May 11, 1965 L. BLUM 3,183,343

ILLUMINATED WALL BRACKET AND HANDRAIL

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FIG. 1

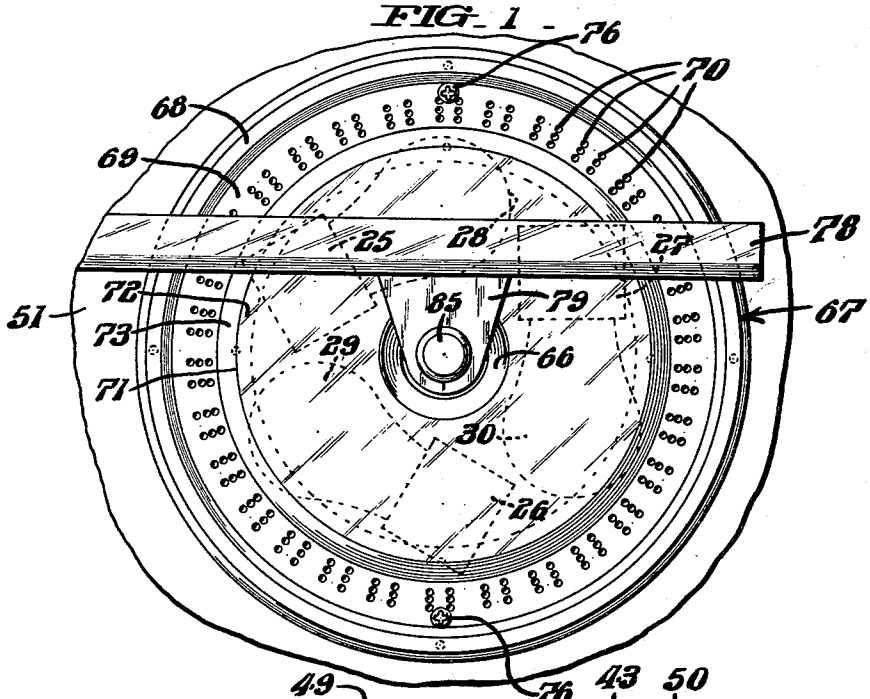

FIG. 2

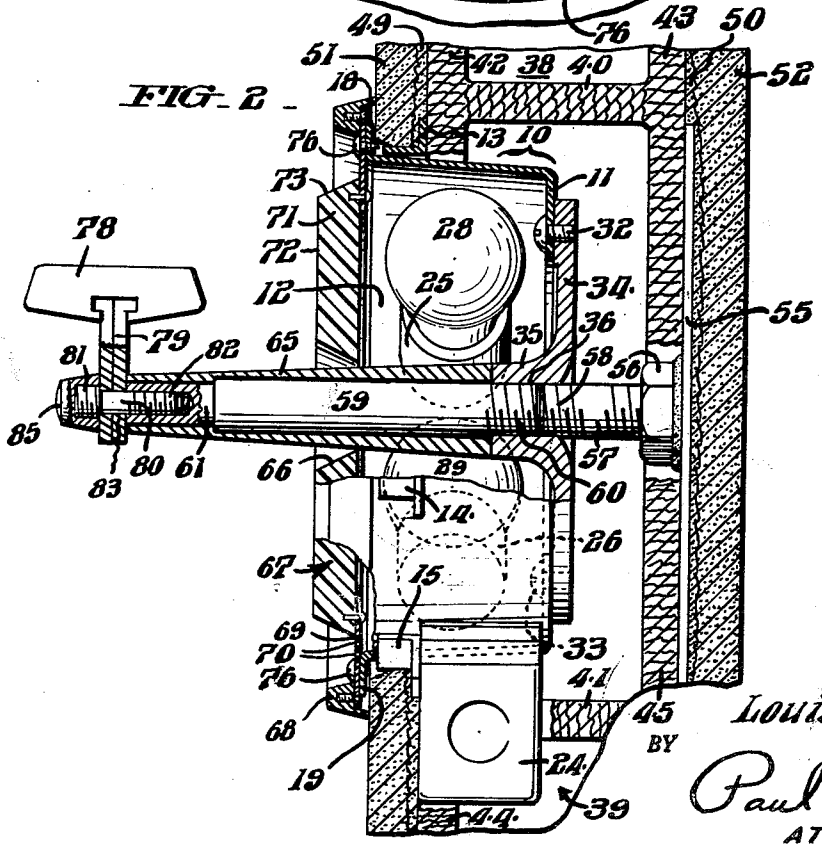

