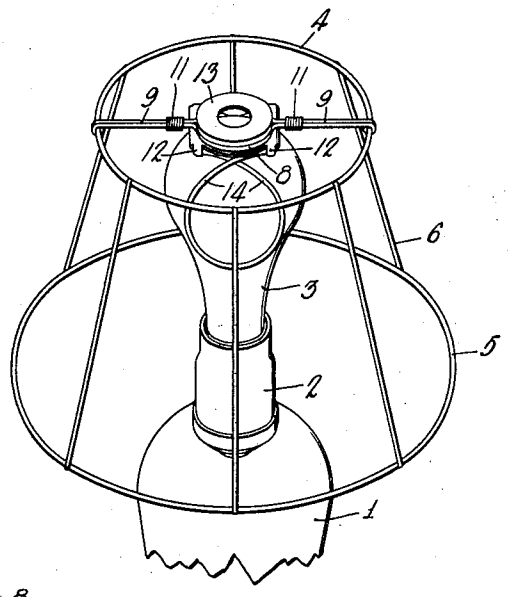
Oct. 20, 1942. H. T. PAISTE 2,299,278

LAMP SHADE AND SUPPORTING MECHANISM THEREFOR

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Fig. 1.



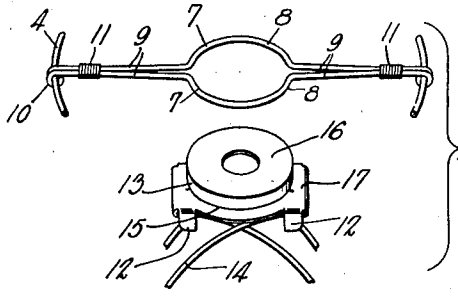


Fig. 2.

Fig. 3.

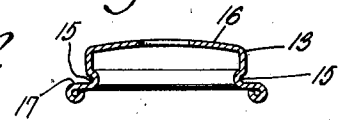


Fig. 4.

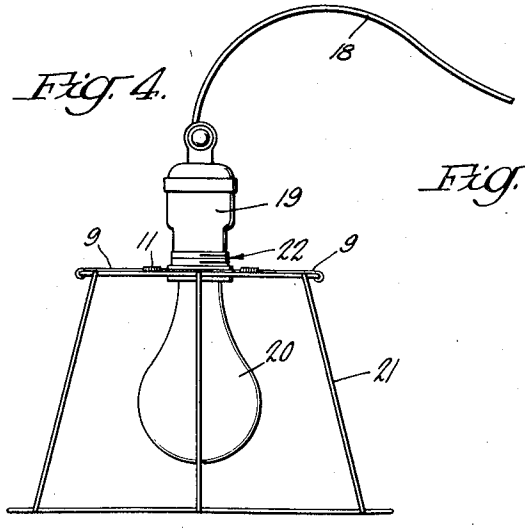
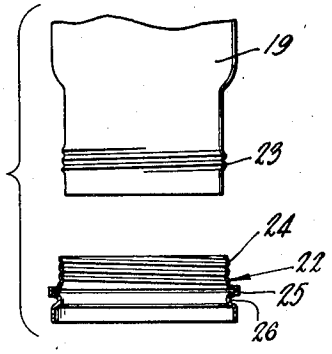


Fig. 5.



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Fig. 6.

