D. CROWNFIELD.

LIGHTING FIXTURE.

APPLICATION FILED JUNE 9, 1915.

1,193,519.

Patented Aug. 8, 1916.

Fig. 1.

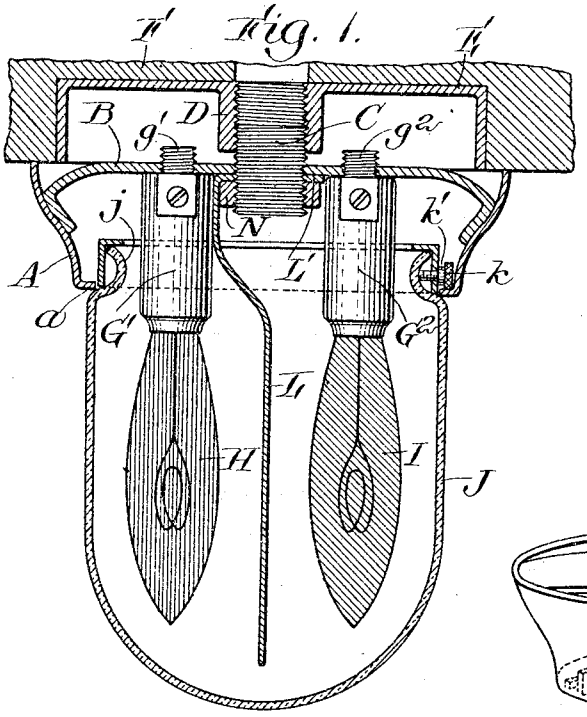


Fig. 3.

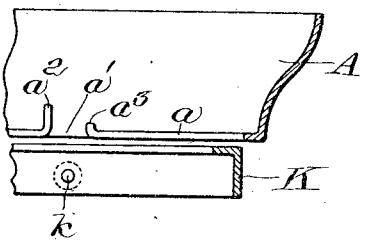


Fig. 4.

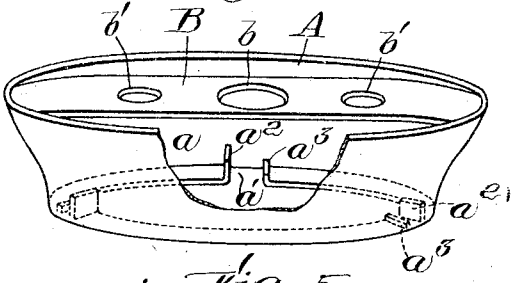


Fig. 2.

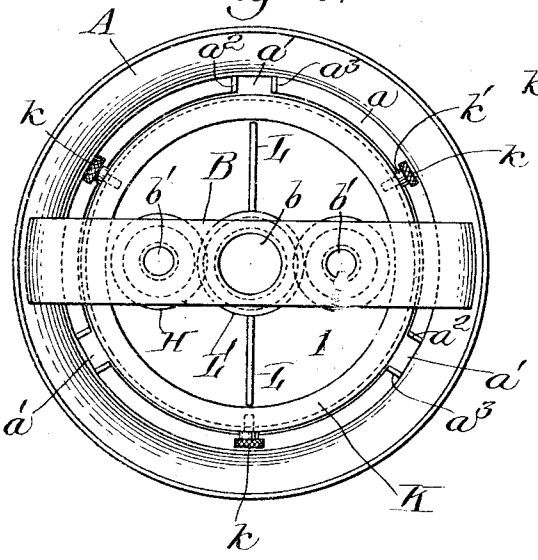
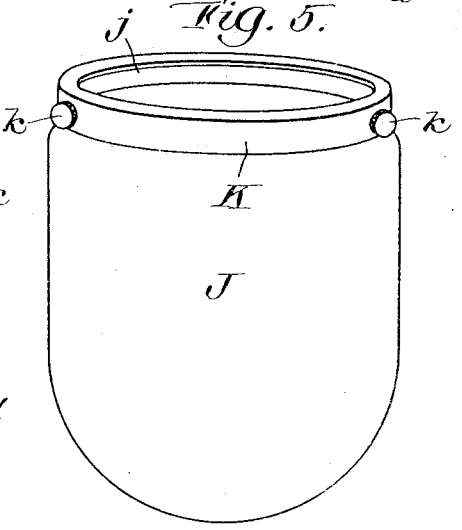


Fig. 5.



