

F. J. RUSSELL.
SIGN RECEPTACLE FASTENING EYELET.
APPLICATION FILED OCT. 26, 1909.

973,817.

Patented Oct. 25, 1910.

2 SHEETS—SHEET 1.

Fig. 1.

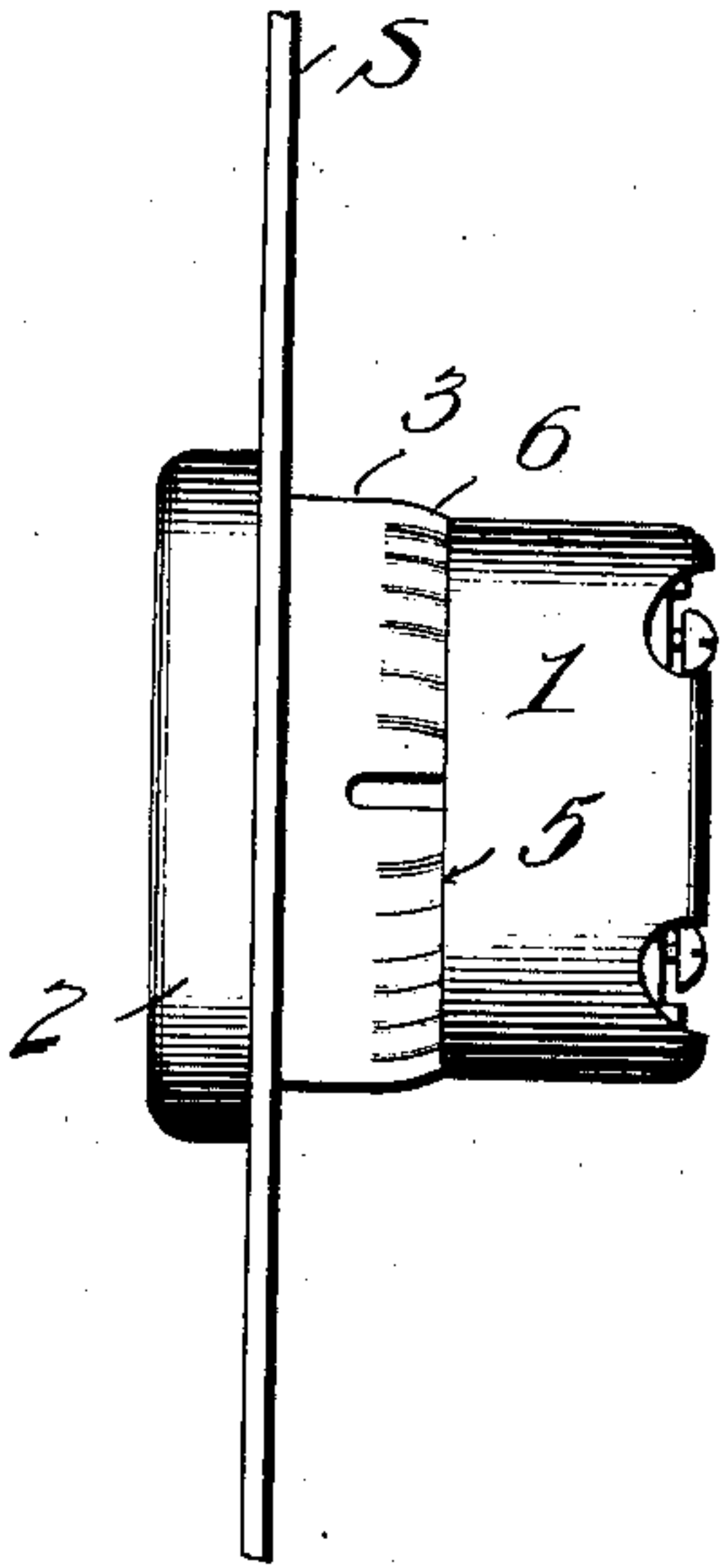


Fig. 2.

