Dec. 2, 1924. 1,517,626

M. HERSKOVITZ

ELECTRIC LIGHTING FIXTURE

Filed March 5, 192.

Fig. 1.

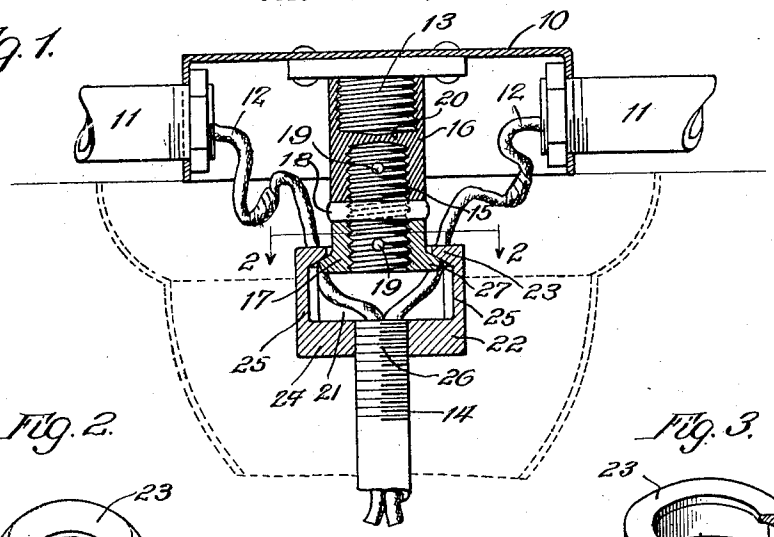


Fig. 2.

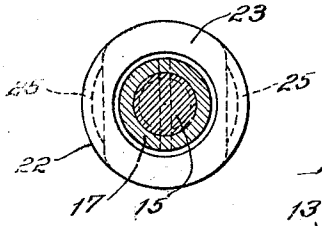


Fig. 3.

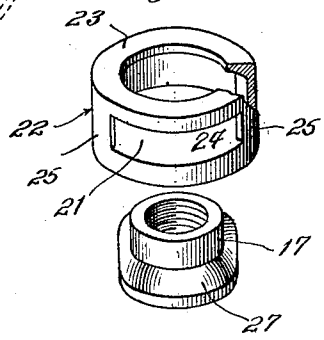


Fig. 4.

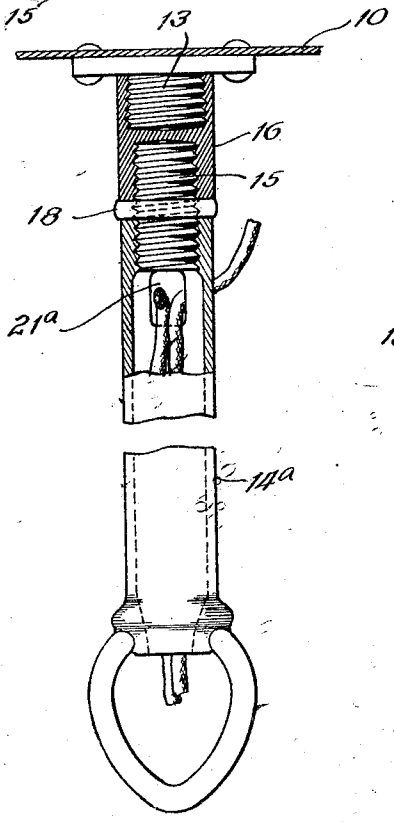


Fig. 5.

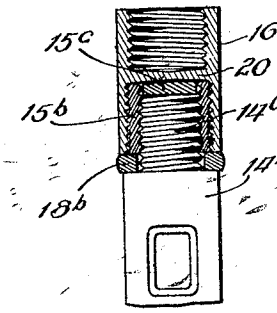
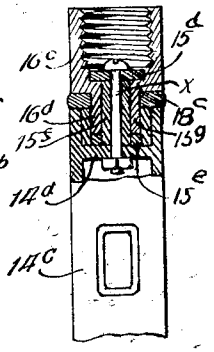


Fig. 6



Inventor:
Max Herskovitz
By: Charles O. Skinner
his Atty.

