A. A. MOFFITT. LAMP RECEPTACLE.

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NO MODEL.

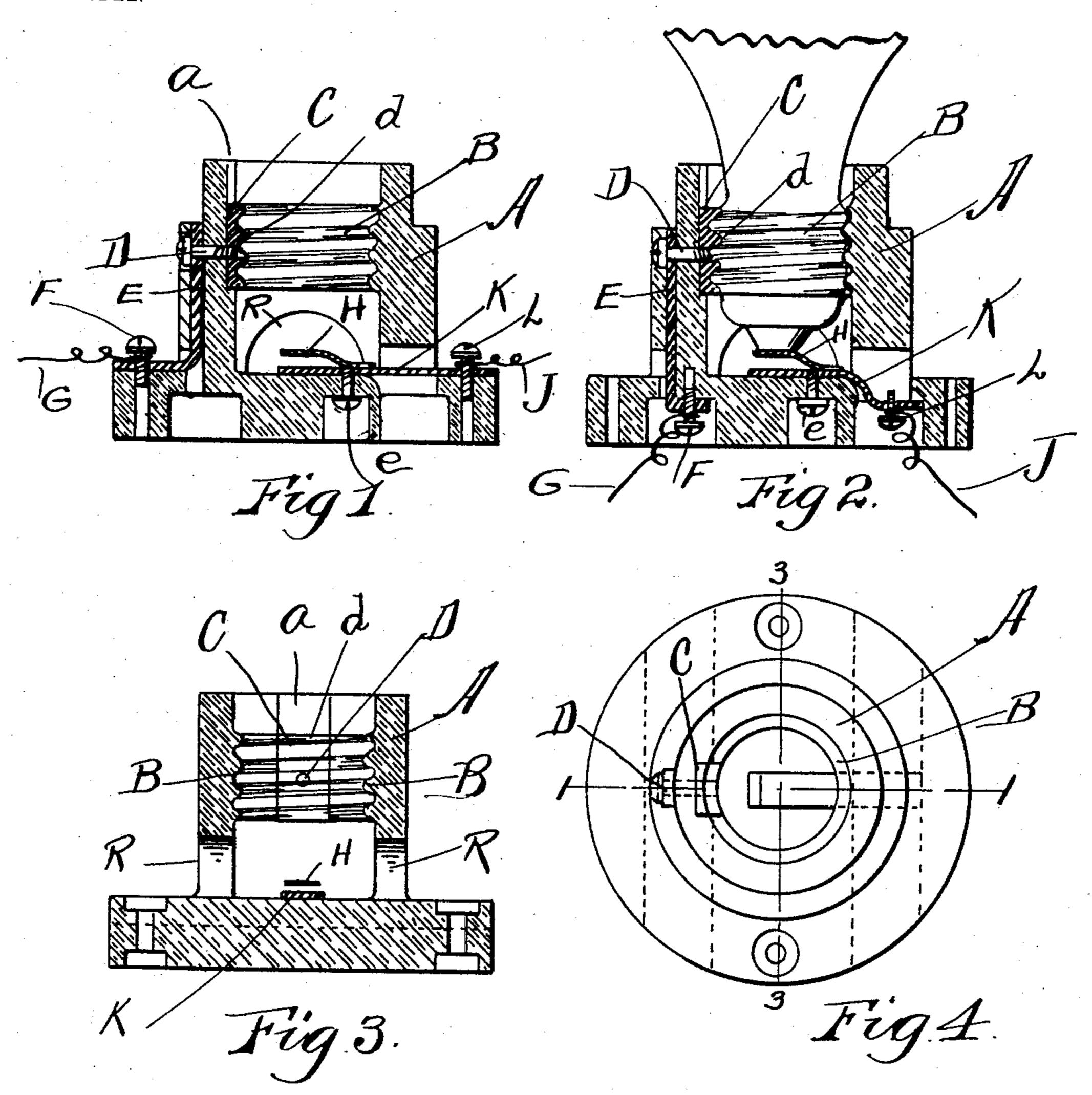


Fig.5.

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Franka. Foster E. S. Ogden. Andrew Moffitt

Howard & Ballow.

United States Patent Office.

ANDREW A. MOFFITT, OF PAWTUCKET, RHODE ISLAND.

LAMP-RECEPTACLE.

SPECIFICATION forming part of Letters Patent No. 771,916, dated October 11, 1904.

Application filed November 14, 1903. Serial No. 181,165. (No model.)

To all whom it may concern:

Be it known that I, Andrew A. Moffitt, a resident of the city of Pawtucket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Lamp-Receptacles; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in receptacles for electric lamps, the primary object of the invention being to provide a lamp-receptacle that will not short-circuit

when exposed to rain and weather.

A further object of the invention is to form on the inner side of the receptacle a threaded portion of the same material by casting or molding and make a connection from the outside of the receptacle to the side of the lamp in the manner hereinafter described.

