

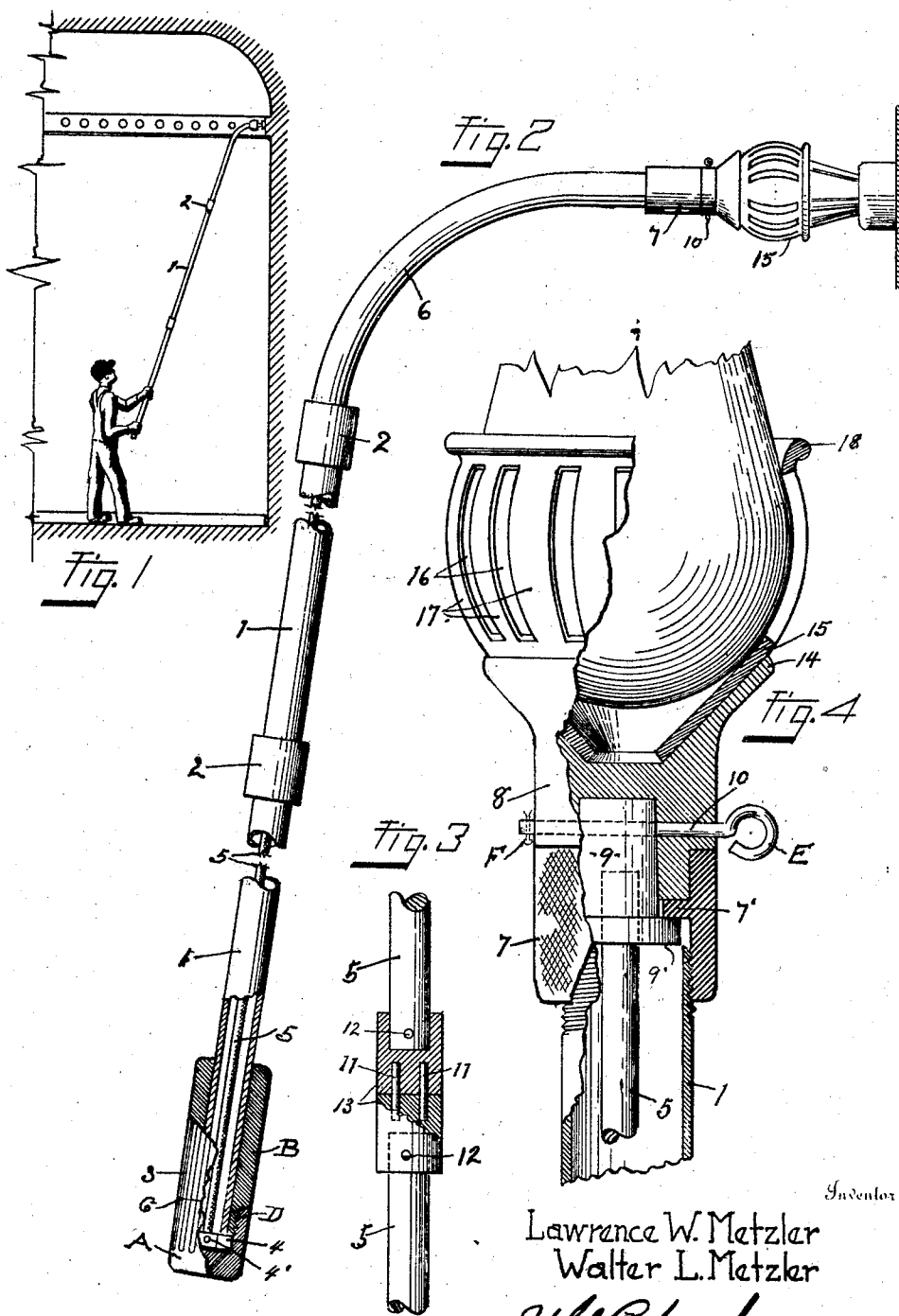
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L. W. METZLER ET AL

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ELECTRIC LAMP MAINTENANCE DEVICE

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Inventor
Lawrence W. Metzler
Walter L. Metzler
U.S. Charles
Attorney

UNITED STATES PATENT OFFICE.

LAWRENCE W. METZLER AND WALTER L. METZLER, OF TOPEKA, KANSAS.

ELECTRIC-LAMP-MAINTENANCE DEVICE.

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To all whom it may concern:

Be it known that we, LAWRENCE W. METZLER and WALTER L. METZLER, citizens of the United States, residing in Topeka, county of Shawnee, and State of Kansas, have invented certain new and useful Improvements in Electric-Lamp-Maintenance Devices, of which the following is a specification, reference being had to the accompanying drawings, which form a part of this application.

