Feb. 26, 1935. H. G. FITZ GERALD 1,992,199

LIGHT SOURCE

Filed Nov. 7, 1932 2 Sheets-Sheet 1

Fig. 1.

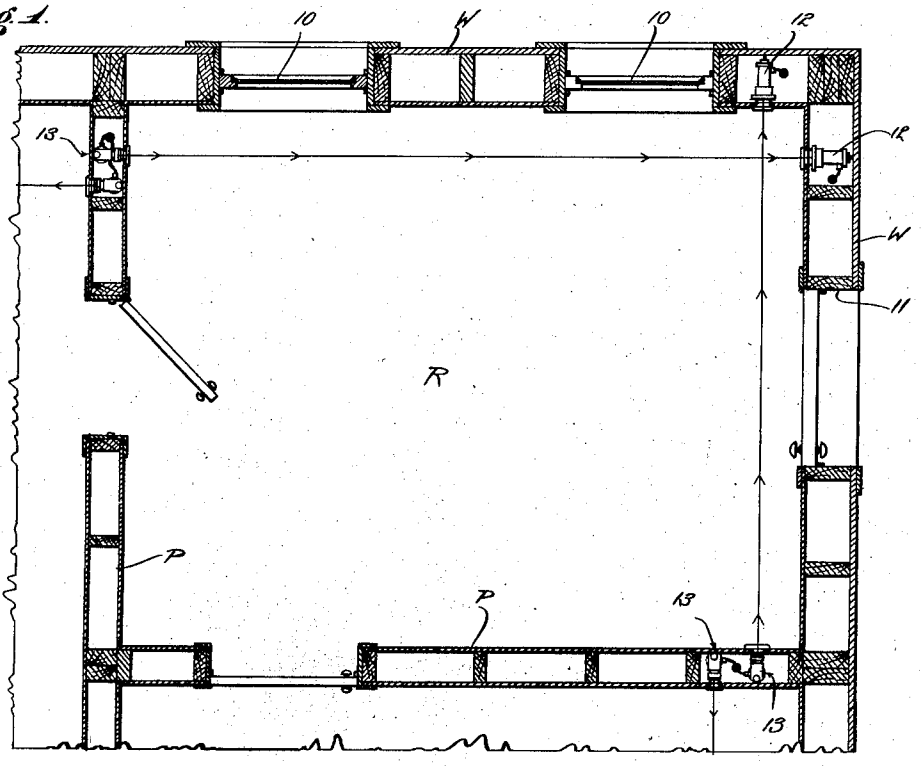


Fig. 2.

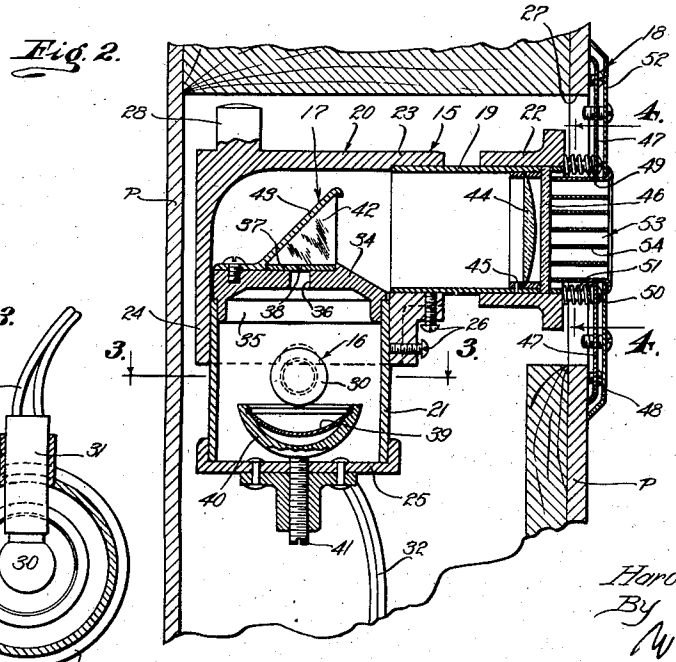


Fig. 4.

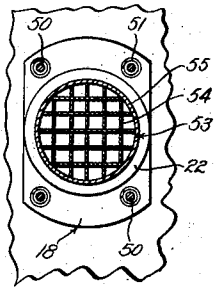
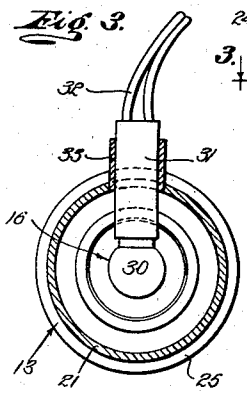


Fig. 3.



