F. J. RUSSELL. SIGN RECEPTACLE FASTENING. APPLICATION FILED OCT. 9, 1908.

973,567.

Patented Oct. 25, 1910.

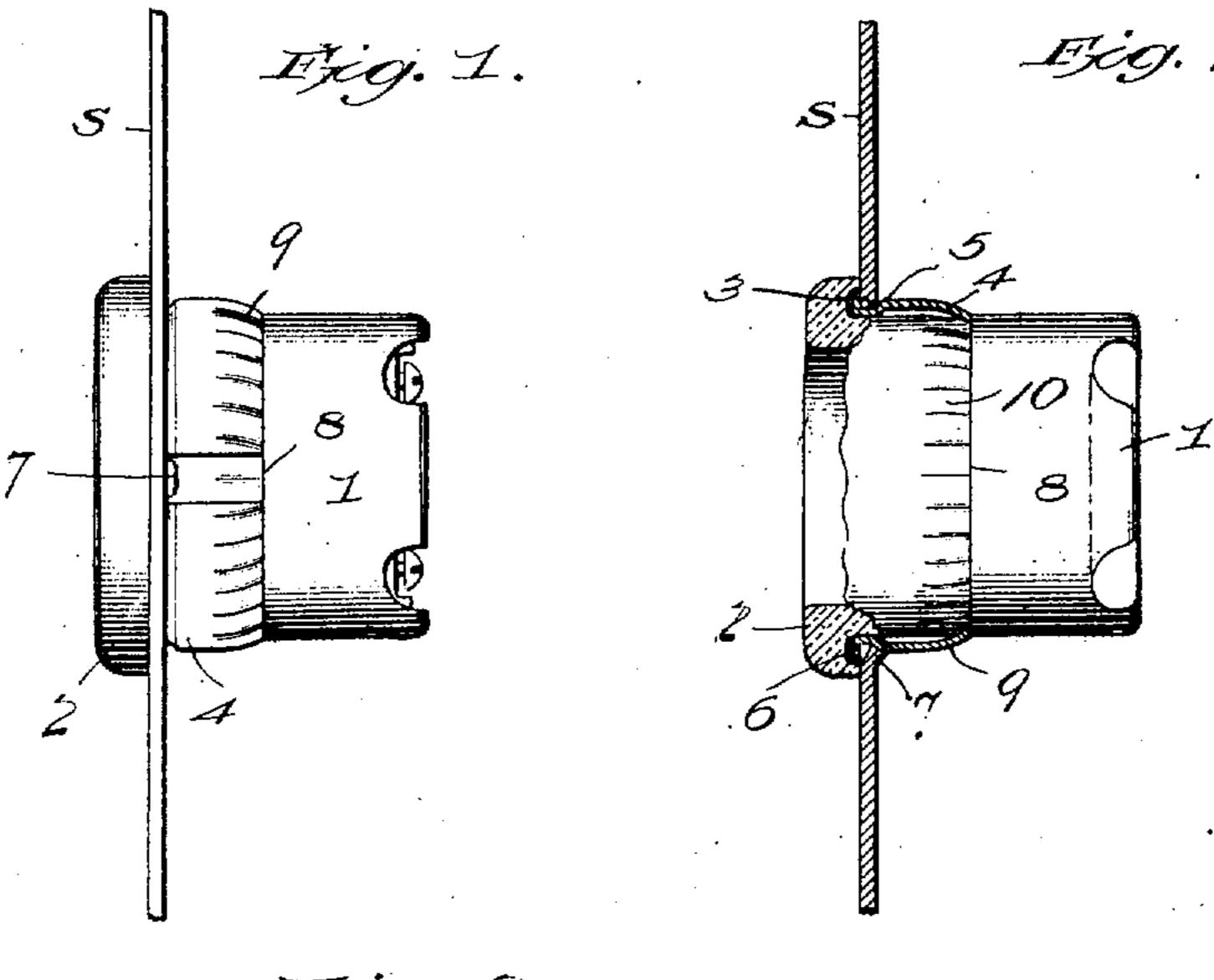
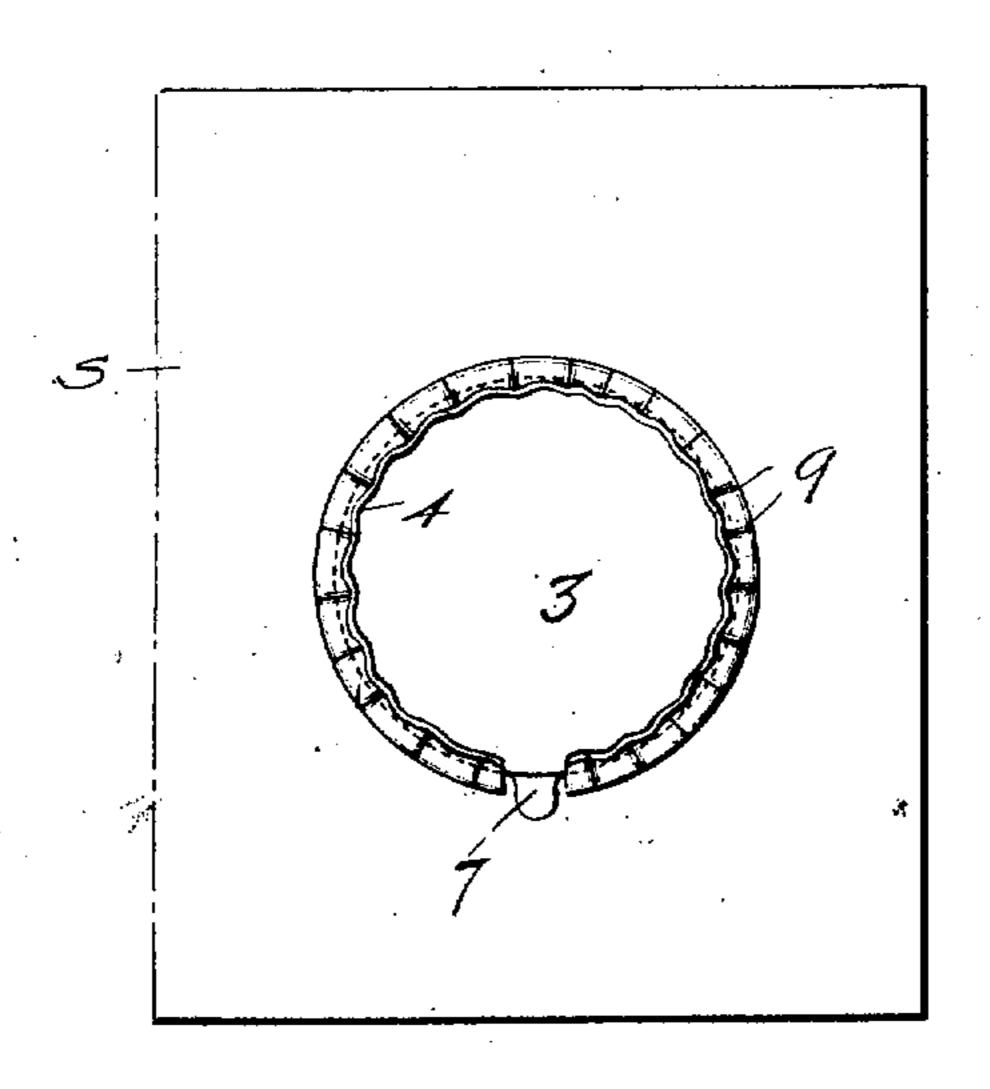


