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B. F. MULDOON

2,290,487

FLASHLIGHT HEAD

Filed May 15, 1940

Fig. 2

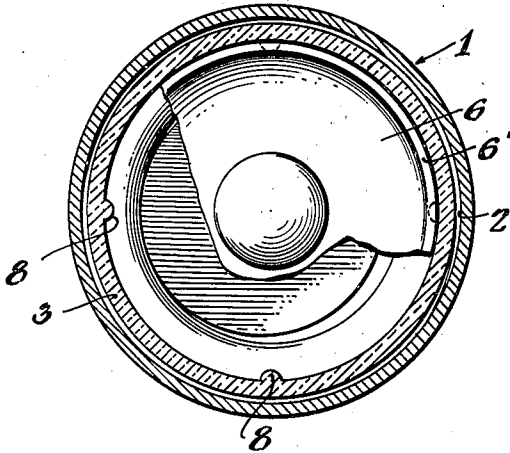


Fig. 3

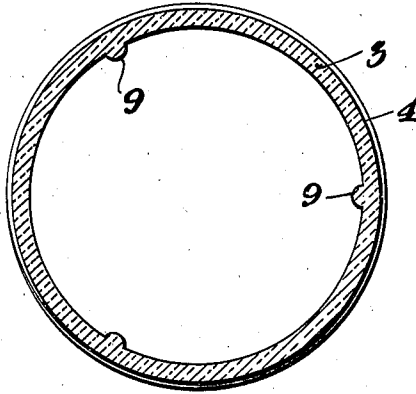


Fig. 1

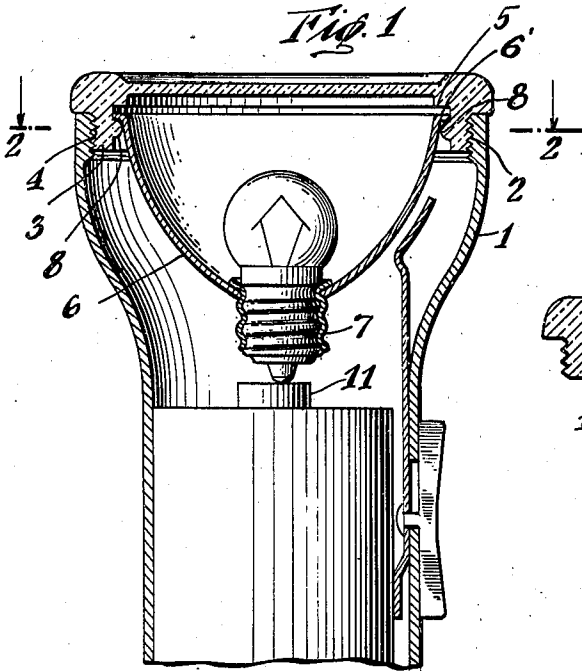
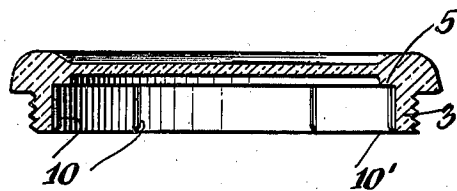


Fig. 4



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2,290,487

FLASHLIGHT HEAD

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Application May 15, 1940, Serial No. 335,219

3 Claims. (Cl. 240—10.66)

This invention relates to a bezel ring for a flashlight head that can be made of a lens portion and a body portion in one piece, or integral, out of transparent plastic material, and can be attached to the head of a flashlight casing by screwing the same thereonto or any other way. This is a continuation-in-part of my application Serial No. 287,239, filed July 29, 1939, which became abandoned on Oct. 18, 1941.

The bezel ring can be colored, if desired, in order to make it suitable in connection with signaling or for warning. The bezel ring is made of insulating material and is adapted to hold or retain a reflector in place which carries a lamp bulb socket. Provision is made whereby the bezel ring will retain the reflector in place but will permit the same to be removed therefrom by hand when desired.

The invention will be understood from the description in connection with the accompanying drawing, in which—Fig. 1 is a longitudinal section through an illustrative embodiment of the invention showing it attached to the head end of a flashlight casing; Fig. 2 is an end view of the head with the reflector partially broken away; Fig. 3 is a section through a modification; and Fig. 4 is a plan view of another modification.