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LIGHT SOURCE

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Fig. 5.

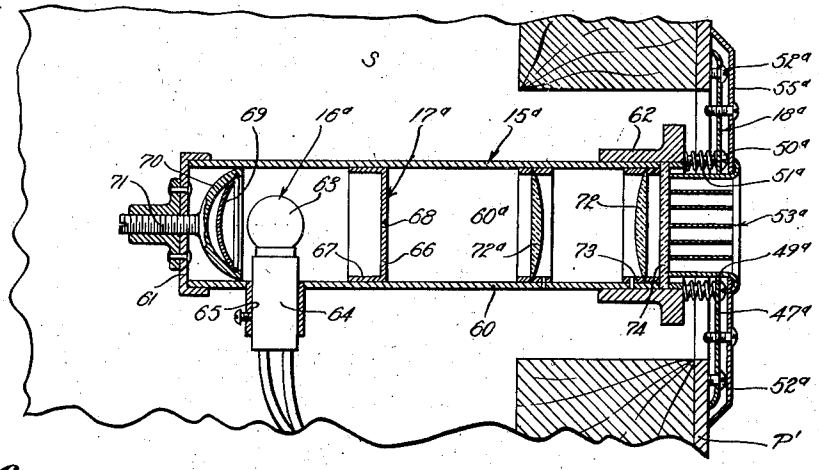


Fig. 6.

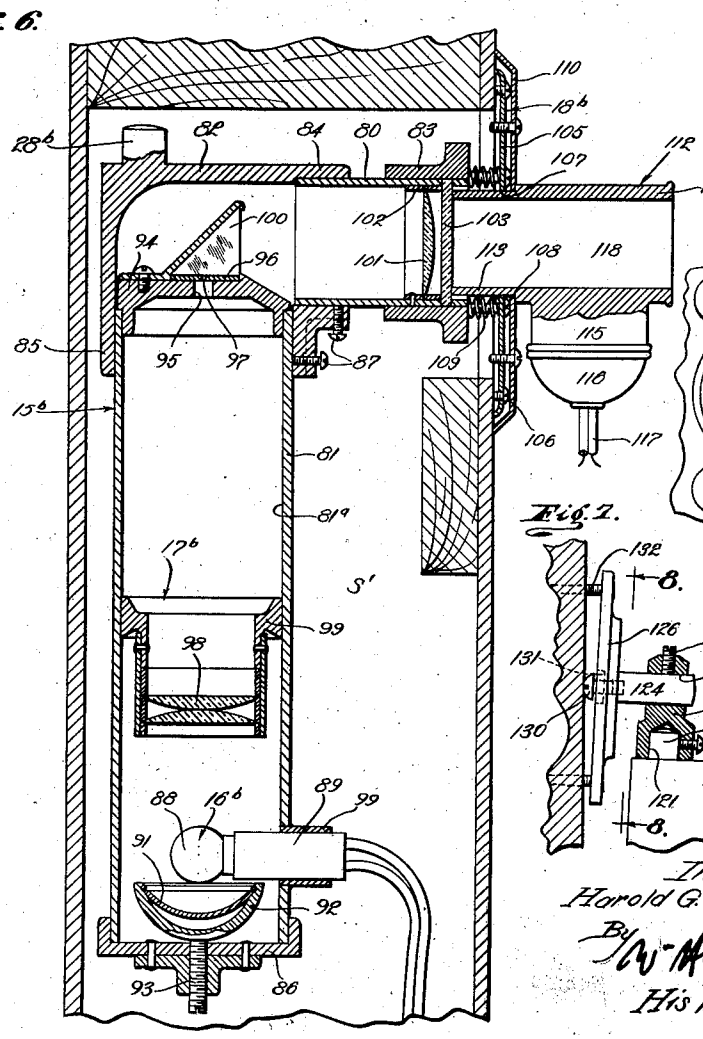


Fig. 8.

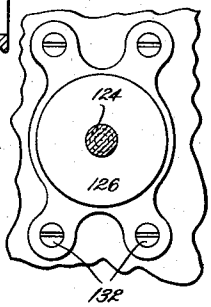


Fig. 7.

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UNITED STATES PATENT OFFICE

1,992,199

LIGHT SOURCE

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Application November 7, 1932, Serial No. 641,588

11 Claims. (Cl. 240—1)

This invention relates to a light source, and relates more particularly to a light source or means for projecting a beam or shaft of light. It is a general object of the present invention to provide a simple, compact and effective means or light source for projecting a comparatively small, intense beam of light.

An object of this invention is to provide a novel and improved light source or light projecting device suitable for use in a signal or alarm system involving a light sensitive or photo electric cell. In accordance with the present invention, the light projecting device is effectively masked or disguised and its beam of projected light is not readily seen under ordinary light conditions making the device particularly adapted for use in burglar alarm or detection systems.

