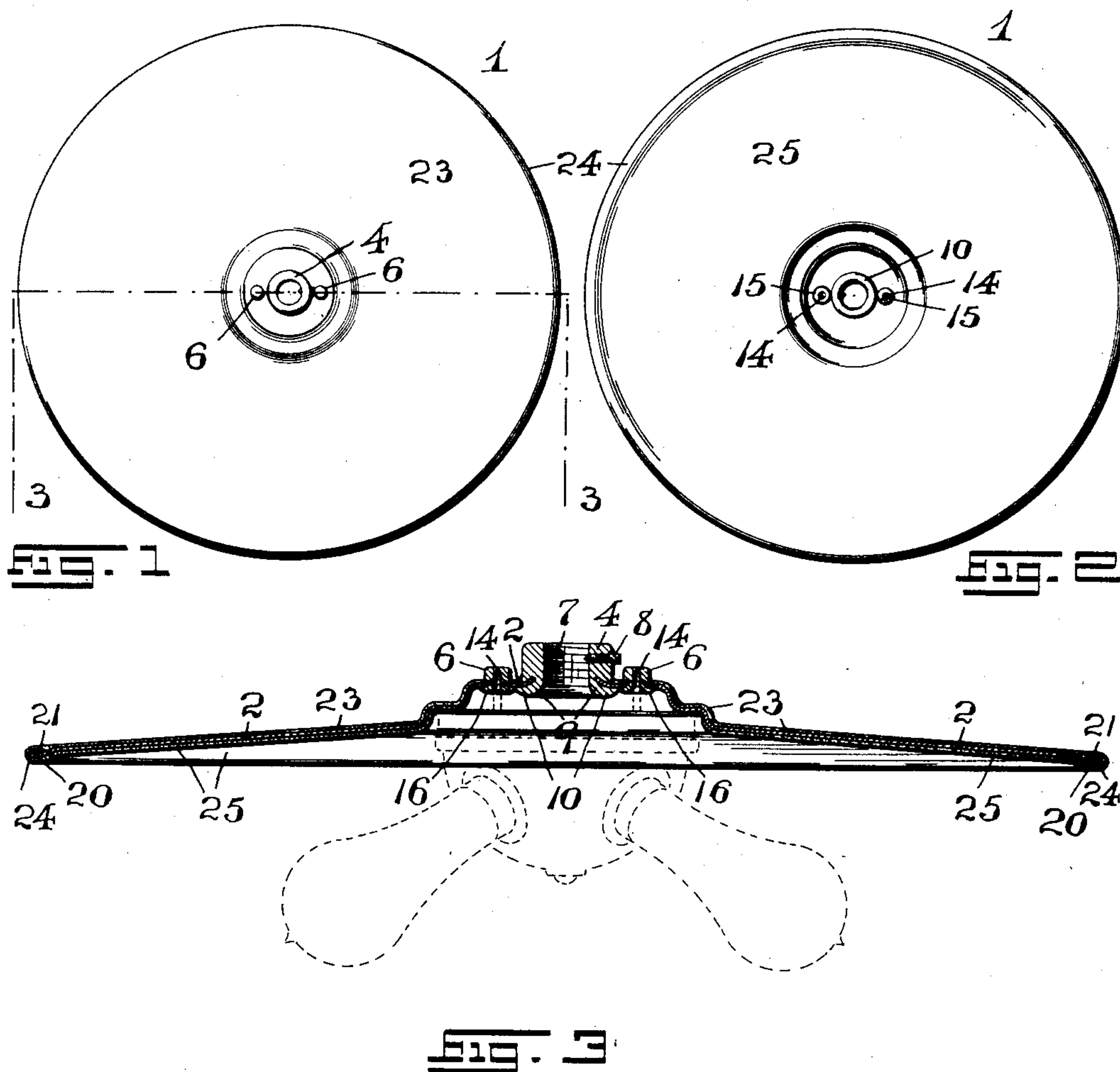


No. 832,280.

