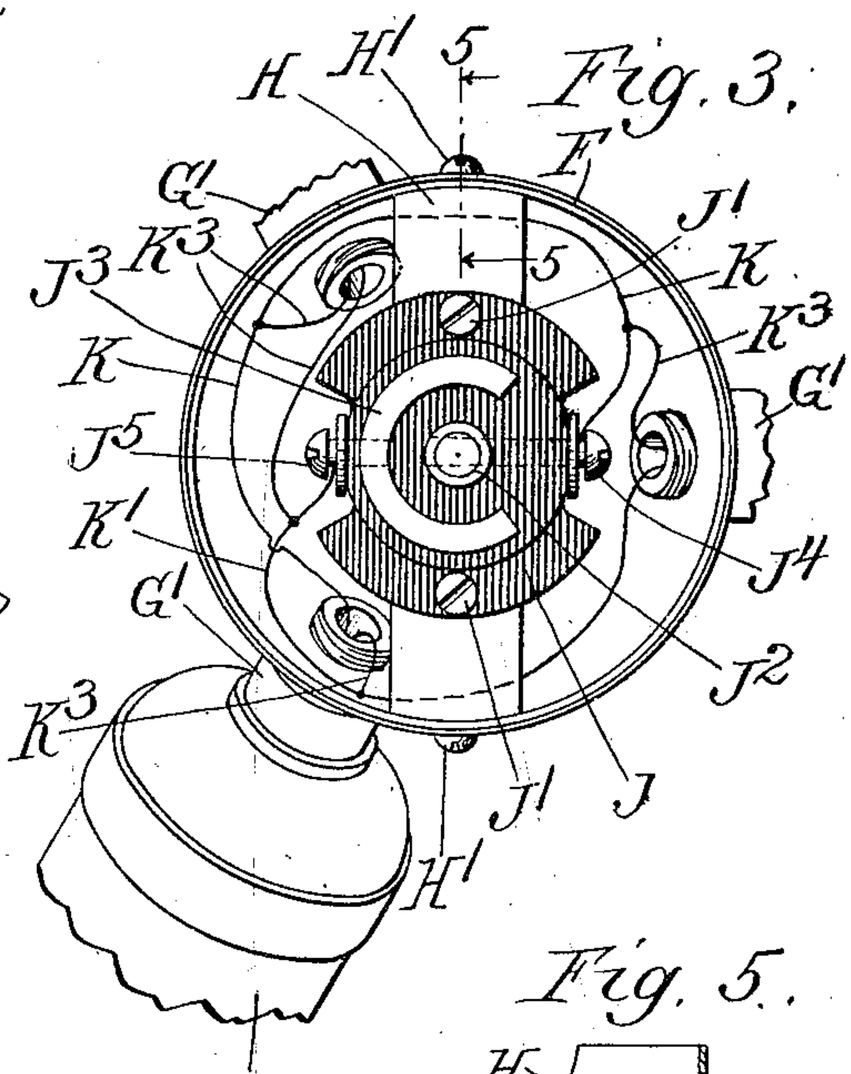


Fig. 3.

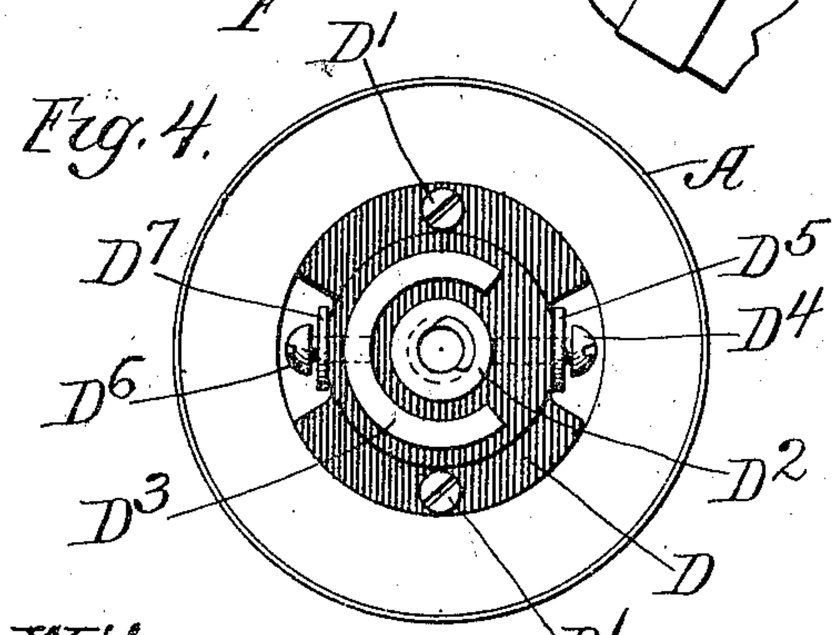


Fig. 4.