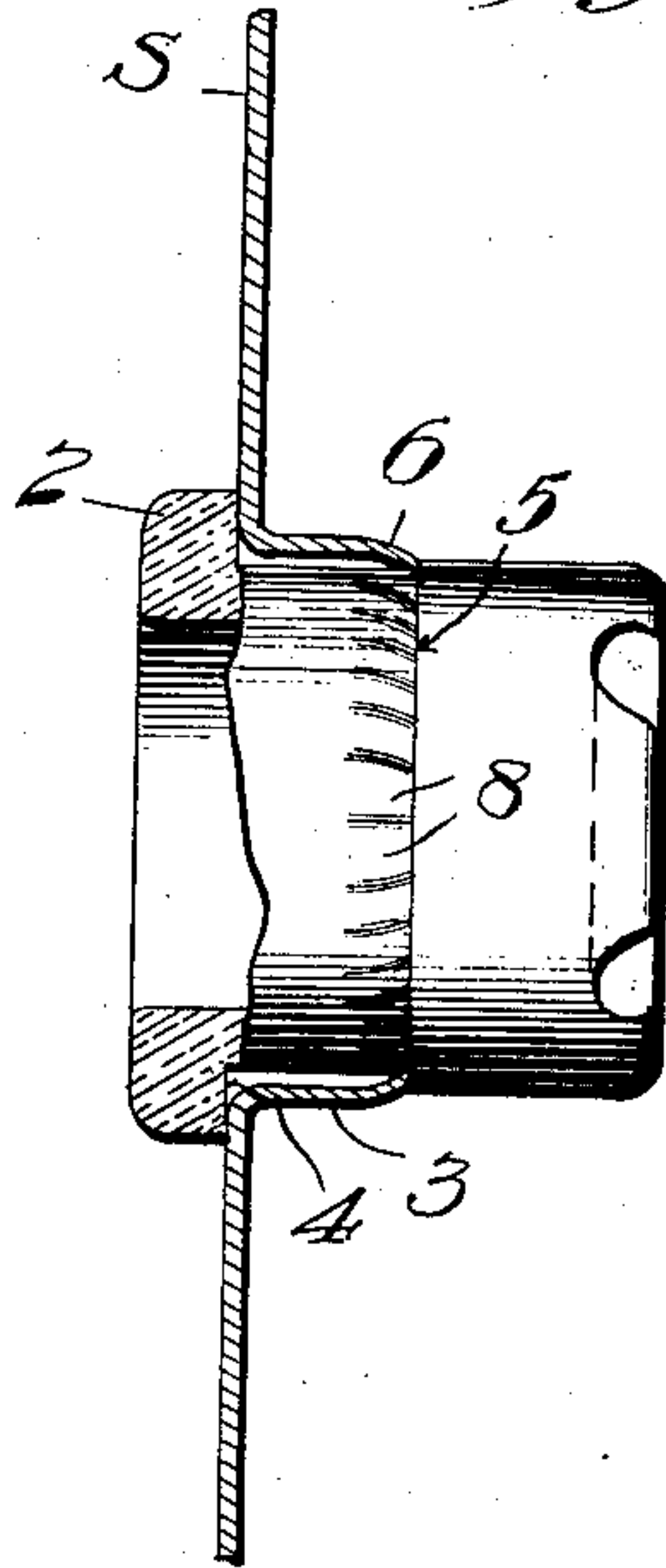


Fig. 3.

