

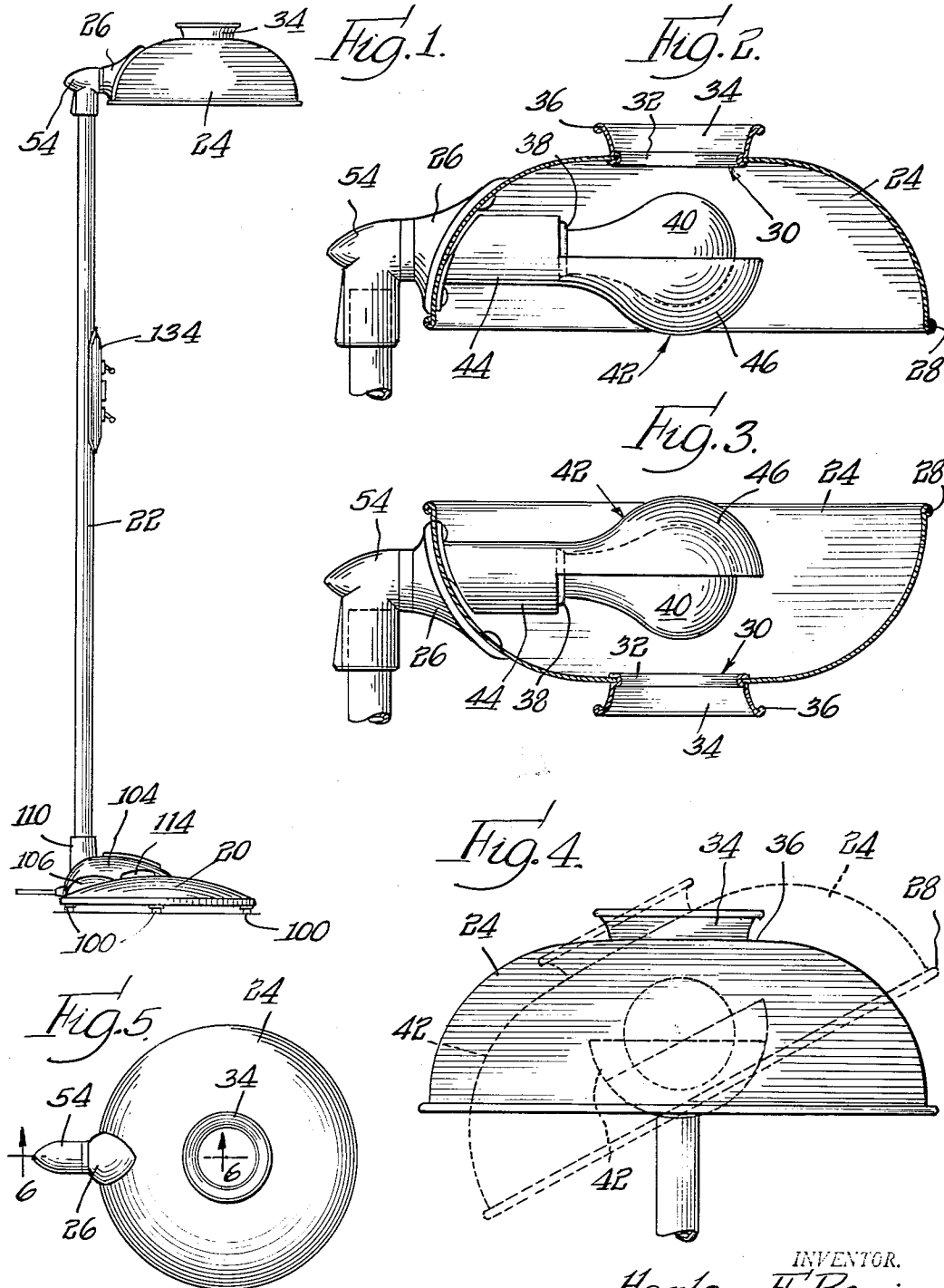
May 15, 1956

H. F. BORIN
HOSPITAL FLOOR LAMP

2,745,949

Filed April 13, 1953

3 Sheets-Sheet 1



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3 Sheets-Sheet 2