PATENTED OCT. 2, 1906.

W. H. SPENCER.
REFLECTOR SHADE.
APPLICATION FILED MAY 2, 1905.

2 SHEETS—SHEET 1.



WITNESSES:

Ges. L. Richards
F. W. W. Fraentzel

INVENTOR:

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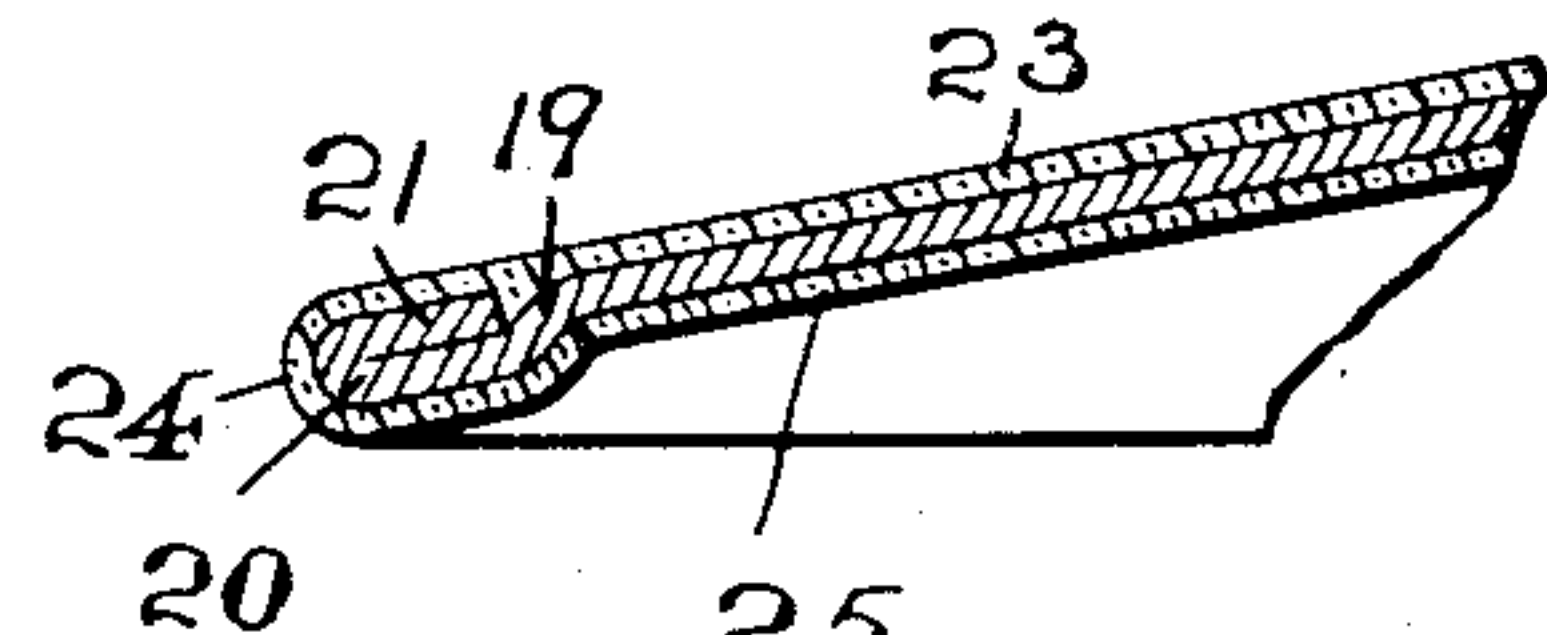
