

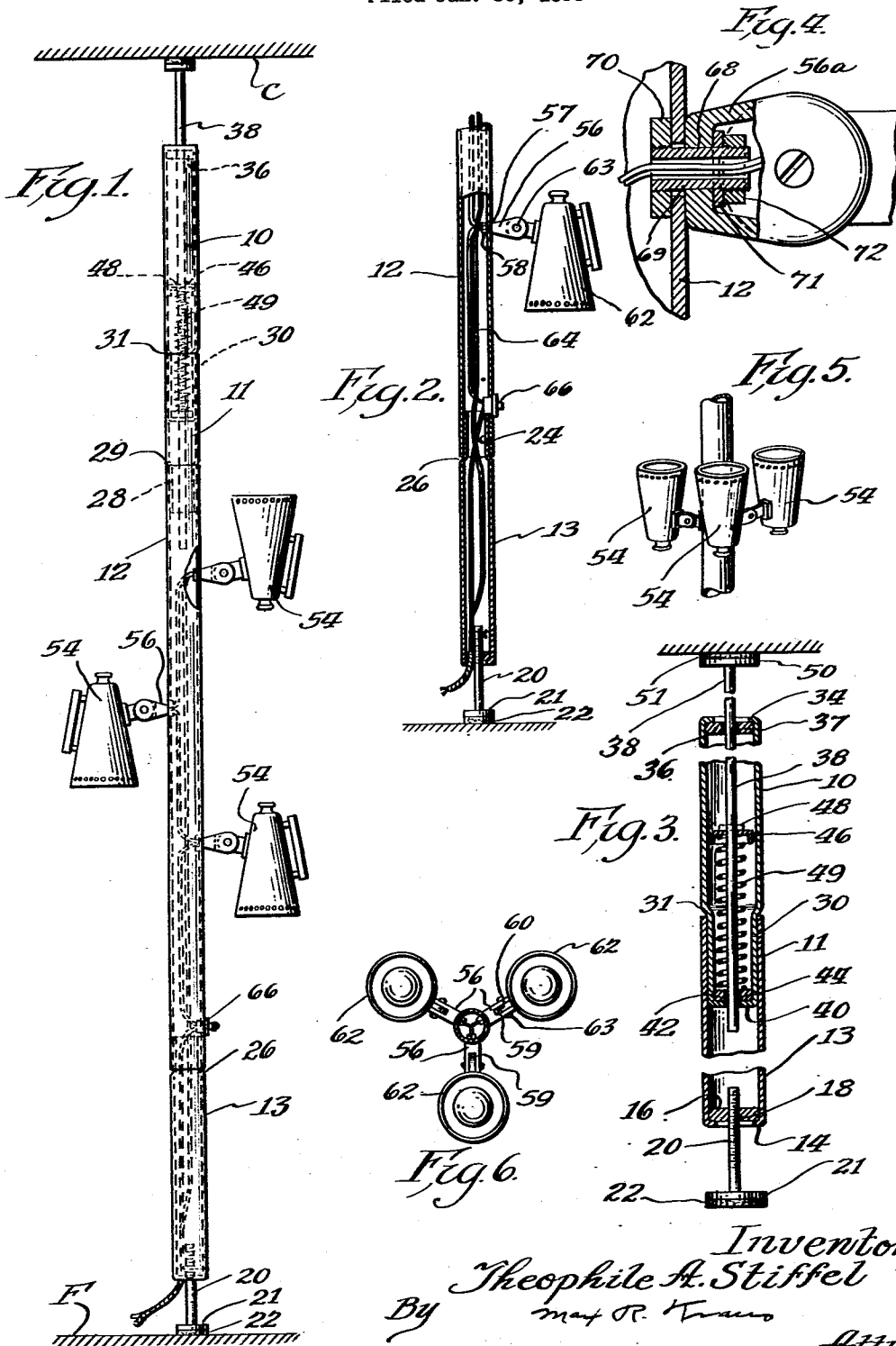
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T. A. STIFFEL

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LIGHTING FIXTURES

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Inventor
Theophile A. Stiffel
By May R. Evans
Atty.

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LIGHTING FIXTURES

Theophile A. Stiffel, Chicago, Ill.

