Nov. 7, 1950 J. A. McHOLLAN 2,528,604

SHADE SUPPORT AND EXTINGUISHER FOR CANDLES

Filed July 13, 1948

Fig. 1.

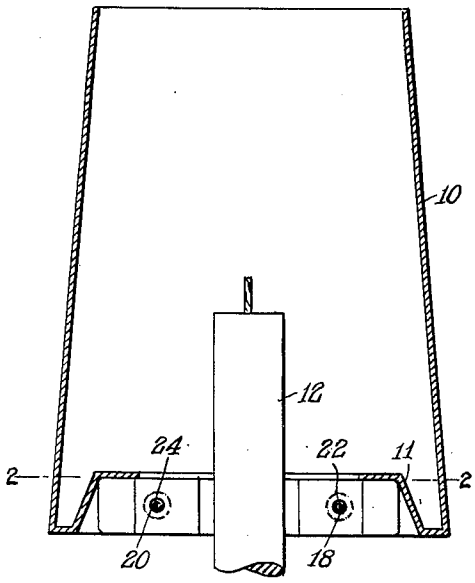


Fig. 3.

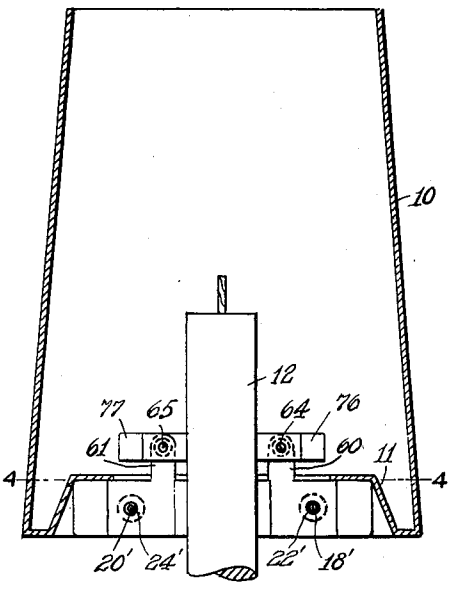


Fig. 2.

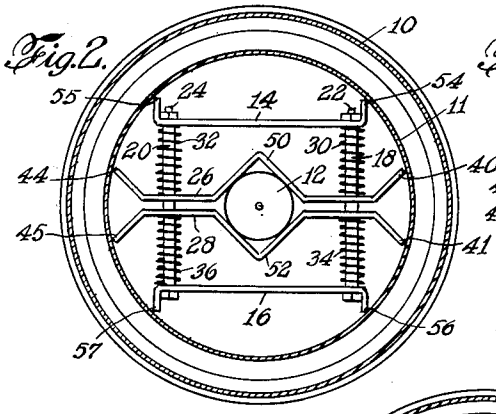


Fig. 4.

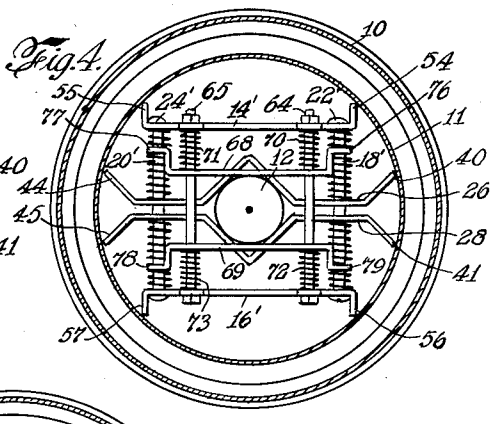
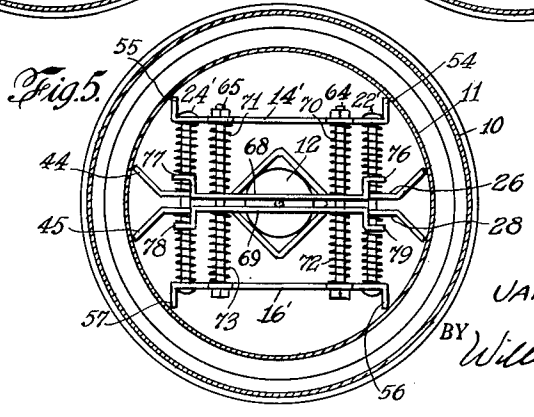


Fig. 5.