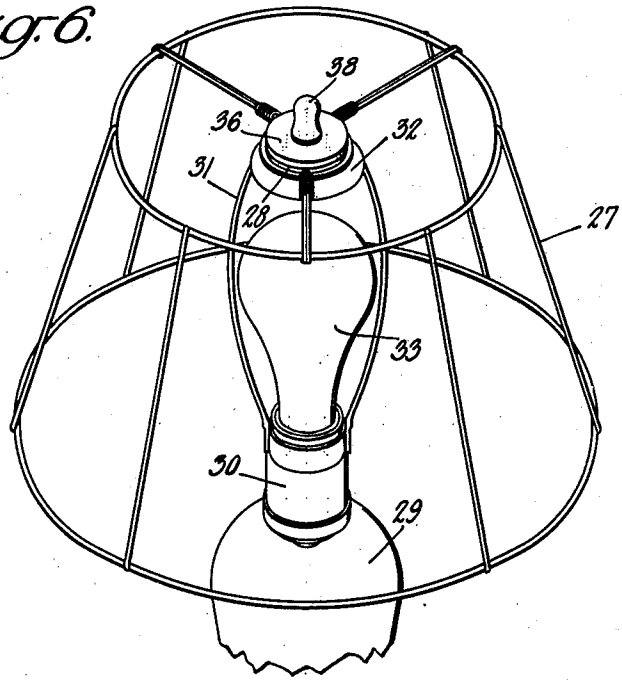


Fig. 7.

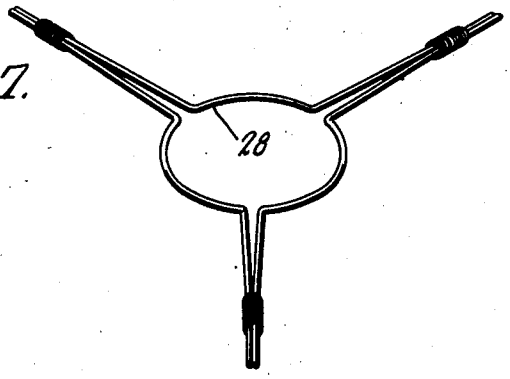
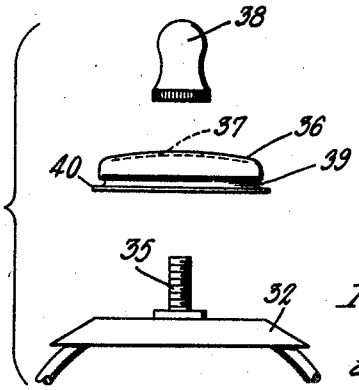


Fig. 8.



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UNITED STATES PATENT OFFICE

2,299,278

LAMP SHADE AND SUPPORTING MECHANISM THEREFOR

Henry T. Paiste, Chestnut Hill, Pa.

Application November 13, 1939, Serial No. 304,236

1 Claim. (Cl. 240—128)

This invention relates to lamp shade supporting devices, and more particularly to a novel lamp shade frame and support structure.

One object of the invention is to provide a simple structure of this character which may be economically manufactured and sold at low cost and which greatly facilitates the attachment and removal of a lamp shade.

Another object of the invention is to provide a novel lamp shade frame and support structure by means of which a lamp shade may be readily attached to different forms of supports, thereby adapting the shade for universal use.

Several different forms of lamp shade holders are now commonly used, and heretofore it has been necessary to employ different lamp shade frames respectively adapted for use with the several shade holders. That is to say, each lamp shade could be used on one shade holder only. It is frequently desirable, however, to be able to use the same lamp shade on different types of holders. For example, when one has a lamp shade which is particularly to his liking, it is desirable to be able to use it on occasions with one type of lamp such as a reading lamp, and on other occasions with another type of lamp such as a bridge lamp. This has generally been impossible in the past, however, it being necessary either to duplicate the lamp shade or convert it to the proper form by changing the frame. Since good lamp shades comprise costly covers, but the frames are relatively inexpensive, it has been particularly annoying in the past to have to go to such lengths simply to obtain the proper lamp shade frame for a particular shade support.

By the present invention there is provided a novel structure which renders a lamp shade frame universally applicable to different types of lamps or shade supports, thereby eliminating the above-mentioned difficulty and annoyance. By means of this structure, it is readily possible to interchange lamp shades on the different types of lamps.