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6 Claims. (Cl. 240—52)

This invention relates to lighting fixtures.

One of the objects of this invention is to provide a lighting fixture which is vertically positioned and has means for engaging the floor and ceiling of the room to support said fixture.

Another object of this invention is to provide a vertically positioned lighting fixture which is supported under tension and engages the floor and ceiling of the room and which permits a plurality of lights to be supported at a plurality of different elevations and in various circumferential positions and which lights may be directed for direct or indirect lighting.

Another object of this invention is to provide a lighting fixture unit which is vertically positioned and held in a fixed position by engagement under tension with the floor and ceiling of the room and is provided with a plurality of detachable sections to accommodate any ceiling height.

This invention has many advantages over floor or table lamps in that it is secured so that it cannot be accidentally dislodged or overturned. It permits the staggering or spacing of the lights at various elevations along the length of the unit, as well as circumferential spacing thereof so that each light beam may be individually and independently controlled and directed at any desired object. It also permits the same light source to be used for direct and indirect lighting.

Another object of this invention is to provide a lighting fixture of the foregoing character which is ornamental and very attractive and which is economical and inexpensive to manufacture.

Other objects will become apparent as this description progresses.

In the drawings:

Fig. 1 is an elevational view showing the lighting fixture supported and maintained under pressure between a floor and a ceiling.

Fig. 2 is a cross-sectional view of the lower portion of Fig. 1.

Fig. 3 is an enlarged cross-sectional view showing particularly the upper section of the pole.

Fig. 4 is a cross-sectional view of a modified form of bracket.

Fig. 5 is a view showing another form of arrangement of lighting elements, and

Fig. 6 is a top plan view taken from the top of Fig. 5.

As shown in Fig. 1 the lighting fixture is formed of four tubular sections designated by the numerals 10, 11, 12 and 13 which are joined together, as will be described, for the purpose of providing a singular tubular pole. Due to the difference in ceiling heights it may be necessary to reduce the length of the pole, consequently one of the tubular sections, for example, section 11 may be eliminated and section 10 may then be secured to section 12, or if a longer tubular column is required additional sections similar to that of section 11 may be added.

The lower tubular section 13 has a circumferential flange 14 and supports a washer 16 which is secured thereto. The washer 16 has a threaded opening 18 which

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threadedly receives a threaded stem or leg 20, the outer end of which has secured to it a circular disc 21 provided with a felt or rubber covering 22. The leg member 20 is therefore adjustable with respect to the tubular section 13. The upper end of section 13 (Fig. 2) is open and is provided with a reduced circumferential portion 24 which nests into section 12 and is held in friction-tight fit therewith. A shoulder 26 on section 13 limits the nesting fit between section 13 and section 12.

The upper open end of section 12 is adapted to receive the reduced circumferential portion 28 of section 11 which is likewise provided with a shoulder 29. The upper open end of section 11 is adapted to receive the reduced circumferential portion 30 of section 10 in frictional-tight engagement. A shoulder 31 is provided on section 10. The upper end of section 10 has a circumferential flange 34. A washer 36 is secured in the upper end of section 10 against said flange and said washer has a central opening 37 which slideably receives a rod 38 which extends into the tubular section 10. The opposite or lower end of section 10 has a circumferential flange 40 which supports a washer 42 which washer has an opening 44 in alignment with opening 37 and through which the rod 38 extends exteriorly of section 10.

Secured to the rod 38 inside section 10 is inverted cup shaped washer 46 and a pin 48. A coiled spring 49 is positioned inside said tubular section 10 surrounding said rod 38 and between the washer 46 secured to the rod and the washer 42 on section 10 and normally urges the rod 38 upwardly as shown in Fig. 1 or outwardly of said tubular section. The rod is prevented from being withdrawn outwardly of said tubular section by the pin 48.

Secured to the outer end of the rod is a disc 50 to which is secured a felt or rubber covering 51. When the sections 10, 11, 12 and 13 are joined together to form an integral post, as shown, the sections are frictionally held together as a unit, however, they may be disassembled if necessary. The unit as shown is supported vertically between the floor, designated by a letter F and the ceiling designated by the letter C and the rod 38 is urged upwardly of section 10 to rest against the ceiling and to hold the pole in a fixed position under tension or pressure against overturning or accidental dislodgment. The leg 20 is also adjustable by merely rotating same with respect to the lower tubular section 13, thus there is provided an adjustable lower leg and an upper member which is constantly under spring tension to rigidly and firmly support the pole in an upright position.

