COASTER FOR DRINKING GLASSES OR THE LIKE Filed May 11, 1961


FIG. 3


FIG. 4


FIG. 6


INVENTOR.
DANIEL J. MORGAN
$B Y$
${ }^{B Y}$ Cumpation + Shaw

3,137,956
COASTER TOR DRINETVG GLASSES OR THR LIEE
Daniel J. Morgan, 3642 Laike Ave., Rochester, N. Y. Filed May 11, 1961, Ser. No. 109,292

3 Clains. (Cl. 40-324)
This invention relates to coasters or supporting devices for drinking glasses such as liquor, cordial, wine, beer or the like glasses, and more particularly to a coaster or holder which is designed for illuminating the bottom of the drinking glass when the same is resting thereon, one object of the invention being to provide an improved holder of the above nature.

Another object is to provide a coaster of the above character which is so constructed that the self-contained illuminating means are normally inoperative and become operative only when a drinking glass or object of similar weight is placed on the device.

Another object is to provide a device having the above advantages which is provided with means whereby a word or design may be illuminated at the same time the bottom of the drinking glass is illuminated.

A further object is to provide a device of the above character having means for affecting the color of the illuminated display.

Still a further object is to provide a glass supporting device having the above advantages which is attractive, durable, reliable in operation, and requires a minimum number of parts which can be readily manufactured and assembled.

To these and other ends, the invention resides in certain improvements and combinations of parts, all as will be hereinafter more fully described, the novel features being pointed out in the claims at the end of the specification.

In the drawings:
FIG. 1 is a top plan view of a coaster embodying the present invention;

FIG. 2 is a side elevational view of the coaster shown in FIG. 1;

FIG. 3 is a sectional elevation substantially along the line 3-3 in FIG. 1;

FIG. 4 is a side elevational view, partly broken away, of the reflecting means shown in FIG. 3;

FIG. 5 is a top plan view of the base showing the bulb and batteries;

FIG. 6 is a sectional elevation substantially along the line 6-6 in FIG. 5, and

FIG. 7 is a sectional elevation showing a modified construction.

The preferred embodiments of the present invention, herein disclosed by way of illustration, are shown in the form of a low coaster or support having a circular body member when viewed from above as shown generally at 20 in FIG. 1, a circular base member 22, an electric lamp bulb 24 and a pair of suitable dry cells.

Body member 20 has a substantially planar upper glass supporting surface 26 which is formed along the periphery thereof with an upstanding lip 28 for preventing the bottom of the drinking glass from sliding off surface 26 . Body member 20 is formed with a circumferentially extending depending side wall 30 which is slightly bowed, as shown in FIG. 3 and is adapted adjacent the lower portion thereof to receive and firmly engage the peripheral edge of base 22 for holding the parts in assembled position. Body 20 is preferably formed of lucite or other suitable, readily moldable plastic material.

Base 22 is provided with an elongated mounting block 32 of suitable insulating material, which is attached thereto by glue or other suitable means and which is provided with a substantially $H$-shaped clip member 34 attached thereto by screws $\mathbf{3 6}$. Clip 34 is formed adja-
cent the center thereof with a socket 38 for receiving electric lamp bulb 24, as shown in FIGS. 3 and 5. Clip 34 is preferably made of copper or other suitable resilient, conducting material and not only holds dry cells 40 and 42 in position, but forms part of the electrical circuit connecting the dry cells with bulb 24.
To this end, clip 34 is provided at one corner thereof with a depending spring contact member 44 which engages one end of dry cell 40 as shown in FIG. 5. A combination clip and conducting member 46 connects the opposite end of dry cell 40 to one end of dry cell 42 . While I have shown the dry cells positioned in series, this is not necessary, and depending upon the voltage capacity of the bulb used, the dry cells may either be in series or in parallel.

A combination retaining and conducting member 48 is mounted adjacent the right end of member 32 and makes contact with the right end of dry cell 42 , as shown in FIG. 5. Member 48 extends to the left beneath dry cell 42 and then extends toward the medial portion of base 22 where there is located an aperture 50 . Member 48 is formed with a depending portion 52 which, with the center contact of bulb 24, forms a switch for opening and closing the electrical circuit from dry cells 40 and 42 to bulb 24. Switch portion $\mathbf{5 2}$ is reversely bent at the free end thereof as at 54 and extends downwardly through aperture 50.
Switch portion 52 is of sufficient length and is so positioned that it will contact the supporting surface upon which the coaster is resting before the bottom of the coaster is parallel with the supporting surface and in substantially complete engagement therewith. Thus, switch 52 holds one side of the coaster in slightly elevated position when there is no glass on the coaster, and thus the coaster is not illuminated when resting alone. However, when a glass or other weight is placed on the coaster, the additional weight is sufficient to cause the coaster to rest evenly on the supporting surface and to move switch member 52 upwardly against center contact of bulb 24 , thereby completing the electrical circuit to the bulb and causing the same to be illuminated.