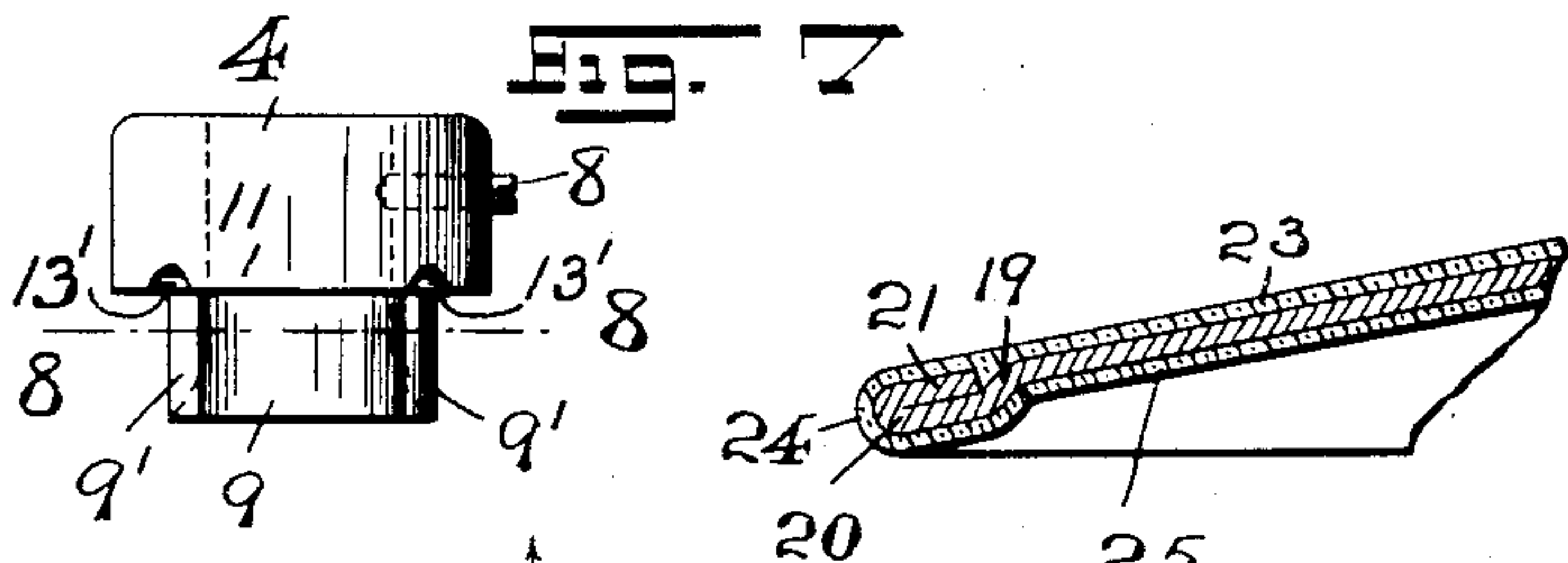
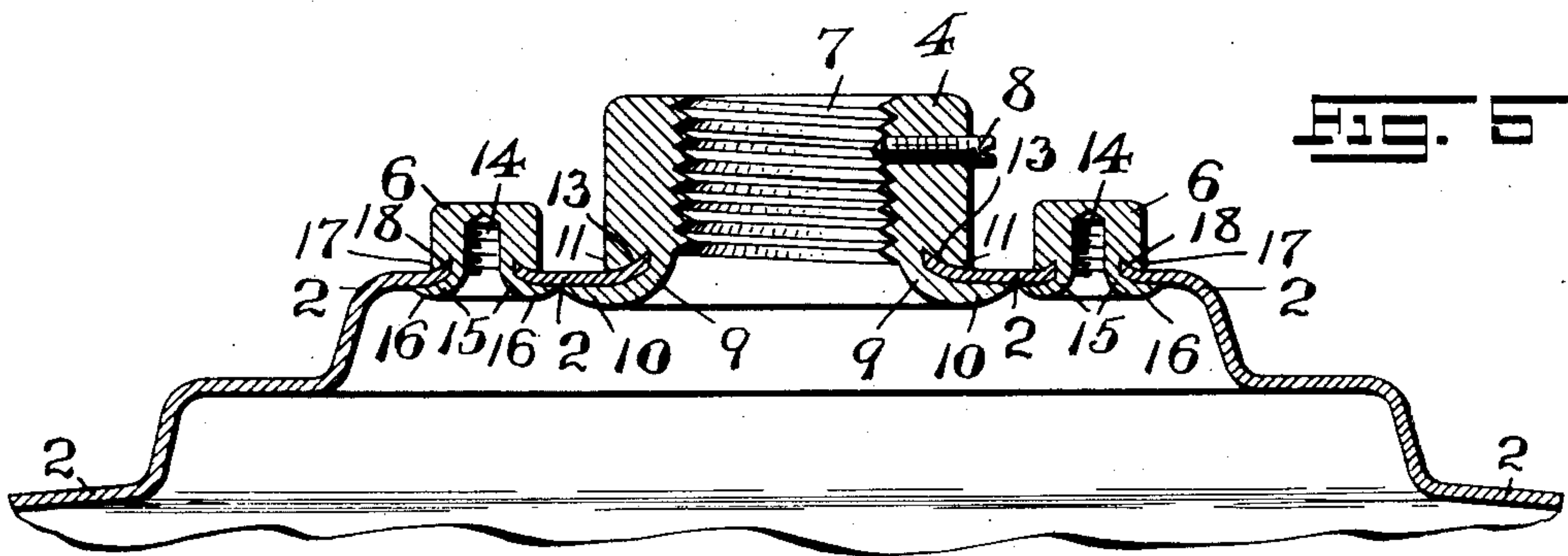
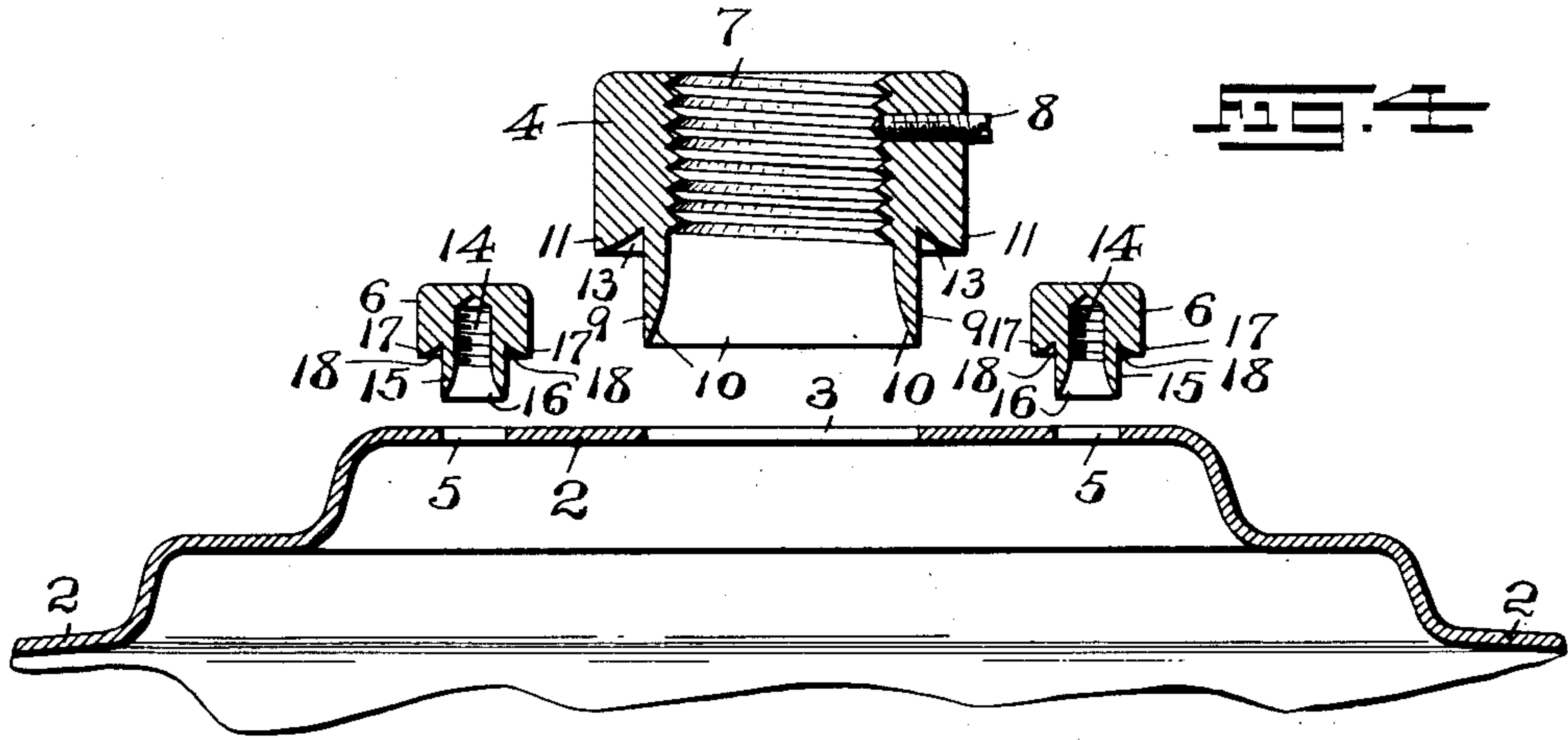
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