

No. 887,496.

PATENTED MAY 12, 1908.

G. B. McBEAN.  
OUTLET BOX COVER.  
APPLICATION FILED JAN. 4, 1907.

Fig. 2.

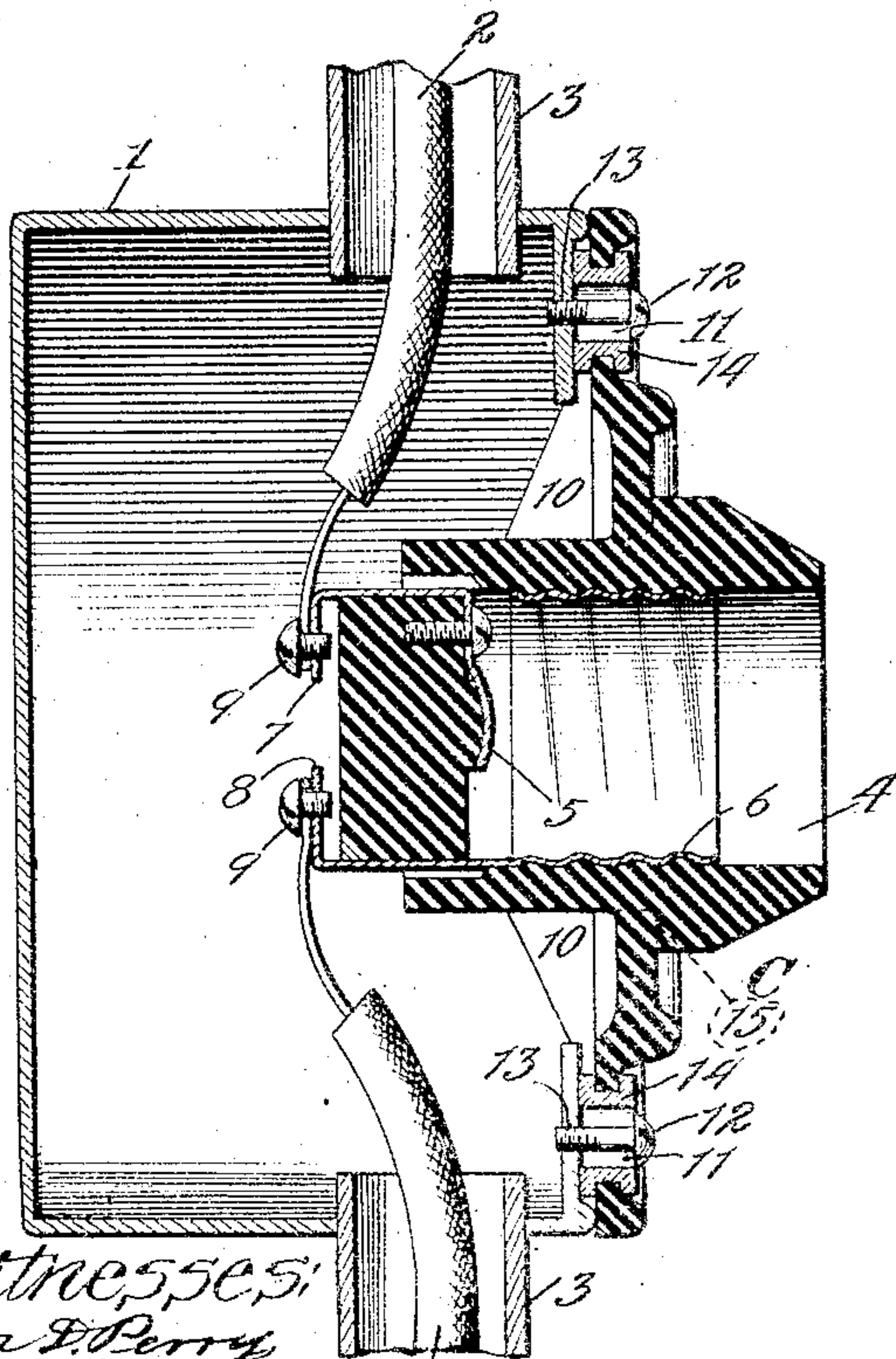
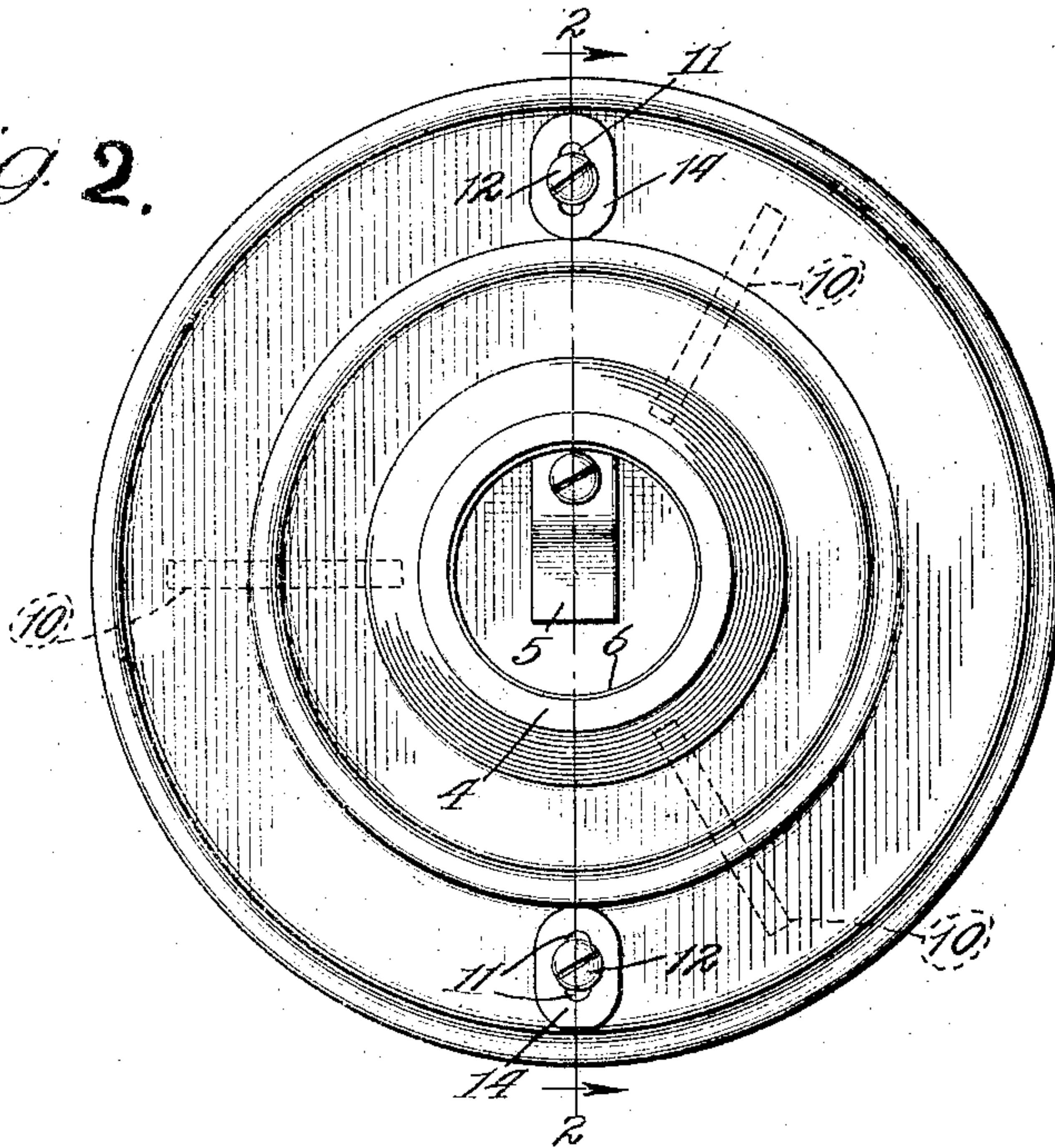


