

No. 753,077.

PATENTED FEB. 23, 1904.

H. HUBBELL.
SHADE HOLDER.

APPLICATION FILED JUNE 11, 1903.

NO MODEL.

2 SHEETS—SHEET 1.

Fig. 1.

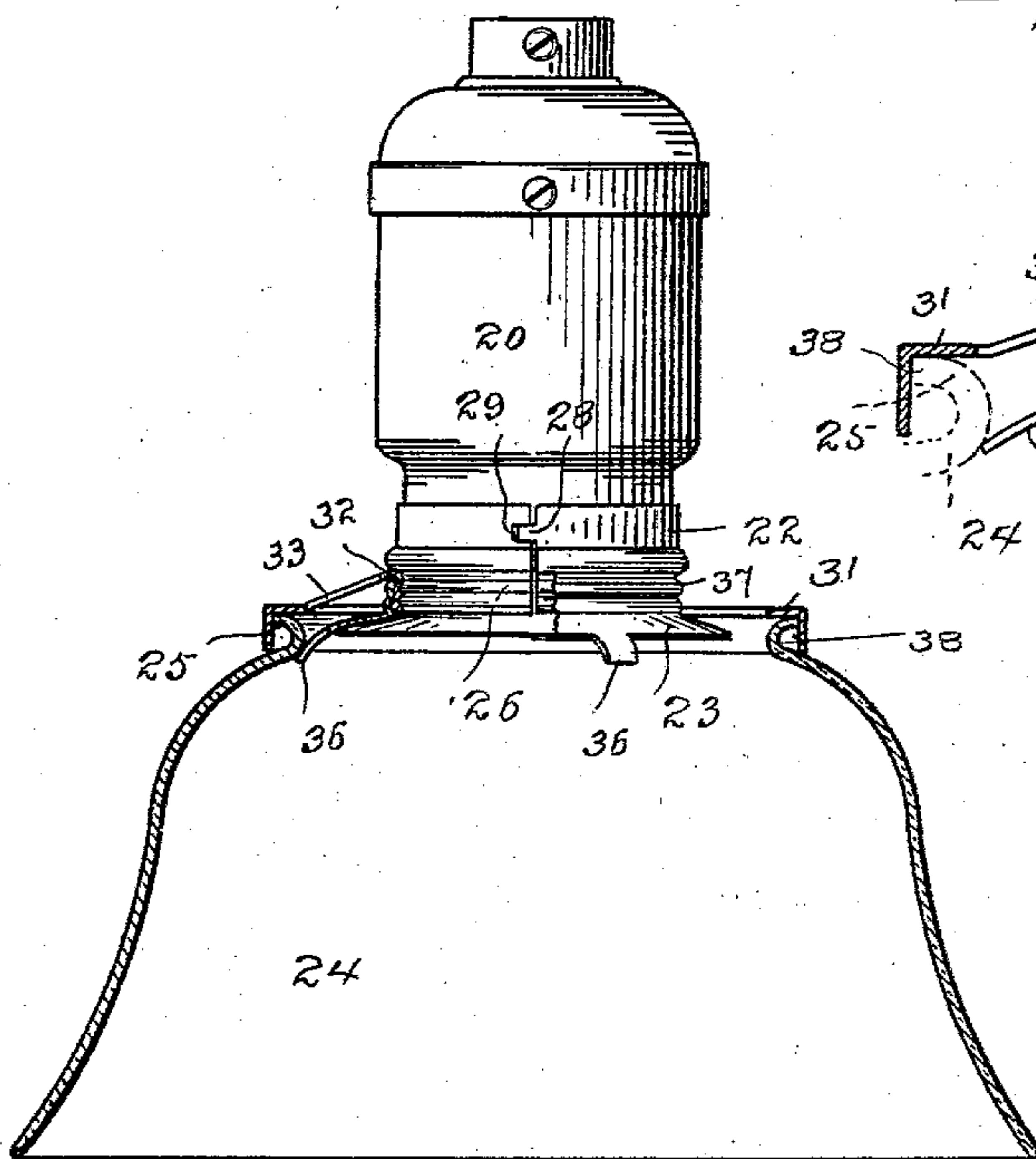


Fig. 1^a.