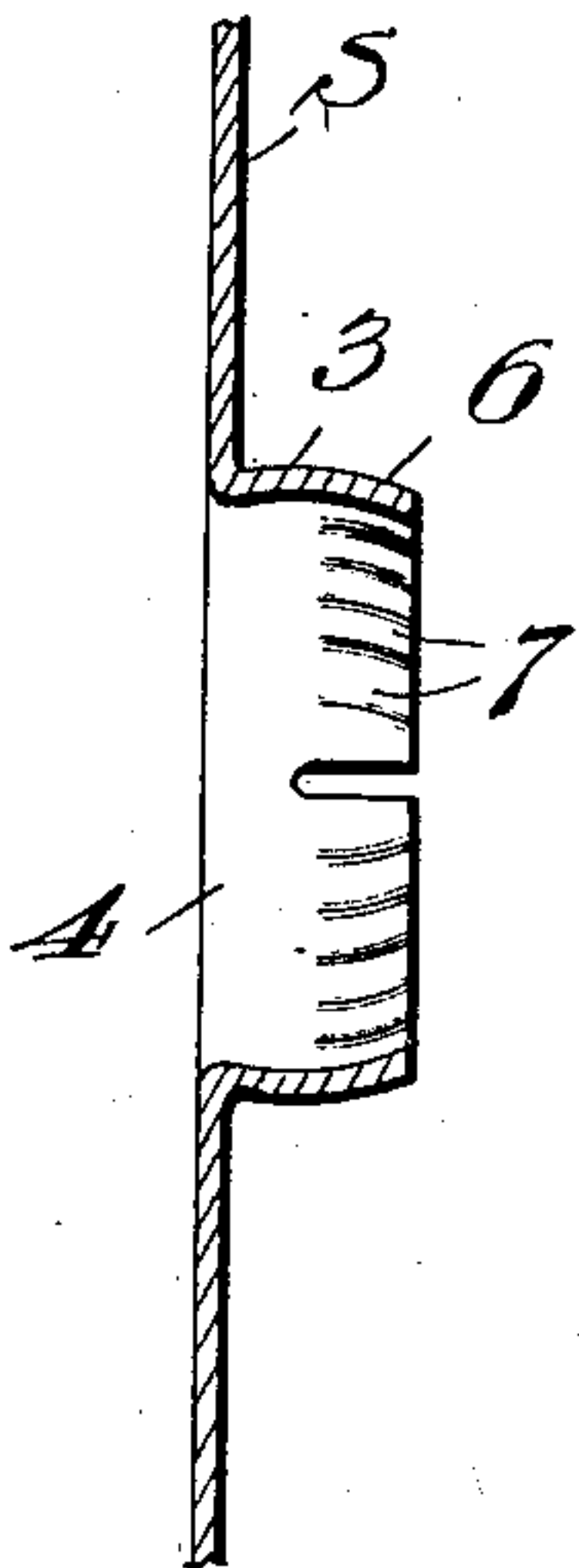
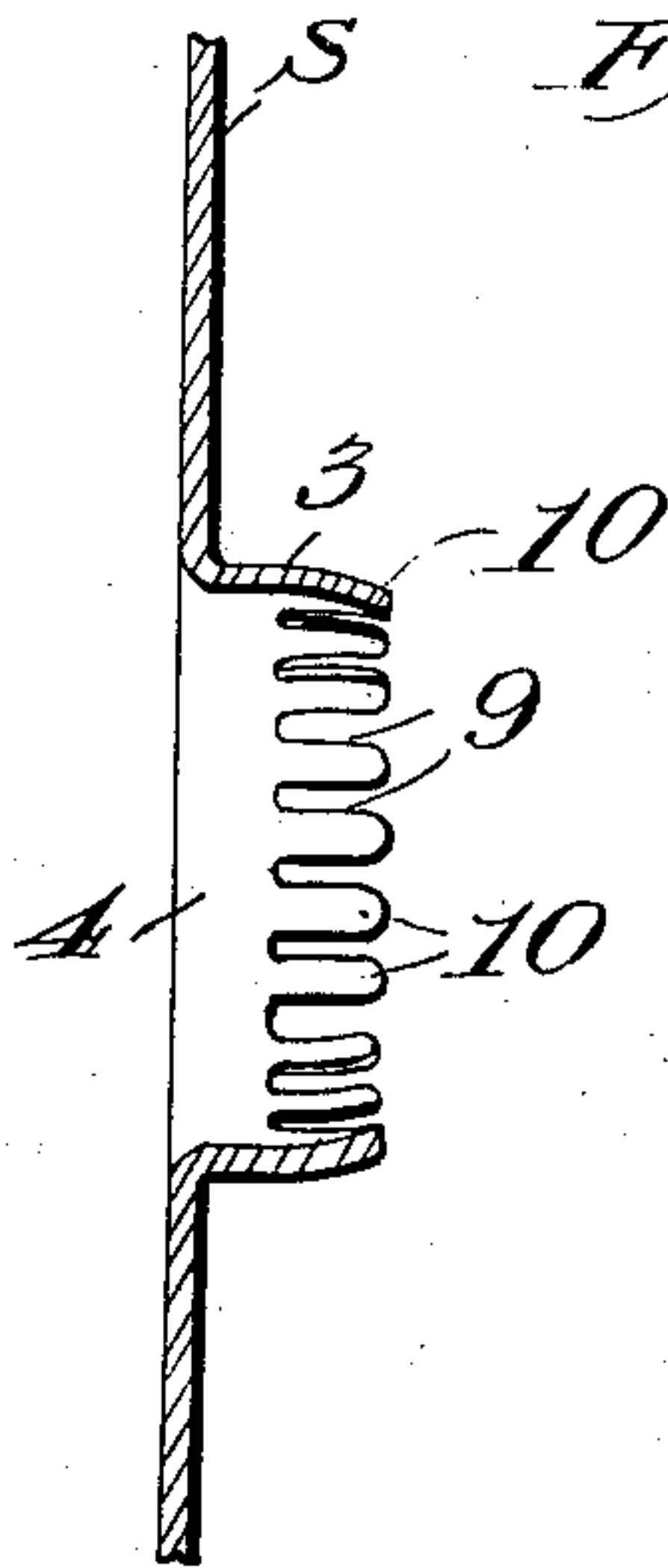


Fig. 4.