Fig. 3.



Inventor

Frank J. Russell

St Manuter.

attorneu

Witnesses M. Moreken

oby

UNITED STATES PATENT OFFICE.

FRANK J. RUSSELL, OF NEW YORK, N. Y.

SIGN-RECEPTACLE FASTENING.

973,567.

Specification of Letters Patent. Patented Oct. 25, 1910. Application filed October 9, 1908. Serial No. 456,949.

To all whom it may concern:

Be it known that I, FRANK J. RUSSELL, a citizen of the United States, residing at New York city, in the county of New York and 5 State of New York, have invented certain new and useful Improvements in Sign-Receptacle Fasterings, of which the following is a specification.

This invention relates to the subject of electrical fixtures, and more particularly to the mounting of electrical receptacles and analogous bodies on a sign board, junction box cover, or other supporting element.

To this end the invention has in view a 15 simple, thoroughly practical, and inexpensive form of fastening device capable of general application to any and all kinds of sign receptacles and analogous electrical bodies without requiring any material alter-20 ation or change in the construction of the latter, while at the same time providing means for readily and satisfactorily fastening the receptacle or other body to the sign board or supporting element in which it may 25 be installed. In this connection, the invention has particularly in view the provision of a form of fastening device designed to be carried with and by the supporting element and admitting of the quick and ready 30 insertion of the receptacle or other body into the receiving hole designed therefor, and at the same time effecting the fastening of the receptacle or other body in place.

A more general object of the invention is to provide a receptacle or equivalent mounting which admits of the receptacle being mounted and secured in smaller and more confined places than is usually possible with the ordinary construction. Also, the invention provides effective means for fastening or clamping the whole body of the receptacle, and at the same time forms an electrical holding means which prevents breakage of the porcelain. Furthermore, the improved mounting is of such a nature as to require no skill for the installation thereof.

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

The improved fastening device, which provides for the mounting of the electrical

receptacle or analogous body, may be utilized in different forms, and various modifications may be resorted to in the application of the invention, but certain practical 60 embodiments of the latter are shown in the accompanying drawings, in which:

Figure 1 is a side elevation illustrating an electrical receptacle fastened upon a sign board or other supporting element by the 65 improved fastening device claimed herein. Fig. 2 is a sectional elevation of the application of the invention shown in Fig. 1. Fig. 3 is an elevation of a sign board or supporting sheet equipped with a fastening eye-70 let such as contemplated by the present invention.

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

For illustrative purposes, the invention is 75 shown in the drawings as applied in connection with a sign receptacle of the kind embodying in its organization a one-piece porcelain or equivalent receptacle body designated in its entirety by the numeral 1. This 80 body is illustrated as provided at what may be termed its outer end with an annular binding collar 2, presenting at its inner side a binding shoulder which impinges against the sign sheet or other supporting element 85 S in opposition to the action of the fastening device forming the subject matter of this application.

The fastening device, as an entirety, may be properly termed a fastening eyelet, inas- 90 much as the same is carried by the supporting element and surrounds the receiving hole 3 therein, said eyelet also projecting beyond one side of the supporting element so as to entirely surround and clamp the receptacle 95 body which is inserted therethrough from the outside.

Referring particularly to the embodiment of the invention suggested in Figs. 1, 2, and 3 of the drawings, the numeral 4 designates 100 the fastening eyelet, which is illustrated as consisting of a sheet metal collar or band bent into circular form corresponding to the circular shape of the receiving hole in the supporting sheet and secured to the latter 105 by any suitable means, so that in effect the fastening eyelet will be a part of the supporting element, thus only requiring the receptacle or analogous body being inserted through the receiving hole and the 110 said eyelet to provide for installing and fastening the said body in place. While vari-

ous expedients may be resorted to to provide for the connection between the fastening eyelet and supporting element, a preferable and practical construction is shown in Figs. 1, 2 and 3, and this construction involves the feature of providing the cyclet at what may be termed its outer edge, with an annular retaining seat 5 receiving the edge portion of the receiving hole 3, and with an exterior outturned retaining flange 6 engaging over the outer edge portion of the hole 3 in the supporting element, thus securing the fastening eyelet against longitudinal displacement, while rotary movement or displacement 15 thereof may be prevented by any suitable means such as providing the supporting element upon one side thereof with a stop lug or equivalent projection 7 engaging between the ends of the collar or band constituting 20 the fastening eyelet. In this connection, it will be observed that the collar or band forming the eyelet is of the split ring type, and inasmuch as sheet metal is preferably utilized in making eyelet, the same acts as a 25 spring clamp to yieldingly clamp upon the whole body of the receptacle or other electrical fitting.