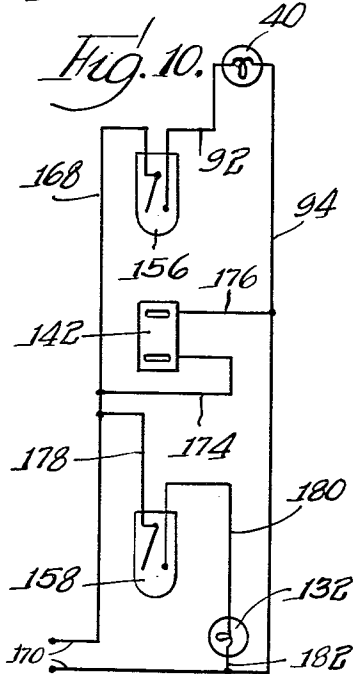
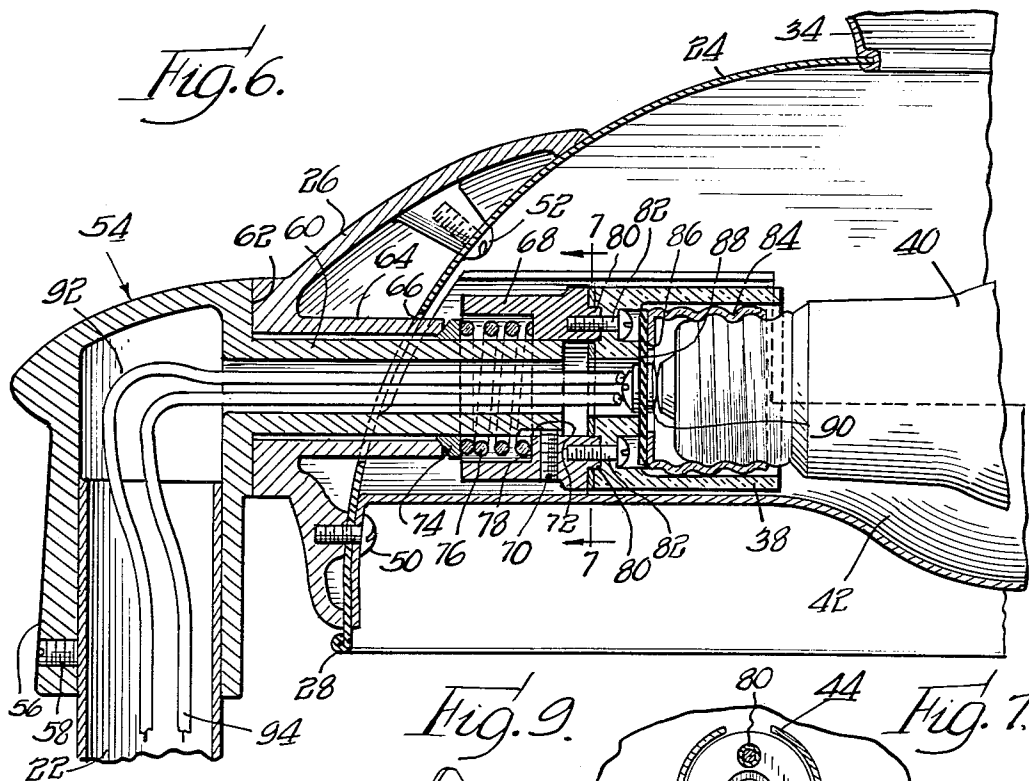
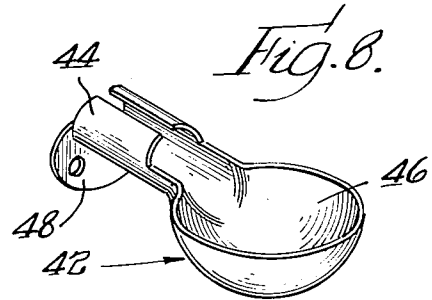
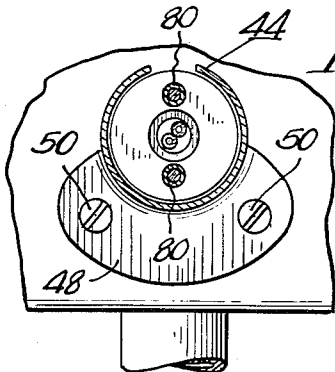
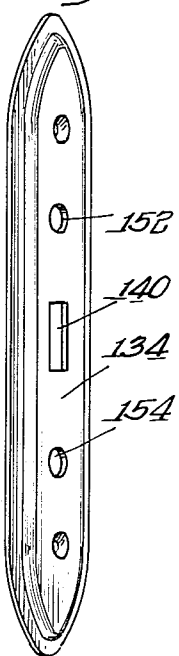


Fig. 9.