It is another object of the invention to provide a light source of the character mentioned that is adapted to be installed in various situations and locations, for example, it may be installed in building partition or wall structures of different characters, on external brackets, etc.

It is another object of the invention to provide a light projecting means or light source of the character mentioned that is operable to project a comparatively small intense beam of light a substantial distance and with a minimum amount of diffusion.

It is another object of the invention to provide a device of the character mentioned that may be easily adjusted or modified when installed to provide for the proper projection of the light rays in the desired direction, and for the desired focus of the light.

It is another object of the invention to provide a light source or light projecting device of the character mentioned that is particularly compact and that is constructed so that it may be entirely contained or arranged in a wall or partition structure, for example, between the lath and plaster walls or faces of a partition.

It is another object of the invention to provide a light projecting device of the character mentioned that may be attached to or carried by a typical electrical outlet plate on a wall or partition so that it is not conspicuous and so that its purpose is not apparent.

It is another object of the invention to provide a novel and improved means for masking or disguising the outlet opening or light aperture of a device of the character mentioned.

It is another object of the invention to provide a simple and effective means for mounting or supporting a device of the character mentioned whereby the beam or ray of light may be directed to any point with great accuracy.

It is a further object of the invention to provide a light projecting device of the character mentioned that may be easily and quickly modified to adapt it for different uses and installations in various situations by utilizing readily interchangeable parts or elements.

Other objects and features of the invention will be apparent and fully understood from the following detailed description of typical forms and applications of the invention, throughout which description reference will be made to the accompanying drawings, in which:

Fig. 1 is a more or less diagrammatic horizontal sectional view of a portion of a building illustrating a burglar alarm system involving the light source provided by the present invention. Fig. 2 is an enlarged vertical detailed sectional view of a typical installation of one form of the invention. Fig. 3 is a transverse detailed sectional view taken as indicated by line 3—3 on Fig. 2. Fig. 4 is a vertical detailed sectional view taken as indicated by line 4—4 on Fig. 2. Fig. 5 is a vertical or longitudinal detailed sectional view of another form of the invention. Fig. 6 is a longitudinal detailed sectional view of still another embodiment of the invention. Fig. 7 is a fragmentary side elevation of an optional means for mounting the device and Fig. 8 is a detailed sectional view taken as indicated by line 8—8 on Fig. 7.

The present invention has numerous applications; however, it is particularly adapted for use in a burglar alarm system involving a photo-electric cell or an element sensitive to light. Throughout the following detailed disclosure, I will describe several typical embodiments and installations or applications of the present invention, it being understood that the invention is not to be construed as limited or restricted to the specific features or applications about to be described, but is to be taken as including any features that may fall within the scope of the claims.

Fig. 1 of the drawings illustrates in a more or less diagrammatic manner a burglar alarm system involving one embodiment of the present invention and installed in a building construction. The portion of the building structure illustrated in Fig. 1 of the drawings includes two exterior walls W and two partitions P forming a compartment or room R. Windows 10 are provided in one wall W while a doorway 11 is formed in the

other wall W. The burglar alarm system when in operation is intended to give an alarm or signal in the event that any one enters the door 11 or the windows 10. Light responsive units or photo-electric cell units 12 are installed in the wall structures W adjacent their point of joinder to receive beams of light extending substantially parallel to the walls W and projected by the light sources 13 provided by the invention. In the particular case illustrated in the drawings, the light sources 13 are installed in the partitions P at points directly opposite the photo-electric cell units 12. The photo-electric cell units 12 may be operatively connected to any desired form of alarm device, signal, indicating instrument, protective device, or the like. In the event that a person or object passes through or interferes with a beam of light produced by one of the light sources 13, the photo-electric cell normally receiving the light, actuates, or causes the actuation of the alarm or indicating device with which it is connected.

A light source 13 of the character illustrated in detail in Fig. 1 of the drawings is illsutrated in detail in Figs. 2, 3 and 4. The embodiment of the invention illustrated in Figs. 2, 3 and 4 of the drawings, includes, generally, a body 15, a source of light 16 in the body 15, an optical system 17 for projecting a beam of light from the body 15, and means 18 for mounting or supporting the body 15.

The body 15 is provided to carry or house the source of light 16, the optical system 17 and various other parts of the device. It is a feature of the invention that the body 15 may be modified or varied to adapt it for use in various situations or installations, and that the parts making up or forming the body 15 may be readily exchanged for others of various sizes, etc., to provide for the installation of the device in any given situation and to provide for the proper and effective projection of the light. In the particular form of the invention being described, the body 15 is adapted to be arranged in a wall or partition structure that is comparatively thin; however, it will be apparent that the body may be carried by an exterior bracket or in any other manner.

