Oct. 7, 1930.

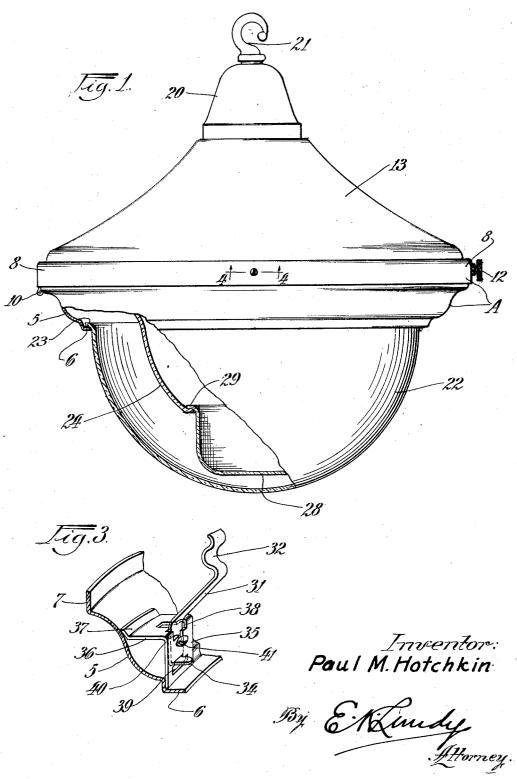
## P. M. HOTCHKIN

1,777,407

LIGHTING FIXTURE

Filed Aug. 13, 1928

2 Sheets-Sheet 1



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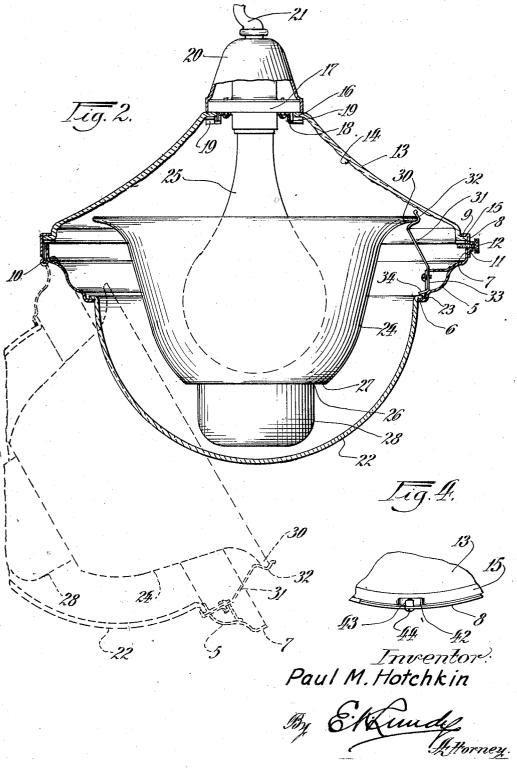
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## UNITED STATES PATENT OFFICE

## PAUL M. HOTCHKIN, OF CHICAGO, ILLINOIS

## LIGHTING FIXTURE

Application filed August 13, 1928. Serial No. 299,237.

pliances and has more particular reference to a lighting fixture in which the principles of indirect illumination are employed.

In the present construction I have utilized a chandelier-body of annular or ringlike formation that is open at the top and bottom and is provided with means to support a translucent glass bowl in the open 10 bottom portion and a transparent or semitransparent cover or closure for the open top portion. Within the chandelier member I have positioned a reflector to direct the light rays upwardly and outwardly through 15 the cover and in the bottom of the reflector there is an opening in which the light-dif-fuser is placed. With the above briefly described construction the greatest volume of light-rays emanating from the lamp are re-20 flected upwardly against the ceiling or other plane surface above the fixture, and the portion of the rays which reach the diffuser pass through the same and illuminate the lower bowl. The cover is secured to a socket ele-25 ment in which the bulb is placed and the chandelier is supported from the top of the structure. In a device made in this manner

the reflector is maintained in a clean condition because dust and other matter is ex-30 cluded from it and by forming the annular chandelier member in two parts in hinged relation to each other the bowl carrying portion may be released and swung downwardly for inspection of the interior or for replacement of any of the parts or for wiping the reflector. This may be done without having

to take the fixture apart. In devising this lighting fixture I have numerous objects in mind, among which are dependability and readiness of operation, durability in construction, simplicity and sturdiness in the formation and arrangement of the parts, accessibility for the purpose of adjustment, replacement or cleaning and the entire fixture is arranged, fabricated

and assembled in a novel and economical manner which permits it to be retailed for a reasonable price.