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FIG. 3

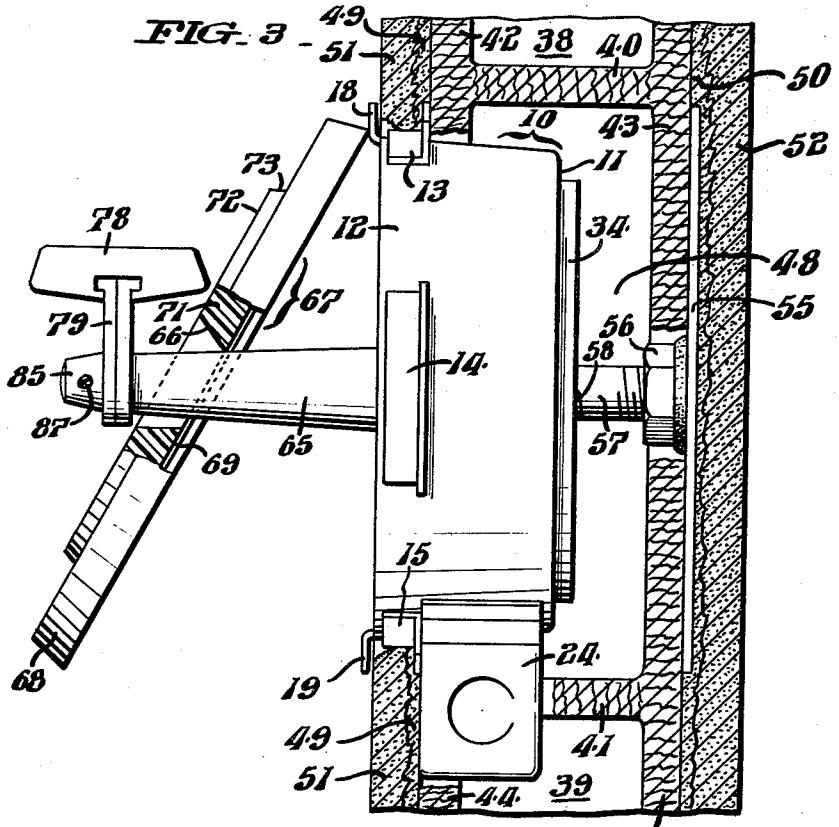
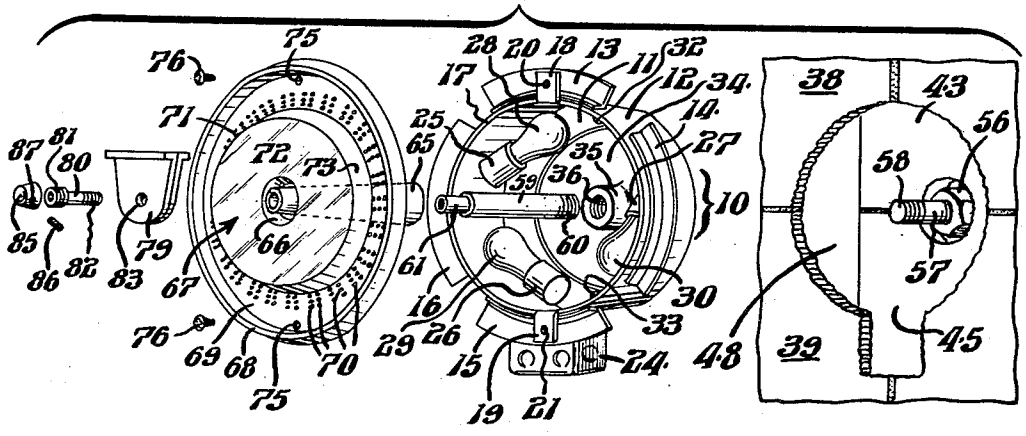


FIG. 4



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ILLUMINATED WALL BRACKET AND HANDRAIL