Witnesses

J. L. Mochman
R. C. Braddock.

Inventor

Frank J. Russell

By

S. P. Mochaupter,
his Attorney

F. J. RUSSELL.
SIGN RECEPTACLE FASTENING EYELET.
APPLICATION FILED OCT. 26, 1909.

973,817.

Patented Oct. 25, 1910.

2 SHEETS—SHEET 2.

Fig. 5

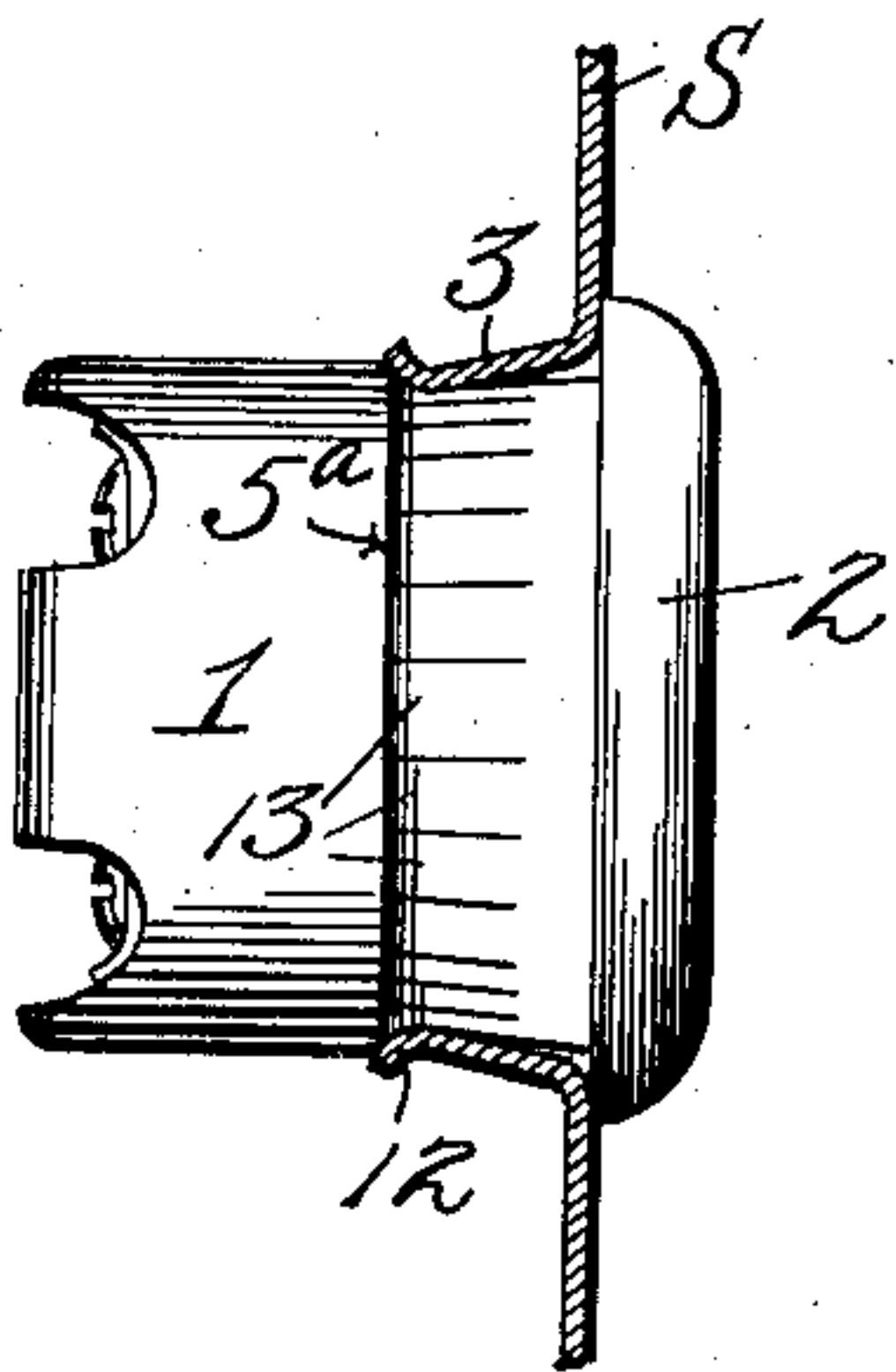


Fig. 6.

