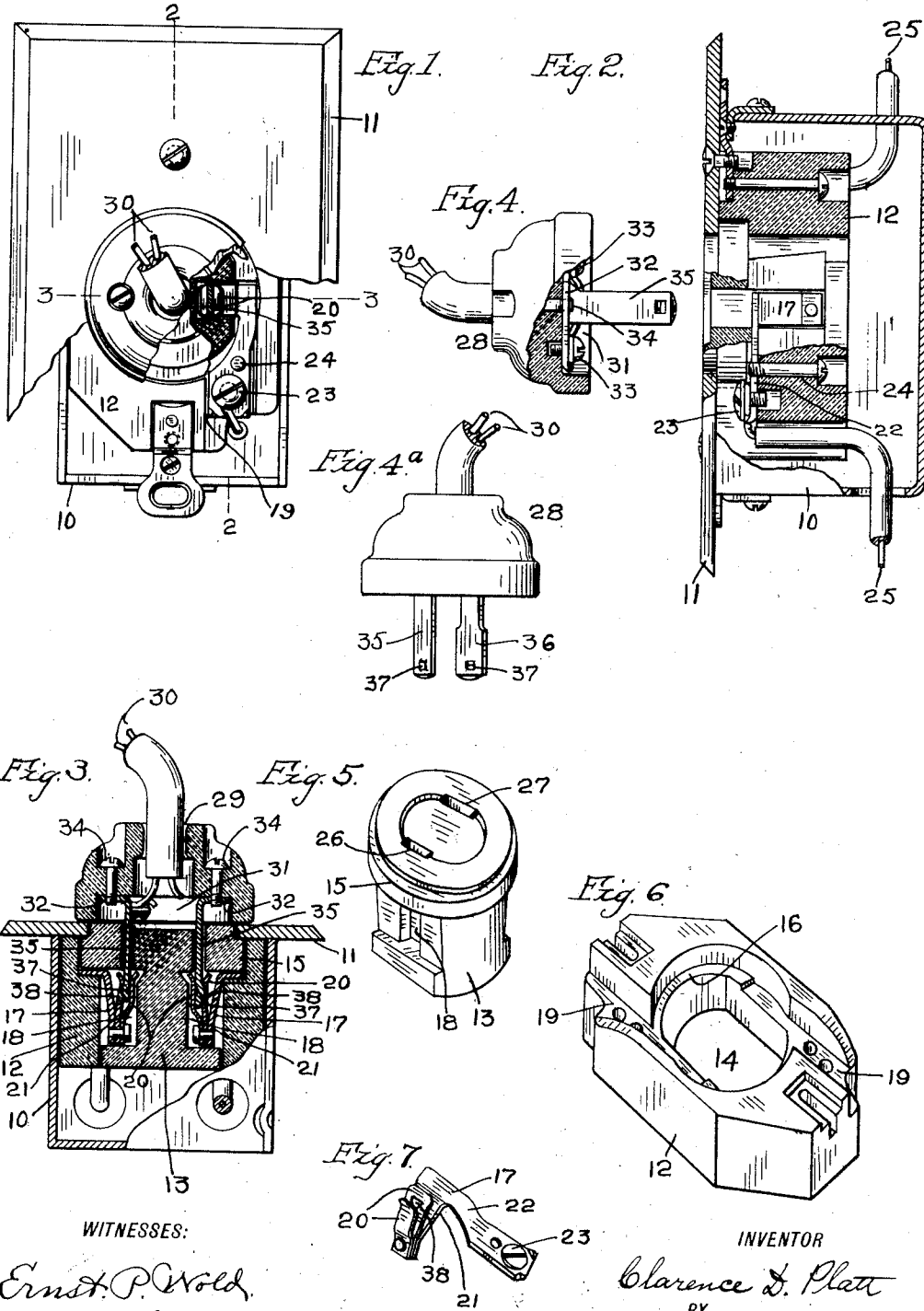


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 FLUSH ATTACHMENT PLUG RECEPTACLE.
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1,012,150.