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FIG. 5

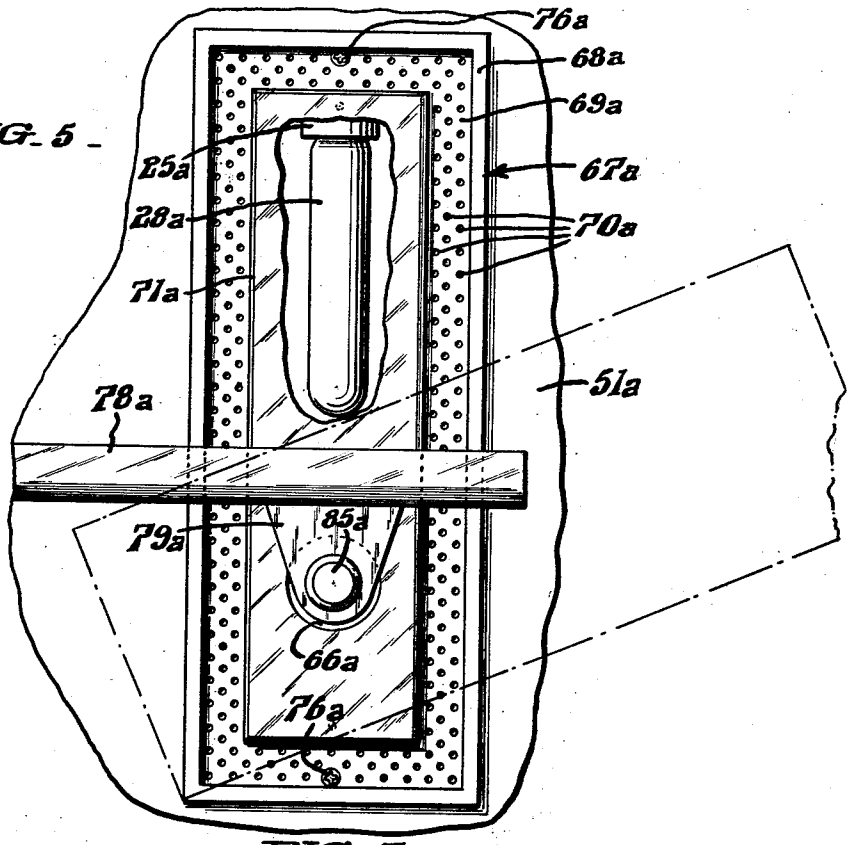
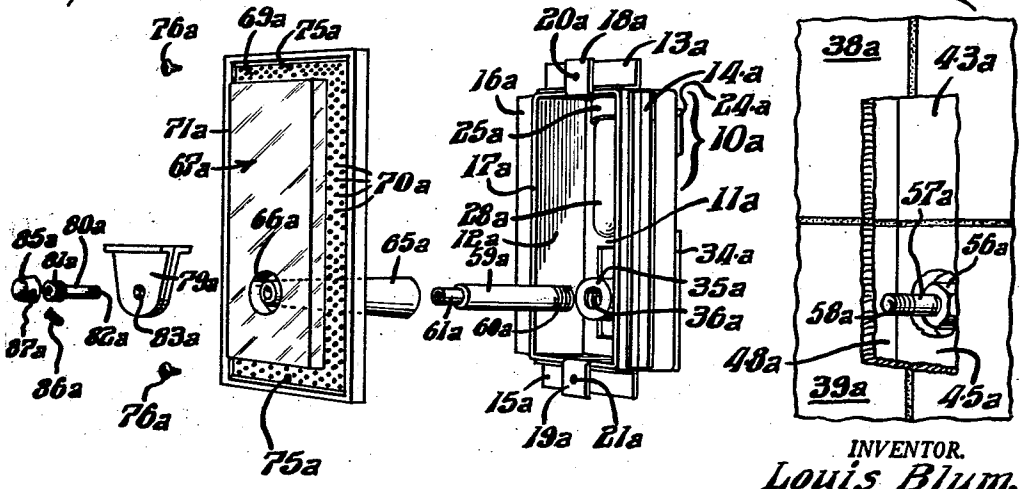


FIG. 7



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ILLUMINATED WALL BRACKET AND HANDRAIL

