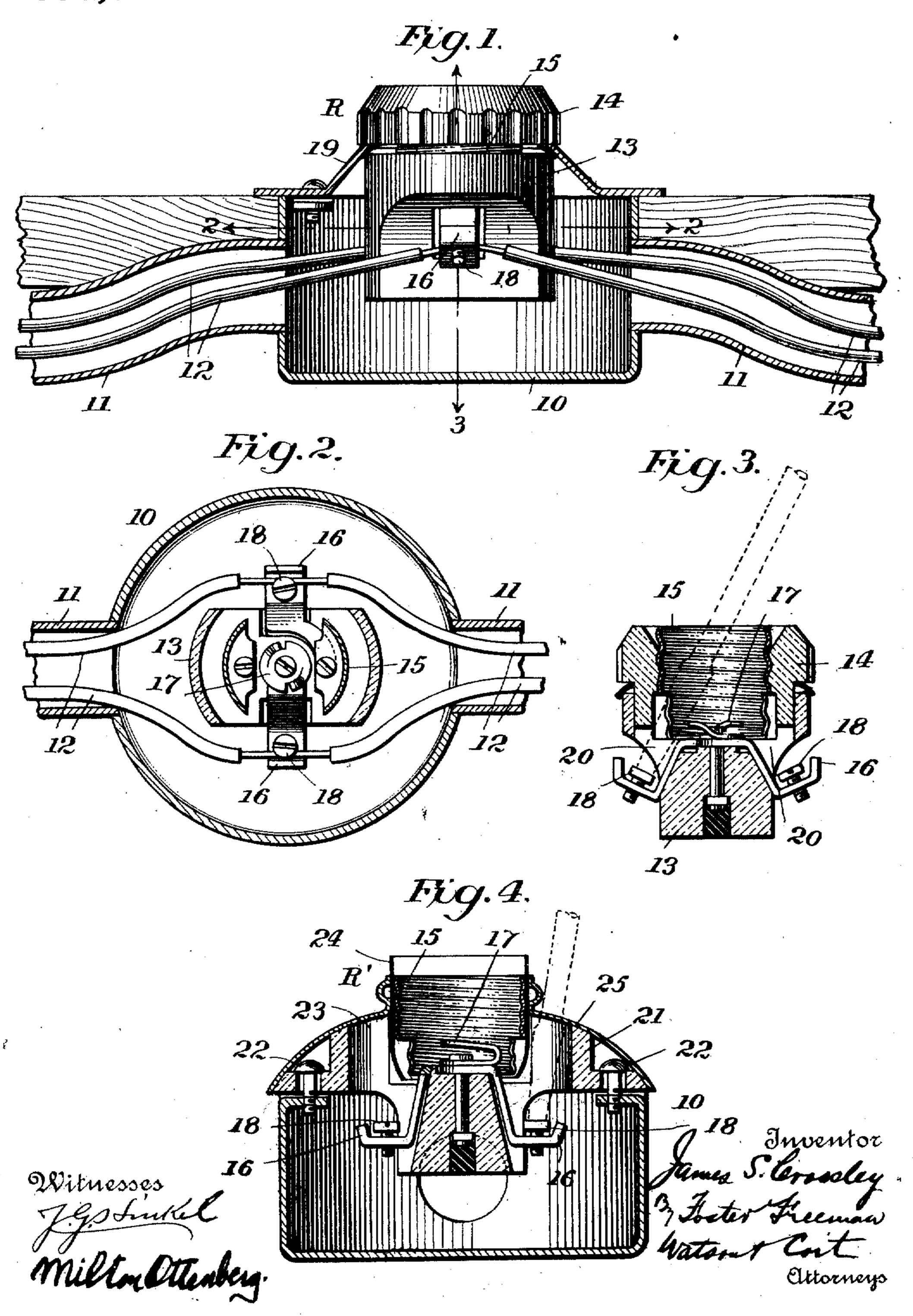
J. S. CROSSLEY.

ELECTRICAL RECEPTACLE.

APPLICATION FILED NOV. 18, 1909.

994,980.

Patented June 13, 1911.



## UNITED STATES PATENT OFFICE.

JAMES S. CROSSLEY, OF SOLVAY, NEW YORK, ASSIGNOR TO PASS AND SEYMOUR, INC., OF SOLVAY, NEW YORK, A CORPORATION OF NEW YORK,

## ELECTRICAL RECEPTACLE.

994,980.

