

E. H. FREEMAN.
FASTENING DEVICE FOR ELECTRICAL SIGN RECEPTACLES.
APPLICATION FILED APR. 1, 1910.

996,844.

Patented July 4, 1911.

Fig. 1.

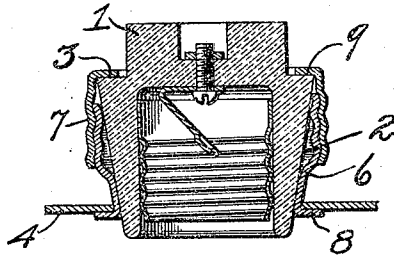


Fig. 3.

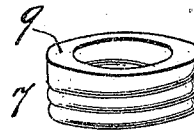


Fig. 4.

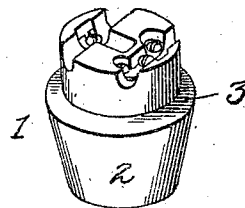


Fig. 2.

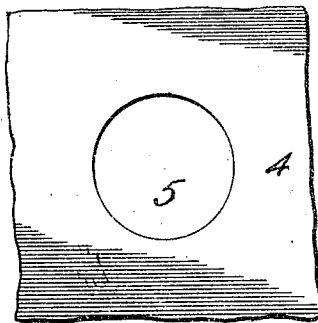
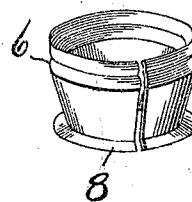


Fig. 5.



Witnesses
W. H. Rockwell
Emory L. Groff.

Inventor
Edgar H. Freeman.

By

D. F. McHaupter
Attorney

UNITED STATES PATENT OFFICE.

EDGAR H. FREEMAN, OF TRENTON, NEW JERSEY, ASSIGNOR TO E. H. FREEMAN ELECTRIC COMPANY, OF TRENTON, NEW JERSEY, A CORPORATION OF NEW JERSEY.

FASTENING DEVICE FOR ELECTRICAL SIGN-RECEPTACLES.

996,844.

Specification of Letters Patent.

Patented July 4, 1911.

Application filed April 1, 1910. Serial No. 552,797.

To all whom it may concern:

Be it known that I, EDGAR H. FREEMAN, a citizen of the United States, residing at Trenton, in the county of Mercer and State of New Jersey, have invented certain new and useful Improvements in Fastening Devices for Electrical Sign-Receptacles, of which the following is a specification.

This invention relates to the subject of fastening means for electrical sign receptacles; and has in view a simple and practical device possessing special utility in its application to the mounting and fastening of electrical receptacles upon a sign board or equivalent supporting element or sheet.

One of the distinctive objects of the present invention is to provide a fastening means for sign receptacles which not only provides means for securely fastening the receptacle to its supporting element, but also positively holds the receptacle against turning without resorting to specially formed holes in the supporting element or any of the other expedients which are commonly employed in some constructions for that purpose.

The present invention also contemplates a structure which is exceedingly simple and of an inexpensive character and, furthermore, one which admits of easy handling and manipulation. In the latter connection the invention is of special utility, that is to say, it not only subserves the functions above indicated, but also greatly facilitates the operations of wiring and placing the receptacle. Also, the present invention admits of the receptacle being positioned and fastened in place wholly from one side of the sign board or other supporting element, which is decidedly advantageous over those forms of sign receptacle fastening which require workmen upon both sides of the sign board.

With these and other objects in view, which will readily appear to those familiar with the art as the details of the invention are better understood, the same consists in the novel construction, combination and arrangement of parts hereinafter more fully described, illustrated and claimed.

The essential features of the invention are necessarily susceptible to structural modification without departing from the spirit or scope thereof, but a preferred and practical embodiment is shown in the accompanying drawings, in which—

Figure 1 is a sectional view illustrating an

electrical receptacle fastened in the sign sheet by the improved fastening devices made according to the present invention. Fig. 2 is a plan view of the sign board or supporting element illustrating the plain round formation of the hole to receive the receptacle body. Figs. 3, 4 and 5 are detail perspective views, respectively, of the coupling and socket members of the fastening and of the receptacle, these several parts being illustrated in the order of assembly.

Like references designate corresponding parts in the several figures of the drawing.