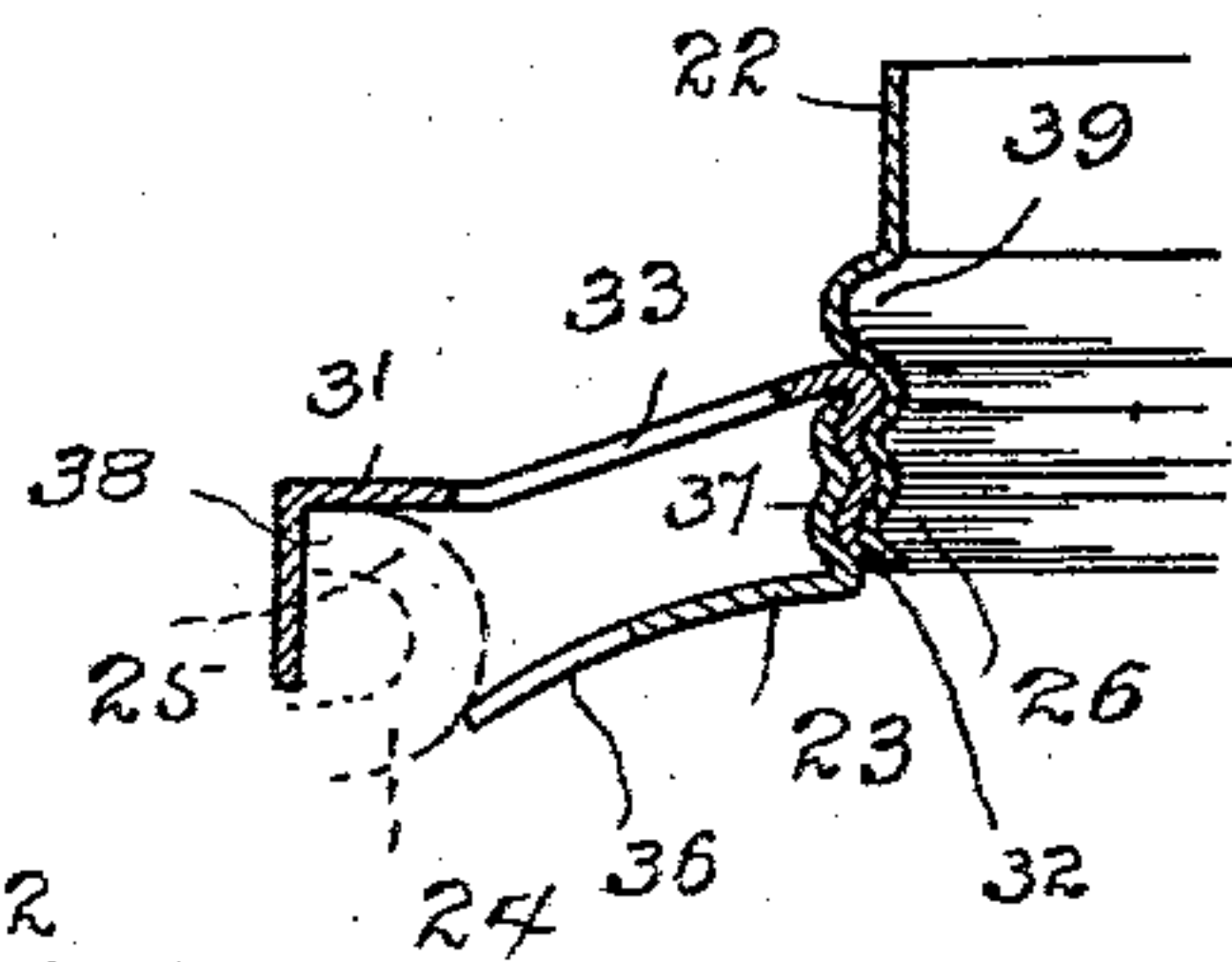


Fig. 2.

Fig. 4.

