

F. T. WHEELER.
 FLUSH PLATE FOR FLUSH RECEPTACLES.
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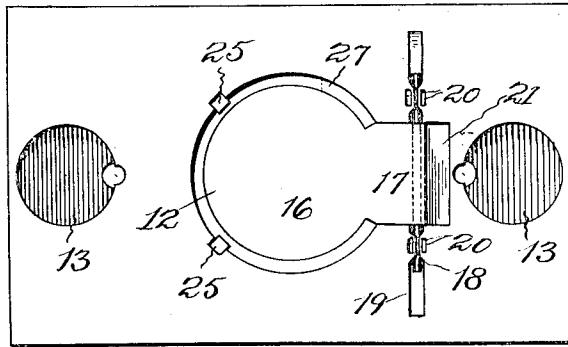
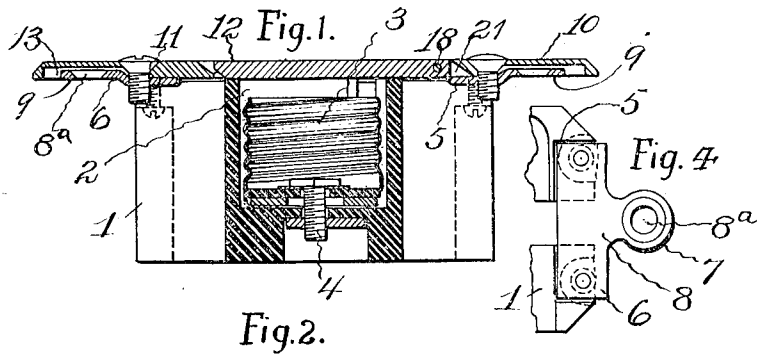


Fig. 3.

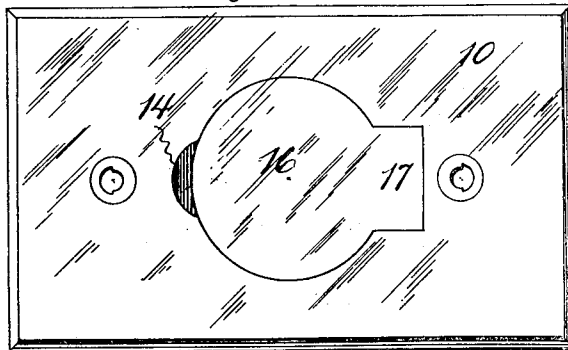
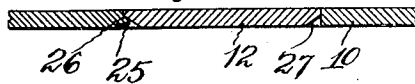


Fig. 5



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UNITED STATES PATENT OFFICE.

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FLUSH PLATE FOR FLUSH RECEPTACLES.

943,958.

Specification of Letters Patent. Patented Dec. 21, 1909.

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To all whom it may concern:

Be it known that I, FRANK T. WHEELER, a citizen of the United States, and a resident of Plainville, in the county of Hartford and State of Connecticut, (whose post-office address is Plainville, Connecticut,) have invented certain new and useful Improvements in Flush Plates for Flush Receptacles, of which the following is a full, clear, and exact description, whereby any one skilled in the art may make and use the same.

The invention relates primarily to "flush receptacles" that is, the class of electrical devices in which the live terminals are arranged within a block of insulating material which is "let in" to a wall, base-board or the like, and more particularly to the plate or finished cover for protecting the parts of the receptacle while giving access to its interior.

The objects of the invention are to provide a flush plate which is in truth an absolute flush plate covering the various parts of the receptacle and lying wholly upon the surface of the wall or base board.

Referring to the drawings:—Figure 1 is a sectional view through such a receptacle and its face plate. Fig. 2 is a detail face view of the rear face of the face plate. Fig. 3 is a front face view of the same. Fig. 4 is a detail plan view of a portion of the receptacle showing the fastening lugs with the face-plate removed. Fig. 5 is a sectional view through the plate and trap cutting through one of the stops for the trap.

It is particularly desirable in the use of flush receptacles that the insulating block or base be located entirely within the wall or opening of the wall or base-board; and it is also essential that the face-plate rests securely against the face of the wall or base-board. Of course, to hold the receptacle in place, means must be provided for securing it, and these holding means have generally been of such a form and arrangement that it was necessary to mar the surface of the wall where they are secured.

It is one of the objects of the present invention to provide a face-plate in conjunction with holding means for the receptacle, which will permit the face-plate resting wholly against the face of the wall and with the holding means also exterior to the wall

opening within which the base of the receptacle is inserted. In all such devices there must be a hinged door to form ready access to the terminal members, and it is most desirable to have this hinged door tightly close the opening and leave a perfectly smooth plate, the door lying flush with the face plate.

