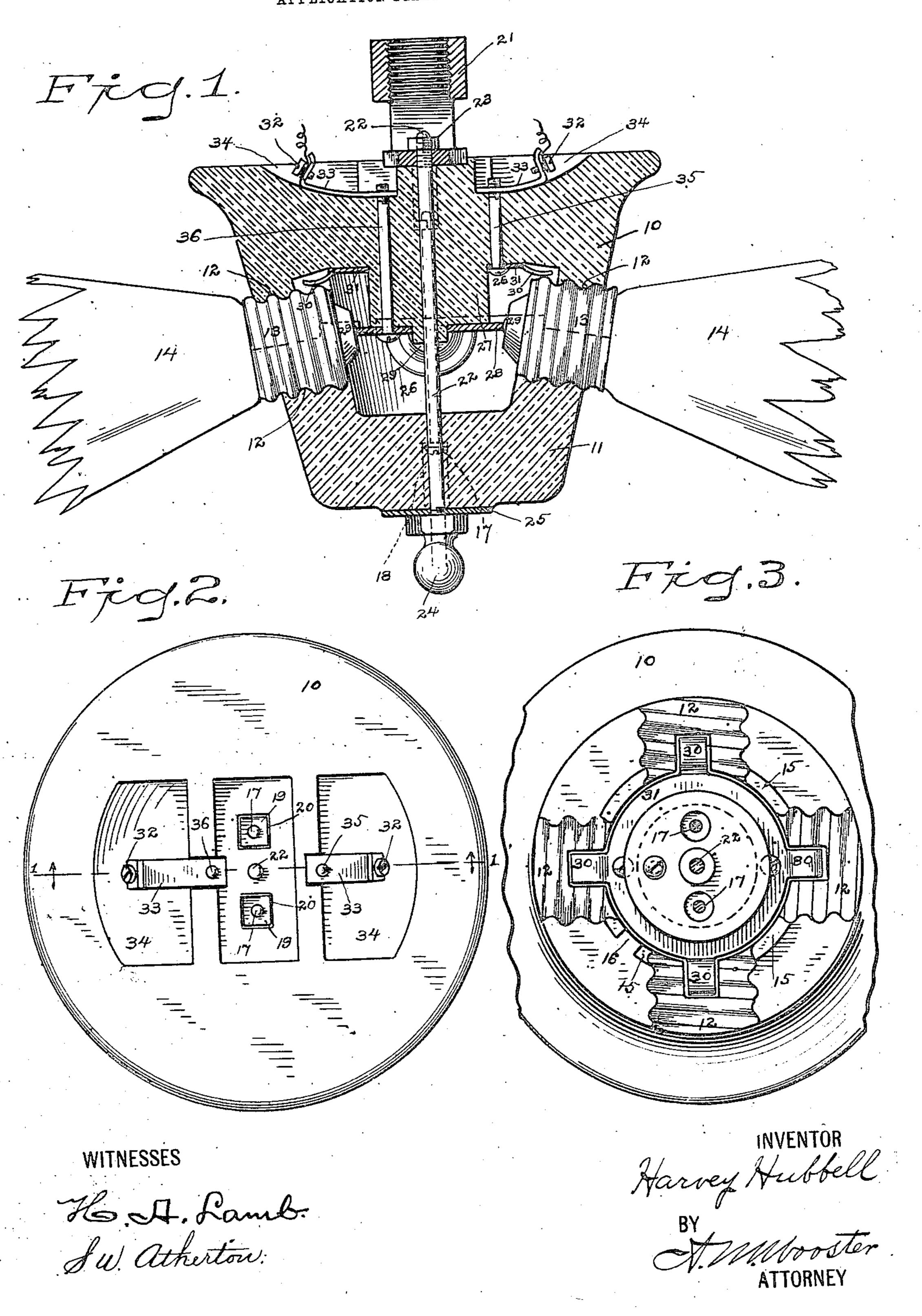
No. 817,642.

## H. HUBBELL: INCANDESCENT LAMP CLUSTER. APPLICATION FILED SEPT. 1, 1905.



## UNITED STATES PATENT OFFICE

## HARVEY HUBBELL, OF BRIDGEPORT, CONNECTICUT.

## INCANDESCENT-LAMP CLUSTER.

No. 817,642.

Specification of Letters Patent.

Fatented April 10, 1906.

Application filed September 1, 1905. Serial No. 276,736.

To all whom it may concern:

Be it known that I, HARVEY HUBBELL, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Con-5 necticut, have invented a new and useful Incandescent-Lamp Cluster, of which the fol-

lowing is a specification.

This invention has for its object to produce a simple and inexpensive incandescent-lamp 10 cluster the body of which shall be made entirely of porcelain or other insulating material and shall be made in two parts, each part containing threaded half-sockets, which in the assembled position form sockets adapt-15 ed to receive the screw-shells of incandescent lamps.

By making the body entirely of porcelain or similar material I am enabled to produce incandescent-lamp clusters in which very lit-20 tle metal is used, there being no exposed metallic parts and no opportunity for corrosion, the cluster being very economical to produce, neat and attractive in appearance, easy and satisfactory to operate, and absolutely safe 25 under all the conditions of use.