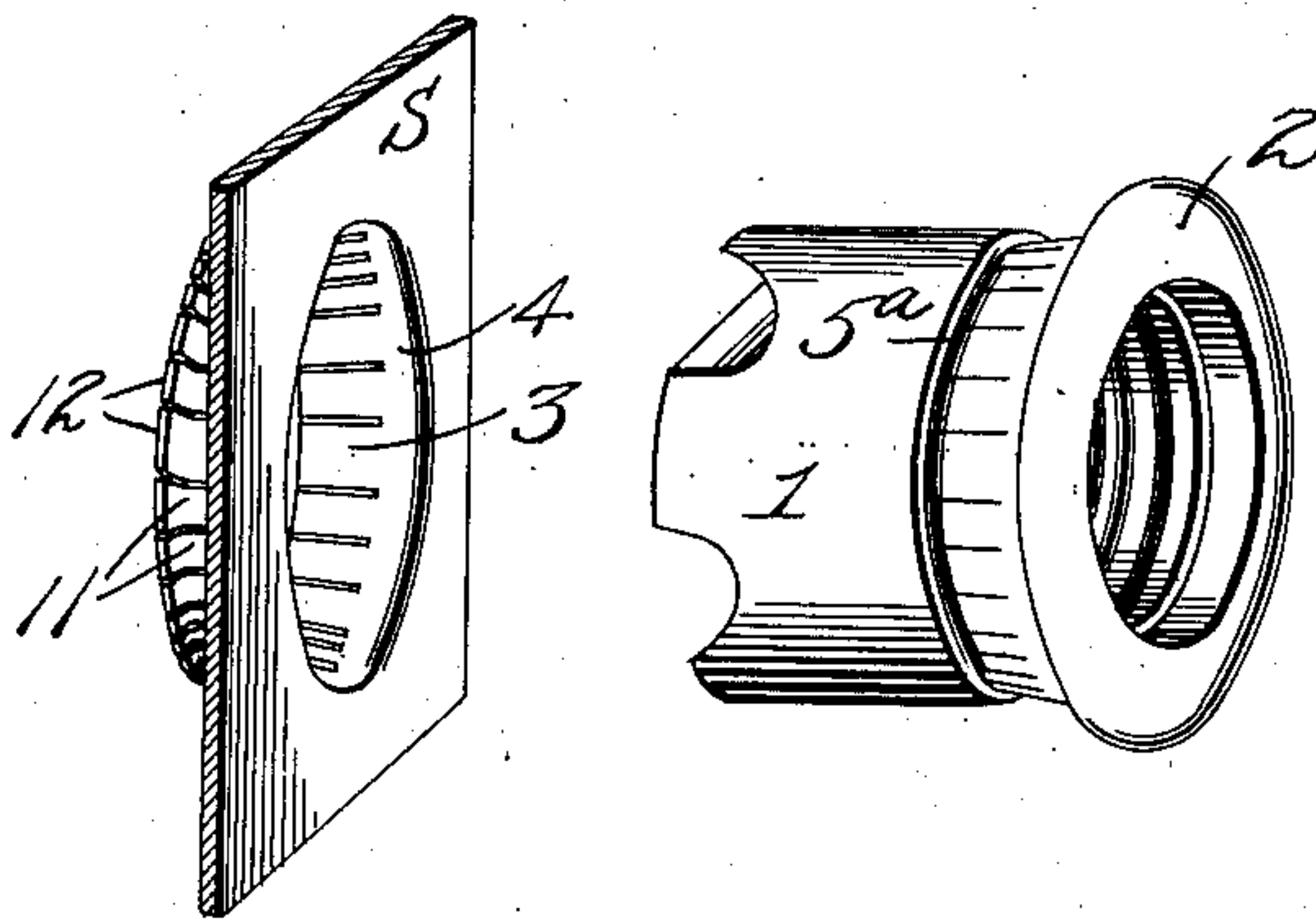


Fig. 7.