The invention may be clearly understood by reference to the accompanying drawings in which:

Figure 1 is a perspective view of one form of lamp shade frame supporting structure, constructed according to the present invention and adapted for association with a particular type of lamp;

Figure 2 is an exploded perspective view illustrating more clearly the shade frame supporting structure;

Figure 3 is a sectional view of the support element;

Figure 4 is an elevational view of the same lamp shade frame applied to a different type of lamp;

Figure 5 is an exploded view illustrating the shade frame supporting elements;

Figure 6 is a perspective view illustrating the same type of lamp shade frame applied to still another form of lamp and supporting structure;

Figure 7 is a fragmentary perspective view of the clamp employed; and

Figure 8 is an exploded view of the shade supporting elements.

In the drawings there are illustrated the three general types of lamp shade supports commonly employed, and in accordance with the present invention, the lamp shade frame is especially constructed, and there are provided certain adapters to enable the same lamp shade to be employed on the different lamps or supports. These three different forms will be described in the order illustrated.

Referring first to Figs. 1 to 3, there is shown in Fig. 1 a common form of table lamp comprising the lamp body or pedestal 1 at the upper end of which there is mounted a lamp socket 2 for receiving the lamp bulb 3. In accordance with the present invention, a specially constructed lamp shade frame is provided, and the shade support, which is commonly used with a lamp of this character, is modified to provide thereon a special adapter or support element for receiving the shade frame.

The lamp shade frame preferably comprises an upper ring member 4 and a lower ring member 5 connected together by rod-like elements 6, the whole assembly constituting a rigid frame for supporting the shade cover which has been omitted for the sake of clear illustration. In accordance with the present invention, there is provided within the upper ring member 4 a manually-manipulable ring-like clamp which is compositely formed by a plurality of cooperatively associated members. As illustrated more clearly in Fig. 2, this clamp comprises similar members 7, each comprising an arcuate portion 8 and radial arms 9, whose ends are attached to the ring member 4, as shown at 10. The members 7 are so constructed and arranged that the complementary arcuate portions 8 form a ring, while the arms 9 are arranged in adjacent pairs. A slidable sleeve, or ferrule 11, is provided on each pair of adjacent arms, and these ferrules constitute a manually-manipulable clamping means for rendering the ring-like clamp effective or ineffective. The ferrules may comprise simply a helix of wire, as illustrated. The construction of the members 7 is such that when the ferrules 11 are in outwardly disposed positions, as shown in Fig. 2, the clamping ring is somewhat expanded, and when the ferrules are moved to their inward positions, as shown in Fig. 1, the clamping ring is contracted.

In further accordance with the invention, the

shade support 12 is specially constructed to receive the ring-like clamp and interlock with the same. The support 12 may be of the general type comprising a shade support element 13 and resilient wire elements 14, the latter being adapted to resiliently engage and embrace the lamp bulb 3, as illustrated in Fig. 1. This general type of shade support is well known, and requires no detailed description. According to the present invention, however, the support element 13 is provided with an annular recess 15, as shown clearly in Fig. 3, and is so constructed that the ring-like clamp of the shade frame may be placed freely over the cap 16 when the clamp is in open or non-clamping condition, as shown in Fig. 2. When the parts are thus associated, the clamping ring rests upon the flange 17 of the support member. The ferrules are then moved to their clamping positions shown in Fig. 1, and this causes the clamping ring to contract and seat in the annular recess 15, thus interlocking the shade frame with the support element 13. When it is desired to remove the shade, it is simply necessary to open the clamp and lift the frame from its support.

In Figs. 4 and 5, there is illustrated the application of the shade frame to another commonly used lamp. This lamp is of the suspension type, and comprises a gooseneck support 18 which carries the lamp socket 19 in which the lamp bulb 20 is inserted. This type of lamp is commonly referred to as a bridge lamp. In this instance, the shade frame 21 is similar to that illustrated in Fig. 1 and above described. In order to adapt the particular type of lamp for receiving this frame, there is provided an adapter 22 which is removably attached to the lamp socket 19, and serves as the shade frame supporting element. As is well known, lamp sockets of the type shown at 19 are provided with threads 23 for receiving some form of lamp shade support. The adapter or support element 22 provided by the present invention has an internally threaded section 24 for removable engagement with the threaded section 23 of the lamp socket. Below the threads 24 there is provided an annular shoulder or flange 25, and immediately below this flange there is provided an annular recess 26.