With these and other objects in view I have devised the novel structure which I will now describe, referring to the accompanying drawings, forming a part of this specification, 30 and using reference characters to indicate the

several parts.

Figure 1 is a vertical section of my novel cluster as in use on the line 1 1 in Fig. 2, two lamps appearing in elevation. Fig. 2 is a 35 plan view of the cluster detached from the hickey, and Fig. 3 is an inverted plan view of the upper part of the body detached.

10 and 11 denote the parts of the body which are molded from insulating material, 40 as porcelain, and are made of any required configuration. The parts are each provided with a plurality of threaded half-sockets 12, which are molded therein. These half-sockets correspond with each other, and each pair 45 of half-sockets together form a socket to receive the screw-shell 13 of an incandescent lamp 14. Each upper part 10 is shown as provided on its under side between the halfsockets with interlocking projections 15 and å å å depression 16, which interlock with corresponding depressions, and a projection (not shown) on part 11 of the body to retain said

other in assembling. The parts of the body 55 are secured together by means of screws 17, the heads of which lie in sockets 18 in part 11

parts accurately in position relatively to each

of the body and engage nuts 19 in sockets 20

in part 10 of the body.

The cluster as a whole is shown as secured to a hickey 21 by means of a central bolt 22, 60 threaded at both ends and engaged by a nut 23 in the hickey and an ornamental nut 24 on the under side of part 11 of the body, a plate 25 being interposed between nut 24 and part 11 of the body which covers sockets 18. With- 65 in the body, when the parts thereof are in the assembled position, is a recess 26, part of said recess being formed in each portion of the body, and projecting into the upper portion of this recess is a hub 27, formed upon part 10 70 of the body.

28 denotes a contact-plate which is secured to the hub and is adapted to be engaged by

the bases 29 of incandescent lamps.

30 denotes contacts shown as extending 75 from a ring 31, which is secured to part 10 of the body at the upper end of recess 26. These contacts are adapted to be engaged by the screw-shells 13 of incandescent lamps.

32 denotes binding-screws for circuit-wires, 80 which are shown as carried by plates 33, lying in recesses 34 in the top of part 10 of the body. One of the plates 33 is shown as secured in place by means of a screw 35, which also secures ring 31 in place, as at the right in Fig. 1, 85 the other plate 33 being shown as secured in place by means of a screw 36, which also secures contact-plate 28 in place, as at the left in Fig. 1.

In use the lamps are attached and de- 90 tached by turning them into the sockets in the body in the usual manner, the vitally important difference between this and other clusters being that there are no parts to be insulated, for the reason that the entire body is 95 made of insulating material. The passage of the current will be readily understood from Fig. 1. Suppose that the current enters at the binding-screw in the left plate 33. It will pass by means of screw 36 to contact-plate 28, 100 thence to the lamps through the engagement of the lamp-bases with said plate. The current passes from the lamps through the engagement of the screw-shells with contacts 30 on ring 31, thence by means of screw 35 to 105 the binding-screw in the right plate 33.

Having thus described my invention, I claim--

1. A cluster for incandescent lamps made in two parts of insulating material, each part 110 having formed therein threaded half-sockets which with the corresponding half-sockets in .

the other part form sockets to receive the

screw-shells of incandescent lamps.

2. A cluster for incandescent lamps comprising a part made of insulating material 5 and having contacts for engagement by the screw-shells and bases of incandescent lamps and threaded half-sockets formed therein, and another part also formed of insulating material and having threaded half-sockets which 10 with the corresponding half-sockets in the other part form sockets to receive the screw-

shells of incandescent lamps.

3. An incandescent-lamp cluster comprising two parts both formed from insulating 15 material and having corresponding threaded half-sockets which together form sockets to receive the screw-shells of incandescent lamps one of said parts having a contact-plate for engagement by lamp-bases and contacts 20 for engagement by screw-shells.

4. An incandescent-lamp cluster comprising two parts both formed from insulating material and having corresponding threaded half-sockets which together form sockets

25 to receive the screw-shells of incandescent lamps, said cluster having an internal recess and within said recess contacts for engage-

ment by the screw-shells and bases of incan-

descent lamps.

5. An incandescent-lamp cluster compris- 30 ing two parts both formed from insulating material and having corresponding threaded half-sockets which together form sockets to receive the screw-shells of incandescent lamps, one of said parts being provided with 35 a ring and contacts projecting therefrom for engagement by the screw-shells of incandescent lamps, and a contact-plate for engagement by the bases of incandescent lamps.

6. An incandescent-lamp cluster consist- 40 ing of two corresponding parts made of insulating material each part having corresponding threaded half-sockets which together form sockets to receive the screw-shells of incandescent lamps, contacts for engagement by 45 said lamps and means for securing the parts

together. In testimony whereof I affix my signature

in presence of two witnesses.

HARVEY HUBBELL.

Witnesses:

A. M. WOOSTER, S. W. ATHERTON.