

March 20, 1928.

1,663,357

G. STEFAN

LIGHTING FIXTURE

Filed Feb. 2, 1927

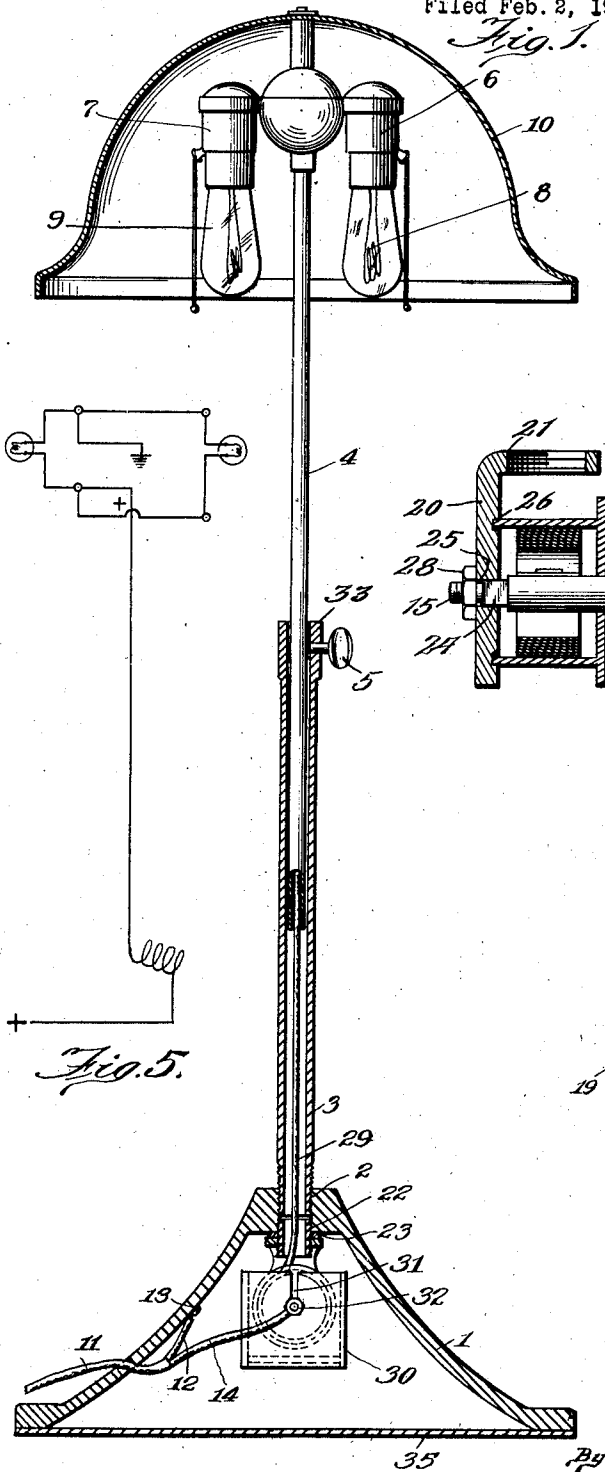


Fig. 2.

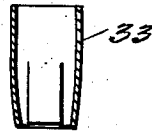


Fig. 4.

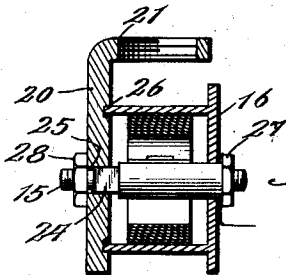
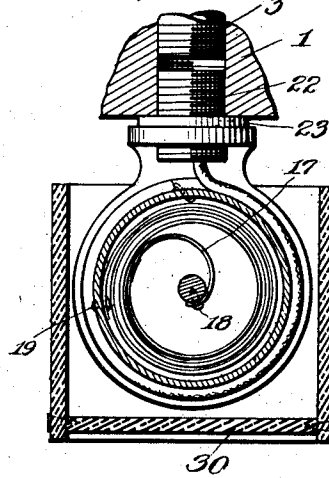


Fig. 3.