Patented Dec. 19, 1911.



WITNESSES:

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FLUSH ATTACHMENT-PLUG RECEPTACLE.

1,012,150.

Specification of Letters Patent.

Patented Dec. 19, 1911.

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To all whom it may concern:

Be it known that I, CLARENCE D. PLATT, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented an Improvement in Flush Attachment-Plug Receptacles, of which the following is a specification.

This invention relates to flush attachment plug receptacles and has for its general object to simplify and cheapen their construction and to greatly improve their mode of operation in use.

It is one of the objects of the invention to provide a receptacle in which the number of parts and screws will be reduced to the minimum and the parts shall all be simple and inexpensive to produce.

A further object of the invention is to provide a receptacle which can be easily and quickly installed and wired for use without removing or separating any of the parts, it being of course understood that the cover plates are wholly independent of the receptacles and are shipped in separate packages.

A further object of the invention is to provide a receptacle which is adapted for use with either a reversible or polarity plug.

A further object of the invention is to provide a convertible plug which may be changed from a reversible to a polarity plug by simply changing one of the contact bars.

A further object of the invention is to provide a receptacle having its terminals thoroughly protected and insulated and in which the insulating center block shall be retained in the base by means of the terminals only, thus eliminating screws and nuts and doing away with adjustment of the terminals.

With these and other objects in view the invention consists in certain constructions and in certain parts improvements and combinations which will be hereinafter described and then specifically pointed out in the claims hereunto appended.

In the accompanying drawing forming a part of this specification, Figure 1 is an elevation of my novel receptacle with the plug in engagement therewith, the top plate and plug being partly removed and the cen-

ter block being partly in section; Fig. 2 a partial longitudinal section on the line 2—2 in Fig. 1; Fig. 3 a transverse section on the line 3—3 in Fig. 1; Fig. 4 an elevation partly in section, corresponding with Fig. 2, of a reversible plug; Fig. 4^a a perspective of a polarity plug; Fig. 5 a perspective of the center block detached; Fig. 6 a perspective of the base detached; and Fig. 7 is a perspective of one of the terminals detached.

10 denotes the wall box or casing and 11 the cover plate which is attached thereto in the usual or in any preferred manner.

My novel receptacle comprises a base 12 and center block 13 both made of insulating material. The base is provided with an opening 14 which may or may not extend through the bottom thereof and which receives the center block. By omitting the usual bottom in the base I make the base so much shallower and adapt it to be used in very thin walls, or where the base is mounted in a box, as shown in the drawing, considerably more room is left in the box for the wires. The upper end of the center block is provided with a circular rib 15 which rests upon a shoulder 16 in opening 14. I have shown the center block as flattened on opposite sides below the rib, the opening in the base being shaped to receive it, the flattened portions terminating in ribs 15'.

17 denotes the terminals as a whole, which are seated in sockets 18 in the sides of the center block and extend outward from the central opening in longitudinal channels 19 in the base. Each terminal comprises contact plates 20 riveted to a plate 21 provided with an extension 22 which lies in a plane substantially at right angles to plate 21, rests upon shoulder 16 and under the rib on the center block, extends outward in the corresponding channel and carries a binding screw 23. The terminals and the center block are secured to the base by screws 24 which extend upward through the base and engage extension 22. In this connection it will be noted that the terminals 17 project over the ribs 15' of the center block 13 and thus lock the latter in place. To disconnect said block it is first necessary to remove the

screws 24 whereupon the parts may be separated. There is one screw only for each terminal, no other screws being required as the terminals themselves retain the center

5 block in place.
25 denotes the line wires which are connected to the binding screws in the terminals. The center block is provided with openings 26 and 27 which extend downward
10 into sockets 18 in alinement with contact plates 20. These openings are adapted to receive contact bars upon the plug. One of the openings, opening 27 in the present instance, is made wider than the companion
15 opening for a purpose presently to be explained.