While I have shown switch $\mathbf{5 2}$ so positioned and of sufficient resiliency that the coaster will not be illuminated when it is resting alone, this is not necessary, and if desired, switch 52 may be so positioned that when switch 52 is not in engagement with the supporting surface, the electrical circuit to the bulb is open; but as soon as the coaster is placed on a table or other substantially flat surface, the switch closes the circuit to the bulb. Of course, if this latter construction is utilized; the coasters would be kept on their sides or in inverted position except when in use, in order to conserve the batteries.
Bulb 24 illuminates the bottom of the glass or other object resting on the coaster and creates a novel and attractive effect. However, in order to improve the i1luminating effect of bulb 24, I preferably provide a reflector member 55 which is located beneath glass supporting surface 26 of body member 20 and which is preferably formed in the shape of an inverted $U$ and as shown in FIGS. 3 and 4. Reflector 56 may be of metal, polished or coated plastic, or other suitable material and is formed with an aperture 58 adjacent the center thereof for the reception of bulb 24, as shown in FIG. 3. In order to properly position reflector 56, it is formed with depending side portions 69 which engage base 22, as shown in FIG. 3. In order to improve the appearance of the coaster, I preferably provide a shield for preventing stray illumination from passing out through the side walls 30 and to this end side portions 60 of reflector 56 are preferably opaque and substantially continuous, thereby shielding the walls 30 of body member 20

However, I have found that the attractive appearance of the coaster may be enhanced if provision is made for a design, symbol or letters which may be in the form of suitable advertising, such as the name of a hotel or the like, and which are illuminated by bulb 24. To this end, side wall 60 of reflector 56 is preferably formed with letters 62 (FIG. 4) extending therethrough which allow light from bulb 24 to be transmitted therethrough and through the adjacent portion of side wall 30 of body member 20. This illuminating effect may be further improved by the use of color filter material, such an cellophane or the like to cause the letters to glow in a particular color. In the present instance, I preferably provide a strip of cellophane 64 (FIG. 4) on the inner surface of side wall portion 60 , thereby causing the letters to appear in the desired color.

In order to insure that a percentage of the light emanating from bulb 24 will pass through letters or design 62, I preferably position bulb 24 relative to opening 58 in reflector 56 so that a portion of the bulb extends above the reflector and a portion extends below, as shown in FIG. 3. By this means, part of the illumination is caused to pass upwardly through glass supporting surface 26 and into contact with the bottom of the glass while a portion of the light strikes against the inner surface of side wall 60 of reflector 56 . Of course, cut out portions 62 allow the light to pass therethrough, thereby providing the illuminated design, symbol or letters.

In FIG. 7 I have shown a modified construction, wherein a separate reflector member is not used, but rather the undersurface of top 26 is provided with a reflective coating 66 of aluminum or other suitable material which improves and increases the amount of light radiating upwardly into contact with the bottom of the drinking glass. In this construction the inner surface of side wall 30 of body 20 is provided with a band of opaque plastic 68, is painted with a dark paint or is otherwise shielded to make the same opaque and prevent transmission of light therethrough. The side walls may be opaque throughout or there may be transparent or translucent portions in any desired shape or configuration in order to provide for an illuminated design, symbol, display or the like, as described earlier.

In use, the coaster may be placed on the table and the electrical circuit to bulb 24 will remain open until a drink or other object is placed on the coaster at which time switch 52 closes the circuit to the bulb and the same is illuminated. This illumination radiates upwardly through the bottom of the drinking glass and illuminates the glass and the contents thereof, thereby creating a novel and attractive effect. In addition, a portion of the side wall of the coaster may also be illuminated to further enhance the pleasant effect of the coaster, and if desired, to convey an advertising message or the like. When the glass is lifted from the coaster, the circuit to bulb 24 is interrupted and the bulb is no longer illuminated.

Thus, it will be seen that my invention accomplishes its objects and provides a novel and improved coaster which comprises a minimum number of parts which can be readily manufactured and assembled and which is durable, easy to service, and will operate for long periods of time without attention.

It will thus be seen that the invention accomplishes its objects and while it has been herein disclosed by
reference to the details of preferred embodiments, it is to be understood that such disclosure is intended in an illustrative, rather than a limiting sense, as it is contemplated that various modifications in the construction and arrangement of the parts will readily occur to those skilled in the art, within the spirit of the invention and scope of the appended claims.
I claim:

1. A novelty coaster for supporting drinking glasses and the like on a support surface, and that is broad in relation to its height to have a low center of gravity and be stable, and comprising a body that is formed with: support surface engaging means at its lower end; a bore; and a top member that is disposed at the upper end thereof and that provides an upper surface for receiving the bottom of a glass thereon, at least a portion of said top member being translucent; a portable source of electric power disposed in said bore, an electric lamp mounted in said bore and disposed, upon illumination thereof, to illuminate the translucent portion of said top member, electrical circuit means including a switch interconnecting said power source and said lamp to energize the lamp upon closing of the switch, an armature member that is mounted to be movable to open and to close said switch, actuating means operatively coupled to said armature member and disposed to engage a support surface upon which said coaster is engaged and to be movable from a first position, in the unloaded condition of the coaster, to a second position in the loaded condition of the coaster, in one which positions the armature member is disposed so that the switch is open and in the other of which positions the armature member is disposed so that the switch is closed, and spring means mounted constantly to urge said actuating means to said first position and to bias said actuating means in said first position to cause it to support the unloaded coaster with at least a portion of said support surface engaging means held out of contact with said support surface, and to yield under the weight of a loaded coaster to permit said support surface engaging means to engage said support surface, fully to support the loaded coaster, and to move to said second position.
2. A novelty coaster in accordance with claim 1 wherein said body is formed with a circumferential wall that is partly opaque and partly translucent, and including a light deflector mounted in the bore of said body and disposed to deflect one part of the light from the lamp toward said top member and another part toward said wall, to cause illumination of the translucent parts of both the top member and the wall when the lamp is energized.
3. A novelty coaster in accordance with claim 1 wherein the switch is normally open and the armature member is in the open switch position in the unloaded condition of the coaster and is in the closed switch position in the loaded condition of the coaster.

## References Cited in the file of this patent UNITED STATES PATENTS

[^0]
[^0]:    2,177,337
    Stein Oct. 24, 1939
    
    2,532,181
    Moore Nov. 28, 1950
    2,945,314
    Baldwin July 19, 1960