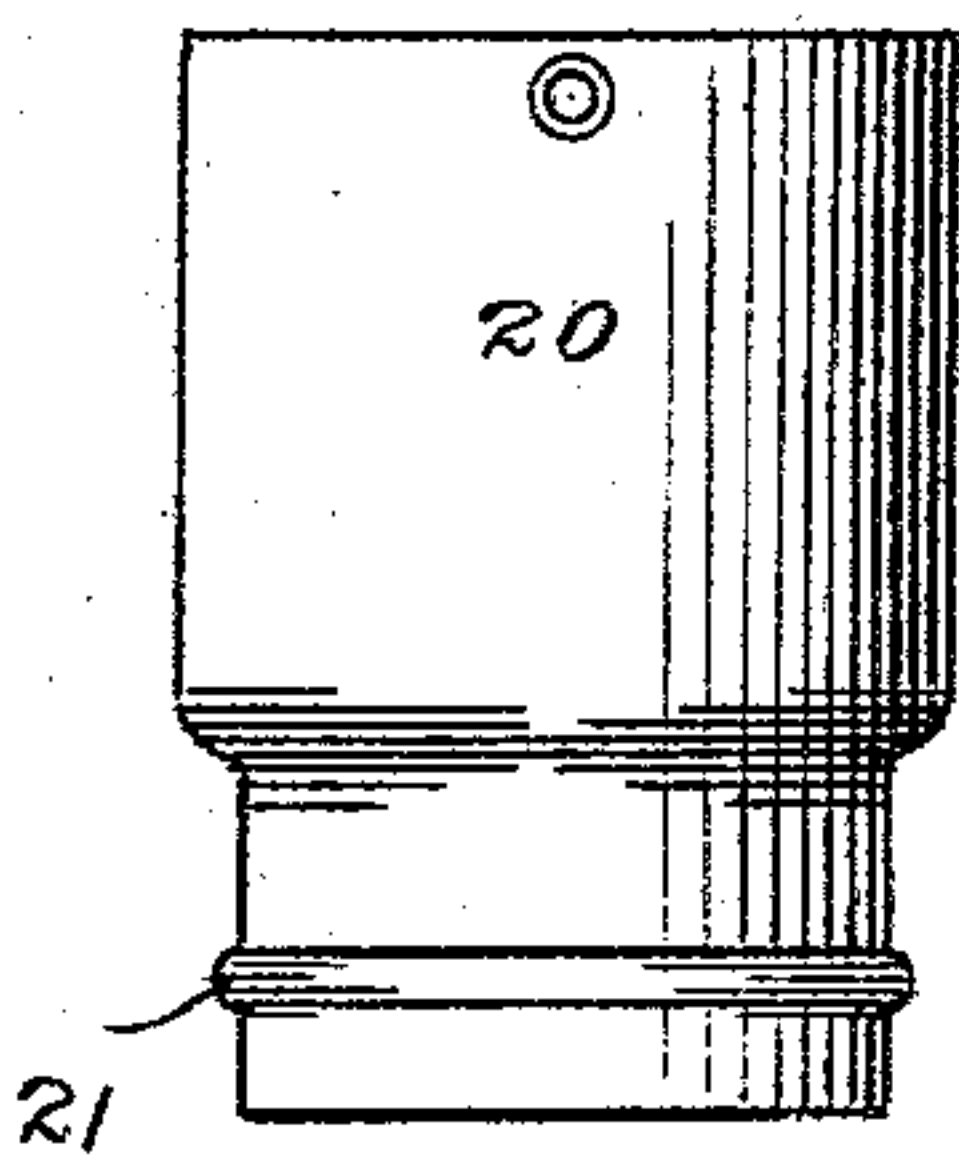
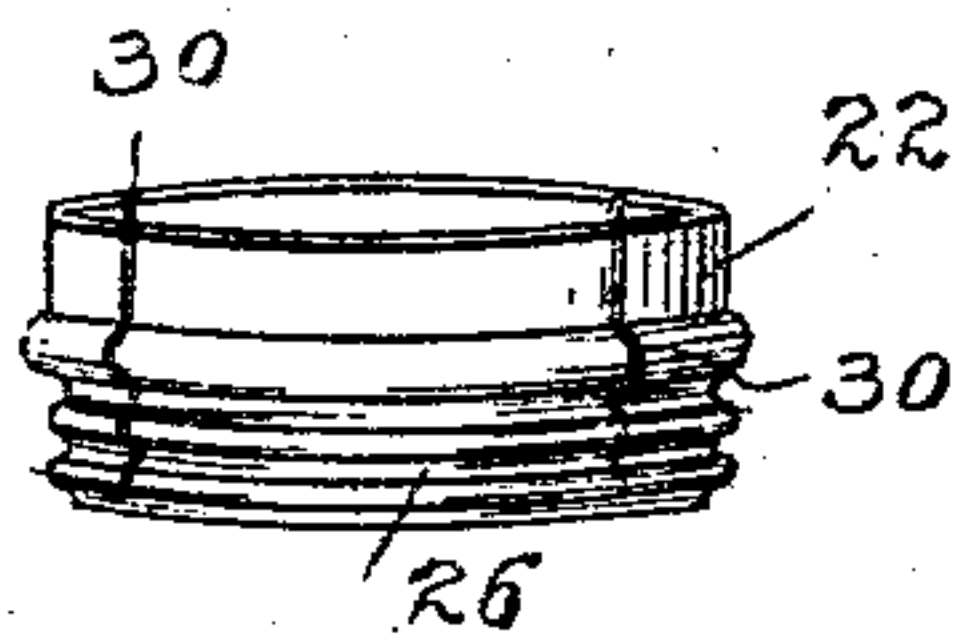