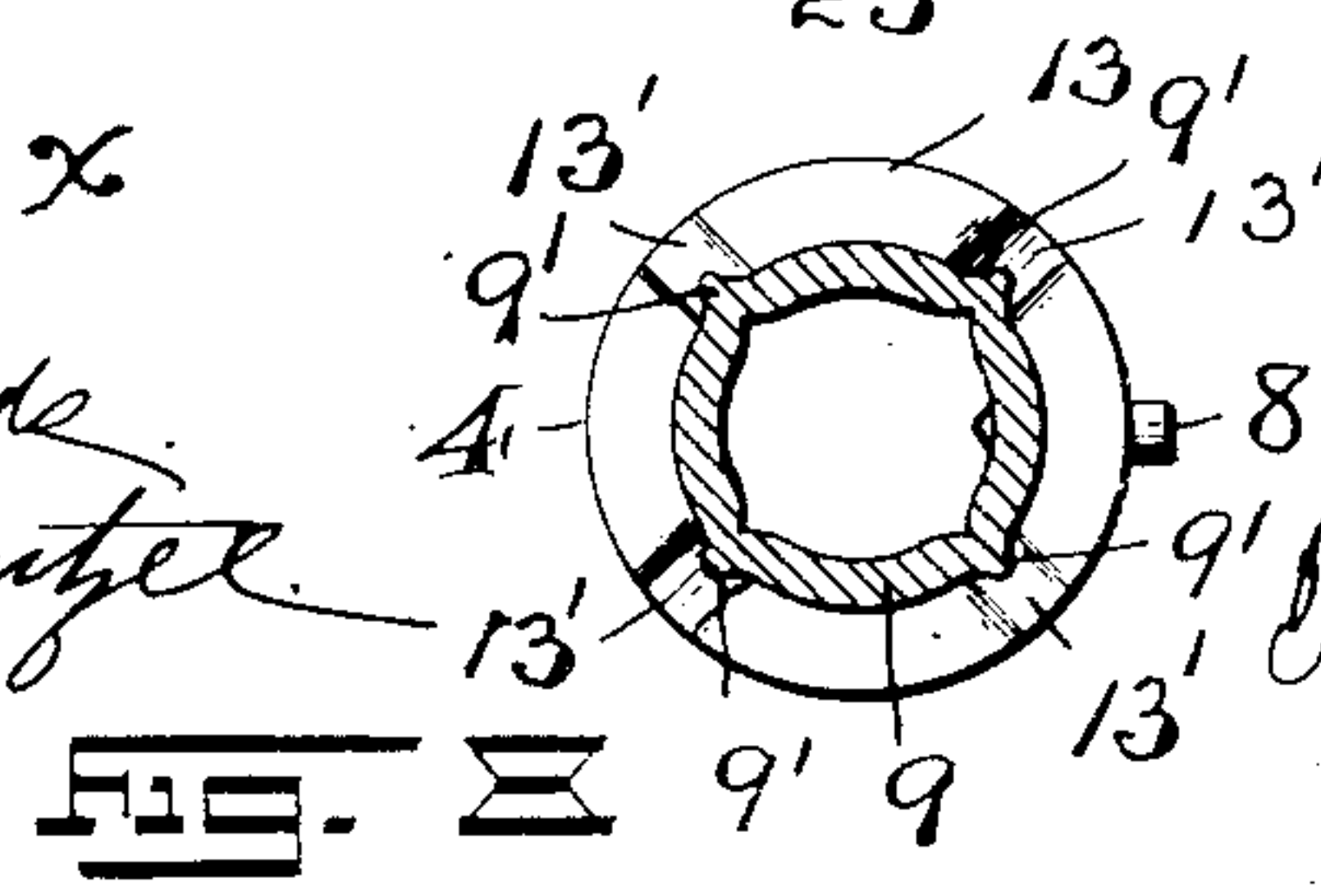
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2 SHEETS—SHEET 2.