Inventor:
Gega Stefan
Irwin D. Groak
Atty.

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UNITED STATES PATENT OFFICE.

GEZA STEFAN, OF CHICAGO, ILLINOIS.

LIGHTING FIXTURE.

Application filed February 2, 1927. Serial No. 165,327.

The invention relates to lighting fixtures and has a special relation to adjustable floor or table lighting fixtures.

The object of the invention is to provide a lighting fixture of the character described which may be adapted for use as a floor lamp when in extended position and as a table lamp when in collapsed position.

A further object of the invention is to provide a lighting fixture of the character described wherein the base and body portion may form one of the electric conductors for the lighting means and a single wire extending through the base and body but insulated therefrom may form the other conductor for said lighting means.

A further object of the invention is to provide a lighting fixture of the character described having a base and novel means mounted in said base upon which may be wound one of the conductors to the lamp filaments for holding the said conductor taut in any desired adjusted position, said means also forming part of said conductor.

A further object of the invention is to provide a lighting fixture of the character described having a base and a body, said body comprising telescoping members and means rigidly secured to one of said members whereby the members will be maintained in close contact with each other at all times.

A still further object of the invention is to provide a lighting fixture of the character described, which will be simple in construction, easy to assemble and inexpensive to manufacture.

With the foregoing and other objects in view, which will appear as the description proceeds, this invention consists in the construction, arrangement and combination of parts of my fixture whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in the appended claim, and illustrated in the accompanying drawings, in which;

Fig. 1 is an elevational view shown partly in section of a lighting fixture embodying the invention;

Fig. 2 is a detail sectional view of the sleeve member employed for maintaining a close contact between the telescoping members;

Fig. 3 is a detail sectional view of the spring drum and insulating casing surrounding the same;

Fig. 4 is a cross sectional view of the spring drum upon which is yieldingly wound one of the conductors; and

Fig. 5 is a wiring diagram of the circuit for the lamp filaments.

Referring to the drawings 1 represents a hollow base for a floor or table lamp, said base being made of metal or any other suitable conducting material, and is provided at its upper end with a screw threaded opening 2 adapted for receiving therein one end of a tubular metal member 3, the other end of which member 3 is adapted for receiving a second metal tubular member 4, which is adapted to telescope in the member 3. A set screw 5 extends through an opening in the upper portion of the member 3 for engagement with the member 4 whereby said members may be rigidly held in any desirable adjusted position. The top of the member 4 has attached thereto in the usual manner the electric light sockets 6 and 7 for receiving the light bulbs 8 and 9, said bulbs being surrounded by a shade 10 secured in a well known manner to a portion of the tubular member 4 to be supported thereby.

The following novel structure is employed for supplying electric energy to the lamps 8 and 9. The wire or cable 11 from the floor plug may be passed through an opening provided in the base 1 and one of the conductors 12 of said cable may be secured by solder or in any other suitable manner to a portion of the base as shown at 13. The other conductor 14 of the cable 11 may be connected by solder or in any other suitable manner to one end of a shaft 15 upon which shaft is mounted for rotation a spring drum 16 open at one end and encasing a spiral spring 17, one end of which spring is detachably secured to a portion of the shaft 15 by means of a slot provided in one end of said spring and a projection 18 formed on said shaft, and the other end of which spring is secured in a similar manner to a projection 19 formed on the inside surface of said drum 16. The open end of said drum is closed by a member 20 having a horizontally extending collar 21 formed at its upper end for supporting said member 20 and drum 16 in their assembled position. A bushing or sleeve 22 of insulating material is threaded into the opening 2 provided in the top of the base 1, upon which may be threaded the collar 21, said collar being insulated from the base 1 by means of a

washer 23 of insulating material or in any other suitable manner.