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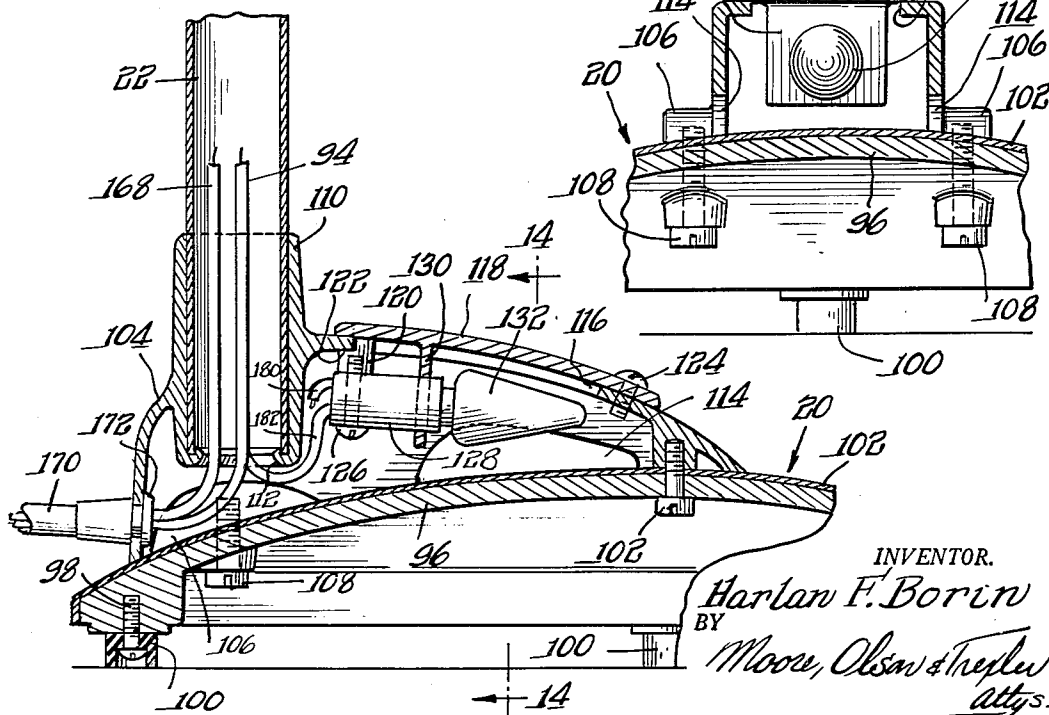
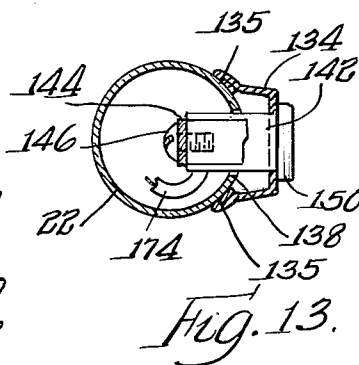
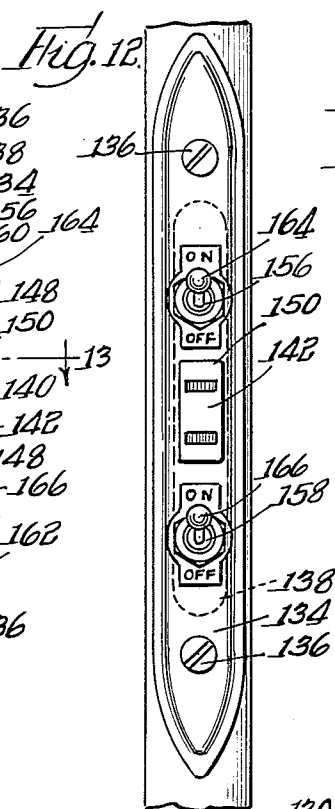
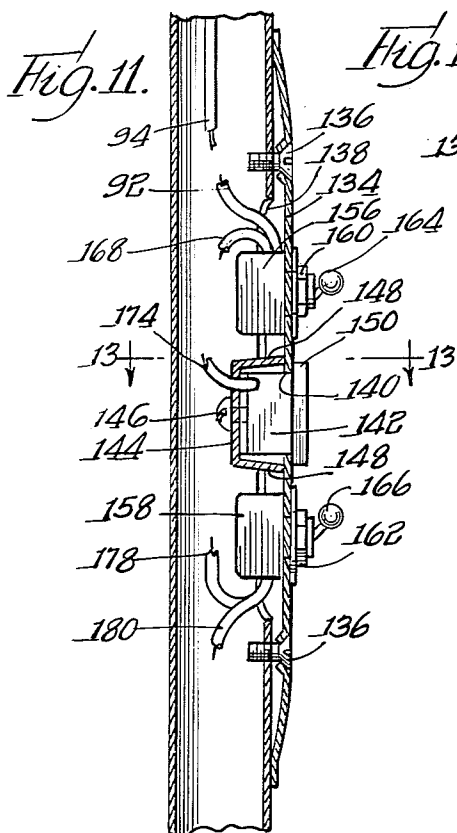
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HOSPITAL FLOOR LAMP