With these and other objects in view the invention consists of certain novel features of construction and arrangement of parts, as will be more fully hereinafter described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a central vertical section on line 1 1 of Fig. 3° 4, showing my improved construction with the wire connections on the upper side of the flange. Fig. 2 is the same as Fig. 1 except that the wire connections are made in the grooves underneath the receptacle. A portion of a lamp is also shown screwed into the socket. Fig. 3 is a section of my receptacle on line 3 3 of Fig. 4. Fig. 4 is a top view of the receptacle. Fig. 5 is a perspective view of the corrugated-metal block which forms a portion of the threaded part of the receptacle and serves to make one contact

Referring to the drawings more particularly, A denotes the cup-like receptacle, which may be made of porcelain, rubber, fiber, or any other suitable non-conducting material. On the inner side of the cup is formed a threaded portion B of the same material, into which the lamp may be screwed. A groove or channel a is made on the inner side of the

cup, said groove extending from the top edge of the cup down through the threaded portion B. This groove a is to receive the block C, which block may be made of brass, copper, or any other good conducting material. 55 It is corrugated on its face at d, which corrugations register with the threads inside of the cup. This block serves to make the necessary contact with the side of the lamp and is held in position by the screw D, which screw 60 is also of a conducting material and makes the connection from the block to the conducting-strip E, which strip is located on the outside of the cup and is also held in place by the same screw D. At the opposite end of 65 this conducting-strip E is the binding-screw F, which screw serves to bind one of the conducting-wires G to the receptacle. In Fig. 2 this wire G is shown as being connected beneath the receptacle. The connection from 70 the other wire, J, is made to the bottom of the lamp through the conducting-strip K. This strip is held in position by the screw e. The binding-screw L is threaded into one end of said strip, and the contact spring-tongue, 75 against which the bottom of the lamp rests, is attached at the other end. In Fig. 1 the binding-screw L is shown as being on top of the flange, and in Fig. 2 the connection is made from underneath the same. At R R are 80 two large holes through the sides of the receptacle to prevent the rain-water or moisture from collecting therein.

In the ordinary receptacles for electric lamps the inside of the cup is lined with a ring or 85 collar of conducting material, such as copper or brass. This ring is corrugated or threaded to receive the screwend of the lamp. The sides of this collar usually extend down to the bottom of the cup and there connect, through 90 a strip of brass, to the binding-post below. By extending this collar down in this manner there is but a short space left between it and the center contact or other pole, and when these receptacles are exposed to the rain 95 and weather, as is the case when they are attached to signs, &c., out of doors, the water soon makes a short circuit between the two connections and the fuse is blown. Another objection to the brass collar is that under the 100 above condition the action of the current, combined with exposure to the weather, soon splits or cracks said collar, and its utility is

destroyed.

In the practical operation of my improved receptacle all of the above-mentioned defects are obviated. By casting or molding the threaded portion of the same material as the cup the copper collar is entirely done away with, and by using the short corrugated block C as the contact-piece and carrying the connection through the side of the cup and down the outside the danger of short-circuiting is entirely avoided. Then, again, I have cut two large drain-holes RR through the side of the receptacle, so as to effectually prevent any amount of water from collecting there.

Having thus described my invention, what I claim as new, and desire to secure by Letters

20 Patent, is—

1. A device for preventing short-circuiting of electric lamps, comprising a cup portion of non-conducting material, means for securing a lamp therein, a contact for the center of the lamp, a block of conducting material adapted to contact with the side of the lamp, said block and said center contact being located on different horizontal planes, whereby they are separated by an approximately vertical space, and short-circuiting by collection of moisture in said cup is prevented, and means for supplying electricity to said contacts.

2. A device for preventing short-circuiting of electric lamps, comprising a cup portion of non-conducting material, means for securing a lamp therein, a contact for the center of said lamp located in the bottom of said cup, a block of conducting material adapted to form a side contact for the lamp, said block being supported at a distance from the bottom of said cup, whereby short-circuiting by collection of moisture in said cup is prevented, and means for supplying electricity to said contacts.

3. A device for preventing short-circuiting of electric lamps, comprising a cup portion of non-conducting material, means for securing a lamp therein, a contact for the center of said lamp located in the bottom of said cup, a block of conducting material supported in the side of the cup at a distance from the bottom, whereby short-circuiting by collection of moisture in said cup is prevented, means

for supplying electricity to said contact and said block, and means for preventing the accumulation of moisture in said cup.

4. A device for preventing short-circuiting of electric lamps comprising a cup portion of non-conducting material, means for securing a lamp therein, a contact for the center of said lamp located in the bottom of said cup, 60 a second contact comprising a block of conducting material supported in the side of the cup at a distance from the bottom, whereby short-circuiting by collection of moisture in said cup is prevented, a conductor incased 65 within the wall of said cup and connected with

said second contact, and means for supplying

electricity to said conductor and also to said

center contact.

of electric lamps, comprising a cup portion of non-conducting material, means for securing a lamp therein, a contact for the center of the lamp, a block of conducting material adapted to contact with the side of the lamp, said 75 block and said center contact being located on different horizontal planes, whereby they are separated by an approximately vertical space, and short-circuiting by collection of moisture in said cup is prevented, and means for supplying electricity to said contacts, said cup being provided with apertures for conducting off accumulations of moisture.

6. A device for preventing short-circuiting of electric lamps, comprising a cup portion of 85 non-conducting material, means for securing a lamp therein, a contact for the center of the lamp, a block of conducting material adapted to contact with the side of the lamp, said block and said center contact being located on different horizontal planes, whereby they are separated by an approximately vertical space, and short-circuiting by collection of moisture is prevented, a conductor incased within the walls of said cup, and means for connecting 95 said block with said conductor.

In testimony whereof I have hereunto set my hand this 13th day of November, A. D. 1903.

ANDREW A. MOFFITT.

In presence of— Howard E. Barlow, Frank A. Foster.