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UNITED STATES PATENT OFFICE.

DAVID CROWNFIELD, OF CAMBRIDGE, MASSACHUSETTS.

LIGHTING-FIXTURE.

1,193,519. Specification of Letters Patent. Patented Aug. 8, 1916.

Application filed June 9, 1915. Serial No. 33,174.

To all whom it may concern:

Be it known that I, DAVID CROWNFIELD, a citizen of the United States, and resident of Cambridge, in the county of Middlesex and State of Massachusetts, have invented new and useful Improvements in Lighting-Fixtures, of which the following is a specification.

This invention relates to a lighting fixture to be used wherever a two-colored or multi-colored signal light is required, and while capable of use for many purposes, it is designed primarily for use in hospitals.

It is a frequent practice in hospitals to arrange two signal lights of different colors in the corridor outside of a ward room or a patient's room, which can be operated by ordinary light switches or buttons from within the room by a patient. The light of one color may indicate that a nurse is required and of another color that a position is required, or the signals could be used according to any other predetermined plan of signaling. Confusion frequently arises, however, in determining which of the colored lamps is in operation because the two lamps are arranged side by side and when one is lighted it illuminates the other and the reflected light from the colored bulb of the unlighted lamp often makes it appear that both lamps are lighted.

The principal object of the present invention is to overcome this objection and to provide a simple, neat and compact fixture in which lights of different colors may be exhibited, so screened from each other that only the lamp which is lighted will be illuminated. This improved fixture is also constructed so that all the fastening means for securing the several parts together are wholly interior to the structure, thus producing a fixture substantially free from crevices and dust-collecting surfaces. These and other features will hereinafter be more fully described and particularly pointed out in the claims.

In the accompanying drawings which illustrate one embodiment of the invention,—Figure 1 is a longitudinal section of a lighting fixture containing the invention; Fig. 2 is a plan view of the inner or supporting end of said fixture; Fig. 3 is a fragmentary view in section illustrating the mode of assembling the main supporting collar and the globe-holding ring; Fig. 4 is a perspective view, partly broken away, of the main supporting collar and bridge piece; and Fig. 5 is a perspective view of the globe and globe-holding ring.

A represents the main supporting ring or collar and B represents a bridge piece secured within and extending across the collar A. The bridge piece B is provided with a central screw-threaded aperture b, and two other screw-threaded apertures b' for holding the lamps.

C represents an exteriorly threaded nipple secured in the threaded boss D of a junction box E which may be of usual construction. The junction box E is set into and fastened to a door, door frame, wall, ceiling or other part of the building, F, where the fixture is to be attached.

G′ and G² represent two porcelain candelabra sockets provided respectively with nozzles g' and g^2 which are screwed into the apertures b', b' of the bridge piece B. Said lamp sockets G′ and G² carry respectively the red lamp H and the green lamp I. Said lamps are connected by the usual wire connections with switches by which the lamps may be operated independently of each other.

J represents a glass shade or globe provided at its open or attaching end with a lip j. The lip j is held within the globe-holding ring K by means of a series of thumb-screws k, which pass through one flange of the ring K, which is angular in cross section. The screws k are each provided with a hub or shoulder k' which acts as a stop to limit the inward movement of the screws when they are turned into the ring K. Thus the screws k cannot be screwed so far into the ring that their inner ends will bind against the lip j' and so endanger the breaking of the globe, especially when the latter expands under the influence of the heat of the lamps. Preferably the inner ends of the screws k when fully screwed into the ring K will just clear the glass of the globe, holding it sufficiently loosely to admit of any reasonable expansion of the glass.