Fig. 5.

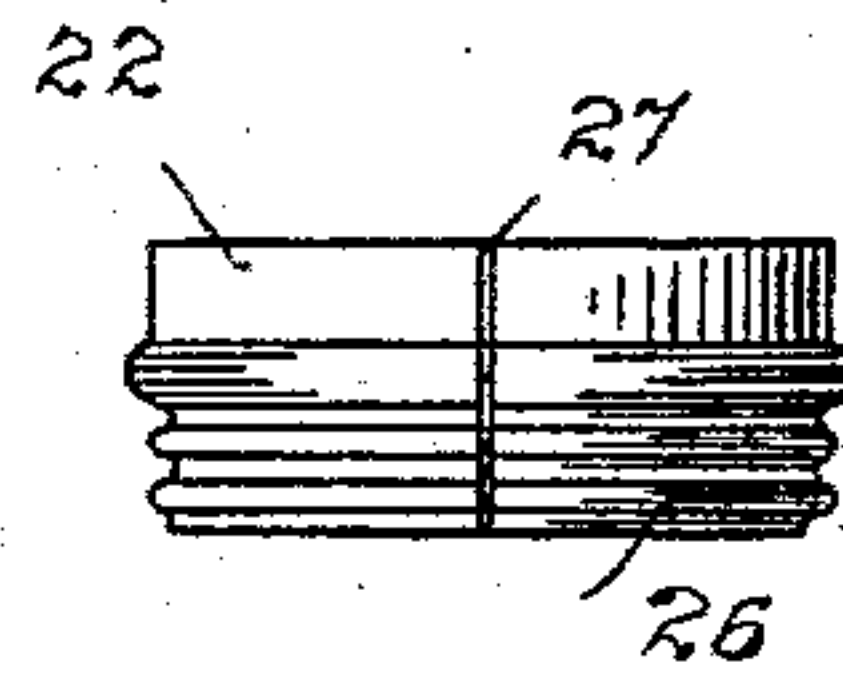
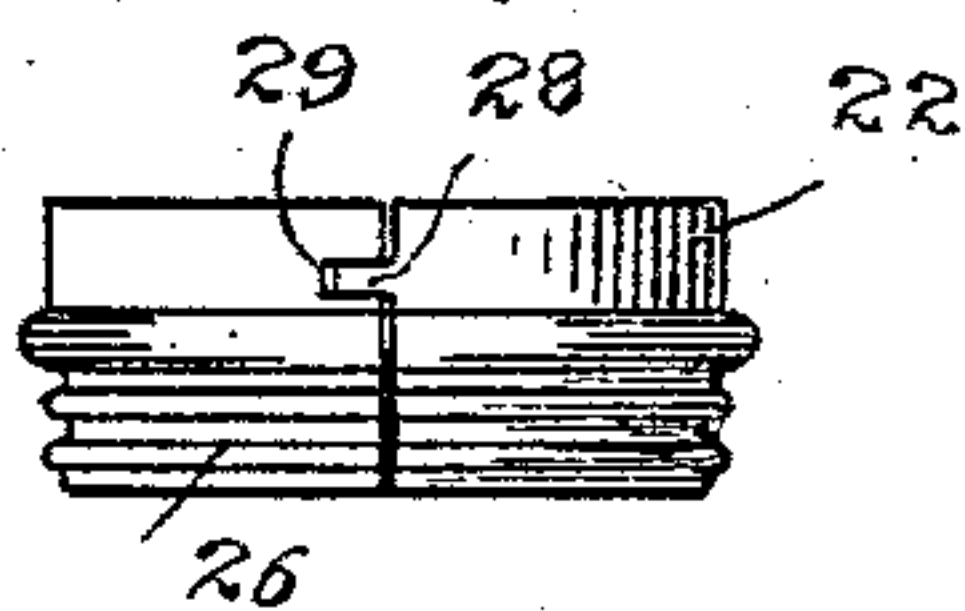