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SHADE SUPPORT AND EXTINGUISHER FOR CANDLES

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6 Claims. (Cl. 240—141)

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This invention relates to a candle-shade supporter. The general object of the invention is to provide a candle-shade supporter which is simple in construction, pleasing in appearance and easily applied to a candle and so that the location of the shade on the candle may be readily adjusted, and one which may or may not have incorporated in it novel automatic candle-extinguishing means which will extinguish the candle flame when the candle has burned down to the top of the supporter. My shade-supporter may be used not only on wax candles but upon candles of the electric type, but of course when used on candles of the electric type the automatic candle-extinguishing means is omitted or does not function.

This application is a continuation-in-part of my application Ser. No. 769,586, filed August 20, 1947, now abandoned.

The invention will be understood from the following description, taken in conjunction with the accompanying drawing in which two forms of the invention are illustrated. Fig. 1 is a sectional elevation showing how a candle-shade rests on a supporter embodying the form of the invention which is not provided with the automatic candle-extinguishing means; Fig. 2 is a sectional plan view on the plane 2—2 of Fig. 1; Fig. 3 is a sectional elevation showing the candle-shade resting on a supporter embodying the form of the invention which contains the automatic candle-extinguishing means; Fig. 4 is a sectional plan view on the plane 4—4 of Fig. 3; and Fig. 5 is a sectional plan, similar to Fig. 4, illustrating the position of the automatic candle-extinguishing means after it has functioned to extinguish a candle.

Referring to the drawing, it will be apparent that a candle-shade which cooperates with both forms of the supporter (hereinafter described) may have a tubular portion 10 which at its bottom is provided with an upwardly and inwardly extending flange 11 the form of which will be apparent from Figs. 1 and 3. Both forms of candle-shade supporter member (about to be described) are adapted to cooperate with the flange 11 of the shade and nest within the recess formed by that flange, as will be apparent from the drawing. Therefore, the supporter is largely hidden within the candle-shade under normal conditions of use, for example, on a table at a level below the eyes of the observers. Unless an observer looks almost vertically into the top of the shade, ordinarily the shade supporter will not be seen. It will be evident also that the supporter will not throw a shadow from the flame of the candle 12 on to the tubular portion 10 of the shade.

The candle-shade supporter illustrated in Figs.

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1 and 2 will now be described. As is best shown in Fig. 2, the form of shade supporter therein illustrated comprises a frame having side members 14 and 16 and cross bars connecting said side members and rigidly holding them in spaced relation. As shown in Figs. 1 and 2 the cross bars comprise tubes 18 and 20 through which pass bolts 22 and 24 which clamp the side members 14 and 16 firmly in engagement with the tubes 18 and 20; but of course rivets may be employed in place of the bolts 22 and 24, or screws 22' and 24' which thread into the ends of the tubes 18' and 20' may be employed, as illustrated in Figs. 4 and 5 which show the shade supporter and automatic candle-extinguisher which will be later described. Candle-engaging members 26 and 28 of the form apparent from Fig. 2, are slidingly supported on the tubes 18 and 20. Surrounding the tubes 18 and 20 and located between the side members 14 and the candle-engaging member 26 are coil springs 30 and 32; and coil springs 34 and 36 are preferably also arranged on the tubes 18 and 20 between the side member 16 and candle-engaging member 28. Thus spring means are provided which cooperate with at least one of the side members and one of the candle-engaging members and tend to hold the candle-engaging members in engagement with one another while permitting their separation when the supporter is being applied to, moved on or removed from a candle. As will be apparent from Fig. 2, the outer adjacent ends 40—41 and 44—45 of the candle-engaging members 26 and 28 diverge from one another. These diverging ends facilitate movement of the candle-engaging members 26 and 28 against the pressures exerted by the coil springs 30—32 and 34—36. As will be apparent, the diverging ends 40—41 and 44—45 may be grasped conveniently, either by the thumb and forefinger of both hands or by the thumb and forefinger of one hand, to effect the necessary movement of the candle-engaging members away from one another when the supporter is being applied to, moved on or removed from a candle. As will be apparent from Fig. 2, the candle-engaging members 26 and 28 are bent away from one another at their middle portions 50 and 52, so that they will cooperate properly with the candle. It will also be apparent from Fig. 2 that the ends 54—55 and 56—57 of the side members 14 and 16 respectively are offset so that they extend in opposite directions; and that these offset ends lie in the same circle and are adapted to cooperate with the upwardly extending portions of the shade flange 11 at points about 90° apart, thereby properly locating the shade on the supporter.