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3 Sheets-Sheet 3



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2,745,949

HOSPITAL FLOOR LAMP

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13 Claims. (Cl. 240—81)

This invention is concerned with a lamp, particularly with a floor lamp designed for hospital or other bedside use.

Several characteristics are necessary or desirable in lamps designed for bedside use. The source of illumination must be capable of being positioned over a bed and yet the lamp must be firmly balanced and substantially incapable of being tipped. A general broad distribution of illumination is necessary for reading in bed and for general diagnosis, but a relatively small spot of light is necessary for many diagnostic and observational purposes. The light must be capable of being aimed and must remain firmly in any position set, preferably without the need of any manipulations to fix the light in the position aimed. Hospital and other bedside lamps frequently are located in otherwise darkened rooms, and it is desirable to be able to find the lamp readily and to turn the lamp on without danger of bumping against the lamp or other objects to disturb a sleeping person.

An object of this invention is to provide an improved bedside floor lamp of improved stability.

Another object of this invention is to provide a bedside lamp having both broad general illumination and a relatively small spotlight.

A further object of this invention is to provide a lamp of the foregoing character which is continuously adjustable in substantially any direction.

A still further object of this invention is to provide improved structure permitting ready adjustability of a lamp and firmly holding the same in adjusted position.

Another object of this invention is to provide a hospital or bedside lamp having a separately controlled night light or locator light.

A still further object of this invention is to provide a hospital or bedside lamp of improved appearance and functional construction.

Other and further objects and advantages of the present invention will be apparent from the following description when taken in connection with the accompanying drawings wherein:

Fig. 1 is a side view of a lamp constructed in accordance with the principles of my invention;

Fig. 2 is a cross-sectional view of the shade in one position of adjustment;

Fig. 3 is a view similar to Fig. 2 showing the shade in another position of adjustment;

Fig. 4 is an end view of the shade taken from the right side of Fig. 2;

Fig. 5 is a top view of the lamp;

Fig. 6 is a cross-sectional view through the lamp shade mounting taken along the line 6—6 of Fig. 5;

Fig. 7 is a cross-sectional view through the mounting as taken along the line 7—7 of Fig. 6;

Fig. 8 is a perspective view of the bulb shield;

Fig. 9 is a perspective view of the electrical switch and outlet panel;

Fig. 10 is a wiring diagram of the lamp;

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Fig. 11 is a cross-sectional view through the lamp standard and base;

Fig. 12 is a front view of the lamp standard and assembled switch and outlet panel;

Fig. 13 is a cross-sectional view along the line 13—13 of Fig. 11; and

Fig. 14 is a cross-sectional view through the base along the line 14—14 of Fig. 11.

Referring now in greater detail to the figures, and first to Fig. 1 for a general view of my lamp, the lamp will be seen to comprise a base 20, an elongated, tubular lamp standard 22 upstanding from one edge thereof, and a lamp shade 24 mounted at the upper end of the standard by adjustable mechanism including a housing 26. The shade 24 is substantially aligned with and positioned above the base 20. Since the shade 24 projects laterally from the standard 22, the shade readily may be positioned above a bed. The alignment of the shade above the base precludes any tendency of the lamp to tip toward the shade.

The shade, as may be seen in Figs. 1-5, comprises a dished out sheet metal section having a rolled over peripheral bead 28 and a central aperture 30 in which is mounted, by means of a crimped over flange 32, an outwardly flared circular spotlight member 34 having a peripheral bead 36. A socket 38 is mounted within the shade 24 in a manner shortly to be described and supports a light bulb 40 in alignment with the aperture 30 and spot 34.