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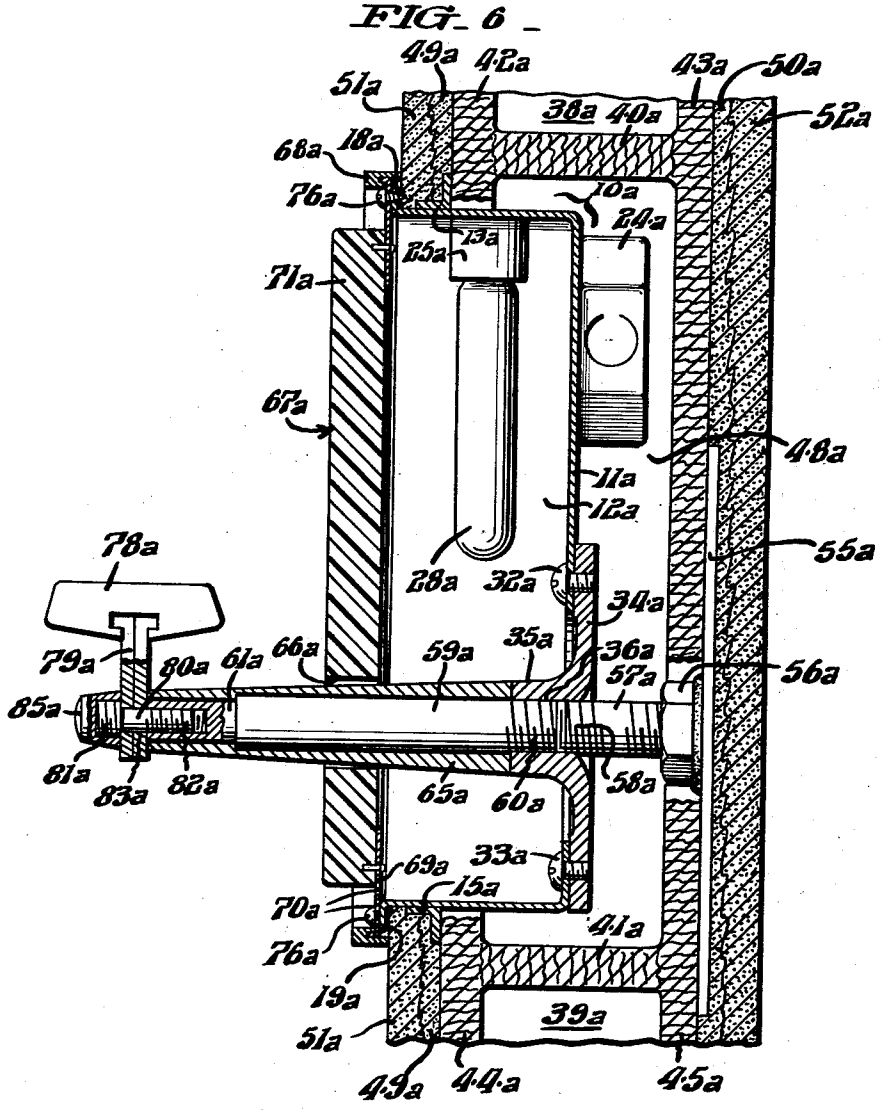
FIG. 6



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ILLUMINATED WALL BRACKET AND HANDRAIL

