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ILLUMINATION OF ROOMS

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Fig. 3.

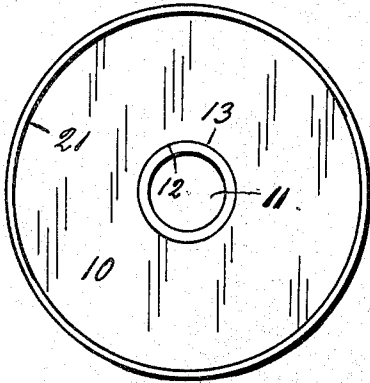


Fig. 2.

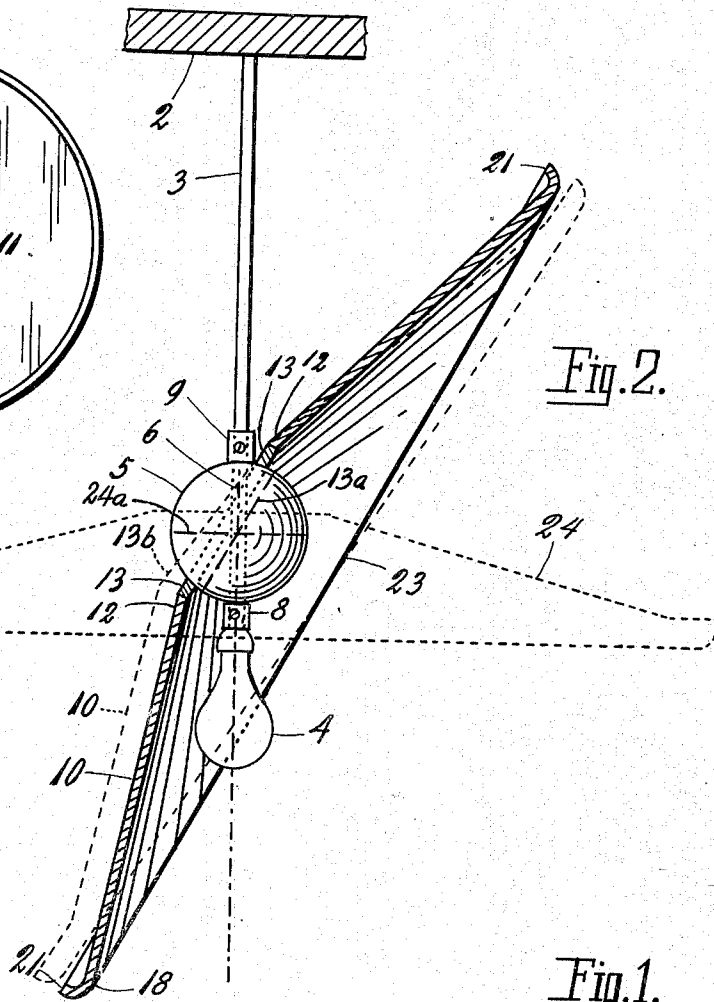


Fig. 1.

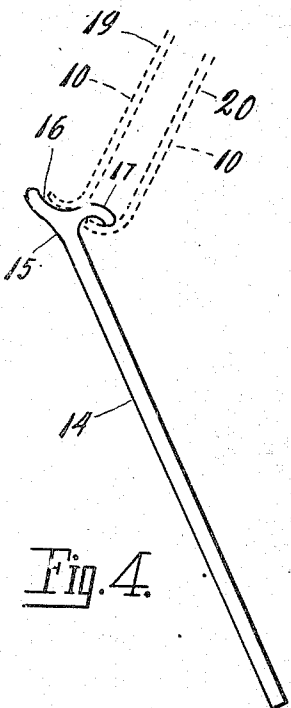
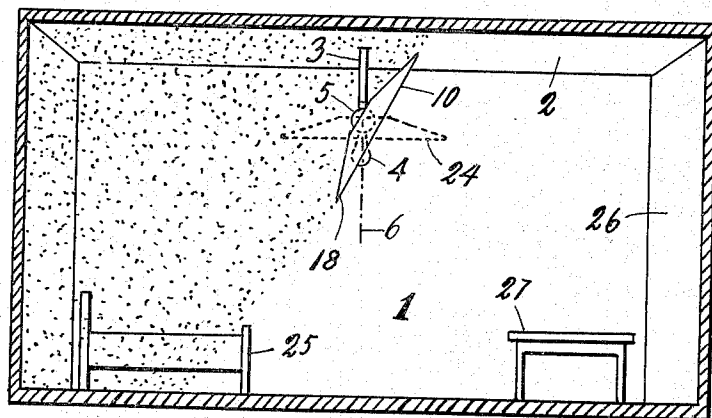