A bulb shield 42 shown in Figs. 2-4 and best seen in the perspective view of Fig. 8 is provided with a split cylindrical portion 44 encircling the socket 38 and supporting a substantially hemispherical portion 46 about the bulb. The end of the split cylindrical sleeve portion 44 is provided with a substantially right-angularly disposed flange 48 (see also Fig. 7) provided with a pair of screw holes for receiving screws 50 which also pass through the shade 24 (see Fig. 6) and are threaded into the housing 26. The shade 24 further is secured by screws 52 passing through the shade and threaded into the housing above the socket 38 and bulb shield 42. The spherical portion 46 of the bulb shield partially surrounds the bulb 40 and is aligned with the opening 30 and spotlight member 34 to cast a spot of light through the latter and also to reflect light onto the inside of the shade so that indirect light may be reflected outwardly from the shade. The inside of the bulb shield and the inside of the shade both are coated with a reflective substance such, for example, as white enamel although it will be understood that any other suitable or desirable coating may be used.

The shade in one position of adjustment has its concave side directed downwardly as shown in Figs. 1, 2, and 6 and in solid lines in Fig. 4 to provide relatively broad diffused or indirect lighting for reading and the like. The shade is rotatable about the axis of the bulb and bulb shield as indicated in dashed lines in Fig. 4 and may be completely inverted as shown in Fig. 3 so that a spot of light emanating from the bulb and passing through the member 34 may be directed downwardly onto a patient or the like.

The structure for adjusting the shade 24 is shown in Fig. 6 and includes a substantially L-shaped casting 54 having a hollow portion 56 over the top of the tubular standard 22 and fixed thereon by means such as a set screw 58. The casting 54 further includes a transverse tube 60 joining the remainder of the casting at a shoulder 62 and fitting through a hollow sleeve-like portion 64 of the housing 26. Both the sleeve-like portion 64 and the tube 60 project through an opening 66 in the shade 24 and a cylindrical socket holder 68 is secured on the end of the tube 60 by means such as a set screw 70

threaded through the socket holder and engaging a flat 72 on the side of the tube 60.

A centering ring 74 of substantially trapezoidal cross section encircles the tube 60 and is forced resiliently against a beveled inner edge of the housing sleeve 64 by a coil spring 76 carried within the socket holder 68 and abutting an internal shoulder 78 therein. The coil spring holds the centering ring 74 tightly against the tube 64 and holds the housing tightly against the shoulder 62 of the casting 54 frictionally to lock the housing, and consequently the shade 24, in place. A manual rotative force applied to the shade is sufficient to overcome the frictional locking force so that the shade may be continuously adjusted to any desired position, the housing and shade then being frictionally locked in the new position as previously described.

The socket holder 68, which conveniently is formed of metal, is provided at its outer end with a pair of diametrically spaced cylindrical projections 80 (Figs. 6 and 7) which are bored and tapped for receipt of a pair of screws as will be apparent shortly.

The socket 38 previously mentioned is formed of insulating material such as porcelain and is provided with a pair of recesses into which the projections 80 fit. Screws 82 fit into countersunk bores in the insulating socket 38 and are threaded into the tapped apertures in the projections 80 to hold the socket firmly in place. The usual metallic, screw threaded contact member 84 is secured in the socket 38 by any suitable or conventional means (not shown) and an open bottom portion 86 on the screw threaded contact 84 is closed by an insulating member 88 carrying a contact button 90, as is well known in the art. Wires 92 and 94 lead from the screw threaded contact 84 and contact button 90 through the tube 60 and down through the tubular lamp standard 22.

Reference next should be had to Figs. 11 and 14 for details of construction of the base 20. The base 20 comprises a casting 96 of a relatively heavy metal such as iron for providing stability to the lamp. The casting has a plurality of tapped apertures for receiving screws 98 holding rubber or similar feet 100 on the bottom of the base. The casting 96 is substantially circular and is provided with a convex upper surface over which is fitted a sheet metal stamping 102. This provides a smooth finished top to the base without the necessity of machining the casting.

An elongated, streamlined casting or support member 104 is supported on top of the casting 96 and sheet metal cover 102 and is provided with a pair of side shoulder portions 106. A plurality of screws 108 extends through suitable apertures in the casting 96 and the sheet metal cover 102 and is threaded into suitable apertures in the support member to secure the same in place.