WITNESSES:
Geo. S. Richards
H. W. Fraentzel



INVENTOR:
William H. Spencer.
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UNITED STATES PATENT OFFICE.

WILLIAM H. SPENCER, OF BROOKLYN, NEW YORK, ASSIGNOR TO GEORGE FRINK SPENCER, OF NEWARK, NEW JERSEY.

REFLECTOR-SHADE.

No. 832,280.

Specification of Letters Patent.

Patented Oct. 2, 1906.

Application filed May 2, 1905. Serial No. 258,463.

To all whom it may concern:

Be it known that I, WILLIAM H. SPENCER, 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 Reflector-Shades; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to numerals of reference marked thereon, which form a part of this specification.

The present invention has reference generally to improvements in that class of reflectors for incandescent electric lights, which reflectors are provided with a centrally-disposed screw-threaded collar for attachment of the shade of the reflector upon a screw-threaded fixture or bracket.

This invention has for its principal objects to provide a simple and cheaply-constructed reflector of the general character hereinafter set forth and, furthermore, to provide in connection with the shade of the reflector a novel and simple clamping or holding means for securing the screw-threaded collar which is to be screwed upon the fixture or bracket to or within a centrally-disposed opening in the shade of the reflector, the said clamping or holding means of the screw-threaded collar being of such a construction that the parts are intimately and securely united and cannot become disconnected or loosened when screwing the screw-collar upon the fixture or bracket.

A further object of this invention is to provide a novel and positive means for immovably securing one or more screw-receiving sockets or devices to the shade to receive the screws by means of which the usual light-cluster is secured upon inner central portion of the shade of the reflector; and, finally, another object of this invention is to cover and entirely surround the marginal reinforcing bead or turnover of the reflector-shade with a layer of enamel or other suitable material, so as to provide the reflector-shade with a straight upper face at all points and prevent all possibility of water during rain and snow storms from lodging upon the shade to the detriment of the enamel and the shade proper.

My present invention consists, therefore, in the novel reflector-shade hereinafter set forth; and, furthermore, this invention consists in the various arrangements and combinations of the several devices and parts, as well as in the details of the construction of the same, all of which will be more fully described in the following specification and then finally embodied in the clauses of the claim which are appended to and which form an essential part of this specification.