Specification of Letters Patent. Patented June 13, 1911.

Application filed November 18, 1909. Serial No. 528,797.

To all whom it may concern:

Be it known that I, James S. Crossley, a citizen of the United States, and resident of | Solvay, county of Onondaga, State of New York, have invented certain new and useful Improvements in Electrical Receptacles, of which the following is a specification.

This invention relates to receptacles for incandescent lamps, plugs and other similar 10 electrical devices, and its object is to provide an appliance of the above type which is so constructed that the terminals may be operated, to connect and disconnect them with line wires, from the front of the device 15 and without removing the same from the outlet box or other wire covering.

The invention will be described in connection with the accompanying drawings, in which,

Figure 1 is a section through an outlet box showing a receptacle embodying one form of the invention in position; Fig. 2 is a section on the line 2 of Fig. 1; Fig. 3 is a section on the line 3 of Fig. 1; Fig. 4 is a sec-25 tional view similar to Fig. 1 but showing the invention embodied in another form of base.

Referring to the drawing, 10 indicates an outlet box of ordinary construction, 11 con-30 duits communicating with the outlet box and 12 the line wires in the conduit.

Referring to Figs. 1 to 3 inclusive, R indicates the receptacle which comprises a base 13 of insulating material such as porcelain 35 and a top or cap 14 of like material. To the base is suitably connected the usual metal socket 15 which is adapted to receive a lamp or plug and the top or cap 14 is attached to the base, as shown, by screwing it onto the 40 outer surface of the socket. One of the hooked terminals 16 is suitably connected with the socket 15, as shown in Fig. 2, and the other terminal 16 is connected with the usual central contact 17. The terminals 45 are provided with binding screws 18 for securing the line wires and connecting them suitably with the terminals. As shown the receptacle is supported centrally in the outlet box by means of a plate 19 which is se-50 cured to the box and the inner margin of which is clamped between the base 13 and the top 14 of the receptacle. The plate 19 forms an ornamental covering for the outlet box and may be of any suitable design. 55

As heretofore constructed, it has been

necessary to remove receptacles from the outlet boxes or other foundations to which they are secured in order to connect or disconnect the line wires and this necessarily required considerable slack in the wires, as 60 the wires had to be drawn out of the box with the receptacle. This excess of wire which had to be coiled or doubled loosely in the box was objectionable as adding to the risk of short circuits, and furthermore there 65 was danger of the wiremen not leaving sufficient wire to permit of removing the receptacle, in which case the wires had to be broken or unduly strained.

The principal object of the present inven- 70 tion is to provide a receptacle which may be connected and disconnected to the line wires in an outlet box or the like without drawing the wires out of the box and which permits of the adjustment of the binding screws and 75 the connection or disconnection of the wires without disconnecting or disturbing the receptacle itself with relation to the box or base on which it is mounted.

The foregoing object is accomplished, as 80 shown in Figs. I to 3 inclusive, by providing openings 20 in the bases 13 and corresponding or registering openings in the threaded sockets 15 through which a screw driver may be passed to manipulate the binding screws, 85 as indicated in Fig. 3, in which a screw driver blade is shown in dotted lines. These openings also permit of the passage of a hook, pliers or other instrument, with which to place the wires under the binding 90 screws or dislodge them from such position. It will be evident from an inspection of the drawing that the line wires may be readily connected or disconnected with the terminals without disturbing any part of the re- 95 ceptacle. The receptacle is also arranged for easy connection to passing or through line wires as distinguished from ended wires. It will also be evident that the invention may be embodied in many different 100 forms or designs of receptacles. I have illustrated one modification, which will now be described.