Fig. 1.

Witnesses:  
Chas. D. Perry  
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Inventor  
G. B. McBean  
By *[Signature]* Att'y.



# UNITED STATES PATENT OFFICE.

GEORGE B. McBEAN, OF CHICAGO, ILLINOIS.

## OUTLET-BOX COVER.

No. 887,496.

Specification of Letters Patent.

Patented May 12, 1908.

Application filed January 4, 1907. Serial No. 350,707.

*To all whom it may concern:*

Be it known that I, GEORGE B. McBEAN, a citizen of the United States of America, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Outlet-Box Covers, of which the following is a specification.

In wiring houses and other buildings for electric lights, it is at present necessary, in order to meet the requirements of modern insurance and municipal regulations, to inclose the conducting wires in tubes which lead through the walls and ceilings of the buildings into terminal or "outlet" boxes, where connections are made with the necessary fixtures, or directly with the lamp socket. To permit of the latter connection it is convenient to locate the lamp socket in the cover of the terminal box, and attempts have heretofore been made to do this in such manner as to provide, at a reasonable cost, a suitably-insulated lamp socket and a strong, durable and readily attached cover, of a character not likely to be burned out by any short circuiting which may occur back of the cover within the box, but so far as I am aware in all of these prior attempts the construction is such that arcing may sometimes occur between the conductors and the metal of the cover, even when the cover is lined with a non-conducting fiber, or like material, riveted or otherwise secured to its inner face.