The invention is clearly illustrated in the accompanying drawings, in which—

Figures 1 and 2 are a top and bottom view, respectively, of a reflector-shade embodying the several improvements of my present invention; and Fig. 3 is a longitudinal vertical section, on an enlarged scale, said section being taken on line 3 3 in said Fig. 1 of the drawings. Fig. 4 is a sectional representation of a portion of the reflector-shade, showing an arrangement of openings or holes for the central fixture-attaching ring and a pair of cluster screw-receiving sockets, the said ring and screw-receiving sockets also being shown in vertical section, but in their detached relation with the reflector-shade and about to be inserted in their assembled positions in the respective holes or openings in the reflector-shade. Fig. 5 is a similar sectional representation of the parts represented in said Fig. 4, but showing the fixture-ring and the cluster screw-receiving sockets in their immovably-fixed positions relative to the shade of the reflector. Fig. 6 is a detail vertical section of the marginal and beaded edge of the shade and the layers of porcelain or other similar material upon the upper and inner faces of the shade and about the bead to provide the shade upon its upper face with a straight and unobstructed surface for the water to run off from the said shade. Fig. 7 is a side view of a modified fixture-receiving ring; and Fig. 8 is a horizontal section of the same, said section being taken on line 8 8 in said Fig. 7 looking in the direction of the arrow x in said Fig. 7.

The reflector-shade herein described is usually used in places out of doors where the same is exposed to the elements and is subjected to rain and snow storms and then to the action of the rays of the sun. In practice heretofore these shades have been made with a marginal bead extending above the

plane of the upper face of the shade, the parts of course being enameled, as usual; but when thus made the shade always had a marginal portion raised above the plane of the upper face of the shade, and the result was that the water from rain and snow invariably lodged against the raised part or shoulder. This had a deteriorating effect in that the water, due to the elements and changes in the weather, caused the enamel in time to peel away, whereby the metal body of the shell became rusted and was rendered unsightly. Furthermore, in time the reflector-shade thereby was rendered useless and had to be replaced. Reflector-shades of this character were also provided with a central fixture-receiving ring and with cluster screw-receiving sockets; but the method and means employed for securing the said ring and screw-receiving sockets to the comparatively thin metal body of the shade was such that an inefficient and insecure fastening means was the result, and especially with the fixture-receiving ring in screwing the same too forcibly upon the screw portion of the fixture or bracket, the soldered or otherwise-fastened ring was easily dislodged from its operative position upon the shade or when not entirely dislodged was sufficiently loosened to render the device inoperative.

Referring now to the several figures of the drawings, the reference character 1 indicates the reflector-shade, and 2 is the metal shell or body of the same. In its upper central portion the said shell or body is made with a receiving-opening 3 for the reception of a fixture-receiving ring 4. The said shell or body 2 may also be provided with two or more other openings 5 for the reception of cluster screw-receiving sockets 6. The said fixture-receiving ring 4 is provided with an internal screw-thread 7 and usually with a tightening or binding set-screw 8. The said fixture-receiving ring is also made with a downwardly-extending annular flange 9, the lower marginal edge of which is made thin or is chamfered upon its inner surface, as at 10 and as clearly shown in Fig. 4 of the drawings. The upper outer surface of the said flange and the lower portion of the main body of the said ring 4 are made in such a manner that an annular shoulder 11 is formed, the lower surface of the said shoulder preferably tapering upwardly and inwardly, substantially as shown at 13. In a like manner the cluster screw-receiving sockets 6 when employed are each provided with an internally-screw-threaded receiving portion 14 for the reception of the screw-threaded portions of the usual screws by means of which the lamp-cluster is secured in its position upon the inner face of the reflector-shade. Each cluster screw-receiving socket 6 is also made with a downwardly-extending annular flange 15, the lower marginal

edge of which is made thin or is chamfered upon its inner surface, as at 16. The upper outer surface of the flange 15 and the lower portion of the main body of each socket 6 are made in such a manner that an annular shoulder 17 is formed, the lower surface of each shoulder 17 preferably tapering upwardly and inwardly in the manner shown at 18 in Fig. 4 of the drawings.