The body 15 illustrated in Figs. 2, 3 and 4 of the drawings is sectional, including an outer end section 19. The outer end section 19 of the body 15 is a tubular member and is comparatively short. The section 19 may be in the nature of a simple cylindrical tubular member as illustrated in the drawings. A flange collar 22 is provided on the outer end of the outer section 19. The collar 22 and the section 19 may be loosely or adjustably connected. The central section 20 of the body 15 is tubular and is angular, being in the nature of an elbow. The inner end of the body section 19 removably and adjustably fits into one arm 23 of the central section 20. The inner section 21 of the body may be in the nature of a straight tubular member and removably fits into the inner arm 24 of the central elbow section 20. In the form of the invention being described, the inner section 21 is comparatively short and is somewhat larger in diameter than the outer body section 19. A detachable cap 25 closes the inner end of the inner section 21. The end sections 19 and 21 are adjustably and removably attached to the central section 20 by suitable set screws 26. A suspension lug 28 projects from the central elbow section 20. The lug 28 is adapted to be employed in connecting the body 15 with various classes of brackets etc., as will be fully set forth in the description of the mounting illustrated in Figs. 7 and 8 of the drawings.

The body 15 may be positioned or arranged as found practical. In the particular installation illustrated in Fig. 2 of the drawings, the outer section 19 of the body 15 has its outer end facing outwardly toward one face of the partition P and the inner section 21 extends substantially parallel with the faces of the partition. The partition P is provided with an opening 27 in one of its walls or faces to receive the outer end of the body section 19. The opening 27 is preferably formed sufficiently large to pass the collar 22 of the body with substantial clearance and is entirely covered by the mounting means 18, as will be subsequently described. It will be apparent from an inspection of Fig. 2 of the drawings that the body 15 of the device is entirely housed or contained within the usual space found in typical partitions and wall structures.

The source of light 16 is disposed in the inner section 21 of the body and is preferably in the nature of a suitable incandescent electric lamp 30. The lamp 30 is removably or replaceably carried in a typical socket 31 which receives electrical conductors 32. The socket 31 extends through a boss 33 and projects through an opening in the wall of the section 21. The socket 31 projects into the body section 21 to support the lamp 30 in a position substantially midway between the ends of the body section and co-axial with the opening in the body section.

The optical system 17 is provided to concentrate the light from the light source 16 into a comparatively small ray or beam, and to project this beam from the outer end of the outer section 19. The light handling means or optical system 17 includes an aperture member 34 mounted on the end of the body section 21 within the arm 24 of the central section 20. The aperture member 34 extends across the end of the section 21 and has a flange or lip 35 fitting into the section 21. A central light passing opening 36 is provided in the member 34. The opening 36 is concentric with the opening in the section 21 and is thus aligned with the lamp 30. An aperture plate 37 is provided on the member 34. The aperture plate 37 is provided with a comparatively small opening 38 registering with and concentric with the opening 36. The optical system 17 includes a reflector 39 mounted behind the lamp 30 for reflecting the light toward the aperture 36. The reflector 39 is in the nature of a concave spherical reflector and is supported by a carrier 40. A screw threaded stem 41 is provided on the reflector carrier 40 and is threaded through a boss on the cap 25. The reflector 39 is formed and positioned to concentrate the reflected light at the apertures 36 and 28. The screw threaded stem 41 provides a means for accurately adjusting the reflector 39.

The light handling means or optical system 17 includes means for changing the direction of the beam passed by the aperture 38 so that it is projected outwardly from the outer end of the body section 19. A light reflecting device is provided on the aperture member 34 to reflect the beam from the opening 38 outwardly through the body section 19. In the preferred form of the invention, a prismatic reflector 42 is mounted on the aperture member 34 to reflect the beam from the opening 38 outwardly through the body section 19. The prism 42 is attached to the member 38 by a suitable clip or bracket 43. In the particular arrangement illustrated in the drawings, the aperture plate 37 is arranged on the outer side of

the member 34 under the prismatic reflector 42 so that the bracket 43 operates to retain both the reflector and the plate 37 on the aperture member 34. The beam of light from the aperture 38 is reflected from the angular reflecting surface of the prismatic reflector 42 to pass centrally through the opening in the outer body section 19.

