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H. F. KRANTZ.
PLUG OR LAMP RECEPTACLE.
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1,044,192.

Patented Nov. 12, 1912.

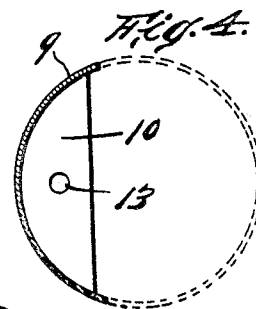
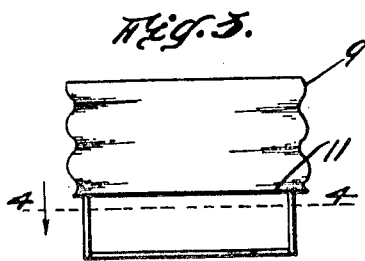
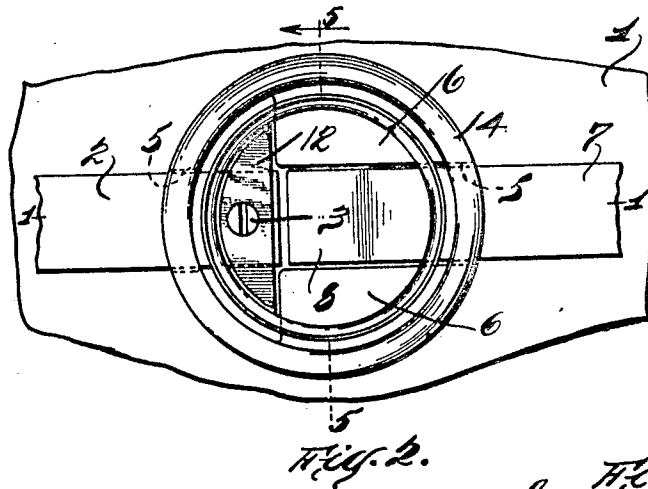
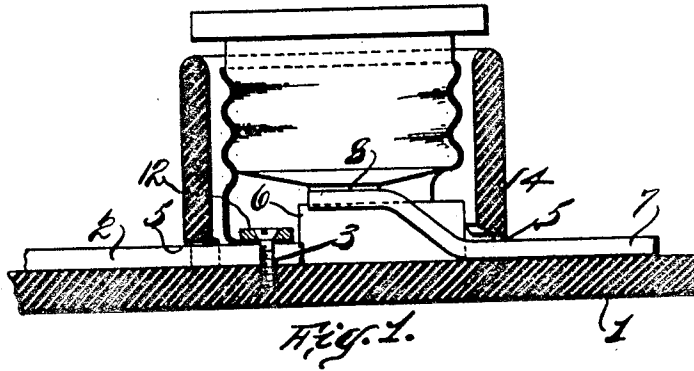
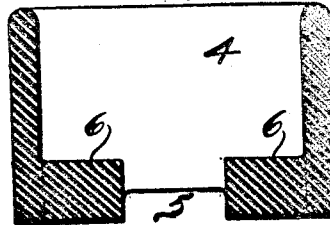


Fig. 5.



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UNITED STATES PATENT OFFICE.

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PLUG OR LAMP RECEPTACLE.

1,044,192.

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To all whom it may concern:

Be it known that I, HUBERT F. KRANTZ, a citizen of the United States, residing at Brooklyn, in the county of Kings, city and State of New York, have invented certain new and useful Improvements in Plug or Lamp Receptacles, of which the following is a clear, full, and exact description.

The object of this invention is to improve the construction of lamp or plug receptacles, to cheapen the construction, to simplify their installation and assembly, and to improve their efficiency by doing away with indirect contacts.

A further object is to reduce the number of screws necessary in such a structure to the minimum.

In carrying out the invention, I provide a casing of any suitable material, preferably porcelain, having at diametrically opposite sides channels through which conductors may be passed. The receptacle is provided with shelves on each side of the conductors for a part of its interior, so terminating as to leave a free and unobstructed opening in the form of a segment of a circle extending through the shell.

It will be understood of course that in making up panel boards and the like, that the conductors are generally rectangular, and are secured to a suitable back plate. According to this invention one of the conductors is bent upwardly and inwardly as it passes between the shelves hereinbefore referred to, and is raised above the plane of such shelves, that it may engage with the center contact of the plug, or lamp base. The other conductor terminates, preferably near the edge of the shelves, passing through a channel in the shell, and this second conductor is adapted to receive a screw passing through it and engaging it or engaging the back plate: I have shown it herein as engaging both conductor and the back plate. This screw is passed through a piece of metal, preferably in the shape of the segment of a circle.