In the drawing, reference character 1 indicates the front or head end of a flashlight casing which may be enlarged in the usual way and is threaded as indicated at 2. It may be made either of insulating material such as fibrous material, for example, or plastic material such as synthetic resin, for example, that can be threaded. It is preferably made of material that can be shaved off by means of a metal edge.

The bezel ring of translucent or transparent material comprises a cylindrical portion 3 that is threaded at 4 so that it can be secured by threaded attachment to the flashlight head 1. The material of which it is made preferably has some flexibility or resiliency but is amply rigid enough to retain its shape.

A circular internal shoulder or stop 5 is provided for the reflector 6 which carries the lamp socket 7. In view of the fact that reflectors of intended sizes vary somewhat and the parts of the bezel rings which accommodate them also sometimes vary, the reflectors are sometimes too loose and accidentally fall out when the heads are removed. In order to prevent this and to permit the reflectors to be installed and kept in place, lugs, ribs, or projections are provided on the inside between the shoulder 5 and the lower

end of the bezel ring. In this way the reflector 6 is retained in place by means of these lugs, ribs, or projections but can be removed by applying sufficient force which is considerably greater than that which usually occurs accidentally.

In the embodiment of the invention shown in Figs. 1 and 2, four lugs 8 that are somewhat rounded or sharpened are provided short distances from the shoulder 5 and the outside diameter of the rim 6' of the reflector 6 is such that it needs to be slightly sprung or flexed to pass these lugs. However, when the distance between the ends of opposite lugs 8 is only slightly greater than the outside diameter of the rim 6' the reflector 6 can be readily put in place and remain there, since the sharp edge of the rim 6' will shave off enough material from one or more of the ends of the lugs 8 to permit the reflector 6 to be inserted and kept in place in the bezel ring 3 with the rim 6' between the lugs 8 and shoulder 5.

In the modification shown in Fig. 3 there are three lugs or projections 9 similar to the lugs 8 and similarly located. In this case the reflector 6 can be turned sidewise slightly, the rim 6' slid over two of the lugs 9 and its opposite side pushed beyond the third lug until its axis is parallel with the axis of the bezel ring 3, whereupon the rim 6' will rest upon the lugs 9 when the reflector 6 is released. Even if the rim 6' is slightly too large or the lugs 9 too long, the rim will shave off enough of the end of the lug to let it pass.

In the modification shown in Fig. 4, a plurality of spaced ribs 10 is provided, preferably extending in an axial direction from the lower end of the bezel ring 3 to the shoulder 5. These ribs are preferably made thin or with sharpened edges so that they will be shaved off the proper amount by insertion of the rim 6' of the reflector 6 in the bezel ring so that when the reflector is inserted in the bezel ring 3 it will remain frictionally connected thereto. Also because of the resiliency of the material and the thin edges of the ribs 10 there is a tendency for the rim of the reflector to sink into these ribs and be securely held in place. The lower ends of the ribs may be rounded as shown at 10' for convenience in inserting the reflector 6.

A lamp bulb is shown in the socket 7 with its center contact bearing against the battery terminal 11. Switch mechanism and electric circuit of well known sort can be used, but are not illustrated in detail as they do not constitute any part of the present invention.

What is claimed is:

1. A bezel ring for a flashlight head, said ring having a body portion adapted to receive a reflector, a rearwardly facing annular shoulder within said ring, and a plurality of longitudinally extending thin edged ribs projecting inwardly from the annular body portion of said ring, said ribs being made of material capable of being shaved off to a close fit by insertion of the flange of said reflector between said ribs.

2. A bezel ring for a flashlight head, said ring having a body portion of insulating material adapted to receive a reflector, a rearwardly facing annular shoulder within said ring, and a plurality of longitudinally extending thin edged in-

tegral ribs projecting inwardly from the annular body portion of said ring, said ribs being made of material capable of being shaved off to a close fit by insertion of the flange of said reflector between said ribs.

3. A bezel ring for a flashlight head, said ring having a body portion adapted to receive a reflector, a rearwardly facing annular shoulder within said ring, and at least three longitudinally extending thin edged ribs projecting inwardly from the annular body portion of said ring, said ribs being made of material capable of being shaved off to a close fit by insertion of the flange of said reflector between said ribs.

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