Referring to Fig. 4, R' indicates a receptacle having a broad insulating base 21 105 adapted to be directly connected to the outlet box 10 by means of screws 22. The terminals 16 are connected respectively to the socket 15 and the central contact 17 in any suitable manner and they are provided with 110

the usual binding screws 18. In this form of the invention I provide openings 23 through the base 21 which are situated directly over the binding screws and exterior 5 to the socket 15 and through these openings the binding screws and the wires are readily accessible. If desired the socket 15 may be cut away to also provide for access to the screws from its interior, but in Fig. 2 I 10 have shown a layer of insulating material 24 surrounding the socket and have especially provided for access to the screws through the outer openings 23, as indicated by the screw driver blade, shown in dotted 15 lines. The receptacle shown in Fig. 4 is provided with an ornamental cap plate 25 which is suitably connected to the base and which must be removed when it is desired to manipulate the terminals. It will be under-20 stood that this cap or cover is removably held in place by screws or some other suitable

way. Having thus described my invention, what

I claim is:—

25 1. In a receptacle, the combination with an insulating base adapted for insertion in an outlet box or suitable support, of terminals located rearwardly on said base and provided with means operable from the 30 front of the receptacle for clamping line wires to said terminals, said base being provided with recesses in alinement with said clamping means, whereby said clamping means may be operated from the front of 35 said receptacle to clamp and release the wires from said terminals leaving the base undisturbed.

2. In a receptacle, the combination with an insulating base, of terminals thereon, 40 means operable from the front of the receptacle for clamping wires to said terminals, said base being provided with recesses in alinement with said clamping means and extending through the walls of said base and 45 open to the front face of the receptacle, whereby said clamping means may be operated from the front of the receptacle to clamp and release the wires from said terminais.

3. In a receptacle, the combination with an insulating base, of contact pieces in said base, including a metal socket, terminals connected to said pieces and located rearwardly of the socket, means operable from the front 55 of the receptacle for clamping conducting wires to said terminals, and means whereby said clamping means may be operated by a tool inserted through the socket to clamp

and release the wires from said terminals. 4. In a receptacle, the combination with an insulating base, of contact pieces in said base, including a metal socket, terminals connected to said pieces and located at the rear of the receptacle, and means operable 65 from the front of the receptacle for clamp-

ing conducting wires to said terminals, said base being provided with recessed portions whereby said clamping means may be operated by a tool inserted through the socket to clamp and release the wires from said ter- 70 minals.

5. In a receptacle, the combination with an insulating base, of contact pieces in said base including a metal socket, hooked terminals connected to said pieces and located 75 in rear of the front of the base, means operable from the front of the receptacle for clamping conducting wires to said terminals, and means whereby said clamping means may be operated by a tool inserted 80 through the socket to clamp and release the wires from said terminals, said terminals being located within the line of the outside contour of the base.

6. The combination with an outlet box or 85 suitable support, of a receptacle, and means for securing the same to said box or support, the said receptacle being provided with terminals adapted for connection to line wires and being provided with openings whereby 90 the said terminals may be manipulated from the front of the receptacle and without disconnecting the same from the outlet box or

support.

7. The combination with an outlet box or 95 other suitable support, of a receptacle adapted thereto, and means for securing the receptacle upon the front of the box or support, said receptacle comprising a socket, a base and terminals on the base in rear 100 of the socket, and said base being provided with openings registering with the terminals whereby the terminals may be manipulated for connecting and disconnecting the line wires without disturbing the relation 105 of the receptacle to the outlet box or other support.

8. The combination with an outlet box or other suitable support, of a receptacle adapted thereto, and means for securing the 110 receptacle upon the front of the box or support, said receptacle comprising a socket, a base and terminals on the base in rear of the socket, and said base and socket being provided with openings registering with the 115 terminals whereby the terminals may be manipulated for connecting and disconnecting the line wires without disturbing the relation of the receptacle to the outlet box or other support.

9. The combination with an outlet box, of a receptacle adapted to be attached to said box and to close the front thereof, an insulating base in said receptacle, terminals mounted on said base and adapted for con- 125 nection to line wires within the box, and openings in the receptacle whereby the terminals may be manipulated for connecting and disconnecting the line wires by an instrument passed into the receptacle from the 130

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front thereof and without disturbing the relation of the receptacle to the outlet box.

10. In a receptacle, the combination with an insulating base, of contact pieces thereon, terminals connected to said pieces and located in rear of the front of the base, and means operable from the front of the receptacle for clamping conducting wires to said terminals, said base being provided with openings in alinement with said clamping

means, and with lateral recesses in which the clamping means are located, and through which the wires pass.

In testimony whereof I affix my signature

in presence of two witnesses.

JAMES S. CROSSLEY.

Witnesses:

B. E. Salisbury, W. B. Hudson.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."