Patented Dec. 2, 1924. 1,517,626

UNITED STATES PATENT OFFICE.

MAX HERSKOVITZ, OF CHICAGO, ILLINOIS; WILLIAM HERSKOVITZ AND CHARLES WEINFELD EXECUTORS OF SAID MAX HERSKOVITZ, DECEASED.

ELECTRIC-LIGHTING FIXTURE.

Application filed March 5, 1921. Serial No. 449,963.

To all whom it may concern:

Be it known that I, MAX HERSKOVITZ, a citizen of the United States, and a resident of Chicago, Cook County, and State of Illinois, have invented certain new and useful Improvements in Electric-Lighting Fixtures, of which the following is declared to be a full, clear, and exact description.

This invention relates to electric lighting fixtures and its principal object is to provide an insulator for lighting fixtures and forming part of the ceiling or wall connection, which is of simple, practical and economical construction. In many large cities it is necessary to provide insulation between the electric lighting fixture and its support, to guard against short circuits, and usually such insulation comprises large blocks of insulation material and is comparatively expensive. One of the objects of this invention is to provide a light insulator which may be readily and quickly assembled with the fixture. Another object is to provide an insulator for the fixture which is flexible or non-rigid, whereby the fixture may center itself and hang plumb.

The invention is clearly illustrated in the accompanying drawing, in which:—

Fig. 1 is a vertical section through the upper portion of an electric lighting fixture and its supporting connection showing a simple embodiment of the present invention. Fig. 2 is a horizontal section taken on line 2—2 of Fig. 1. Fig. 3 is a perspective view of a hickey and bushing comprising two members of the device. Fig. 4 is a view partly in side elevation and partly in central vertical section, showing a slightly modified form of the present invention. Fig. 5 is a view partly in side elevation and partly in central vertical section of a second slightly modified form of the invention, and Fig. 6 is a view, partly in side elevation and partly in central vertical section of a third modified form of the invention.

Referring to said drawing and first to Figs. 1 to 3, inclusive, which illustrate the preferred embodiment of the invention, the reference character 10 designates an outlet box of ordinary construction, and 11 the electric conduits or pipes that contain the usual electric conductor cords 12. The usual screw threaded supporting stud 13 is secured to the outlet box, as is customary, and forms the means for supporting the fixture. The parts described are common and well known, and require no further description so far as this specification is concerned.

The electric lighting fixture, in which the preferred embodiment of the invention is illustrated in Figs. 1 to 3, has a stem 14 which is separated from the stud 13 by an insulated connection which permits of relative movement between the stud 13 and stem 14. Between the stem 14 and stud 13 is interposed a threaded insulating plug 15 formed of fiber or other tough, hard insulating material, and said insulating plug completely insulates the fixture from the stud 13. One end of said insulating plug 15 is screwed into one end of a coupling 16 and its other end is screwed into a bushing 17, and between said coupling and bushing is interposed a flange or shoulder 18 formed of insulating material, which, if desired, may be integral with or separate from the insulating plug 15. Preferably, the insulating plug may be positively secured against removal from the coupling 16 and bushing 17 by pins 19, which extend through the coupling, plug and bushing. The coupling 16 is internally threaded at its upper or free end, and screws upon the supporting stud 13, as is clearly shown in Fig. 1. Preferably the two threaded ends of the coupling 16 are separated by a wall or partition 20.

In cases where a stem 14 of usual construction is employed in the fixture, I provide a flexible or loose connection between said stem and the insulating plug to permit the fixture to center itself and hang plumb, in case the stud is out of plumb. Said connection comprises a hickey 22 having a centrally apertured top portion 23 and a bottom portion 24 connected by a side wall 25, having transverse openings 21 formed therein through which the conductor cords may pass. The bottom portion 24 of the hickey is centrally apertured and the aperture is threaded to receive the screw threaded end of the stem 14. The bushing 17 projects out through the opening in the top portion 23 of the hickey 22 and at its lower end it is formed with a flange 27 upon which the top portion 23 of the hickey 22 rests. Preferably the upper surface of the flange 27 is made convex and the underside of the top portion of the hickey 22 is made concave, thereby providing a sort of ball-and-socket-

like connection between the two, whereby the stem may center itself upon the bushing and hang plumb. The flange 27 is made narrow enough to pass through the opening 21 in the side wall 25 of the hickey 22, and in assembling the bushing and hickey, the bushing is inserted through an opening in the side wall of the hickey and its apertured end thrust out through the opening in the top portion thereof. The flange of the bushing 17 is made long enough to engage with the edges of the side walls 25 when the bushing is in place in the hickey (see Fig. 2), whereby the bushing and hickey are held against relative rotation with respect to each other.