The lighting fixtures are preferably secured to section 12 which would be one section above the lowermost section 13 for the reason that section 12 would position the lighting fixtures at the desired height. Furthermore, it would not interfere with the sliding movement of rod 38. As shown in Fig. 1, section 12 is provided with three lighting fixtures and while three are shown any number of lighting fixtures may be suitably arranged on said section at different desired elevations and they are spaced circumferentially around said section. The lighting fixtures which are all designated by the numeral 54 each has a bracket 56 (Figs. 2 and 6) having a threaded nipple 57 which fits into an opening in the section 12 and is secured thereto by a threaded nut 58 which locks said bracket to the section 12. The bracket is bifurcated as at 59, as best shown in Fig. 6, to receive the extension 60 secured to the shade 62 of the lighting fixture. A pin 63 secures said extension to said bracket for swiveling action. The lighting fixture is provided with the usual electrical socket which receives a light bulb around which is supported the shade 62 heretofore mentioned.

The shade 62 and light bulb supported therein may

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be adjustably positioned to direct the light beam whenever desired by swiveling same on the pin 63 and may also be rotated by rotating bracket 56 so that the light may be directed to the ceiling or floor for indirect or direct lighting or in any other direction as desired. An electrical insulated conducting wire 64 connects the various lighting fixtures 54 and said conducting wire extends through the tubular section 12 and is connected to a switch 66 secured to the lower end of section 12. Said conducting wire extends downwardly through section 13 and outwardly thereof and is electrically connected by means of the usual plug to a source of electric current. The conducting wire passes through the nipple 57 and bracket 56 and is secured to the socket positioned in the shade 62.

By operating the switch 66 the lighting fixtures 54 are turned on and off as desired.

Fig. 4 shows a modified bracket for supporting the lighting fixture. The bracket 56a shown has a rear opening 68 which receives a short pipe 69 threaded at its opposite ends. One end of pipe 69 is connected to tubular section 12 by a nut 70 and the other end of the pipe is connected to the bracket by a washer 71 and nut 72. The remainder of bracket 56a and the manner of attaching the shade thereto is similar to that previously described. This bracket connection permits the bracket 56a to be rotatably connected to tubular section 12 so that the light may be directed for direct or indirect lighting.

The modified arrangement of fixtures shown in Figs. 5 and 6 is similar to that previously described except that the lighting fixtures 54 are circumferentially positioned around section 12 on the same elevation and are directed for indirect lighting. Any combination or arrangement of lighting fixtures may be provided as desired.

It will be understood that various modifications and changes may be made from the foregoing without departing from the spirit and scope of the appended claims.

I claim:

1. In a lighting unit to be supported by and between floor and ceiling surfaces, comprising a plurality of elongated sections detachably joined together to form a single pole, said pole being of a length greater than the distance between the floor and ceiling surfaces while not in use, and having means at each end thereof for engaging said floor and ceiling surfaces for supporting the pole in a vertical position, one of said sections being substantially hollow and having a lighting fixture mounted thereon to support a light exteriorly of said section, electrical conductors extending interiorly of said section and connected to said lighting fixture, one of said sections having an abutment member extending therefrom, and spring means in said section for normally urging said abutment member outwardly of said section for engagement with one of the surfaces to support the pole under compression between the two surfaces.

2. In a lighting unit to be supported by and between floor and ceiling surfaces, comprising a plurality of elongated sections detachably joined together to form a single pole, said pole being of a length greater than the distance between the floor and ceiling surfaces when not in use, and having means at each end thereof for engaging said floor and ceiling surfaces for supporting the pole in a vertical position, one of said sections being substantially hollow and having a lighting fixture mounted thereon to support a light exteriorly of said section, said lighting fixture being adjustably positioned with respect to said section to direct the light in any desired direction, electrical conductors extending interiorly of said section and connected to said light fixture, one of said sections having an abutment member extending therefrom, and means for moving said abutment member outwardly of said section for engagement with one of the surfaces to support the pole between the two surfaces.