The shaft 15 is provided with a squared portion 24 which is adapted to be received in a squared opening 25 formed in the member 20 for preventing any rotation of said shaft relative to said member 20, and for permitting rotation of said drum 16 relative to both the shaft and member 20. A circular groove 26 is provided in the inner face of the member 20 and is adapted to receive therein the open end of the drum so as to make close contact between said drum and member 20 at all times. Nuts 27 and 28 are threaded on the ends of the shaft 15 for holding the drum and member 20 in assembled position. The wire or conductor 14 is secured to one end of the shaft 15, and the circuit is continued through the member 20 to the drum 16 to which is connected by solder or any other suitable manner one end of a conductor or wire 29, a portion of which may be wound around said drum and the remainder of which extends through the tubular members 3 and 4 to be connected to the sockets 6 and 7. The return line for this circuit is through the tubular members and base to the cable 11. Because of the portion of wire 29 being wound on the spring drum the members 3 and 4 may be extended to their full extended position to be used as a floor lamp or they may be collapsed to be used as a table lamp, the wire 29 being maintained taut at all times and out of the way in the body of the lighting fixture.

The drum and member 20 may be positioned in a box 30 of insulating material to insulate them from the base 1. The box 30 is open at its upper end and is provided on its sides with slots 31 for receiving the ends of the shaft 15, and nuts 32 of insulating material are threaded on the free ends of said shaft for holding said box on the shaft in its assembled position.

The tubular members 3 and 4 must be maintained in close contact with each other at all times in order to insure a good circuit. This is accomplished by positioning a sleeve 33 of metal or the like, in the upper portion of the tubular member 3, the lower portion of said sleeve being slitted and bent inwardly to form a plurality of inwardly extending spring fingers 34 for engagement with the member 4. By this construction a good contact is always maintained between the tubular members and this is important as the body of the lighting fixture is to act as one of the conductors for the electric circuit to the lamps. A plate 35 may be arranged on the bottom of the base and secured thereto in the usual manner.

In the wiring diagram illustrated in Fig. 5

the completed circuit may be readily traced. The plus line enters the fixture through the opening in the base and is secured to the spring drum through which it passes to the wire 29 to the lamp filaments. The return line comprises the tubular members 3 and 4 and the base 1. In the case where the base 1 may be constructed of a non-conducting material, the wire 12 may be secured directly to a portion of the tubular member 3, the remaining structure being the same.

It will be noted that the invention provides a lighting fixture which may be simple to assemble and construct, conceals all of the conducting wires within the body of the fixture and which may be adapted for several different uses.

This invention is not to be understood as restricted to the details shown and described, since they may be modified within the scope of the appended claim, without departing from the spirit and scope of the invention.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:

In a lighting fixture of the character described the combination of a base of metal having tubular telescoping members of metal mounted thereon, and electric light bulbs supported by said telescoping members, an electric circuit supplying current to said bulbs, said base and tubular members forming one conductor for said circuit, an electric conductor comprising a single wire extending through said tubular members to said bulbs forming a portion of the other conductor for said circuit, means cooperating with said tubular members for assuring a good electrical contact therebetween at all times, said means comprising a metallic sleeve having inwardly extending spring fingers formed thereon, said sleeve being rigidly secured to one of said tubular members in position for bringing the spring fingers thereof into yielding engagement with the other of said tubular members, a metallic bracket mounted and supported within said base and insulated therefrom, a metallic shaft mounted on said bracket, said shaft having a metallic spring wound drum mounted for rotation thereon, said drum having a portion of said wire wound thereon for permitting the extension or withdrawal thereof as the telescoping members are extended or collapsed, and means surrounding said drum for insulating the same from said base, said drum and shaft being electrically connected with said single wire wound thereon so as to form the remaining portion of said conductor for said circuit.

In testimony whereof I affix my signature.
GEZA STEFAN.