The improved fastening device forming the subject-matter of this application is intended to be applicable to different kinds and styles of electrical receptacles which are constructed for use in a sign sheet or equivalent supporting element, but in all forms of the invention the receptacle body must be specially formed to carry out the purposes and functions of the invention. To illustrate this, there is shown in the drawings an electrical sign receptacle of a type which embodies in its organization a one-piece porcelain or equivalent body 1, which is fitted with the necessary contacts and line terminal elements. According to the present invention the receptacle body 1 is exteriorly tapered, as indicated at 2, and is provided at a point intermediate the ends thereof with an annular binding shoulder 3 with which coöperates one of the members of the fastening in the manner presently explained.

In carrying out the invention it is only necessary to provide the sign board or equivalent supporting element 4 with a plain circular hole 5 for the reception of the open end of the receptacle body and one of the members of the fastening, inasmuch as the fastening when securely tightened serves to rigidly hold the receptacle in place, not only against endwise displacement but also against rotative movement, which is quite necessary on account of the frequent renewals required in the lamps.

The fastening device proper essentially consists of two members, namely, a socket member 6 and a coupling member 7 coöperating with the receptacle body and with the supporting element to provide for securing the receptacle body in position. The socket member 6 of the fastening device is formed of sheet metal and consists of what may be

termed a longitudinally split screw-shell. This split screw-shell is tapered in the direction of its length to provide a conical socket which receives therein the tapered body of the receptacle, and at one end the shell forming the socket-member 6 is provided with an out-turned securing flange 8 which engages with the supporting element 4 at one side thereof and about the edge of the hole 5 therein. In connection with the assembling of the parts, it is to be noted that the longitudinal split in the socket member makes it resilient and permits the same to be contracted so that its flanged end may be inserted through the hole 5 in the supporting element, and then, by releasing the contracting force upon the said socket member or shell 6, the latter springs or expands into holding engagement with the supporting element. In this position, the socket member or shell 6 is adapted to have the tapered receptacle body inserted therein from one side of the supporting element and crowded into said socket member by means of the coupling member 7. The coupling member 7 also consists of a screw-threaded shell, whose threads engage with the corresponding threads on the socket member or shell 6. In addition to its screw-threads the coupling member or shell 7 is formed at one end with a holding flange 9 which impinges upon the annular binding shoulder 3 of the receptacle body. It will thus be seen that when the tapered receptacle body is inserted into the tapered or conical socket member 6 the screwing home of the coupling member 7 causes the receptacle body to wedge tightly into the socket member with the result of securely fastening the same in place against both endwise and rotary displacement.

From the foregoing it is clear that the construction and advantages of the herein described sign receptacle fastening will be apparent without further description.

I claim:—

1. In an electrical receptacle mounting, the combination with the supporting element and the receptacle body, of a fastening device comprising a screw-shell socket member engaged in the hole of the supporting element, and a screw-shell coupling member arranged wholly at one side of and beyond the supporting element, said coupling member having a holding engagement

with the receptacle body and a screw engagement with the socket member.

2. In an electrical receptacle mounting, the combination with the supporting element and a receptacle body, of a fastening device comprising a socket member carried by the supporting element and projecting to one side thereof, and a coupling member arranged wholly at one side of and beyond the supporting element, said coupling member having a holding engagement with the receptacle body, and a detachable fastening connection with the socket member.

3. In an electrical receptacle mounting, the combination with the supporting element and a tapered receptacle body, of a fastening device comprising a tapered socket member carried by the supporting element and a coupling member engaged with the receptacle body and with the socket member.

4. In an electrical receptacle mounting, the combination with the supporting element and a receptacle body exteriorly tapered, of a fastening device comprising a resilient socket member fitted to the supporting element and being formed with a taper, and a coupling member arranged to wedge the receptacle body in the socket member.

5. In an electrical receptacle mounting, the combination with the supporting element and receptacle body having an external taper, of a fastening device comprising a screw-shell socket member fitted to the supporting element, and a screw-shell coupling member engaged with the receptacle body and also having screw-engagement with the socket member.

6. In an electrical receptacle mounting, the combination with the supporting element, and a receptacle body having an external taper and an annular binding shoulder, of a fastening device comprising a flanged and split screw-shell socket member sprung into the hole of the supporting element, and a flanged screw-shell coupling member engaging the shoulder of the receptacle body and having a screw-engagement with the socket member.

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

EDGAR H. FREEMAN.

Witnesses:

CASPER J. FABER,
MARY S. CURTIS.