In forming the plate herein described, provision is made for preventing inward movement. The trap or hinged door is pressed out of a plate of material and the opening thus formed is then reamed out until the trap and opening fit nicely together.

Referring to the drawings, the numeral 1 denotes a block of insulating material for a flush receptacle, having the usual central opening 2 within which are arranged a tubular contact member 3 and a central stud contact member 4. At either end of the insulating block 1 and on its outer face are formed recesses 5 surrounded by insulating material and within which are suitably secured lugs or tangs 6. These are preferably secured to the insulating base by screws passing through said base and entering threaded openings in the lugs. The outer ends of the lugs terminate in eye pieces 7, which are offset from the main body part 8 of the lug and have their lower surface lying substantially in the same plane with the outer face of the insulating block 1. The eyes 7 are perforated as at 8^a, and afford a convenient means of securing the receptacle in place without necessitating the cutting away of the wall or base-board to "let in" the eyes or holding lugs.

The numeral 10 denotes the face plate which is arranged to be secured to the lugs or tangs 6 by screws 11. The face plate has a hinged door or trap 12 overlying the central opening 2 and terminal contacts of the receptacle; and, on its rear face, has openings 13 of a sufficient depth to receive the eye portions 7 of the holding lugs or tangs, thus bringing the face plate 10 into close contact with the surface of the wall or base-board. By this arrangement the insertion and removal of all of the parts may be readily made from the outside without necessitating cutting of the wall or base-board. It is understood, of course, that the main openings of rectangular form are ordinarily

made during the construction of the building for the purpose of receiving the rectangular base of the receptacle. The outer face of the face-plate 10, when the hinged door or trap 12 is closed, presents a smooth and unbroken appearance except for the slight depression 14 which affords a finger opening to permit grasping the bevel edge of the trap or door. The trap is of substantially circular form as to its body part 16, and has an extending portion 17, through the lower edge of which is a pivot opening for the hinge pivot 18.

Coincident with the line of the pivot is an opening 19 formed in the rear face of the face plate 10 by running a milling cutter or like device across said plate. This is of a sufficient depth to receive the pivot 18 and bring the outer edges of the trap or door just flush with the surface of the face-plate. To secure the hinge pivot 18 in place, the metal at the sides of the milled opening, is swaged down on opposite sides thereof as at 20, thus contracting the opening 19 and securely binding the pivot in place.

The face-plate 10 is beveled away as at 21 to permit swinging of the door without interfering with its perfectly flush appearance when it is in closed position. To prevent forcing the plate inward there are provided lugs 25 which are stamped up from the back of the face-plate 10 and forced outward into the opening through said plate. The upper surface 26 of these lugs is formed to correspond to the bevel edge 27 on the trap and thus the face of the plate 10 and its trap are always maintained in perfect alinement, giving a smooth plate surface. In producing this face-plate the door or trap 12 is pressed out of the body of the plate 10, the metal flowing somewhat. The opening formed by pressing out the trap is then reamed and the edges of the trap are trimmed to nicely fit one another. The lugs 25 are formed by pressing out small portions of the metal at the edge of the opening for the trap and thus provide the necessary stops to prevent inward movement of the trap against the porcelain base. Obviously the stop lugs

may very readily be adjusted to bring the outer surface of the trap into perfect registering position with the surface of the face plate, without necessitating the re-finishing of the entire opening formed through said plate, and even after the high finish by buffing, plating, etc., is effected, with its attendant liability of warping or disarranging the parts. This adjustment may be readily effected without liability of injuring the highly finished surfaces.

It will be seen from the above description that the receptacle may be inserted in the wall opening and secured through the eyes 7, and that the flush-plate may then be applied, giving a most finished appearance without necessitating the sinking of the holding parts into the surface of the wall or base-board.

What I claim as my invention and desire to secure by Letters Patent is:—

1. As an article of manufacture, a face plate having a hinged trap, said trap being pressed out of the body of the face plate, and leaving an opening therein conforming substantially to the general outline of the trap, said opening having a lug projecting thereinto and pressed out of the metal of the face plate and forming a stop for the trap, said trap being of substantially circular form with an integral projection, the latter pivoted in the opening of the face plate.

2. As an article of manufacture, a face plate for flush receptacles having a hinged trap, said trap being of substantially circular form with an integral projection, the whole pressed out of the face plate and pivoted in the opening thus formed, a transverse hinge pivot intermediate the projection and face plate and a series of independent lugs pressed out of the metal of the face plate at the edge of the opening and projecting into said opening adjacent to the under surface of the plate forming a stop for the trap.

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Witnesses:

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