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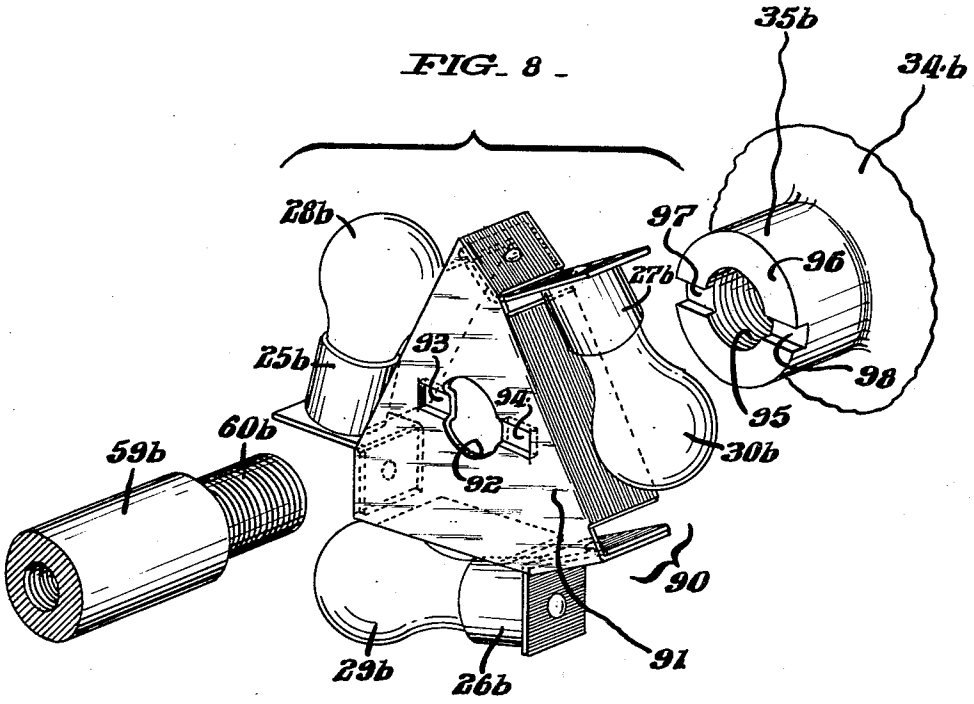
FIG. 8



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United States Patent Office 3,183,343 Patented May 11, 1965

3,183,343

ILLUMINATED WALL BRACKET AND HANDRAIL

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15 Claims. (Cl. 240—2)

This invention relates to illuminated wall brackets. More particularly, this invention relates to illuminated wall brackets adapted for use in association with railing supports and similar structures.

It is an object of this invention to provide an illuminated wall bracket structure which is adapted for use in rooms, corridors, stairways and the like, in association with a railing support, such as a handrail, or the like.

It is another object of this invention to provide an illuminated wall bracket which is adapted to provide lighting for a recessed fixture while at the same time providing substantial support for a railing structure.

It is another object of this invention to provide an illuminated wall bracket which is simple, pleasing in appearance and relatively economical to construct, yet sturdy, durable and capable of supporting the substantial loads necessarily borne by railing supports of the kind associated herewith.

It is another object of this invention to provide an illuminated wall bracket structure which provides incandescent recessed lighting which is safe, efficient and reliable.

It is another object of this invention to provide an illuminated wall bracket structure which is adapted to the easy removal and replacement of the incandescent light source contained therein.

Other objects and attendant advantages of the invention will become more fully apparent hereinafter and in the drawings wherein:

FIG. 1 is a view in front elevation of an illuminated wall bracket and associated railing as provided in accordance with this invention;

FIG. 2 is a view in cross section of the bracket and railing shown in FIG. 1;

FIG. 3 is a view in side elevation, with parts shown in section, of the bracket and railing shown in FIG. 1;

FIG. 4 is an exploded view in perspective of the elements of the wall bracket as provided in accordance with this invention;

FIG. 5 is a view in front elevation of a modification of the wall bracket and associated railing as provided in accordance with this invention;

FIG. 6 is a view in cross section of the modified form of wall bracket and railing shown in FIG. 5;

FIG. 7 is an exploded view in perspective of the elements of the modified wall bracket shown in FIG. 5; and

FIG. 8 is an exploded view in perspective of some of the elements of a modified wall bracket.

The following description is directed to the specific forms and embodiments of the invention illustrated in the drawings and is not intended to limit the scope of the invention itself which may be practiced in a wide variety of forms and arrangements.

Adverting herewith to the specific form of the invention illustrated in the drawings, an illuminated wall bracket as provided in accordance with this invention and shown in FIGS. 1 to 4 inclusive, comprises a generally cylindrical steel box 10 having a rear surface flange 11, a side wall 12, having affixed thereto, peripheral flanges 13, 14, 15 and 16 adjacent rim 17 bounding the open front of the box. Extending outwardly, perpendicularly to the side wall 12 of the steel box 10 on opposite sides of the rim 17 thereof, are small rectangular flanges 18 and 19 having thereaded holes 20 and 21 formed therein for a purpose to be explained more fully hereinafter. Suspended from the bottom portion of the cylindrical wall 12 is a terminal or outlet box 24.

Interior of the box 10 a plurality of electric light bulb sockets 25, 26 and 27 are disposed equidistantly about the inner surface of the wall 12. Screwed into the sockets 25, 26 and 27 are light bulbs 28, 29 and 30 respectively.