A projection lens 44 may be provided in the outer body section 19 to focus or cause the convergence of the light rays of the beam toward a remote point, for example, a photo-electric cell unit 12. The projection lens 44 may be in the nature of a plano-convex lens and may be supported in a suitable carrier 45. By loosening the set screw 26 the body section 19 is freed so that it may be adjusted relative to the central section 20 to provide for the focusing of the beam. The section 19 is also adjustable relative to the collar 22. A light filter 46 may be provided in the outer body section 19 in front of the lens 44. The light filter 46 may be of any suitable color value, the color of the filter depending upon the light conditions prevailing in the compartment R. It has been found that a blue filter 46 is usually effective, as it produces a light that is more or less difficult to see.

The means 18 for mounting the body 15 provides for the positioning or arrangement of the device within the wall or partition structure and permits the accurate adjustment or setting of the body 15 so that the beam of light may be directed onto a remote point as desired. The mounting means 18 includes a mounting plate 47 adapted to be attached to the wall structure at the opening 27. In the typical installation illustrated in the drawings, the plate 47 is attached to the face of the partition P by screws 48. The mounting plate 47 extends across the opening 27 in the partition and has a central opening 49 concentrically aligned with the opening in the body section 19. One or more screws 50 pass through openings at diametrically opposite sides of the opening 49 and thread into openings in the flanged collar 22. In the embodiment of the invention illustrated, there are four screws 50 at diametrically opposite sides of the opening 49. Springs 51 surround the screws 50 and are arranged under compression between the mounting plate 47 and the end of the collar 22. It will be apparent how the screws 50 may be employed to accurately adjust or set the body 15 in any desired position so that the light beam is directed as desired. The springs 51 operate to maintain the body 15 in its set or adjusted position. A conventional outlet plate 52 of the type commonly employed in connection with a service or convenience outlet may be provided to cover the mounting plate 47. The outlet plate 52 entirely conceals the mounting plate 47 and gives the outer end of the device the appearance of a common outlet.

The invention may include means for masking the outer end of the light source and for preventing the divergence of the light as it leaves the body 15. A light mat or mask 53 may extend into the opening 49 in the plate 47. The mask 53 includes a multiplicity of spaced plates 54 crossed or disposed at right angles to one another and connected to one another to form a structure resembling an open ended section of a honey-comb. The honey-combed plates 54 may be carried in a tube 55 adapted to fit in the opening 49. The mask 53 is preferably provided with a dull black or dark finish so that it has no tendency to reflect the light. As the light rays of the beam immediately after passing through the projecting lens 44 are substantially parallel, they pass through the openings between the honey-combed plates 54 with little or no interference. The honey-combed plates 54 of the mask 53 effectively conceal the lighted interior of the device and prevent the dispersion or divergence of the light rays.

The embodiment of the invention illustrated in Fig. 5 of the drawings is adapted to be installed in a wall or partition structure where there is a comparatively large or wide space S behind the wall or in the partition construction. This embodiment of the invention includes generally a body 15^a, a source of light 16^a, an optical system 17^a in the body 15^a, and means 18^a for mounting the body 15^a on the wall or partition structure P'. The body 15^a is a simple tubular member including an elongate tubular section 60 closed at its inner end by a detachable cap 61. An adjustable flanged collar 62 is provided on the outer end of the body section 60. In the installation illustrated in Fig. 5, the body 15^a extends inwardly from the face of the wall or partition P' and is disposed at substantially right angles to the face of the wall or partition P'.

The source of light 16^a is in the form of an incandescent electric lamp 63 and is positioned in the inner end portion of the body section 60. The lamp 63 is carried by a typical socket 64. The lamp socket 64 is carried in an opening 65 in a boss projecting from the body section 60. The lamp 63 is positioned so that its filament is in alignment with the axis of the body opening.

The optical system 17^a for handling the light from the light source 16^a includes an aperture plate 66 arranged in the body section 60 in front of the lamp 63. The aperture plate 66 is in the nature of a disc extending across the body opening 60^a and is provided with a peripheral flange 67 seated on the wall of the opening. A comparatively small central opening 68 is provided in the aperture plate 66. The aperture 68 is coaxial with the body opening 60^a and aligned with the lamp 63. A concave spherical reflector 69 is mounted in the inner end of the body 15^a behind the lamp 63. The reflector 69 is supported in a carrier 70. The carrier 70 includes a stem 71 screw threaded through an opening in the cap 61 so that the reflector 69 may be readily adjusted relative to the lamp 63. The reflector 69 is constructed and positioned so as to concentrate the reflected light at the aperture 68. A projection lens 72 is provided in the outer end of the body opening 60 to project the beam of light outwardly from the body. The lens 72 may be in the form of a plano-convex lens operable to focus the light rays at a remote point, for example, on a photo-electric cell unit on a distant wall. A tubular carrier 73 is provided to mount the projection lens 72 in the opening 60^a. A second projection lens 72^a is provided in the body section 60 between the lens 72 and the aperture plate 66 to straighten or condense the beam of light before it reaches the lens 72. The two lens 72 and 72^a may be of the same focal length. The combination of the lenses 72 and 72^a materially reduces the necessary effective length of the optical system between the aperture plate 66 and the outer lens 72 and permits the lens 72 to be of small diameter without increasing the size of the projected beam. The combination of two spaced projection lenses just described may be used in the embodiments of the invention when it is desirable to shorten the optical system between the aperture plate and the outer end of the body. A light filter 74 of a

suitable color value may be mounted in front of the projection lens 72.