The outer ends or heads of the screws k constitute projections by which the ring K and globe J are supported upon the collar A. The supporting collar A is provided at its lower edge with an inturned flange a in which are a series of apertures a' spaced to correspond with the projecting screws k. At the sides of said apertures projections or

spurs a^2 and a^3 are provided on the flange a and serve as stops to prevent the accidental dislodgment of the screws k from the flange a when the fixture is assembled. Preferably one of said spurs, as a^3, is shorter than the other so that in assembling the device the screw projections k may be passed into the collar through apertures a', whereupon the globe and ring K may be turned until the screws pass over the stops a^3 so as to rest upon the flange a. In case the globe and globe-holding ring should be turned too far and so endanger the screws k again passing out through the apertures a', the longer stops a^2 will engage and arrest the further turning movement of the ring K.

It will be noticed that the bridge piece B which is screwed on to the nipple C constitutes the supporting member for the entire fixture and carries both lamps H and I as well as the collar A which supports the globe J and globe-holding ring K. The means for securing the collar A to the wall or other support are wholly interior to the collar, and the means for supporting the globe J on the collar A are also wholly interior to the collar, so that there are no exposed or external fastening devices which would be likely to catch dust, and the entire exterior of the fixture presents a substantially continuous rolling surface free from dust-collecting parts. The collar A is drawn close to the surface of the support F by means of the threaded nipple C and socket b in the bridge piece B. In order to screen said lamps from each other so that neither shall be illuminated by rays from the other, I provide a shield L located between the lamps and within the globe J having a bent over fastening lug L' through which the nipple C passes. A nut N is screwed to the end of the nipple C and clamps the lug L' of the shield to the bridge piece B. In use the shield L is preferably arranged parallel to the usual line of observation, as for example parallel to the length of a corridor, so that both lamps will be visible to the observer. In case one lamp is illuminated, however, no rays therefrom can reach the other lamp on account of said screen L and there will be no danger of both lights appearing to be illuminated when one only is lighted.

I claim:

1. In a lighting fixture, a plurality of lamps adapted to be lighted independently of each other, a shield between said lamps adapted to screen said lamps from each other, a bridge piece common to said lamps and shield having a central aperture, and a stem passing through the aperture to secure the screen and bridge piece together and to support all of said elements.

2. In a lighting fixture, a collar, a bridge piece secured within and extending across the collar, a plurality of lamps adapted to be lighted independently of each other secured to said bridge piece, a shield also secured between said lamps adapted to screen said lamps from each other, and a globe-supported by said collar and inclosing said lamps and shield.

3. In a lighting fixture, a collar, a bridge piece secured within and extending across said collar, a nipple screwed into the center of said bridge piece and supporting the whole fixture, a pair of lamps adapted to be lighted independently of each other, one secured to said bridge piece at each side of said nipple, a shield also secured to said bridge piece between said lamps adapted to screen said lamps from each other, and a globe supported by said collar and inclosing said lamps and shield.

4. In a lighting fixture, a collar having an inturned flange provided with apertures, a globe, a globe-holding ring within said collar-flange, and screws passing through said globe-holding ring, the inner ends of which secure the globe to said ring, and the outer ends of which constitute projections adapted to pass through said apertures in the collar-flange and to rest upon said flange.

5. In a lighting fixture, a collar having an inturned flange provided with apertures, a globe, a globe-holding ring within said collar-frame, and screws passing through said globe holding ring, having a shoulder to limit the inward movement of said screws, the inner ends of said screws loosely engaging and securing the globe to said ring, and the heads of said screws constituting projections adapted to pass through said apertures in the collar-flange and to rest upon said flange.

6. In a lighting fixture, an inverted bell-shaped collar, a centrally supported bridge piece wholly interior to said collar to fasten said collar to its support, a globe, a ring wholly interior to said collar to fasten said globe to said collar.

Signed by me at Boston, Massachusetts, this 1st day of June, 1915.

DAVID CROWNFIELD.

Witnesses:

ROBERT CUSHMAN,

JOSEPHINE H. RYAN.