When the ring-like clamp on the shade frame is in non-clamping condition, the clamping ring may be placed freely over the lower end of the adapter or support element 22, bringing the clamping ring into abutment with the shoulder or flange 25. In this position, the ferrules of the clamp are moved to clamping position, causing the clamping ring to retract and seat in the recess 26. The clamping ring, and, of course, the shade frame, is thereby securely interlocked with the support element 22. Removal of the lamp shade may be readily effected whenever desired in an obvious manner.

In Figs. 6 to 8 there is shown the same type of lamp shade frame applied to still another commonly used lamp. In this instance, the clamp on the shade frame 27 is shown as comprising three complementary members 28 instead of two, as previously shown and described. This is merely to demonstrate that the ring-like clamping member may be composed of any desired number of complementary members within the limits of practicability. Aside from this obvious modification, the shade frame is the same as previously described. It will be understood, of course, that the shade frame of Fig. 1 could be used in the device of Fig. 6, as well as the modified form of frame.

The lamp illustrated in Fig. 6 comprises a body or pedestal 29 and a lamp socket carrying a lamp shade supporting yoke 31. This yoke usually comprises two upwardly extending arms carrying a support element 32 for the shade frame. The arms are bulged outward sufficiently to accommodate the lamp bulb 33.

According to the present invention, the support element 32 is specially constructed as illustrated clearly in Fig. 8. This element carries a central threaded stud 35 adapted to receive an adapter or frame support element 36. This element has a central aperture 37 through which the stud 35 may project when the adapter element is placed upon the element 32. A nut 38 adapted for threaded engagement with the stud 35 serves to hold the adapter element 36 securely in place.

The adapter element 36 is provided with an annular recess 39 and an adjacent flange 40, and is so constructed that the ring-like clamp, when in open condition, may be placed freely over the top portion of the adapter element 36, and may rest upon the flange 40. When the clamp is adjusted to its closed condition, the clamping ring seats in the recesses 39, thus interlocking the clamp with the adapter or support element 36. Whenever desired, the shade frame may be readily removed in an obvious manner.

It will be seen from the illustrations of the drawings and from the above description that the provision of the specially constructed lamp shade frame, embodying as an integral part thereof the manipulable clamp, and the provision of an adapter or support element forming a part of or removably secured to the different forms of lamp shade supports, result in a novel structural combination which makes possible the use of one lamp shade on different types of lamps, and also makes it possible readily to interchange lamp shades. Thus, the invention makes it readily possible to adapt the common existing forms of lamps to the universal use of a single type of lamp shade frame, thus making possible the interchange of lamp shades.

It will be noted that each of the illustrated structures comprises the combination of the manipulable clamp on the shade frame and a cooperative support element adapted to interlock with the clamp.

While the invention has been illustrated and described with reference to the three principal types of lamps employed most frequently, it will be understood that it is not limited to these forms but is applicable to other types of lamps. Moreover, it will be understood that the structure provided according to the invention is not limited to specific details, but is susceptible to modification.

I claim:

A lamp-shade frame and support structure, comprising a lamp-shade frame having at its top a ring-like clamp and manually-manipulable clamping means therefor, and a support for said frame comprising resilient lamp-embracing means, and a cap carried by said means and insertable within said ring-like clamp when said clamping means are in non-clamping positions, said cap having an annular recess within which said ring-like clamp seats when said clamping means are moved to clamping positions, thereby interlocking said clamp with said support element.

HENRY T. PAISTE.