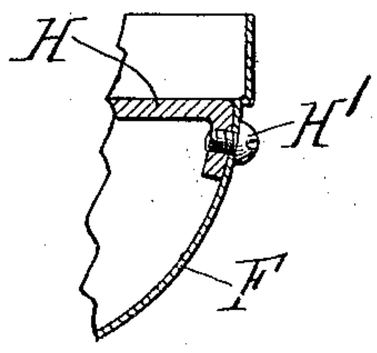


Fig. 5.

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UNITED STATES PATENT OFFICE.

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ELECTRIC-LIGHT CLUSTER

No. 862,397. Specification of Letters Patent. Patented Aug. 6, 1907.

Application filed March 27, 1905. Serial No. 252,164.

To all whom it may concern:

Be it known that I, LOUIS HRUSKA, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Electric-Light Clusters, of which the following is a specification.

My invention relates to electric light clusters, and has for its object, among other things, to provide an electric light fixture in which the cluster of lights is removable from the rest of the fixture without disturbing the wiring.

The device is illustrated in the accompanying drawings wherein

Figure 1 is an elevation showing the shade in section; Fig. 2, a vertical section on line 2—2 of Fig. 1 with the shade and shade holder removed; Fig. 3, a plan view of the removable member of the fixture; Fig. 4, a plan view of the stationary member of the fixture, and Fig. 5, a detail section on line 5—5 of Fig. 3.

Like letters of reference indicate like parts in all the drawings.

In general, the fixture comprises two parts, one of which is adapted to be more or less permanently fixed to the wall of the room or otherwise, while the other, supporting the lamps, is removable by a very simple operation easily understood by any one. It will be obvious that the device can take a number of different forms according to the particular adaptation to use, and, therefore, I do not purpose to limit myself to any one construction.

In the form shown in the drawings, A represents a hollow shell, preferably of metal, which may be secured to the ceiling by means of the tube or pipe A^1, or be hung from a cord in any usual manner. To the shell A is preferably clamped a shade holder B, as for example, by means of the screw B^1.

C represents the shade held in position on the holder by the screws C^1 C^1. Within the shell A, is a block D of insulating material, preferably porcelain, which is secured to the shell A by means of the screws D^1 D^1. Centrally in this block, is set the socket D^2 which is preferably made of brass and screw threaded. Encircling this and also set into the porcelain block, is the contact piece D^3 which is preferably made as shown in Fig. 4; that is, in the form of a hollow cylinder with a segmental part cut therefrom. I have represented the block D as consisting of one piece of material, apertured to receive the socket and the contact piece, but it is obvious that it might be made up of a number of separate parts. The screw D^4 extends through the block D at the place where the contact piece D^3 is cut away, and makes electrical contact with the socket D^2. A washer D^5 may be provided, and between the washer and the screw D^4 is secured the end of the conductor E. On the other side of the block is a similar screw D^6 taking into the contact piece D^3 and provided with the washer D^7, and this serves as a binding post for the conductor E^1, the conductors E, E^1, it will be understood, supplying the lamps with current.

The removable part of the fixture is composed of a shell F preferably of metal to which are secured any number of lamps GG of any preferred type, and in any desired manner. The lamps GG may, for example, be provided with screw threaded nipples G^1G^1. For convenience in assembling, I prefer to support the contact pieces in the lower part of the fixture on a removable cross piece H, which may be secured to the shell F by means of the screws H^1H^1. On the cross piece H is the block J of non-conducting material preferably porcelain, secured thereto in any desired manner, as for example, by means of the screws J^1J^1. Into this block, is set centrally thereof, the screw J^2 adapted to screw into the socket in the upper part of the fixture. Surrounding the screw is the contact piece J^3 of similar size and form as the contact piece D^3 in the upper part of the fixture. The binding screw J^4 is in contact with the screw J^2, and a binding screw J^5 is in like manner connected with the contact piece J^3.