Secured to the rear surface flange 11 by means of screws 32 and 33 is a rear plate 34 having an inwardly projecting boss 35 provided with a tapped and threaded hole 36.

The wall bracket as provided in accordance with this invention is shown in FIGS. 2 and 3 set into a hollow tile wall which comprises hollow tiles 38 and 39 having transverse sections 40 and 41 and front and rear sections 42 and 43 and 44 and 45 respectively. It will be evident that a transverse section of the tile wall intermediate the transverse sections 40 and 41 may be removed, if necessary, in order to provide a hollow space 48 large enough to receive the box 10. Rough coats 49 and 50 are provided on opposite sides of the tile wall adjacent the sections 42 and 43 thereof, respectively, and applied to each of the aforesaid rough coats 49 and 50, are finished coats 51 and 52 respectively. Similarly, the aforesaid rough coats 49 and 50 and finished coats 51 and 52 are applied at opposite sides of the tile wall adjacent the sections 44 and 45 of the tile section 39.

Embedded in the rough coat 50 adjacent the walls 43 and 45 of tile sections 38 and 39 respectively, is an anchor plate 55 to which is affixed through a nut 56, an inwardly projecting stud 57 having a threaded end 58. as may be clearly seen in FIG. 2, thereaded end 58 of the stud 57 is screwed into the threaded hole 36 of the boss 35 of the rear plate 34. A barrel 59 having a threaded end 60 and a diametrically reduced portion 61 is screwed at the threaded end 60 into the opposite side of the threaded hole 36 in the boss 35 and is thereby supported to extend outward perpendicularly from the tile wall and the box 10. A conical sleeve 65 is supported on the barrel 59 and is adapted to extend through a beveled orifice 66 formed centrally in a translucent face plate 67. Face plate 67 comprises a rim flange 68, a flat depressed annular surface 69 perforated by holes 70 and a solid center portion 71 having a front surface 72 and a side surface 73. The flat perforated annular surface 69 is provided with diametrically opposed holes 75 for the reception of self-tapping screws 76 which are adapted to enter the holes 20 and 21 of the rectangular flanges 18 and 19 of the box 10, thereby holding the face plate 67 securely against the front of the box.

A rail 78 having a support plate 79 depending from the under surface thereof is secured to the end of the barrel 59 and the sleeve 65 by means of a screw 80 having a diametrically enlarged threaded portion 81 at one end thereof and a second threaded portion 82 at the opposite end thereof, which latter end is screwed into the diametrically reduced portion 61 of the barrel 59 so that the screw extends through a hole 83 in the plate 79, the diametrically enlarged portion 81 thereof resting flush against the plate 79. A threaded cap 85 is screwed onto the diametrically enlarged threaded portion 81 of the screw 80 and a second screw 86 adapted to enter a hole 87 in the cap 85 holds the aforesaid cap securely in place on the end 81 of the screw 80.

In FIG. 8 there is illustrated a modification of a wall bracket arrangement as provided in accordance with this invention wherein the sockets 25*b*, 26*b* and 27*b* adapted to receive bulbs 28*b*, 29*b* and 30*b*, respectively, are affixed to a generally triangular fitting 90 having a front panel 91 in which there is formed centrally thereof a generally circular hole 92 and at the rear surface of which there is formed, on opposite sides of the aforesaid hole, projecting lugs 93 and 94. The circular hole 92 is adapted to receive

a center stem 59*b* having a diametrically reduced threaded end 60*b* which is in turn adapted to be received into a threaded hole 95 in a boss 35*b* formed on rear plate 34*b*. Formed in the annular surface 96 of the boss 35*b* are generally rectangular slots 97 and 98 which slots are adapted to receive the lugs 93 and 94 of the fitting 90. When assembled, the fitting 90 is supported by the reduced end 60*b* which is in turn supported by the projecting boss 35*b*.

The lugs 93 and 94 received into the grooves 97 and 98, respectively, prevent fitting 90 from rotating around the stem 59*b*.