It is therefore the object of the present invention to improve these combined covers and sockets in such manner that they may be made with the lowest possible expense and at the same time will have a neat appearance, will give me the widest possible choice of insulating material and will effectually prevent arcing and short circuiting, as more fully hereinafter set forth.

The invention consists in the matters thus and hereinafter set forth and particularly pointed out in the appended claims, when considered in connection with the accompanying drawing, in which,—

Figure 1 is a sectional view of an outlet box provided with a porcelain lamp socket and cover made of substantially a single piece, in accordance with my invention. Fig. 2 is an outside front view of the socket and cover.

In said drawing, 1 designates an ordinary terminal or outlet box into which the con-

ductor wires 2 of an electric lighting system are brought, usually through tubes 3.

C designates, as a whole, the cover of the box, which, in accordance with the present invention, is made of what practically amounts to a solid piece of glass, porcelain, or other insulating frangible material. At its center this cover is formed with a socket portion 4 that is made of the usual shape of sockets for receiving incandescent electric lamp bulbs, and is provided with the usual metallic terminals 5 and 6, one of which takes the form of an internally threaded sleeve into which the end of the bulb can be screwed. Portions 7 and 8 of these terminals are extended back through apertures in the rear end of the socket to receive the binding screws 9 by which connections are made with the conductors 2.

The disk portion of the cover, of which the socket portion 4 forms, as it were, a central hub, is likewise made of frangible insulating material such as porcelain, and surrounds the socket like a flange, its extreme diameter being substantially that of the outlet box for which it is to serve as a cover. This portion of the cover may be made comparatively thin and light, and at the same time kept from warping by a plurality of radial ribs 10, herein shown as three in number. Radially elongated slots 11 are provided at diametrically opposite points near the outer edges of the cover, and by passing screws 12 through these slots into tapped holes 13 in the outlet box, the cover may be readily and securely clamped to the latter. The radial elongation of the holes 11 renders it unnecessary for the holes 13 to be located with any great degree of accuracy, and in order to prevent the pressure of the screws from cracking the frangible cover the slots 11 are lined with flanged bushings 14, preferably made of some soft metal or alloy into which the heads of the screws seat themselves without placing a breaking strain upon the cover.

In the practical making of the cover and socket thus described, the socket and disk portion of the cover can be molded separately, the disk being provided at its center with a hole large enough to receive the socket. The latter is then inserted in the disk and positioned there by the contact of a shoulder 15, formed on the socket, with the face of the disk. The parts are then baked together, after being treated with the wash



which forms the glaze of the porcelain, and when taken from the oven will be cemented together and in what amounts to a single integral piece. As is obvious, by thus combining the socket and cover in a unitary structure I shall not only have the widest possible choice of insulating materials but am also able to mold or press the structure at a single operation and thus materially reduce the expense of manufacture as well as entirely eliminate destructive arcing and short circuiting; and it will be observed also that by my manner of fastening the cover in place I am enabled to use material even more frangible than porcelain (for instance, annealed glass, colored or uncolored) as the flanges on the bushings need embrace the edges of the holes but comparatively lightly, the body portions of the bushings taking up all the strain of the fastening screws.

A cover constructed in this manner can be produced at exceedingly low cost and made exceedingly attractive in appearance.

I claim as my invention:—

25 1. The combination of an outlet box for electric conductors, a combined cover and lamp socket, made of frangible insulating material, the socket portion being made integral with the cover portion and provided with metallic terminals and being adapted to receive and hold the lamp, and the cover portion being provided with holes near its edges,

metallic bushings in these holes, and fastening screws passing through the bushings and engaging the body portion thereof, thus relieving the frangible material of the strain of the fastening devices. 35

2. A cover for outlet boxes consisting of a plate of insulating material adapted for attachment to the box and having formed integral with it a lamp socket, this socket extending centrally through the cover and having its rear end closed by an integral insulating portion, a threaded metallic lining in the socket having a terminal extension extending through the back wall thereof, and another terminal supported on the back wall and extending back through the same. 40 45

3. A cover for outlet boxes adapted for attachment to a box and having an integral tubular socket extending through it centrally and radial ribs connecting the rearwardly extending portion of the socket to the inner face of the cover, these ribs being integral with the socket and the cover, and suitable terminals carried by the socket at its inner end. 50 55

In testimony, that I claim the foregoing as my invention, I affix my signature in presence of two subscribing witnesses, this 18th of December, A. D. 1906.

GEORGE B. McBEA

Witnesses:

K. A. COSTELLO,  
M. V. McGRATH.