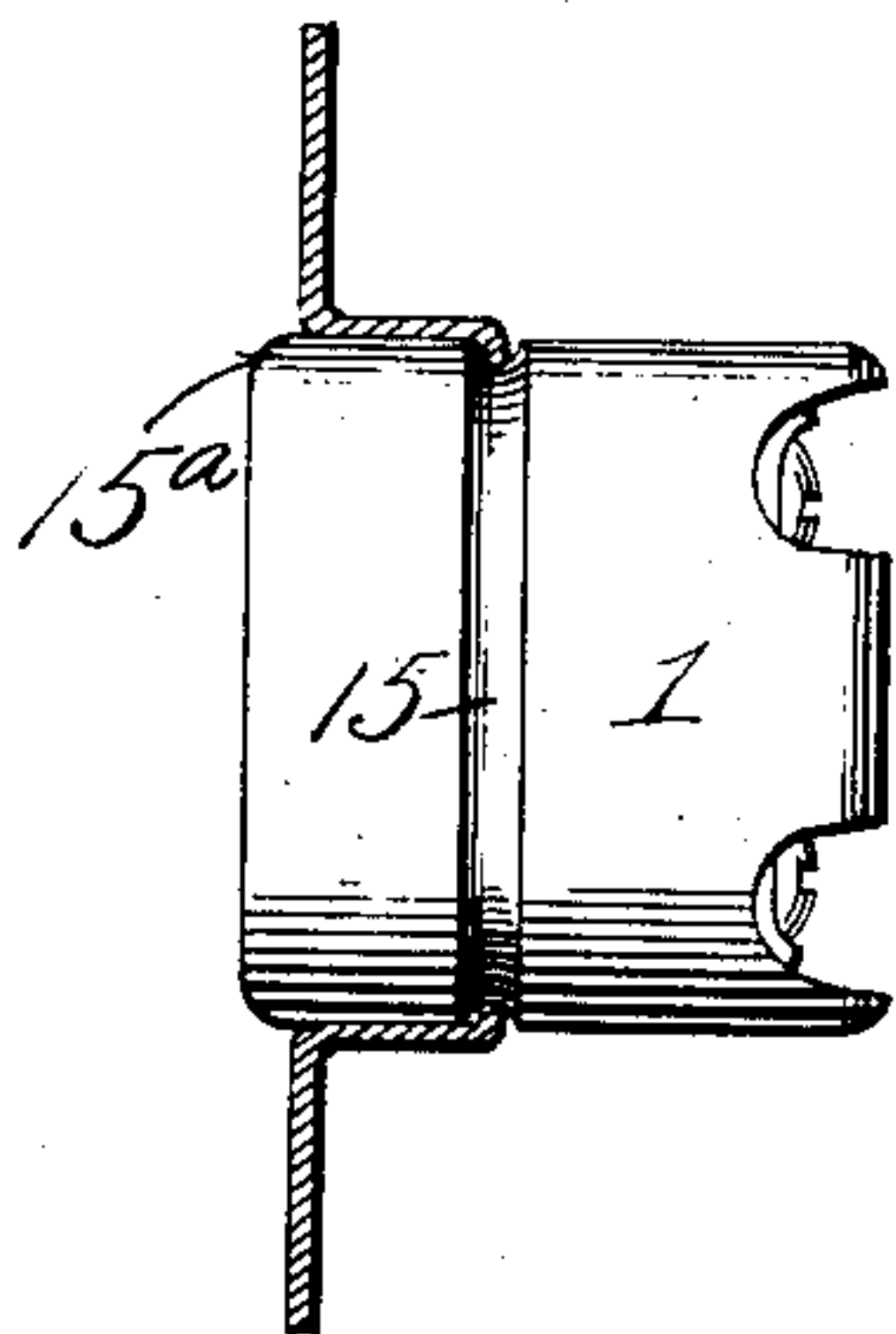
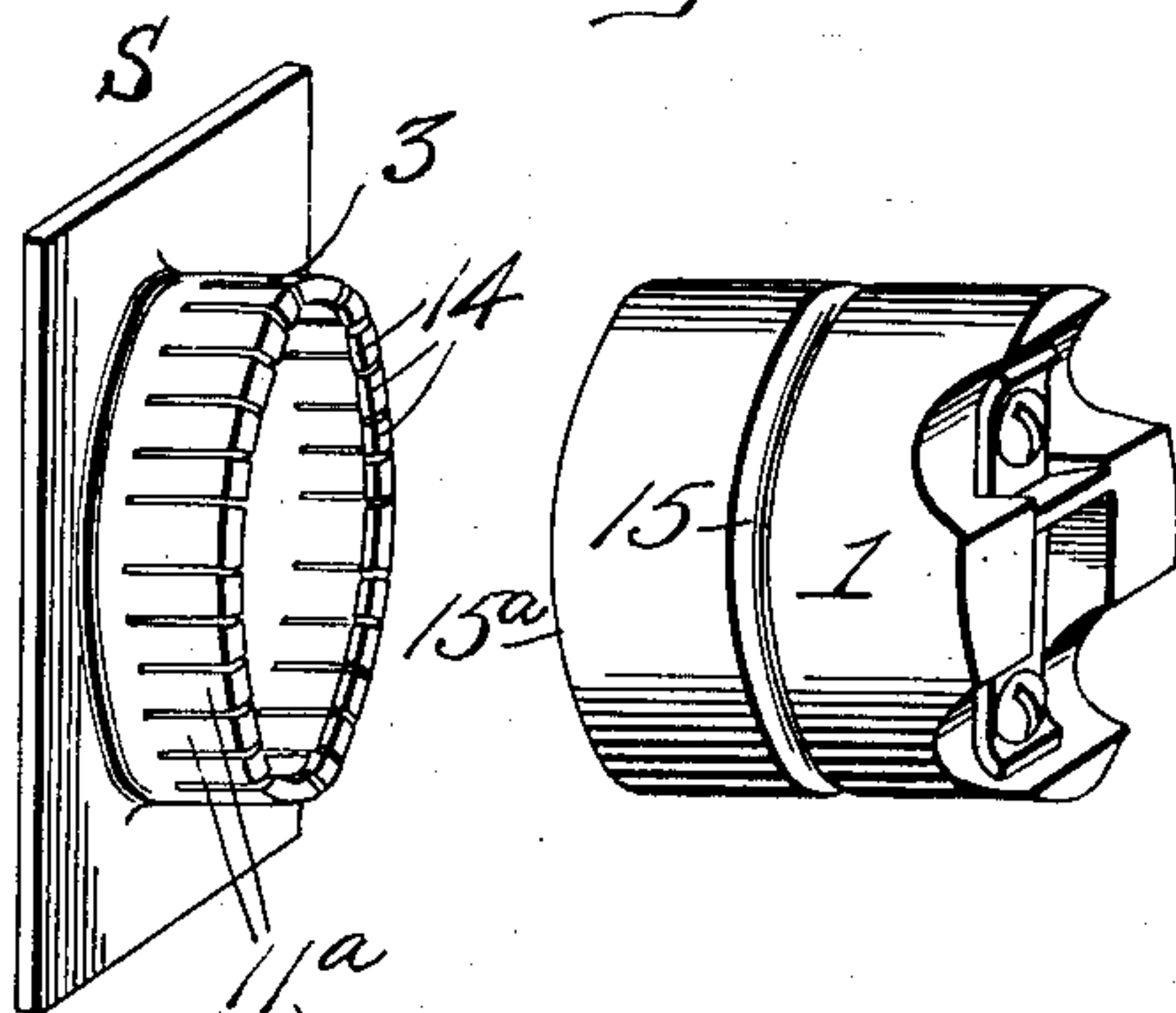