FIGS. 5, 6 and 7 illustrate a modification of the illuminated wall bracket as provided in accordance with this invention in which is provided a generally rectangular steel box 10*a*, having a rear wall 11*a*, side walls 12*a* having affixed thereto peripheral flanges 13*a*, 14*a*, 15*a* and 16*a* adjacent rim 17*a* bounding the open front of the box. Extending outwardly, perpendicularly to the top and bottom walls of the steel box 10*a* are small rectangular flanges 18*a* and 19*a* having threaded holes 20*a* and 21*a* respectively formed therein. Affixed to the rear surface of the wall 11*a* of the box 10*a* near the top thereof is a terminal or outlet box 24*a*.

Interior of the box 10*a*, a socket 25*a* depends from the top wall thereof and fitted thereinto is an elongated light bulb 28*a*.

Secured to the rear wall 11*a* by means of screws 32*a* and 33*a* is a rear plate 34*a* having an inwardly projecting boss 35*a* extending through an opening in the wall 11*a* and provided with a tapped and threaded hole 36*a*.

The wall bracket as provided in accordance with modification of the invention shown in FIG. 6 is set into a hollow tile wall which comprises hollow tiles 38*a* and 39*a*, having transverse sections 40*a* and 41*a* and front and rear sections or walls 42*a* and 43*a* and 44*a* and 45*a* respectively. A hollow space 48*a* is provided intermediate transverse sections 40*a* and 41*a* for the reception of the box 10*a*. Rough coats 49*a* and 50*a* are provided on opposite sides of the tile wall adjacent the sections 42*a* and 43*a* thereof respectively and applied to each of the aforesaid coats, 49*a* and 50*a* are finished coats 51*a* and 52*a* respectively. Similarly, the aforesaid rough coats 49*a* and 50*a* and finished coats 51*a* and 52*a* are applied to opposite sides of the tile wall adjacent the sections 44*a* and 45*a* of the tile section 39*a*.

Embedded in the rough coat 50*a*, adjacent the walls 43*a* and 45*a* of tile sections 38*a* and 39*a* respectively, is an anchor plate 55*a* to which is affixed through a nut 56*a* an inwardly projecting stud 57*a* having a threaded end 58*a*. As may be clearly seen in FIG. 6, threaded end 58*a* of the stud 57*a* is screwed into the threaded hole 36*a* of the boss 35*a* of the rear plate 34*a*. A barrel 59*a* having a threaded end 60*a* and a diametrically reduced portion 61*a* is screwed at the threaded end 60*a* into the opposite side of the threaded hole 36*a* of the boss 35*a* and is thereby supported to extend outward perpendicularly from the tile wall and the box 10*a*. A conical sleeve 65*a* is supported on the barrel 59*a* and is adapted to extend through an orifice 66*a* formed in a translucent face plate 67*a*. Face plate 67*a* comprises a rim flange 68*a*, a flat depressed surface 69*a* perforated by holes 70*a* and a solid center portion 71*a*. The flat perforated surface 69*a* is provided with diametrically opposed holes 75*a* for the reception of self-tapping screws 76*a* which are adapted to enter the holes 20*a* and 21*a* of the rectangular flanges 18*a* and 19*a* of the box 10*a*, thereby holding the face plate 67*a* securely against the front of the box.

A rail 78*a* having a support plate 79*a* depending from the under surface thereof is secured to the end of the barrel 59*a* and the sleeve 65*a* by means of a screw 80*a* having a diametrically enlarged threaded portion 81*a* at one end thereof and a second threaded portion 82*a* at the opposite end thereof, which latter end is screwed into the diametrically reduced portion 61*a* of the barrel 59*a* so that the screw extends through a hole 83*a* in the plate 79*a*, the diametrically enlarged portion 81*a* thereof, resting flush against the plate 79*a*. A threaded cap 85*a* is screwed onto the diametrically enlarged threaded portion 81*a* of the screw 80*a* and a second screw 86*a* adapted to enter a hole 87*a* in the cap 85*a* holds the aforesaid cap securely in place on the end 81*a* and the screw 80*a*.

Ordinarily, when it is desired to replace the bulbs 28, 29 and 30 in the box 10, the screws 76 are removed from the flanges 18 and 19 of the box 10 and from the holes 75 of the annular surface 69 of the face plate 67 and the face plate is tilted, as illustrated in FIG. 3, to provide access to the interior of the box 10.