The wiring to the lamps may be arranged in any desired manner. In the drawing, I have shown two conductors K, K^1, leading from the binding screws J^4, J^5 respectively, and to the terminals of one of the lamp circuits. These wires may be tapped by other branch wires, as for example K^2, K^3, one pair leading to each of the lamps of the cluster.

I have thus described in detail, one form of my device, but it will be clear that the invention is susceptible of embodiment in various forms of construction and that considerable change might be made to meet varying conditions without departing from the spirit and purpose of my invention. Therefore, I do not limit myself to the particular forms, devices and constructions here shown.

The use and operation of the device will perhaps have been made sufficiently clear by the foregoing. It is one of the purposes of my invention to secure a very compact and simple form of removable electric light cluster, and one which will be at the same time sightly and capable of being used by unskilled persons without danger to the mechanism.

It will be seen that the contacts between the removable and the stationary part are very perfect, and furthermore, involve no mechanism at all likely to get out of order. One is made by the retaining screw J^2, and the other by the two contact pieces D^3, J^3. The latter parts, although cut away so as to give convenient access to the socket and screw, will always touch over a considerable portion of their areas and cannot get out of

alinement. When it is desired to remove the lower part of the fixture so as to clean or take off the shade or for any other purpose, the shell D is simply unscrewed from the upper part of the fixture, leaving the wiring to the lamps undisturbed. If it is necessary to get at any of the several wires leading to the lamps, this may be easily done by removing the cross piece H. There may, of course, be any number of lamps, and these lamps may be of any desired type.

I claim:

1. In an electric light fixture, the combination of a fixed block of insulating material, having a screw device centrally thereof, serving as an electrode, and an arc of conducting material struck from the center of such screw device with a removable part carrying a block of insulating material, a screw device adapted to engage with the screw device on the fixed block and serving as an electrode, an arc of material similar to such other arc and adapted to be brought into contact therewith when the parts are in operative position, and a binding post extending through an aperture in such circular electrode into contact with such screw device.

2. In an electric light fixture, combination of a fixed block of insulating material, a screw device centrally thereof, forming an electrode, an arc of conducting material struck from the center of such device, a removable shell, a removable cross piece on such shell, a block of insulating material secured to such cross piece, a screw device in such block serving as an electrode, and an arc of material similar to such other arc and adapted to be brought into contact therewith when the parts are in operative position.

3. In an electric light fixture, the combination of two separable sections, one of said sections carrying the main line terminals, the other a plurality of lamps connected up on an open circuit, with means for securing such sections together and for closing the circuit from the mains through the lamps, comprising a central screw on one of the sections forming one of the terminals of this circuit, a metallic part on the other section with which the screw engages and forming the corresponding terminal of the circuit through such section, and a pair of cylindrical contact pieces on the sections arranged concentrically with respect to the screw device and adapted to be brought into contact when the sections are screwed together, said cylindrical contact pieces being cut away at one side to give access to the other pair of terminals inclosed thereby.

4. In an electric light fixture, the combination of two separable sections, one of said sections carrying the main line terminals, the other a plurality of lamps connected up on an open circuit, with means for securing such sections together and for closing the circuit from the mains through the lamps, comprising a central screw on one of the sections forming one of the terminals of this circuit, a metallic part on the other section with which the screw engages and forming the corresponding terminal of the circuit through such section, and a pair of contact pieces on the sections arranged concentrically with respect to the screw device and adapted to be brought into contact when the sections are screwed together, such contact pieces in the form of arcs less than circles and greater than half circles.

5. In an electric light fixture, a relatively fixed section comprising a block of insulating material, a central screw device associated with said block, a contact piece arcuate in cross section embedded in the block and concentric with such screw device, said screw device and contact piece being connected with the main line wires, in combination with a removable section comprising means for supporting a plurality of lamps connected up on an open circuit, a block of insulating material, a central screw device associated therewith, and a contact piece arcuate in cross section embedded in said block, such screw device and contact piece forming the terminals of the lamp circuit.

6. In an electric light fixture, a relatively fixed section comprising a casing, a block of insulating material in said casing, a central screw device associated with said block, a contact piece arcuate in cross section embedded in the block and concentric with such screw device, said screw device and contact piece being connected with the main line wires, in combination with a removable section comprising a casing forming with the other casing an inclosure for the contact pieces and their connections supporting a plurality of lamp sockets connected up on an open circuit, a block of insulating material in such case, a central screw device associated therewith, and a contact piece arcuate in cross section embedded in said block, such screw device and contact piece forming the terminals of the lamp circuit.

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