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3. In a lighting unit to be supported by and between floor and ceiling surfaces, comprising a plurality of elongated sections being connected adjacent their ends to the ends of adjacent sections in fixed immovable relation with respect to each other to form a continuous hollow rigid wall throughout the length of said sections when said sections are joined together, a lighting fixture mounted on one of said sections to support a light exteriorly of said section, electrical conductors extending interiorly of said section and connected to said lighting fixture, the outermost of said sections forming a self-contained unit and supporting a rod and spring means within said section for normally urging said rod outwardly of said section for engagement with the surface of a room to support said pole under compression between the floor and ceiling surfaces of said room, said sections and said rod being of a length greater than the distance between the floor and ceiling surfaces when not in use.

4. In a lighting fixture to be supported by and between floor and ceiling surfaces, comprising a plurality of tubular sections joined together to form a single pole, certain of said sections having end portions nesting within the end portions of adjacent sections, said sections having means formed thereon for limiting of the telescopic nesting of said sections and for holding said sections in fixed immovable telescopic relation with respect to each other to form a continuous hollow rigid wall throughout the length of said sections when said sections are joined together, a lighting fixture mounted on one of said sections to support a light exteriorly of said section, electrical conductors extending interiorly of said section and connected to said lighting fixture, the outermost of said sections forming a self-contained unit and supporting a rod and spring means within said section for normally urging said rod outwardly of said section for engagement with the surface of a room to support the pole under compression between said ceiling and floor surface, said sections and said rod being of a length greater than the distance between the floor and ceiling surfaces when not in use.

5. In a lighting fixture to be supported by and between floor and ceiling surfaces, comprising a plurality of tubular sections joined together to form a single pole, certain of said sections having end portions nesting within the end portions of adjacent sections, said sections having means formed thereon for limiting of the telescopic nesting of said sections for holding said sections in fixed immovable telescopic relation with respect to each other to form a continuous hollow rigid wall throughout the length of said sections when said sections are joined together, a lighting fixture mounted on one of said sections to support a light exteriorly of said section, said lighting fixture being adjustably positioned with respect to said section to direct the light in any desired direction, electrical conductors extending interiorly of said section and connected to said lighting fixture, the outermost of said sections forming a self-contained unit and supporting an abutment member extending therefrom and spring means within said section for normally urging said abutment member outwardly of said section for engagement with one of the surfaces to support the pole under compression between the two surfaces, said pole being of a length greater than the distance between the floor and ceiling surfaces when not in use.

6. In a lighting fixture to be supported by and between floor and ceiling surfaces, comprising a plurality of elongated tubular sections detachably joined together to form a single pole, certain of said sections having end portions nesting within the end portions of adjacent sections, said sections having means formed thereon for limiting the telescopic nesting of said sections for holding said sections in fixed immovable telescopic relation with respect to each other to form a continuous hollow rigid wall throughout the length of said sections when said sections

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are joined together, a lighting fixture mounted on one of said sections to support a light exteriorly of said section, said lighting fixture being adjustably positioned with respect to said section to direct the light in any desired direction, an electrical conductor extending interiorly of said section and connected to said lighting fixture, the lowermost of said sections supporting an adjustable leg for engagement with the floor surface, the uppermost of said section forming a self-contained unit and supporting a rod and spring means within said section for normally urging said rod upwardly of said section for engagement with the ceiling surface to support the pole under compression between said two surfaces, said pole being of a length greater than the distance between the floor and ceiling surfaces when not in use.

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References Cited in the file of this patent

UNITED STATES PATENTS

527,273	Fowler et al.	Oct. 9, 1894
953,425	Miller	Mar. 29, 1910
1,175,522	Horn	Mar. 14, 1916
1,573,286	Whitney	Feb. 16, 1926
1,999,844	McElroy	Apr. 30, 1935
2,120,619	Matthiesen	June 4, 1938
2,164,609	Cusick	July 4, 1939
2,540,752	Negovan	Feb. 6, 1951
2,638,302	Reed	May 12, 1953
2,688,684	Miskella	Sept. 7, 1954