The screw threaded shell which is usually used in devices of this character, and has become the standard, is also provided with a portion in the shape of the segment of a circle at its bottom, while the balance of its lower circumference is cut out so as to fit when in place tightly against the shelves hereinbefore described. As a consequence

of such construction, the mere securing of the screw and threaded shell into place by one screw assembles the entire device, prevents it from rotation, or from vertical movement, for it cannot rotate for channels are provided in the shell of insulation bridging over the conductors, and it cannot rise for the threaded shell and screw are holding the insulated shell down because the shell bears upon the shelves which are an integral part of the porcelain. The ordinary plug or lamp may then be inserted as in any other receptacle.

The scope of my invention will be pointed out in the claims.

In the accompanying drawings: Figure 1 is a central vertical section on line 1—1 Fig. 2 of my improved device. Fig. 2 is a plan of Fig. 1. Fig. 3 is a detail in side elevation of the threaded outer terminal showing its cut-away portion. Fig. 4 is a plan slightly enlarged on line 4—4 Fig. 3. Fig. 5 is a section of the insulating shell taken on line 5—5 Fig. 1.

As shown in the drawings, 1 is the back plate; 2 is a conductor of rectangular cross section provided with a threaded aperture at one end for the reception of a screw 3; 4 is the shell of insulation to protect the parts. It is provided on diametrically opposite sides with channels 5, which straddle the conductors hereinbefore and hereinafter described. The shell 4 is provided with shelves 6 terminating preferably at the sides of the channels 5, and extending a little across the center line indicated by the dotted line 5—5 Fig. 2, so as to leave a free open passage through the shell in the shape of the segment of a circle.

A conductor 7, preferably of rectangular cross section is passed through one of the channels 5, and bent upwardly and inwardly to form a conducting surface 8 above the plane of the shelves 6. A threaded terminal 9 provided with a bottom lip 10, preferably in the shape of the segment of a circle, is provided, a little more than half of its lower cylindrical portion being cut away, so as to accommodate the shelves 6—6, the proportions being such that when the threaded shell is in position the edge 11 of the cylindrical shell will rest upon the shelves 6 and hold them and the receptacle down in place. I prefer to provide a block 12 of metal in the shape of the segment of a circle, an

to pass the screw 3 through the block, through a hole 13 in the shell threading it into conductor 2.

In carrying out this invention, details of construction may be varied from those shown, and yet the essence of the invention be retained; some parts might be employed without others, and new features thereof might be combined with elements old in the art in diverse ways, although the herein described type is regarded as embodying substantial improvements over such modifications.

As many changes could be made in the above construction, and many apparently widely different embodiments of the invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawings shall be interpreted in an illustrative and not in a limiting sense.

It is furthermore desired to be understood that the language used in the following claims is intended to cover all the generic and specific features of the invention herein described, and all statements of the scope of the invention which as a matter of language might be said to fall therebetween.

I claim as my invention:

1. The herein described plug or lamp receptacle, consisting of the protecting shell, the threaded inner terminal shell of conducting material, a back plate, conductors, a projection carried by the protective shell at a distance from its top adapted to be engaged by the threaded terminal shell, means for securing the terminal shell to the back plate, whereby the protective shell will also be held in position against the back plate.

2. The herein described plug or lamp receptacle, consisting of the protecting shell, the threaded inner terminal shell of conducting material, a back plate, conductors, a projection carried by the protective shell at a

distance from its top adapted to be engaged by the threaded terminal shell, means for securing the terminal shell to the back plate, whereby the protective shell will also be held in position against the back plate, channels in said shell engaging said conductors to prevent rotation of the shell by means of their engagement with the conductors.

3. The herein described plug or lamp receptacle, consisting of a back plate, two conductors, a protective shell having an intumed shelf or ledge, one of said conductors being arranged upwardly and inwardly, above the plane of said shelf, to form a central terminal, the other conductor entering the protective shell, a threaded outer terminal within the protective shell, and means for securing the threaded terminal to one conductor, a portion of the threaded shell resting on the shelf, whereby the protective shell is held in position.

4. The herein described plug or lamp receptacle consisting of a back plate, two conductors, a protective shell having intumed shelves or ledges, one of said conductors being arranged upwardly and inwardly above the plane of said shelves, to form a central terminal, the other conductor entering the protective shell, a threaded outer terminal within the protective shell, and means for securing the threaded terminal to one conductor, a portion of the threaded shell resting on the shelves, whereby the protective shell is held in position, said means for securing the threaded shell to the back plate consisting of a single screw passing through the shell.

Signed at Brooklyn, New York, this 19th day of July, in the year one thousand nine hundred and eleven.

HUBERT F. KRANTZ.

Witnesses:

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