In the modified form illustrated in Fig. 4 the coupling 16 and insulating plug 15 may be constructed as in the preferred form, but the flexible connection is omitted, and the stem 14^a is directly connected with the insulating plug 15. In this form, the stem 14^a is shown as having outlet openings 21^a near its upper end for the conductor cords, and its upper open end is internally screw threaded and screws upon the lower end of the insulating plug 15. The insulated spacing shoulder 18 is interposed between the coupling 16 and stem 14^a, thereby completely insulating the stem from the coupling. The lower end of the stem is shown as provided with a loop or other means for supporting the remainder of the lighting fixture.

In the modified form illustrated in Fig. 5, a hollow stem 14^b is used, as in the modified form shown in Fig. 4, but in this case the stem is formed with a reduced externally screw threaded neck 14^c. The stem is insulated from the coupling 16 by an externally and internally threaded sleeve 15^b which is formed of insulating material, and which screws into the coupling 16 and upon the neck 14^c of the stem. A block 15^c of insulating material is interposed between the extreme end of the neck 14^c and wall or partition 20 of the coupling and a shoulder or ring 18^b of insulating material is interposed between the lower end of the coupling and body of the stem 14^b.

In the modified form illustrated in Fig. 6, the coupling 16^c is internally threaded at its upper end and its lower end is reduced in diameter to leave a neck 16^d. The stem 14^c is connected to the coupling 16^c by a screw x, which extends through the neck portion 16^d and through a cross wall 14^d of the stem 14^c. The coupling and stem are completely insulated from each other by a fibre spacing shoulder 18^c, interposed between the stem and coupling, fibre washer 15^d between the screw x and coupling, a fibre washer 15^e between the neck 16^d and cross wall 14^d, a fibre sleeve 15^f between the shank of the screw and internal face of the neck 16^d and a fibre sleeve 15^g between the neck 16^d and internal face of the stem 14^c.

The stems of the various forms may comprise the tubular chandelier member of lighting fixtures, and the coupling, insulating plug, bushing, hickey and stem of the preferred form may be assembled to provide a unit ready for installing in buildings. Likewise, the coupling, insulating plug, and stem comprising the modified forms are assembled to provide units for installation. Conveniently, in assembling the unit a bar may be inserted in the openings of the hickey and outlet openings of the stem for use as a handle when screwing the parts upon the insulating plug, and said bar will also act as a stop to prevent the insulating plug from entering beyond the outlet hole in the hickey or stem.

More or less variation of the exact details of construction is possible without departing from the spirit of this invention: I desire, therefore, not to limit myself to the exact form of the construction shown and described, but intend, in the following claims, to point out all of the invention disclosed herein.

I claim as new and desire to secure by Letters Patent:

1. An insulator for electric lighting fixtures, comprising a coupling threaded at both ends, a hickey having outlet openings for conductor cords and an open annular top, the underside of which is concave, an internally threaded bushing capable of being inserted into said hickey through said outlet openings and extending out through said opening in the top of said hickey and having a flange, convex upon its upper face, and upon which said hickey rests, said flange extending into said outlet openings for engagement with the side wall of the hickey, whereby the coupling and hickey are held against relative rotation, a threaded insulating plug secured in said bushing and coupling and an insulating shoulder interposed between said coupling and bushing.

2. An insulator for electric lighting fixtures, comprising a coupling threaded at both ends, a hickey having an open annular top the underside of which is concave, said hickey having also an outlet opening in its side, and an internally threaded bushing capable of being inserted into said hickey through said outlet opening and extending out through said open top of the hickey and having a convex flange on which the concave underface of the top rests, a threaded insulating plug secured in said bushing and coupling and an insulating shoulder interposed between said coupling and bushing.

MAX HERSKOVITZ.