Fig. 3.



WITNESSES.

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2 SHEETS—SHEET 2.

Fig. 6.

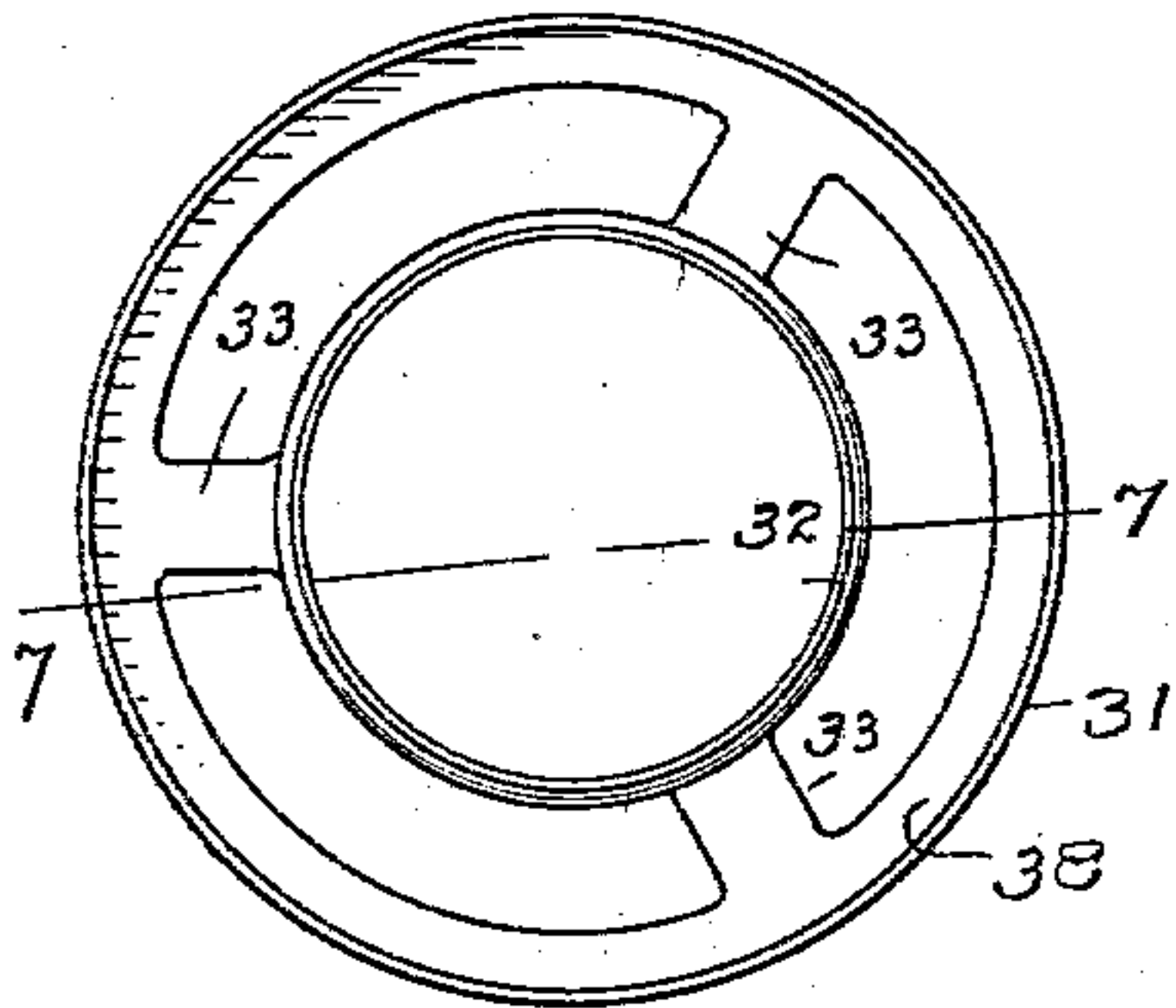


Fig. 8.