The support member is provided with cylindrical vertical bosses forming a tube-like portion 110 receiving the lower end of the lamp standard 22. A lip 112 is bent upwardly and inwardly to support the weight of the standard 22 and of the parts carried thereby. The lamp standard 22 is held against upward movement by a press fit in the tubular portion 110 and additionally may be secured by any suitable or desirable means including welding, soldering, or screw threads, or by a set screw or screws.

The sides of the elongated support member 104 are apertured at 114 forwardly of the shoulders 106 and a light source is placed within the member 104 to shine outwardly through these apertures to act as a night light or a locator light. The top of the member 104 is provided with an elongated aperture 116 which is closed by a cover 118. The cover 118 is provided with a lug 120 having a shoulder 122 fitting under the member 104 at one end of the aperture 116. The other end of the cover 118 is held in place by a screw 124 extending through the cover and threaded into the member 104. A screw

126 is threaded through a socket member 128 and into the lug 120 to mount the socket member within the elongated support member 104. The front end of the socket member 128 is located by an apertured flange 130 extending downwardly from the cover 118. A small bulb 132 is threaded into the socket member 128 and is positioned adjacent the apertures 114 to cast light outwardly therethrough.

An electric switch and outlet panel 134 is located on the front of the lamp standard 22 at a comfortable height, preferably somewhat greater than half way from bottom to top. The panel 134 (Figs. 1, 9, 11, 12 and 13) is elongated and is curved at the ends to provide a neat appearance and to avoid the possibility of corners on which clothing or the like could catch. The panel 134 is provided with longitudinal folded over edges 135 which are curved transversely in order to be complementary to the outer surface of the tubular lamp standard 2 and is held against the front surface of the lamp standard by a pair of screws 136 passing through the panel and threaded into the lamp standard. The standard is apertured at 138 behind the panel as shown in Figs. 11, 12, and 13 in order to accommodate a pair of switches and an outlet socket as will be apparent shortly.

The center of the panel 134 is provided with a rectangular opening 140 (see particularly Fig. 9) for receipt of an outlet or plug receptacle 142 (Figs. 11-13). The receptacle is held against outward movement by a bracket 144 secured to the back of the receptacle by a screw 146 and having a pair of diverging legs 148 impinging against the back or inside of the panel 134. The receptacle or outlet 142 is held against inward movement by an integral flange 150 on the outlet bearing against the outer surface of the panel 134.

The panel 134 further is provided with a pair of circular apertures 152 and 154 (Fig. 9) spaced between the screw holes and the rectangular aperture 140 for receipt of a pair of conventional snap switches 156 and 158 (Figs. 11 and 12) for controlling the operation of the main light bulb 40 and the night light bulb 132. The switches are held in place by nuts 160 and 162 clamping against the front face of the panel and threaded on to shafts extending from the fronts of the switches. Switch actuating levers 164 and 166 extend from the fronts of the switches, and suitable "ON-OFF" indicia are provided on the front of the panel as shown in Fig. 12.

A wiring diagram for my lamp is shown in Fig. 10. The wire 92 from the bulb 40 will be seen to lead to the switch 156 (see also Figs. 6 and 11). A wire 168 leads from the switch 156 down through the tubular lamp standard 22 and out through the rear end of the support member 104 into a two-wire cable 170 provided with an integral grommet member 172 snapped into an aperture in the support member 104. The wire 94 leads from the bulb 40 to the two-wire cable 170.

The outlet or plug receptacle 142 is connected between the wires 94 and 168 by lead wires 174 and 176 so that power at all times is supplied to the outlet. A wire 178 leads from the wire 168 to the switch 158, and a wire 180 leads from the switch 158 to the bulb 132, the circuit being completed by a wire 182 leading to the wire 94. The switches 156 and 158 allow the main light or bulb 40 and locator or night light or bulb 132 to be energized selectively.

The disposition of the lamp shade and base both to the same side of the lamp standard allows the lamp shade to be positioned directly over a bed with no danger of tipping. The cast metal portion of the base further adds to the stability. The unique design of the lamp shade and bulb shield affords a source of broad general illumination or a concentrated spot of light, while the improved mounting structure for the shade allows the direction of the shade, and hence of the light, to be continuously adjusted in any direction. After adjustment the mounting structure frictionally holds the shade in adjusted posi-

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tion. The lamp has a pleasing appearance and the functional construction of the lamp avoids useless trimming or other parts that might catch on clothing or the like. The night light or locator light allows the lamp to be located readily in an otherwise darkened room and provides a comforting source of low level illumination for restless sleepers.