The means 18^a for mounting the body 15^a may be identical with the mounting means 18 described above. The mounting means 18^a is readily adjustable whereby the body 15^a may be set to provide for the accurate projection of the beam of light to any particular point. In accordance with the invention, the mounting means 18^a includes a mounting plate 47^a attached to the wall or partition structure P' by screws 52^a, or the like. A central opening 49^a is provided in the mounting plate 47^a to register with the body opening 60^a. One or more screws or bolts 50^a extend through openings at diametrically opposite sides of the opening 49^a and thread into openings in the collar to support the body 15^a. Springs 51^a surround the screws 50^a and are arranged under compression between the collar 62 and the mounting plate 47^a. The screws 50^a may be employed to accurately set or adjust the body 15^a while the springs 51^a maintain the body in its set or adjusted position. A convenience or service outlet plate 55^a may be provided to cover and conceal the mounting plate 47^a. A mat box or mask 53^a may be provided in the opening 49^a. The mask 53^a may be identical with the mask 53 described above, and operates to aid in preventing diffusion of the light and in concealing the light sources.

The embodiment of the invention illustrated in Fig. 6 of the drawings is operable to project a beam of light a considerable distance and is adapted to be installed in a wall or partition structure having a comparatively small or narrow internal space S'. The light source illustrated in detail in Fig. 6 of the drawings includes, generally, a body 15^b, a light source 16^b in the body 15^b, an optical system 17^b for handling the light, and means 18^b for mounting or carrying the body 15^b.

The form of the invention illustrated in Fig. 6 of the drawings is operable to project a light beam a considerable distance and the body 15^b is sufficiently long to contain an optical system capable of effectively projecting the light beam the desired distance. The body 15^b includes two end sections 80 and 81 and an elbow or angular central section 82. The end section 80 may be a straight cylindrical tubular part provided at its outer end with an adjustable flanged collar 83. The central section 82 is in the form of a tubular elbow and its outer arm 84 receives an end of the section 80. The inner body section 81 extends into the other arm 85 of the central section and is an elongate tubular member. A detachable cap 86 closes the inner or lower end of the elongate inner section 81. The sections 80 and 81 are adjustably and removably held in the opposite ends of the central section 82 and are attached to the central section by suitable set screws 87. In the installation illustrated in Fig. 6, the body 15^b is arranged in a position where the outer body section 80 is substantially normal to the face of the wall or partition, while the inner section 81 is substantially parallel with the face of the partition and depends or projects downwardly from the central section 82. It is to be understood that the body 15^b may be installed or positioned as desired or found practical. A suspension lug 28^b may be provided on the central section 82.

The source of light 16^b is in the form of a suitable incandescent lamp 88 and is carried by a socket 89. The socket 89 extends through a boss 90 on the body section 81 to project into the body section. The lamp 88 is preferably positioned so that it is co-axial with the opening 81^a in the section 81.

The means 17^b for handling the light includes a reflector 91 positioned in the opening 81^a behind the lamp 88. The reflector 91 is in the nature of a concave spherical reflector and is supported by a carrier 92. A stem 93 is threaded through an opening in the cap 86 whereby the reflector 91 may be adjusted relative to the lamp.

An aperture member 94 is mounted on the upper end of the body section 81 within the arm 85 of the central section. The member 94 has a central aperture 95 co-axial with the opening 81^a. An aperture plate 96 is provided on the member 94 and has a small opening or aperture 97 co-axial with the opening 95. In accordance with this embodiment of the invention, a condensing lens 98 is arranged between the lamp 88 and the apertures 95 and 97. The condensing lens 98 is preferably positioned in the opening 81^a at the point of maximum concentration of the light from the reflector 91 and is such as to focus the light at the aperture 97. A carrier 99 supports the condensing lens 98 in the opening 81^a. A prismatic reflector 100 is provided on the aperture member to reflect the beam of light from the aperture 97 outwardly through the body section 80. A projection lens 101 is provided in the outer end of the body section 80. A ring or carrier 102 mounts the projection lens 101 in the section 80. The body section 80 may be adjusted relative to the central section 82 to properly focus the beam of light on the distant point. A light filter 103 may be mounted in the collar 83 in front of the lens 101.