28 denotes the plug which is made of insulating material and is provided with a central hole 29 to receive wires 30 and a
20 recess 31 in its under side which receives plates 32 carrying binding screws 33 and from which the contact bars extend. Plates 32 and the contact bars are secured in place by screws 34. I have shown narrow and
25 wide contact bars indicated respectively by 35 and 36. Openings 26 in the center block are adapted to receive contact bars 35 only and openings 27 are adapted to receive either contact bar 35 or 36. Should a re-
30 versible plug be required, the plug is provided with two contact bars 35, as in Fig. 4, which permit the plug to be engaged with the receptacle either way. Should a polarity plug be required, however, the plug
35 is provided with a contact bar 35 and a contact bar 36, as in Fig. 4^a. When this form of plug is used the plug can be engaged with the receptacle in one way only as contact bar 36 will not enter opening 26,
40 and the plug must be turned to place contact bar 36 in alinement with opening 27 before the plug can be placed in engagement with the terminals of the receptacle.

Electrical connection is made by simply
45 passing the contact bars on the plug through the openings in the center block and into engagement with the terminals therein. The contact bars may or may not be provided with bosses 37 and one of the contact
50 plates 20 of each terminal with a corresponding opening 38 to receive the boss, as clearly shown in Fig. 3.

Having thus described my invention I claim:

55 1. A receptacle of the character described comprising a base having an opening, a center block in said opening, terminals socketed in the center block and screws engaging the terminals whereby the terminals
60 and center block are secured to the base.

2. A receptacle of the character described comprising a base provided with an opening having a shoulder and channels leading
65 from the opening, a center block having a rib resting on the shoulder, sockets, and

openings leading into the sockets, terminals in the sockets having extensions lying in the channels and binding screws, and screws engaging the terminals, for the purpose set forth.

3. A receptacle of the character described comprising a base having an opening, a center block in said opening having sockets and openings leading into the sockets, one of said openings being longer than the other,
75 terminals in the sockets and screws engaging the terminals, for the purpose set forth.

4. The combination with a receptacle comprising a base having an opening, a center block in said opening having sockets and openings leading into the sockets, and terminals secured to the base and having projecting contact ends lying in the sockets, and engaging the center block to retain the same in position.

5. The combination with a receptacle comprising a base having an opening, a center block in said opening and having sockets and openings leading into the sockets, one of said openings being longer than the other, and terminals secured to the base and having projecting contact ends lying in the sockets and engaging the center block to retain the same in position.

6. The combination with a receptacle comprising a base having an opening with a shoulder therein and channels leading from the opening, a center block in said opening having a rib engaging the shoulder, sockets, and openings leading into the sockets and terminals secured to the base and having projecting contact ends lying in the sockets and having extensions lying in the channels and provided with binding screws, said contact ends engaging said center block to retain the same in position.

7. A convertible plug having a central opening for wires and a recess in its under side, and plates secured in said recess and provided with binding screws and contact bars of different widths, for the purpose set forth.

8. A receptacle of the character described comprising an insulating base having an opening and channels leading therefrom, a center block in said opening and terminals socketed in the center block and having extensions lying in the channels and provided with binding screws, said terminals locking the center block in position, the terminals and extensions being insulated by the base and center block.

9. A receptacle of the character described comprising a base with an opening through it, a center block filling said opening and terminals socketed in the block, said terminals retaining said center block in position.

10. A receptacle of the character described comprising a base having an opening through it and provided with a shoulder

and channels, a center block extending
through the opening and resting on the
shoulder, sockets in said block and openings
leading into the sockets, and terminals in
5 the sockets having extensions lying in the
channels, said terminals retaining the center
block in position.

In testimony whereof I affix my signature
in presence of two witnesses.

CLARENCE D. PLATT.

Witnesses:

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S. W. ATHERTON.