Although a particular example of my invention has been shown and described, it will be understood that this is by way of example only and does not constitute a limitation on the invention which includes all that which falls fairly within the spirit and scope of the appended claims.

I claim:

1. A floor lamp comprising a base adapted to be positioned beneath an article of furniture, an elongated standard of substantial height extending upwardly from said base adjacent one side thereof and fixed relative thereto, socket means for receiving a light bulb, a lamp shade, means for adjustably mounting said lamp shade about said socket means adjacent the top of said standard, said mounting means including means securing said shade for pivotal adjustment about a substantially horizontal axis extending outwardly from said standard and above said base, said lamp shade thereby being in substantially vertical alignment with said base for overlying an article of furniture, and conducting means within said standard and leading to said socket means for furnishing electrical energy to a bulb in said socket means.

2. A floor lamp comprising a base adapted to be positioned beneath an article of furniture, an elongated standard of substantial height extending upwardly from said base adjacent one side thereof and fixed relative thereto, socket means for receiving a light bulb carried adjacent the top of said standard, a lamp shade, means for mounting said lamp shade about said socket for continuous pivotal adjustment about a horizontal axis overlying said base and fixed relative thereto, said lamp shade thereby being in substantially vertical alignment with said base for overlying an article of furniture, and conducting means within said standard and leading to said socket means for furnishing electrical energy for a bulb received in said socket means.

3. A floor lamp comprising a base adapted to be positioned beneath an article of furniture, an elongated standard of substantial height extending upwardly from said base adjacent one side thereof, socket means for receiving a light bulb, a dished out lamp shade having a relatively small aperture in the top thereof and forming a light transmitting opening, means for adjustably mounting said lamp shade about said socket means adjacent the top of said standard and in substantially vertical alignment with said base for overlying an article of furniture, a bulb shield mounted adjacent said socket means and facing said shade for reflecting light against said shade and through said aperture, said shade therefore furnishing broad general illumination in one direction and a spot of light through said aperture in the other direction, and conducting means within said standard and leading to said socket means for furnishing electrical energy to a bulb received in said socket means.

4. A floor lamp comprising a base adapted to be positioned beneath an article of furniture, an elongated standard of substantial height extending upwardly from said base adjacent one side thereof, socket means for receiving a light bulb, a dished out lamp shade having a relatively small aperture in the top thereof and forming a light transmitting opening, means for adjustably mounting said lamp shade about said socket means adjacent the top of said standard and in substantially vertical alignment with said base for overlying an article of furniture, and a bulb shield mounted adjacent said socket means and facing said shade for reflecting light against said shade and through said aperture, said shade therefore furnishing

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ing broad general illumination in one direction and a spot of light through said aperture in the other direction.

5. A floor lamp comprising a base, an elongated standard upstanding from said base, socket means mounted adjacent the top of said standard for receiving a light bulb, a dished out lamp shade having a relatively large open face and a relatively small aperture opposite said face forming a light transmitting aperture, means for adjustably mounting said lamp shade about said socket means and adjacent the top of said standard, and a bulb shield mounted opposite said aperture and fixed relative to said shade for movement as a unit with said shade, said bulb shield having a reflecting surface for reflecting light against said lamp shade to provide a diffused source of illumination, and for reflecting light through said aperture to provide a spotlight.

6. A floor lamp comprising a base, an elongated standard upstanding from said base, socket means mounted adjacent the top of said standard for receiving a light bulb, a dished out lamp shade having a relatively large open face and a relatively small aperture opposite said face forming a light transmitting aperture, means for adjustably mounting said lamp shade about said socket means and adjacent the top of said standard, said adjusting means including a pair of relatively movable surfaces and resilient means urging said surfaces into frictional engagement, and a bulb shield mounted opposite said aperture and fixed relative to said shade for movement as a unit with said shade, said bulb shield having a reflecting surface for reflecting light against said lamp shade to provide a diffused source of illumination, and for reflecting light through said aperture to provide a spotlight.