Fig. 8.



Witnesses
W. H. Rockwell
R. C. Braddock

Inventor
Frank J. Russell.
By L. T. Wolhaupter
his Attorney

UNITED STATES PATENT OFFICE.

FRANK J. RUSSELL, OF BROOKLYN, NEW YORK.

SIGN-RECEPTACLE FASTENING-EYELET.

973,817.

Specification of Letters Patent.

Patented Oct. 25, 1910.

Application filed October 26, 1909. Serial No. 524,727.

To all whom it may concern:

Be it known that I, FRANK J. RUSSELL, a citizen of the United States, residing at Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Sign-Receptacle Fastening-Eyelets, (Case B,) of which the following is a specification.

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

The invention has in view the provision of a simple and practical form of fastening device carried with and by the supporting element, and admitting of the quick and ready insertion of the receptacle into the receiving hole designed therefor, and at the same time securely fastening the receptacle in place.

A further object of the invention is to provide a sign receptacle mounting or fastening of such a nature as to require no skill for the installation thereof, while at the same time being so designed and arranged as to admit of the receptacle being mounted and secured in smaller and more confined places than is usually possible with the ordinary construction.

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 engages a part of the receptacle of less diameter than the major part 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 operation wherein the receptacle and the fastening device are simply pushed together, and through the hole without rotary movement at all. Furthermore, the invention provides a fastening device or eyelet which is complete in one piece.

Many other objects and advantages of such a construction will be apparent to those familiar with the art, and it will also be understood that various modifications may be resorted to in the application of the invention without departing from the principle thereof, but certain practical embodiments of the invention 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 improved fastening device claimed herein.

Fig. 2 is a sectional elevation of the application of the invention shown in Fig. 1. Fig. 3 is a sectional view of the sign-board or supporting element, with the receptacle removed. Fig. 4 is a view similar to Fig. 3, but illustrating another modification in the structural formation of the fastening eyelet. Fig. 5 is a view similar to Fig. 2, but illustrating a further modification in the formation of the fastening eyelet, and in the formation of the depressed portion in the body of the receptacle. Fig. 6 is a perspective view of the same construction illustrated in Fig. 5, and showing the receptacle body separated from the supporting element, but in a position for insertion therein. Fig. 7 is a view similar to Fig. 5, but illustrating a further modification in the formation of the fastening eyelet, and of the receptacle body. Fig. 8 is a view similar to Fig. 6, but illustrating the operative relation of the parts shown in the modification of Fig. 7.