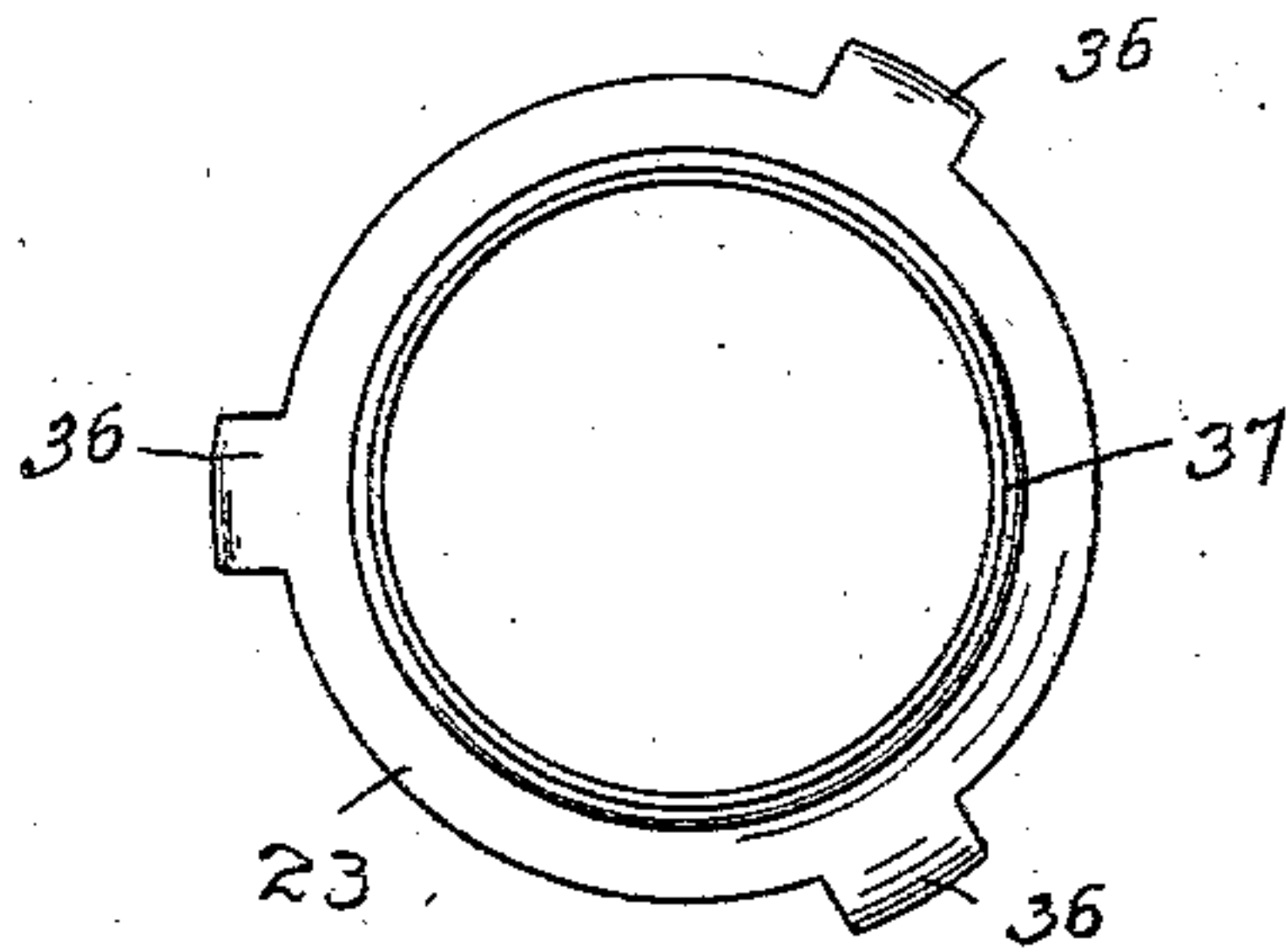


Fig. 7.