In order to positively lock the receptacle or other body 1 against longitudinal dis-30 placement after having been inserted through the eyelet 4, the said body may be conveniently provided with an external annular catch shoulder 8 behind which snaps the inner locking edge of the eyelet, and said 35 locking edge portion of the eyelet may be provided with a continuous series of corrugations 9 forming locking elements adapted to interlock with corresponding and complemental elements 10 arranged in an an-40 nular series upon the body 1 adjacent to the shoulder 8. These interlocking elements 9 and 10 serve to prevent rotary movement or displacement of the receptacle or other body 1

In the applied position of parts shown in Figs. 1 and 2, the front shoulder or flange 2 of the receptacle or other body overlies and covers the flanged outer edge portion of the eyelet 4.

From the foregoing it will be observed that a distinctive feature of the present invention is that the body of the receptacle is cylindrical and free from projections, and that the fastening device or eyelet engages 5g a part of the receptacle smaller than the general diameter of the receptacle body. This admits of employing the invention in connection with a plain round hole in the supporting element, and also involves an 60 operation wherein the receptacle and the fastening device are simply pushed together and through the hole without rotary movement at all. Furthermore, it will be observed that the fastening device or eyelet is 65 a complete device in one piece.

Other modifications will readily suggest themselves to those skilled in the art, and it will be understood that various changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention.

I claim:

1. In a mounting for electrical receptacles and analogous bodies, the combination with the supporting element and the receptacle body, of a one piece fastening eyelet consisting of a sheet metal collar having one edge portion engaging in the hole of the supporting element and its opposite edge portion engaging with the receptacle body.

2. In a device of the class described, the combination with the supporting element having a receiving hole, and the receptacle body, of a fastening eyelet consisting of a spring split collar or band having one edge portion interlocked with the supporting element within the receiving hole, and its opposite edge portion provided with a locking element engaging the receptacle body.

3. In a device of the class described, the combination with the supporting element, and a receptacle body having a depressed shoulder, of a one piece fastening device having one part engaging said depressed 95 shoulder and another part engaging the supporting element.

4. In a receptacle mounting, the combination with a supporting element, and a receptacle body having a depression in its wall, of a fastening device engaging with said depression and with the supporting element, said device being arranged to receive and hold the receptacle body when the latter is inserted through the supporting element 105 and into the fastening device.

5. The combination, in a receptacle mounting, of a supporting element having a round hole, a receptacle body having a plain contour with depressions in its sides, and a 110 non-rotative tubular clamping device slidably receiving the body and having locking engagement with the depressions of the body and with the supporting element.

6. In a receptacle mounting, the combination with the receptacle body having a depression in the sides thereof, and a supporting element having a round hole to receive the body, of a fastening device having one part to spring into the depression, and another part to engage the side of the supporting element nearest to the depression.

7. In a receptacle mounting, the combination with the receptacle body having a depression in the sides thereof, and a supporting element having a round hole, of a fastening device having one part to spring into the depression and another part to engage the supporting element on the side farthest from the depressions.

8. In a receptacle mounting, the combination with the receptacle body having a depression in the sides thereof, and a supporting element having a round hole, of a fastening device having one part to spring into the depression, and another part to engage the supporting element on both sides.

9. In a mounting for electrical receptacles and analogous bodies, the combination with the body having an external shoulder and an external series of locking corrugations, the supporting element, and a fastening eyelet consisting of a sheet metal collar or band having a flanged edge portion engaged with the supporting element, and a corrugated

edge portion cooperating with the shoulder and corrugations of the body.

10. In a sign receptacle mounting, the combination with the receptacle body having a shoulder, and a supporting element, of 20 a fastening eyelet in the form of a ring or band having one edge engaging the supporting element and the other edge engaging a shoulder on the receptacle body.

In testimony whereof I hereunto affix my 25 signature in the presence of two witnesses. FRANK J. RUSSELL.

Witnesses:

THEO. STOLL, DAVID E. DANIELSON.