I prefer to carry out my invention, and 50 to accomplish the numerous objects thereof ber 9 of the upper part projects inwardly 100

My invention relates to illuminating ap- in substantially the manner hereinafter fully described and as more particularly pointed out in the claims, reference being herein made to the accompanying drawings that form part of this specification.

In the drawings:

Fig. 1 is a vertical side elevation of a lighting fixture made in accordance with my invention with a portion broken away and in section to disclose the interior construc- 60

Fig. 2 is a vertical axial section of the fixture shown in Fig. 1.

Fig. 3 is a view, in perspective, of a portion of the chandelier-body showing the de- 65 tails of a bracket or mounting for the reflector element.

Fig. 4 is a fragmentary detail of the manner of securing the cover and chandelierbody together, the view being taken on line 70 4—4 of Fig. 1 and looking in direction of the arrows.

The drawings are to be understood as schematic for the purpose of illustrating a typical or preferred form in which my in- 75 vention may be made and in these drawings the same reference characters have been employed to designate like parts wherever they appear throughout the several views.

The construction which I have disclosed 80 comprises a chandelier-body A that is open at its top and bottom, which openings are closed by a cover and a bowl, and these parts are thus cooperatively related and assembled with the body so as to enclose a reflecting 85 device. The chandelier-body is of annularshape and consists of two pieces of suitably shaped sheet-metal interfitted and in hinged relation to each other. The lower part 5 of the chandelier-body is of a compound 90 curved shape in the cross-section with its lower edge formed into an inwardly extending flange 6 and with its upper portion formed into an upstanding rim 7 of cylindrical formation, and upper part of the 95 chandelier-body is of L-shape in cross section the longer member 8 being of cylindrical shape so as to interfit with the rim 7 of the lower part and the shorter lateral mem-

from the upper edge of the member 8. A hinge 10 connects the members and opposite the hinge the member 8 is provided with a hollow embossment 11 that is threaded to 5 receive the thumb screw 12 that passes through the aperture in the adjacent segment of the upstanding rim 7 so as to thereby maintain the two parts of the chandelier-

body in normal position.

The upper open portion of the chandelierbody A is closed by a cover 13 made of transparent or semi-transparent glass that is preferably roughened upon the interior surface as indicated at 14 for the purpose of breaking 15 up light rays that pass through the cover and avoid undesirable rings or striations upon the ceiling or other surface upon which the upwardly directed light rays impinge. At its lower edge the cover has a laterally projecting flange or bead 15 that projects under the flange 9 of the chandelier body A and the upper portion of the cover 13 is provided with an opening and the edge thereof projects inwardly as at 16 to provide a flange 25 whereby the cover is connected to the lamp socket or hanger 17 by means of an attaching plate 18 having spring tongues 19 that engage with the edge of the cover. An ornamental husk or cap 20 encloses the portion of 30 the socket that projects above the cover and a suitable hook 21 thereon provides means whereby the fixture may be suspended from the ceiling or other surface.

The lower open part 5 of the chandelierbody is closed by a bowl 22 preferably made from opal glass or other translucent material, the bowl being hemispherical in shape and is provided on its upper edge with a lateral outwardly projecting flange or bead 23 that rests upon the lower flange 6 of the chandelier body.

Mounted within the chandelier-body is a reflector 24 that is designed to reflect light rays upwardly and outwardly from within the chandelier-body from a bulb or light unit 25 that is mounted in the socket 17. The reflector is preferably opaque and one of its surfaces is silvered to increase its reflective property. The lower portion of the reflector 24 is provided with an opening 26 and the walls of the reflector at this portion extend inwardly towards the axis of the reflector as shown at 27.

Positioned in opening 26 is a light diffuser 55 28 in the form of a cup of opal glass or other translucent material that has an outwardly flared lip 29 at its upper edge so that the diffuser may be inserted into the opening 26 and will be supported by engaging the lip with the inward portion of the reflector. Light rays from bulb or light unit 25 pass through the opening 26 and through the diffuser 28 and are scattered upon the bowl 22 causing illumination thereof, but it will 65 be understood that only a portion of the light

rays emanating from the fixture are utilized in illuminating the bowl 22.