Figs. 3, 4 and 5 show a candle-shade supporter

which is similar to the supporter illustrated in Figs. 1 and 2, but is provided with the automatic candle-extinguishing means hereinbefore mentioned. In this embodiment of the invention, as will be apparent from Fig. 3, the side members 14' and 16' are provided with upwardly extending lugs 60 and 61, as is best shown in Fig. 3. These lugs 60 and 61 support auxiliary cross bars which may consist of bolts or rivets 64 and 65 which are parallel to the tubes 18'—20' which form part of the cross bars by which the side members 14' and 16' are held spaced apart in parallel relation to one another.

Mounted for sliding movement on the bolts or rivets 64 and 65 are cooperating candle-extinguishing members 68 and 69 which are provided with holes accommodating the side bolts or rivets 64 and 65. Surrounding the bolts or rivets 64 and 65 and arranged respectively between each pair of the lugs 60—61 and the members 68 or 69, are spring means in the form of coiled springs 70, 71, 72 and 73 which tend to hold the members 68 and 69 in engagement with one another while permitting their separation to engage a candle. The ends 76, 77, 78 and 79 of the members 68 and 69 are offset in some such manner as shown in Figs. 4 and 5 in order to facilitate their manual movement away from one another when the shade supporter is being applied to, moved on or removed from a candle.

The manner in which the candle-engaging members 26 and 28 engage a candle will be obvious from the drawing. It will also be evident from Fig. 4 that, when the candle supporter there shown is applied to a candle, the candle-extinguishing members 68 and 69 are also in engagement with the cylindrical surface of the candle 12. As the wax portion of the candle is consumed, there comes a time when the members 68 and 69 will be no longer held separated from one another by the candle but will move toward one another under the influence of the springs 70, 71, 72 and 73, and will reach the positions shown in Fig. 5, and the engagement of those members 68 and 69 with the wick of the candle will extinguish its flame. When the candle flame is thus extinguished, it is an indication that the candle-shade holder should be lowered on the candle, or a new candle should be inserted. Thus any danger that the candle-shade and the supporter will topple from the candle during the burning of the latter is eliminated. Moreover, the candle-shade supporter shown in Figs. 3, 4 and 5 positively insures that the candle upon which it is used will be automatically extinguished when the wax has been consumed to a point substantially on a level with the upper surface of the shade supporter.

What is claimed is:

1. A candle-shade supporter comprising a frame having side members with free ends lying in the same circle and adapted to cooperate with a candle-shade, said side members being connected only by a single pair of cross-bars attached at their ends to said side members and rigidly supporting the latter in spaced relation, candle-engaging members having adjacent free ends which are adapted to be manually engaged and are slidingly supported on said pair of cross-bars, and spring means cooperating with each side member and the adjacent candle-engaging member and tending to hold said candle-engaging members in engagement with one another while permitting their manual separation to engage a candle.

2. A candle-shade supporter according to claim 1, in which the said adjacent free ends of the candle-engaging members diverge from one another, thereby facilitating their manual separation.

3. A candle-shade supporter according to claim 1, in which the free ends of each side member are offset so that the ends of the side members extend respectively in opposite directions and lie about 90° apart in the same circle.

4. A candle-shade supporter according to claim 1, in which said side members are each provided with two upwardly extending lugs, and in which there are auxiliary cross-bars connecting said lugs, candle-extinguishing members supported and slidable on said auxiliary cross-bars, and spring means cooperating with said lugs and with said candle-extinguishing members and tending to hold said candle-extinguishing members in engagement with one another while permitting their separation to engage a candle.

5. A candle-shade supporter according to claim 4, in which said spring means cooperating with said candle-extinguishing members consists of coil springs surrounding said auxiliary cross-bars.

6. A candle-shade supporter according to claim 4, in which the adjacent ends of said candle-extinguishing members diverge from one another.

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