To all whom it may concern:

Be it known that I, LINDON Y. COWL, a citizen of the United States, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Lamp-Shade Supporters and Protectors, of which the following, when taken in connection with the drawings accompanying and forming a part hereof, is a full and complete specification, sufficient to enable those skilled in the art to which it pertains to understand, make, and use the same.

The object of this invention is to obtain a combined lamp-shade supporter and protector which may be used on a lamp producing considerable heat—such as, a Welsbach mantle-lamp—to support a glass shade not specially adapted to sustain great heat without fracture thereof, and to protect such shade from the heat of the lamp, so as to lessen the probability of fracturing same.

In the drawings referred to as accompanying this specification, Figure 1 is a vertical sectional view of a lamp-shade supporter and protector embodying the invention, and Fig. 2 an elevation of a modification thereof.

A reference-letter applied to designate a given part is used to indicate such part wherever the same appears.

A A are the ordinary bent metal shade-supports of a common Welsbach lamp.

B is a metal supporter having the cylindrical part b and the flange part b' b''.

C is an asbestos covering of substantially the same shape as the supporter B and fitting over such supporter, so as to be interposed between it and the fluted or corrugated ring D.

E is an asbestos covering to fluted or corrugated ring D of substantially the same shape as such ring and fitting thereon in a manner to be interposed between it and the shade F. Shade F may be constructed of glass, if desired, the principal purpose of this invention being, as hereinbefore stated, to obtain a lamp-shade supporter and protector by means of which a lamp-shade made of ordinary glass may be used.

In the modification illustrated in Fig. 2 the supporter and protector is constructed of a single piece of metal, as G, having the cylindrical part g and the fluted or corrugated flange g' thereto, and is provided with the covering H, corresponding in shape therewith and fitting thereto in such a manner as to be interposed between such supporter and a lamp-shade placed thereover to be supported and protected thereby.

The manner of operation of the device embodying this invention when the same is constructed substantially as illustrated in Fig. 1 is as follows: Ascending currents of heated air adjacent to the chimney of the lamp pass between the chimney and the cylindrical part b of supporter B, as is indicated by the arrow I. Ascending currents of heated air a little farther removed from the chimney of the lamp and rising to the under side of the ring D pass along the passages formed by the flutings or corrugations thereof toward the center of such ring, passing out of such flutings or corrugations above the supporter B, as is indicated by the arrow J. Ascending currents of air yet farther removed from the chimney of the lamp will strike the under side of the shade F and passing toward the center thereof will pass between the ring D and such lamp-shade in the passages formed by the flutings or corrugations of such ring (or between the covering E of ring D and the shade F) and so out from under the shade, as is indicated by the arrow K. The several currents of air moving as described tend to maintain the shade F at a low temperature in addition to the heat insulation afforded by the several asbestos covers.

The supporter B is preferably made of metal—as, say, aluminium, the same not being easily tarnished and well adapted to stand without injury thereto a much greater heat than such supporter is subjected to—and such metal is provided with the asbestos cover C, which is interposed between it and the fluted or corrugated ring D, so that the heat of such supporter B will not be conducted to such ring D.

Ring D is preferably made of metal—as, say, aluminium—for the same reasons which induce me to use metal for the construction of supporter B and is fluted or corrugated, so that the ascending currents of heated air striking the under side thereof pass along in the flutings or corrugations thereof toward the center of such ring and out from under it, as indicated by arrow L, and the ring D is pro-
vided with asbestos cover E, so that when the ring is heated heat therefrom will not readily be conducted to shade F.

It will be found when a shade supporter and protector is constructed as heretofore described, the excessive heating of the shade placed thereon is avoided.

When a lamp-shade supporter and protector is constructed as set out in the modification illustrated in Fig. 2 of the drawings and heretofore described, ascending currents of heated air strike the under side of the flutings or corrugations of the supporter and ring G and pass along therein to the central opening thereof and upward through such central opening between the peripheral wall of the cylindrical part thereof and the lamp-chimney, and the ascending currents of heated air striking the under side of the shade support thereby will pass inward on the under side of such shade toward the center opening thereof, passing through the passage-ways formed on the under side of such shade by the flutings or corrugations in the supporter and ring G and in the cover H thereof. The heat of the supporter and fluted or corrugated ring G is not conducted to the shade F because of the asbestos cover H interposed therebetween and also because of the moving currents of air in the flutings or corrugations of the supporter and cover.

It is evident that the modification illustrated in Fig. 2 of the drawings is substantially as good a shade-supporter as is the construction illustrated in Fig. 1 of the drawings; but the device embodying my invention constructed as illustrated in Fig. 1 of the drawings more effectually protects the shade supported thereby from the heat of the lamp than does modification illustrated in Fig. 2.

I have found in practice when a lamp-shade supporter and protector is constructed as hereinbefore described that a glass lampshade silvered to present the appearance of an ordinary mirror may be used on a lamp and that such silvering will not be cracked, blistered, peeled, blackened, or otherwise injured by the heat generated by the lamp to which the same is attached.

Having thus described my invention, the construction of a device embodying the same, and its operation, what I claim as new, and desire to secure by Letters Patent, is—

1. In a lamp-shade supporter and protector, the combination of a flanged cylindrical part, an asbestos cover of substantially the same shape, a separable radially fluted or corrugated part supported by the cylindrical part and a cover of non-heat-conducting material of substantially the same shape fitting thereover; whereby the supported shade is protected thereby from the heat generated by the lamp, and the supporter and shade are provided with passage-ways for the passage of heated air from under the shade substantially as described.

2. A lamp-shade supporter and protector comprising a cylindrical part and a radially fluted or corrugated part and a cover of non-heat-conducting material of substantially the same shape fitting thereover; whereby the supported shade is protected thereby from the heat generated by the lamp and passage-ways are obtained from underneath the shade for ascending currents of heated air; substantially as described.

LINDON Y. COWL.

In presence of—

CHARLES T. BROWN,
RICHARD F. HAYES.