Referring now to Figs. 4 and 5 of the drawings, it will be seen that when the annular flange 9 of the fixture-receiving ring 4 is inserted in the central receiving-opening 3 in the shell or body 2 of the reflector-shade its undercut shoulder 11 will rest directly upon the upper surface portions of the said shell or body 2 which bound the said opening 3. In like manner when the cluster screw-receiving sockets 6 are inserted in the respective openings 5 in the said shell or body 2 each undercut shoulder 17 will rest directly upon the upper surface portions of the said shell or body 2 which bound the said openings 5. After the said ring 4 and sockets 6 have thus been arranged the chamfered marginal flanges 9 and 15 of the ring 4 and sockets 6, respectively, are upset against the under surface portions of the said shell or body 2 in the manner illustrated in Fig. 5 of the drawings. From an inspection of said Fig. 5 it will be seen that the upsetting and closing down of the said flanges 9 and 15 against the under or inner surface portions of the shell or body 2 which bound the various openings 3 and 5 draws the said bounding portions of the shell or body 2 upwardly into the upwardly and inwardly tapering parts of the shoulders 11 and 17 of the ring 4 and sockets 6, respectively. In this manner the said ring 4 and sockets 6 are securely fastened to the metal body or shell of the reflector-shade against displacement, as will be clearly evident. Furthermore, this means and method of connecting the ring 4 and sockets 6 to the shell or body 2 provides water-tight connections at these points, as will be clearly seen from an inspection of Figs. 3 and 5. Referring now to Figs. 3 and 6 of the drawings, it will be seen that said shell or body 2 is made with an annular and downwardly-curved portion 19 and with a turned-over edge portion 20, terminating in an annular edge 21. This edge 21 is practically in the same plane of the main shell or body 2, the annular bead which is formed by these parts being slightly below the plane of the main shell or body 2.

A coating or layer 23 of porcelain, enamel, or the like of one color, usually green, is placed upon the upper and outer face of the shell or body 2, said layer preferably extending around the marginal bead of the said shell or body 2 and slightly upon the inner marginal edge portion of the shell or body, as at 24, the remaining surface of the inner face

of the said shell or body 2 being provided with a layer 25 of white enamel or other similar material. In this manner the upper layer 23 provides a perfectly smooth and unobstructed surface for any water to run off therefrom, and a reflector-shade which is perfectly waterproof is the result.

I am aware that some changes may be made in the arrangements and combinations of the parts, as well as in the details of the construction of the same, without departing from the scope of this invention. Hence I do not limit my invention to the exact arrangements and combinations of the parts as described in the foregoing specification and as illustrated in the accompanying drawings, nor do I confine myself to the exact details of the construction of the said parts.

Having thus described my invention, what I claim is—

1. In a reflector-shade, a metal shell or body formed with an opening bounded by an upwardly-extending marginal edge, and a receiving-fixture in said opening, said fixture having an internally-screw-threaded receiving portion and being provided with an annularly-extending groove corresponding to and in which said upwardly-extending mar-

ginal edge is arranged, said fixture being provided below said groove with an outwardly-extending flange tapering toward its marginal edge to a sharp edge lying close against the lower surface of the said shell or body of the reflector-shade, substantially as and for the purposes set forth.

2. In a reflector-shade, the combination, with a shell or body formed with an annular and downwardly-curved portion, and having its marginal edge bent upwardly and backwardly toward and upon said annular and downwardly-curved portion, of an enamel or other layer upon the upper surface of said shell and around the said upwardly-bent marginal edge, the upper and outer face of the said layer being perfectly straight to prevent a collection of water upon the shade, substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 26th day of April, 1905.

WILLIAM H. SPENCER.

Witnesses:

FREDK. C. FRAENTZEL,
GEO. D. RICHARDS.