The reflector 24 has an outwardly flared upper portion 30 and is supported from the chandelier body by means of several spring arms 31 which at their free ends are provided with concave notches 32 in which the edge of the flared portion 30 of the reflector is seated. These spring arms 31 comprise the upper portions of brackets made from strips of suitable metal and said arms 31 project obliquely inward from straight portions 33 which at their lower ends are provided with lateral tongues 34. The brackets 31 are removably mounted in holders that are secured to the portion 5 of the chandelier-body A, and each holder consists of a strip of metal bent angular shape so that there is an upright portion 35 that rests upon the flange 6 and a horizontal portion 36 that extends outwardly towards the curved portion of the member 5 of the chandelier-body where it is provided with an oblique flange 37 that lies flat against the wall of the portion 5 and is brazed or welded thereto. In order to mount the bracket 31 in 90 the holder the latter is provided with a slot 38 at the angle formed by its portions 35 and 36 and adjacent the lower edge of the upright portion 35 there is another slot 39 through which the tongue 34 protrudes in a position 95 to be above the rim 23 of the bowl and thus maintain the latter against accidental dislodgement. A lateral recess 40 extends downwardly from the slot 38 to receive the shank of a set-screw 41 that is screwed into the 100 straight portion 33 of the bracket to clamp the latter in position.

In order to maintain the cover against rotation and to assist in securing it to the chandelier-body the flange or bead 15 of the cover 105 is provided with a plurality of recesses 42 to receive squared blocks or nuts 43 and small screws 44 are inserted through the wall 8 of the chandelier-body and screwed into the respective blocks or nuts 43 in these recesses.

With the construction above described the reflector and the light unit are protected against dust and foreign matter, and whenever access is desired to the interior of the fixture, the screw 12 may be turned back- 115 wardly until it is withdrawn from the hole in the upstanding flange 7 of the chandelierbody. The lower member of the chandelierbody may then be lowered to the position shown in dotted lines in Fig. 2 and will carry 120 with it the bowl, the reflector, and the diffuser without disturbing the latter. If it is then desired to clean the reflector and the diffuser the latter may be lifted out and the former may be released from the spring brackets 31 1235 and removed with ease. While the reflector and diffuser are out of the fixture the bowl 22 may be cleaned without removing it. It is also possible with the herein disclosed construction to readily replace the lamp or bulb 130

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25 whenever desired merely by opening the chandelier-body.

What I claim is:-

1. A lighting fixture comprising a pair of annular members coacting to provide a chandelier body that is open at the top and bottom, a bowl suspended from the chandelier body, a reflector within the body, means on the chandelier body for supporting said reflector, a 10 supporting cap above said body, and a lighttransmitting cover secured at its lower portion to the chandelier body and suspended from said cap whereby said body and the parts carried thereby are supported by said 1; cover.

2. A lighting fixture comprising two annular members coacting to provide a chandelier body that is open at the top and bottom, a bowl suspended from the lower portion of said body, a reflector within the body, means on the chandelier body for supporting said reflector, a supporting cap above said body, and a light-transmitting cover suspended from said cap and connected to the upper portion of said body whereby said body and the parts carried thereby are supported by said cover.

3. A lighting fixture comprising upper and lower annular members hinged together for independent movement and together providing a chandelier body open at its top and bottom, a bowl suspended from said chandelier body, a reflector within said body, means on the chandelier body for supporting said reflector, a supporting cap above said body, and a light transmitting cover secured at its lower portion to the chandelier body and suspended from said cap whereby said body and the parts carried thereby are supported by said cover.

4. A lighting fixture comprising upper and lower annular members hinged together for independent movement and together providing a chandelier body that is open at its top and bottom, a bowl suspended from the lower member of said body, a reflector within said body, means on the lower member of said body for supporting said reflector, a supporting cap above said body, and a light-transmitting cover secured at its lower portion to the upper member of said body and connected at its upper portion to said cap whereby said body and the parts carried thereby are supported by said cover.

5. A lighting fixture comprising a pair of annular members coacting to provide a chandelier body that is open at the top and bottom, a bowl suspended from the chandelier 60 body, a reflector, means for maintaining the reflector within the chandelier body, a fixture supporting device above the chandelier body, and a light-transmitting cover attached to said supporting device and secured 65 at its lower portion to the chandelier body

whereby said body and bowl are supported by said cover.

6. A lighting fixture comprising upper and lower annular members hinged together for indepedent movement and coacting in closed position to provide a chandelier body open at its top and bottom, a bowl suspended from the lower body member, a reflector, means for maintaining the reflector within the chandelier body, a fixture supporting device above the chandelier body, and a light-transmitting cover attached to said supporting device and secured at its lower portion to the upper member of the chandelier body whereby said body and bowl are supported by said cover 80 and said fixture may be opened by the lowering of said bowl with the lower member of the body.

Signed at Chicago, in the county of Cook and State of Illinois, this 6th day of Aug., 85

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