From the foregoing, it will be evident that it is an advantageous feature of the invention, in addition to the other important and novel features thereof, that the bulbs may be removed or replaced from the box 10 simply by removing the screws 76 and tilting the face plate 67 against the bevelled edges of orifice 66, without any further dismantling or detachment of the parts of the illuminated wall bracket and railing support.

In the modified form of the invention illustrated in FIGS. 5, 6 and 7, face plate 67*a* may be revolved around the conical sleeve 65*a* as indicated by the dot and dash lines in FIG. 5, thereby providing access to the bulb 28*a* which may be inserted into the socket 25*a* or removed as desired.

It will be apparent that the rail 78 is illuminated by the light source which is itself recessed within the wall supporting both bracket and rail.

Although this invention has been described with reference to specific forms and embodiments thereof, it will be evident that a great number of variations may be made without departing from the spirit and the scope of this invention. For example, parts may be reversed, equivalent elements may be substituted for those specifically disclosed, and certain features of the invention may be used independently of other features, all without departing from the spirit and scope of this invention as defined in the appended claims.

Having thus described my invention, I claim:

1. A combined illuminated bracket and railing structure for attachment to a wall or the like comprising an anchor plate embedded in said wall and having secured thereto a projecting stud, a box secured to said stud and arranged to seat within a space in said wall, a light source disposed within said box, a translucent face plate secured to the front of said box and arranged to transmit light therefrom, a rigid barrel secured to said box at the rear surface thereof and arranged to extend perpendicularly to the surface of said wall through an orifice in said face plate and an elongated rail extending adjacent said wall substantially parallel thereto and secured to the end of said barrel whereby said rail is supported adjacent said wall and said light source.

2. The structure defined in claim 1 wherein said stud extends into a threaded opening in the rear surface of said box and wherein said barrel extends into said opening from the opposite end thereof.

3. The structure defined in claim 2 wherein said barrel comprises a diametrically reduced portion, said diametrically reduced portion being adapted to receive securing means for said rail.

4. The structure defined in claim 3 wherein said securing means comprises a screw threaded at the opposite ends thereof, one of said ends being diametrically enlarged and arranged to seat against said rail, said diametrically enlarged portion being adapted to receive an ornamental cap.

5. The structure defined in claim 1 wherein said face plate is generally circular and is provided with a plurality of vent orifices.

6. The structure defined in claim 5 wherein said face plate is further provided with a central bevelled orifice whereby said face plate may be tilted outwardly from said box.

7. The structure defined in claim 1 wherein said light

source comprises a plurality of electric light bulbs circumferentially arranged in said box.

8. The structure defined in claim 1 wherein a conical sleeve is disposed on said barrel and arranged to extend through said orifice in said face plate to said rail.

9. The structure defined in claim 1 wherein said box is further provided with a plurality of rim flanges adapted to be embedded in said wall.

10. The structure defined in claim 6 wherein said face plate is secured to the front of said box by means of screws passing through said plate into diametrically opposed flanges at the front of said box adjacent the surface of said wall.

11. The structure defined in claim 1 wherein said stud is secured to said anchor plate by means of a nut immovably affixed to said plate.

12. The structure defined in claim 1 wherein said rail comprises a support plate having an orifice extending therethrough, said support plate being arranged for attachment to an end of said barrel.

13. The structure defined in claim 1 wherein said light source comprises electric light bulbs disposed adjacent the periphery of a generally triangular fitting, said fitting being supported on said barrel and arranged for interlocking engagement with said box at the rear surface thereof.

14. In a handrailing and illuminated supporting bracket for attachment to a wall or the like, the combination comprising a box having an open top, said box being adapted for being set in said wall, means carried by said box for anchoring the same to said wall, a light source disposed within said box, a translucent covering over the open top of said box, an elongated member affixed to

said box and extending through said covering, and a handrail secured to the free end of said member and thereby disposed in spaced relation to said covering in position for being illuminated thereby.

15. In a handrail and illuminated supporting bracket for attachment to a wall or the like, anchor means rigidly affixed to said wall, a substantially rigid box connected to and supported on said anchor means, lighting means disposed within said box for lighting said handrail, translucent cover means on the outer side of said box having an opening therein, handrail mounting means connected to and supported on said box and extending out through said opening and handrail means mounted on the outwardly extending portions of said handrail mounting means in position to be lighted by said lighting means.

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