Fig. 4.

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ILLUMINATION OF ROOMS

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5 Claims. (Cl. 240—78)

My invention relates to improvements in illumination of rooms having a suspended source of light.

One object of the invention is to utilize the source of light of a room more advantageously, and for that purpose I provide an adjustable reflector which is adapted to direct the light coming from the source to any of the sides of the room where better illumination is desired. Another object is to provide an illumination control to darken selected parts of an illuminated room, which is often desirable in sick rooms, or in rooms where children sleep and the person taking care of them has work to do requiring good illumination.

I attain these objects by the mechanism and its arrangement with the source of light illustrated in the accompanying drawing in which—

Figure 1 is a vertical section of a room in perspective, and a source of light on a conduit extending from the ceiling of the room, and showing the adjustably mounted reflector, shown in detail in Fig. 2.

Fig. 2 is a detailed view of the ceiling suspended source of light and the adjustably mounted reflector, the reflector is shown in section.

Fig. 3 is a top view of the reflector shown in section in Fig. 2.

Fig. 4 is a reflector adjusting tool, and an illustration of the manner the reflector is engaged by the tool for adjustment.

Similar numerals refer to similar parts throughout the several views.

Figure 1 shows a room 1, from the ceiling 2 of which extends the conduit 3 having on its end a source of light 4. On the conduit 3, adjacent the source of light 4, is rotatably mounted a ball or globe 5 with axis of rotation 6 aligned with the source of light 4. The globe 5 is held against axial movement by the collars 8 and 9 secured on the conduit 3. The reflector 10 has a circular opening 11 in which the globe 5 is received. To the edge 12 of the reflector 10 is secured a flexible contact member 13, and the opening 11 formed thereby is slightly smaller than the globe 5. As is shown in Fig. 2 the edge or contact member 13 has a relatively narrow globe engaging face so that the entire face is relatively close to but spaced from the major dimension or circle 13^a of the globe 5. When the reflector is positioned as is shown in full lines the globe 5 is tightly wedged in between the opposite sides of the contact member 13 which engages the globe slightly spaced from and above its major dimension 13^a. To loosen the contact member 13 from the tight