7. A floor lamp comprising a base, an elongated standard upstanding from said base, socket means mounted adjacent the top of said standard for receiving a light bulb, a dished out lamp shade having a relatively large open face and a relatively small aperture opposite said face forming a light transmitting aperture, means for adjustably mounting said lamp shade about said socket means and adjacent the top of said standard, said adjustable mounting means including a pair of concentrically mounted tubular members, the outermost of said tubular members having an internally beveled edge, a centering ring mounted about the innermost of said tubular members and having an externally beveled edge engaging the internally beveled edge of the outermost tubular member for relatively centering the two tubular members, spring means engaging said centering ring and urging said beveled surfaces into frictional engagement, and a bulb shield mounted opposite said aperture and fixed relative to said shade for movement as a unit with said shade, said bulb shield having a reflecting surface for reflecting light against said lamp shade to provide a diffused source of illumination, and for reflecting light through said aperture to provide a spotlight.

8. A floor lamp comprising a base, an elongated standard upstanding from said base, socket means mounted adjacent the top of said standard for receiving a light bulb, a dished out lamp shade having a relatively large open face and a relatively small aperture opposite said face, means for adjustably mounting said lamp shade about said socket means and adjacent the top of said standard, a pair of concentrically mounted relatively rotatable tubular members, a socket holder mounted on the inner of said concentric members and having a cylindrical recess surrounding the inner concentric member, an internally beveled edge surface on the outer concentric member, a centering ring surrounding the inner concentric member and having an outer beveled surface complementary to the inner beveled concentric surface of said outer concentric member, and a coil spring trapped in said cylindrical recess and abutting said centering ring for forcing said beveled surfaces frictionally into contact relatively to center said concentric members and frictionally to lock said lamp shade in adjusted position, a socket

mounted on said socket holder, and a bulb shield mounted opposite said aperture and movable as a unit with said shade, said bulb shield having a reflecting surface for reflecting light against said lamp shade to provide a diffused source of illumination, and for reflecting light through said aperture to provide a spotlight.

9. A floor lamp comprising a base adapted to be positioned beneath an article of furniture, an elongated standard of substantial height extending upwardly from said base adjacent one side thereof, socket means carried adjacent the top of said standard for receiving a light bulb, a lamp shade, means for adjustably mounting said lamp shade about said socket means adjacent the top of said standard and in substantially vertical alignment with said base for overlying an article of furniture, an elongated housing mounted on top of said base and having a vertically disposed tubular member at one end of said housing for receiving said elongated standard, said housing having light transmitting openings in the side thereof adjacent the center of said base, and socket means within said housing for receiving a light bulb to provide a night light at said base.

10. A floor lamp comprising a base, an elongated standard upstanding from said base, socket means adjacent the top of said standard for receiving a light bulb, a lamp shade, means for adjustably mounting said lamp shade adjacent the top of said standard and about said socket means, a housing on said base and having light transmitting openings therethrough, said housing having an aperture therein, a removable cover for said aperture, and socket means mounted on the inside of said cover and carried by said cover for receiving a light bulb within said housing to provide a night light at said base.

11. A floor lamp comprising a base adapted to be positioned beneath an article of furniture, an elongated standard of substantial height extending upwardly from said base adjacent one side thereof, socket means adjacent the top of said standard for receiving a light bulb, a lamp shade, means for adjustably mounting said lamp shade adjacent the top of said standard and about said socket means and in substantially vertical alignment with said base for overlying an article of furniture, means providing

a night light on said base, said standard having an elongated aperture on one side thereof no lower than the mid point of the standard, an elongated panel having tapered ends mounted over said aperture, a pair of switches and an electrical outlet mounted on said panel, conducting means in said standard individually connecting said switches with said socket means and with the means providing the night light, and conducting means connected to said outlet.

12. A hospital floor lamp comprising a base, a lamp standard upstanding therefrom, a lamp head comprising a shade and light source mounted adjacent the top of said standard, a lamp housing on said base and adjacent said standard, said housing being substantially impervious to light rays at the top and having an edge portion spaced above said base providing a lateral light transmitting opening for locating said base without throwing light up into a patient's eyes, and means for receiving a light source beneath said housing.

13. A floor lamp comprising a base, an elongated standard upstanding from said base, socket means mounted adjacent the top of such standard for receiving a light bulb, a dished out lamp shade having a relatively large open face and a relatively small aperture opposite said face and forming a light transmitting aperture, means for adjustably mounting said lamp shade about said socket means and adjacent the top of said standard, and means mounted in conjunction with said lamp shade for concentrating light through said light transmitting aperture, whereby said lamp provides a spot of light through said light transmitting aperture and a diffused source of illumination from the open face.

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