Our invention relates to an electric lamp maintenance device and has for its principal object the possibility of withdrawing and replacing of electric lamps on the ceiling or frieze of rooms without the use of ladders of scaffolding or other provisions being made at the time of constructing of the building for permanent access to the lighting means.

A still further object of our invention is to provide a device having extension means for the varying heights of lamps that may be encountered.

A still further object of the invention is to provide a device that will manipulate the lamp whether it be vertically or horizontally disposed.

Referring the drawings, Fig. 1 is a miniature picture illustrating the use of the device. Fig. 2 is a detailed drawing of the staff and curvature. Fig. 3 is an enlarged detailed drawing of the connection employed for the drive cable. Fig. 4 is an enlarged detailed drawing of the grip and connections to the staff and cable for rotating the grip.

1 is a hollow tube functioning as a staff, the said tube being in lengths and connected by unions 2, the object of which is to vary the lengths as the height of the lamps may require; on the end of the first section of the staff is a grip 3, revolubly mounted and in the end of said grip as at 4 is a hexagon member firmly mounted therein, to which the cable 5, is attached by means of a pin 4', by which means the said cable is energized.

6 is a section of the said grip, which is made in two parts, the members A, and B, dividing on a line as at C the said members being screwed firmly together as shown at D, to member A, the cable 5 is firmly attached as heretofore described, the said grip is held in position on the end of the staff by the cable or other means may be employed independent of the cable, the tubing having a curvature and is firmly connected to the

staff by union 2, as heretofore described, the said section may be curved to accommodate the different position of lamps, and are interchangeable as the case may require, on the opposite end of said curved member is a ferrule 7, which is screwed firmly to the pipe 1, 8 is a member revolubly mounted in the end of said ferrule 7, and is held in engagement therewith by a stud 9, said stud being seated in said member 8, and held firmly therein by a pin 10, having a ring E on the end thereof, and on the opposite end of said pin A, cotter F, to prevent said pin from sliding outward, said stud 9 having a flange 9', engaging on an annular ring 7', which is integral with said ferrule 7, functioning as means for holding said member 8 rotatably connected to said ferrule, in the end of said stud, and firmly imbedded in the end thereof, is a flexible cable 5, which transmits the torque imposed upon member 3, to member 8 independent of the staff as designated by 1, and continued by member 6, said staff being firmly jointed by unions as heretofore described.

At the places in the staff 1, connected by unions 2, the flexible cable 5 is arranged as shown in detail drawing, Fig. 3, so as to permit interchange of staff accessories and lengths 7. The connection 13 is so arranged as to firmly hold cable 5, by means of pin 12 and transmit torque, between connections 13 by means of dowel pins 11, the said dowels being rigidly connected to one member of the connection, and slideably engaging in apertures in the adjacent member.

Member 8 having an annular flange 14, forming a socket adapted to receive a flexible member 15, the said member being firmly connected to the walls of the socket and extending outward conforming to the shape of a lamp globe functioning as a grip for rotating the lamp for placing or removing the lamp. Said grip may be made of rubber, fabric, or other flexible material, and in the walls thereof may be openings 16, so that the remaining ribs 17, will yield spirally gripping firmly to the smooth surface of the lamp globe, 18 is a flexible rim flaring slightly so that the lamp will enter the socket more freely, the said rim expanding and contracting as it passes over the larger portion of the lamp.

We do not confine ourselves to make the grip exactly as shown in detail as the walls

thereof may have spirally imposed slits, or other materials may be used having a sufficient grip, without mutilating the walls.

And such other modifications may be made as are within the scope of the appended claim.

Having thus described our invention what we claim as new and desire to secure by Letters Patent is:—

10 In an electric lamp maintenance device, a hollow staff having a rotatably mounted sleeve over the end thereof, on the opposite end a hollow curved member rigidly mounted thereon, a ferrule screwed on the end of
15 said curved member, an annular flange in said ferrule, a socket rotably mounted on the end of said ferrule and a stud fastened to said socket by means of a pin so that said socket will rotate with said stud, a

flange on said stud engaging said annular 20 flange in said ferrule on the opposite side from said socket so that the socket and stud are rotatably mounted relative to said ferrule, a rubber flexible grip having a plurality of grooves in the side, and in close proximity 25 to each other so that the remaining, intervening, flexible portion will yield spirally, gripping the lamp bulb, a torque transmitting cable connected to the extreme outer end of said sleeve, the said outer end being 30 detachable, but sufficiently rigid to rotate said cable, the opposite end of said cable extending into an aperture in said stud and rigidly fastened therein so that said cable will transmit torque to said socket.

LAWRENCE W. METZLER.
WALTER L. METZLER.