The means 18^b for mounting the body 15^b is such that the body may be accurately adjusted or positioned as found desirable or necessary. The mounting means 18^b may be identical with the means 18 described above. A mounting plate 105 is attached to the wall structure by suitable screws or bolts 106 and is provided with a central opening 107 registering with the open outer end of the body section 80. Bolts or screws 108 extend through openings in the plate 105 at diametrically opposite sides of the opening 107 and thread into the outer end of the collar 83 to support the body 15^b. Helical springs 109 surround the screws 108 and are held under compression between the plate 105 and the collar 83. The screws 108 may be adjusted to accurately set or position the body 15^b. An outlet plate 110 may be provided to cover and entirely conceal the mounting plate 105.

A mat box or mask of the type illustrated in Figs. 2 and 5 may be arranged in the opening 107 to aid in concealing the outer end of the device and to aid in preventing the divergence of the light rays.

I have illustrated in Fig. 6 of the drawings, a false socket 112 that may be employed in place of the mask just mentioned. The false socket 112 about to be described may be used in connection with any embodiment of the invention. The false socket 112 is formed to represent a common or typical socket of the type often found on extension wires or conductors and adapted to fit in convenience outlets, etc. In the particular case illustrated, the false socket 112 represents a two way socket and includes an arm 113 for extending into the opening 107, an outwardly projecting arm 114, and a lateral arm 115 provided at its end with a part 116 representing a plug and

receiving dummy conductors 117. An opening 118 extends longitudinally through the aligned arms 113 and 114 to pass the beam of light from the light filter 103. The dummy or false socket 112 effectively disguises the unit or light source so that it resembles a typical convenience outlet receiving a common two-way socket. The longitudinal opening 118 in the false socket 112 tends to prevent undesirable divergence of the light rays and masks the outer end of the light source.

Fig. 7 of the drawings illustrates a means for suspending the body 15^d of one of the light sources or units of the character described above. The mounting or suspending means of the mounting illustrated in the drawings may be employed to carry any of the embodiments of the invention, and is adapted to support a light source on the exterior of a wall, partition, or the like. The optional mounting or suspending means being described includes, a member 120 having a socket 121 in one end for receiving the suspension lug 122 on the body 15^d. The suspension 122 corresponds to the lugs 28 and 28^b described above. The member 120 may be attached to the lug 122 by a set screw 123. The body 15^d may be turned to any desired or suitable position prior to tightening of the set screw 123. The member 120 projects outwardly and is provided with a transverse opening 125. A stem 124 projects from a plate 126 and extends through the opening 125. A set screw 127 is provided on the member 120 to clamp against the stem 124. A screw 130 is threaded into an opening in the inner side of the plate 126. The screw 130 normally projects from the inner side of the plate 126 to act as a pivot member. A socket 131 may be provided in the plate 126 to receive the head of the screw 130 to permit the effective adjustment of the pivot member or screw. Screws or bolts 132 pass through spaced openings in the plate 126 and are adapted to thread into openings in a wall partition, a suitable mounting plate, or the like. The plate 126 may be set at any desired or suitable angle by suitably adjusting the screws 132. The screw 130 acts as a pivot on which the plate 126 may rock while it is being set or adjusted.

It is believed that the utility and practicability of the present invention will be readily apparent from the foregoing detailed description. The invention provides light sources that may be installed or arranged in wall or partition structures and in various other locations, and that are capable of projecting comparatively small intense beams of light. The various body parts of the several forms described above as well as the elements and the optical systems of the several units may be readily interchanged, thus permitting the devices to be modified to suit various installations. The devices are particularly simple and compact in construction and are entirely concealed when installed in partition of wall structures as illustrated in Figs. 1 to 6 of the drawings. The masks 53 are particularly effective in preventing the divergence of the light rays and in concealing the light sources. The false socket 112 is also effective in concealing the source of the light and in disguising the device. The means 18 for mounting the body 15 is such that the body may be set or positioned with great precision whereby the beam of light may be projected as desired.

The several forms or embodiments of the invention described above may be employed as the light sensitive or photo-electric units of the system; for example they may be utilized as the units 12 illustrated in Fig. 1 of the drawings. When employed in this manner the lamp is not used and a light sensitive cell or element may be installed in the body at or adjacent the point occupied by the lamp. Where the invention is embodied in a light receiving photo-electric cell unit, the light filter, the light concentrating reflector, and like parts may be dispensed with if desired. It will be apparent that the several forms of the invention are adapted for use as light receiving light responsive or photo-electric cell units with little or no modification.