contact with the globe 5 the lower side of the contact member 13 is moved away from the major dimension 13^a of the globe to the position shown in dotted lines 13^b. In this position the contact member engages the globe at a smaller circle than the circle of engagement when in secured position, and is thereby loosely slidable on the globe and easily adjusted to different positions on the globe. To secure the reflector to the globe the lower side of the contact member 13 is moved from the loosely slidable position, shown in dotted lines 13^b, toward the major dimension 13^a of the globe. During this securing movement the upper side of the contact member 13 is held stationary on the globe by frictional contact therewith. By this operation the globe 5 is tightly jammed in between the opposite sides of the contact member 13, thereby firmly securing the reflector to the globe. By this construction the reflector can be adjusted to different positions with respect to the source of light 4 and is firmly supported in the adjusted position. Fig. 4 shows a reflector adjusting tool and comprises a handle 14 provided with a head 15 having a depression 16 and a hook 17. The manner the rim portion 18 of the reflector 10 is engaged by the tool for adjustment to a new position is shown in dotted lines 19 and 20. In adjusting the reflector to a new position the rim portion 18 is engaged by the tool from the underside, as is illustrated by the dotted lines 19, and by pushing upward the reflector is lifted from its binding position and caused to slide on the surface of the globe. After adjustment to the new position the hook 17 is used to engage the upturned rim 21 in the manner illustrated by the dotted lines 20, and by pulling downward and away from the globe the globe is tightly wedged in between the opposite sides of the edge member 13 of the reflector. When the reflector is positioned as is shown in full lines it can be adjusted to any position about the source of light by applying horizontally directed force against the rim of the reflector at 23, whereby the globe 5 is turned on the conduit 3. The dotted lines 24 show the position to which the reflector may be adjusted when a uniform illumination throughout the room is of advantage. The broken line 24^a indicates the major dimension of the globe with respect to the position of the reflector shown in dotted lines 24. As is illustrated in Fig. 1 the reflector may be positioned to darken the part of the room where the bed 25 is located, which is often desirable in sick rooms, or in rooms where children sleep and the person taking care of them is en-

gaged in work to which a good illumination is necessary. In the position of the reflector shown in full lines in Fig. 1 many of the light rays from the source of light 4 are directed by the reflector 10 to the wall 26 and by the latter they are reflected to the table 27, thereby the shadow effects at the table are greatly reduced, which is of advantage to the performance of work requiring uniform illumination.

I claim:

1. In an illumination unit, a globe, a source of light disposed below and adjacent thereof, and a reflector having supporting means surrounding and firmly engaging said globe adjacent its major dimension to support the reflector in position, said means being movable upwardly away from the major dimension of said globe to a position to be loosely slidable on the globe to facilitate adjustment of said reflector with respect to said source of light, and said means being movable from the loosely slidable position toward the major dimension of said globe to secure the reflector to the globe.

2. In an illumination unit, a globe, a source of light disposed below and adjacent thereof, and a reflector provided with supporting means having a relatively narrow globe engaging face, said means surrounding and firmly engaging said globe adjacent its major dimension and being movable upwardly away from the major dimension of the globe to a position to be loosely slidable on the globe, and said means being movable toward the major dimension of said globe with one side when the opposite side is held stationary on the globe by frictional contact therewith to wedge the globe in between the sides of the supporting means.

3. In an illumination unit, a globe, a source of light disposed below and adjacent thereof, and a reflector having flexible supporting means surrounding and firmly engaging said globe adjacent its major dimension and being movable upwardly away from the major dimension of said globe to an extent to be loosely slidable on said

globe, said means being movable toward the major dimension of said globe with one side when the opposite side is held stationary on said globe by frictional contact therewith, and said means adapting itself to the variation in relation between its contact face and that of said globe during said adjusting movement on said globe.

4. In an illumination unit, a room provided with a rigid downwardly extending support having a source of light on its extended end, a globular support mounted on said rigid support adjacent said source of light, a reflector slidable upon said globular support and having means arranged to clutchingly engage said globular support when forced downward thereon to support the reflector in a certain reflecting position with respect to said source of light and being released from the clutching engagement with said globular support when forced upward thereon for adjusting the reflector to a different reflecting position with respect to said source of light, and means operable from a remote position adapted to engage said reflector for adjustment to different reflecting positions with respect to said source of light.

5. In an illumination unit, a room provided with a rigid downwardly extending support having a source of light on its extended end, a globular support rotatably mounted on said rigid support adjacent said source of light and adapted to be rotated from a remote position, means on said rigid support to prevent axial movement of said globular support, a reflector adjustably mounted upon said globular support and having means arranged to clutchingly engage said globular support when forced downward thereon and adapted to support the reflector in a position with respect to said source of light to reflect the light to one side with respect to the axis of rotation of said globular support, and means operable from a remote position adapted to engage said reflector for turning said globular support on said rigid support.

LUDWIG SCHWARZMAYR.