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

For illustrative purposes the invention is shown in the drawings as employed with a sign receptacle of the kind embodying in its organization a one-piece porcelain or equivalent body designated as a whole by the numeral 1. This body is provided at its front end with an annular binding collar 2 impinging against the sign-sheet or other supporting element S in opposition to the action of the fastening device or eyelet 3. This applies particularly to the construction illustrated in Figs. 1 to 6, inclusive, of the drawings, as will be hereinafter particularly pointed out.

As above indicated, the fastening device as an entirety may be properly termed a fastening eyelet, inasmuch as the same is carried by the supporting element and surrounds the receiving hole 4 therein, said eyelet also projecting from and beyond one side of the supporting element so as to entirely surround and clamp the receptacle body which is inserted therethrough.

Referring particularly to the embodiment of the invention suggested in Figs. 1, 2 and 3 of the drawings, the fastening eyelet 3 is shown as consisting of a resilient sheet-metal collar or band of circular form in cross-section to correspond to the form of the plain round hole in the supporting element and to the cylindrical contour of the receptacle body 1. Also, the construction

shown involves the feature of the fastening eyelet being carried with and by the supporting element, thus only requiring the receptacle body to be inserted through the receiving hole in the eyelet to provide for installing and fastening the said body in place.

In all embodiments of the invention shown in this application the fastening eyelet 3 is an integral part of the supporting sheet and is illustrated as being punched out directly from the metal of the sheet. However, various modifications may be resorted to in the structural details of this eyelet. For instance, in the construction shown in Figs. 1, 2 and 3, it will be observed that the collar or band forming the eyelet is of the split-ring type, and being of resilient metal acts as a spring-clamp to yieldingly clamp upon the body of the receptacle when inserted in place in the hole of the supporting element. Also in this same construction provision is made to secure an effective locking action by forming the body 1 with an external annular catch shoulder 5 producing a depressed portion in the body which is of less diameter than the major parts thereof. This shoulder 5 is adapted to be engaged, through a spring snap-action by the inner locking edge 6 of the eyelet, and this locking edge portion 6 may be formed with a continuous series of corrugations or projections 7 forming locking elements which interlock with corresponding and complementary elements 8 arranged in an annular series upon the depressed part of the body 1 adjacent to the shoulder 5. These interlocking elements 7 and 8 serve to prevent rotary movement of the receptacle body.

The modification suggested in Fig. 4 of the drawings suggests the plan of having the free edge of the eyelet broken up, by notches or slits 9, into a continuous series of spring locking tongues 10, but in all other respects being the same in construction and function as the eyelet shown in Figs. 1 to 3, inclusive. Again, in Figs. 5 and 6 of the drawings, the free edge of the eyelet is shown as being cut into by a continuous series of longitudinally disposed slits producing a continuous circular series of spring locking tongues 11 for the same purpose as the tongues 10 shown in Fig. 4, but in the

modified structure of Figs. 5 and 6 the free ends of the locking tongues 11 are provided with outturned curved engaging tips 12 which fit a curved annular catch shoulder 5^a surrounding the receptacle body 1. Furthermore, in this modified construction shown in Figs. 5 and 6, the depressed part of the receptacle body between the shoulder 5^a and the front binding collar 2 is formed with a continuous circular series of bearing flats 13 against which the spring tongues 11 flatly rest and thus prevent the receptacle body from turning.

The modification shown in Figs. 7 and 8 of the drawings suggests the plan of having the spring tongues 11^a of the eyelet formed at their free ends with intumed holding prongs 14 adapted to snap into engagement with an annular retaining groove 15 formed in the body of the receptacle. In this form of the invention the receptacle body is provided with a plain rounded front guiding nose 15^a, permitting the receptacle body to be shoved through the eyelet from the rear, as well as from the front if conditions should require.

The present application includes and covers forms of the invention disclosed in the opening application filed October 9, 1908, Serial Number 456,949.

What I claim is—

1. In a receptacle mounting, the combination with the receptacle body having a front shoulder and an intermediate shoulder, of a supporting element having an integral fastening eyelet receiving the receptacle body and engaging between said two shoulders.

2. In a receptacle mounting, the combination with the receptacle body having an annular shoulder, and a depressed part adjacent to said shoulder and formed with a continuous series of bearing flats, of a supporting element having an integral fastening eyelet provided with spring locking tongues engaging said shoulder and said flats.

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

FRANK J. RUSSELL.

Witnesses:

THEO. STOLL,

WM. F. MESCHENMORN.