Having described only typically preferred forms of my invention, I do not wish to limit myself to the specific details set forth, but wish to reserve to myself any changes or variations that may appear to those skilled in the art or fall within the scope of the following claims.

Having described my invention, I claim:

1. A light source adapted to be arranged in a partition or wall structure having an internal space and an opening in one face communicating with the space, said light source including a body adapted to be positioned in the space, the body having an opening with an open end at said opening in the face, a source of light in the body opening, means in the body opening controlling the light from the source so as to project a comparatively small beam from the open end of the body, and means adjustably mounting the body on the wall structure, the last mentioned means being accessible for adjustment from the outer side of the wall structure whereby the beam may be accurately directed on a remote point.

2. A light source adapted to be arranged in a partition or wall structure having an internal space and an opening in one face communicating with the space, said light source including a body adapted to be positioned entirely within the space, the body having an opening with an open end adjacent said opening in the face, means attached to the outer face of the wall structure for mounting the body, a source of light in the body opening, means in the body opening controlling the light from the source so as to project a comparatively small beam from the open end of the body, and means in said opening in the face for preventing divergence of the light of said beam, the outer end of the last mentioned means being substantially flush with the outer side of the body mounting means

3. In combination, a body having an opening extending into one end, means in the body for projecting a beam of light from the opening, a plate for mounting the body on the face of a wall structure or the like, and having an opening to register with the body opening, and a false electric socket extending into the opening in the plate to disguise the combination and having an opening to register with the body opening.

4. A light projecting device adapted to be installed in a partition or wall structure having an internal space including a body to be arranged in the space and adapted to extend into a lateral opening in the wall structure to have an end adjacent a face of the wall, the body having an opening with an open end adjacent said face, means in the body for projecting a beam of light from the open end of the body opening, and means for adjustably mounting the body including a member on the wall structure adjacent said lateral opening, and screws extending through openings in the member and threaded into openings in the end of the body.

5. A light projecting device adapted to be installed in a partition or wall structure having an internal space including a body to be arranged in the space and adapted to extend into a lateral opening in the wall structure to have an end adjacent a face of the wall, the body having an opening with an open end adjacent said face, means in the body for projecting a beam of light from the open end of the body opening, and means for adjustably mounting the body including a member on the wall structure adjacent said lateral opening, screws extending through openings in the member and threaded into openings in the body, and a spring arranged between the member and the body.

6. A light projecting device adapted to be installed in a partition or wall structure having an internal space including a body to be arranged in the space and adapted to extend into a lateral opening in the wall structure to have an end adjacent a face of the wall, the body having an opening with an open end adjacent said face, means in the body for projecting a beam of light from the open end of the body opening, means mounting the body on the wall structure including a mounting plate on the face of the structure, and a convenience outlet plate concealing the mounting plate.

7. A light projecting device adapted to be installed in a partition or wall structure having an internal space including a body to be arranged in the space and adapted to extend into a lateral opening in the wall structure to have an end adjacent a face of the wall, the body having an opening with an open end adjacent said face, means in the body for projecting a beam of light from the open end of the body opening, a plate on the face of the wall carrying the body, the plate having an opening registering with the body opening, and a part simulating an electric fitting extending into the above mentioned opening.

8. A device of the character described including, a body comprising a tubular central section having angularly related arms, and sections having adjustable telescopic connections with the said arms, a source of light in an end section, an aperture plate in the central section, means for reflecting the beam from the aperture of the plate into the other end section, an objective lens system in the said other end section.

9. A device of the character described including, a body, means in the body for projecting a beam of light, and means for mounting the body including a lug on the body, a mounting plate having a pivot member on its inner side, an adjustable connection between the plate and the lug, and more than two screws passing through openings in the plate spaced around the axis of the pivot member for attaching the plate to a support and operable to tilt the plate in any direction on the pivot member.

10. A light source adapted to be arranged in a partition or wall structure having an internal space and an opening in one face communicating with the space, said light source including a body adapted to be positioned in the space, the body having a passage with an open end at said opening in the face, a source of light in the body passage, means in the body passage controlling the light from the source so as to project a small beam from the open end of the body, and means for adjustably mounting the body on the face of the wall structure, the last mentioned means including a mounting plate attached to the outer face of the wall structure and means adjustably connecting the body and plate.

11. A device of the character described including a body comprising two tubular sections and means connecting the sections in angular relation to one another and whereby they are individually longitudinally adjustable, a light source in one section, an aperture plate in the body and carried by said section, a projecting lens in the other section for projecting a small beam of light from an end of the body, means on the aperture plate for changing the direction of the beam and means adjustably mounting the body whereby the direction of the beam may be varied.

HAROLD GRAVES FITZ GERALD.