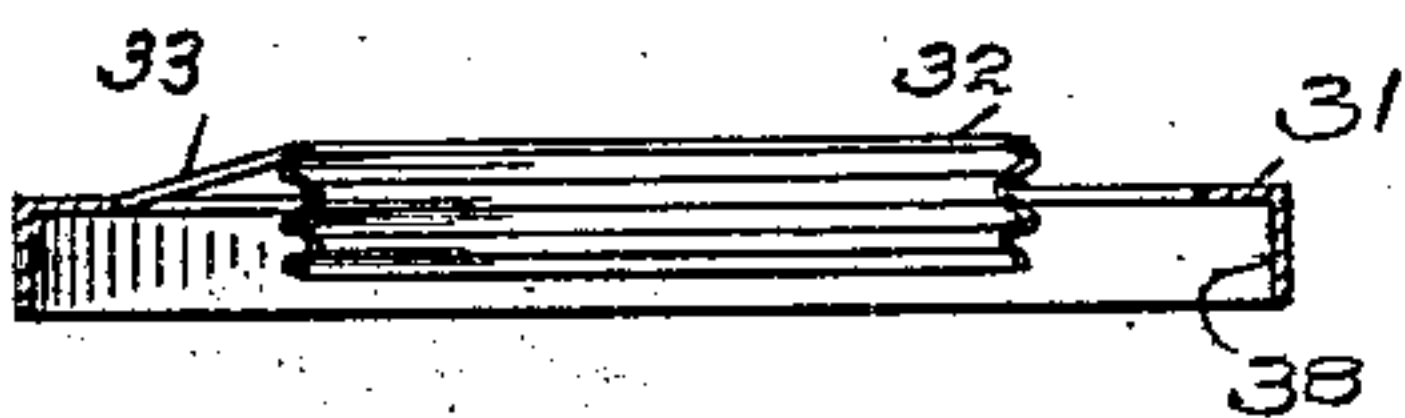


Fig. 9.

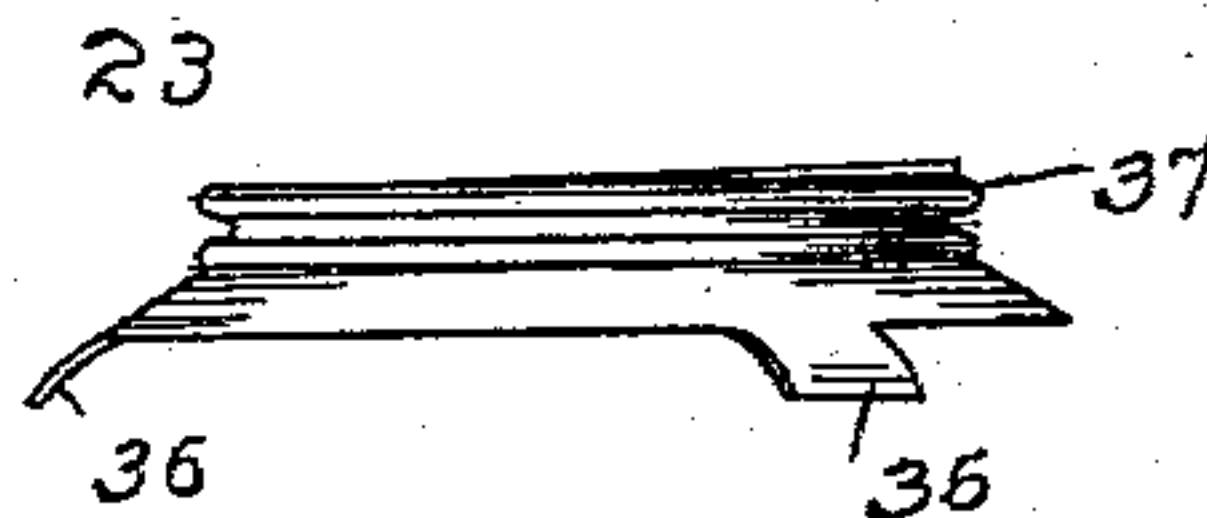


Fig. 10.

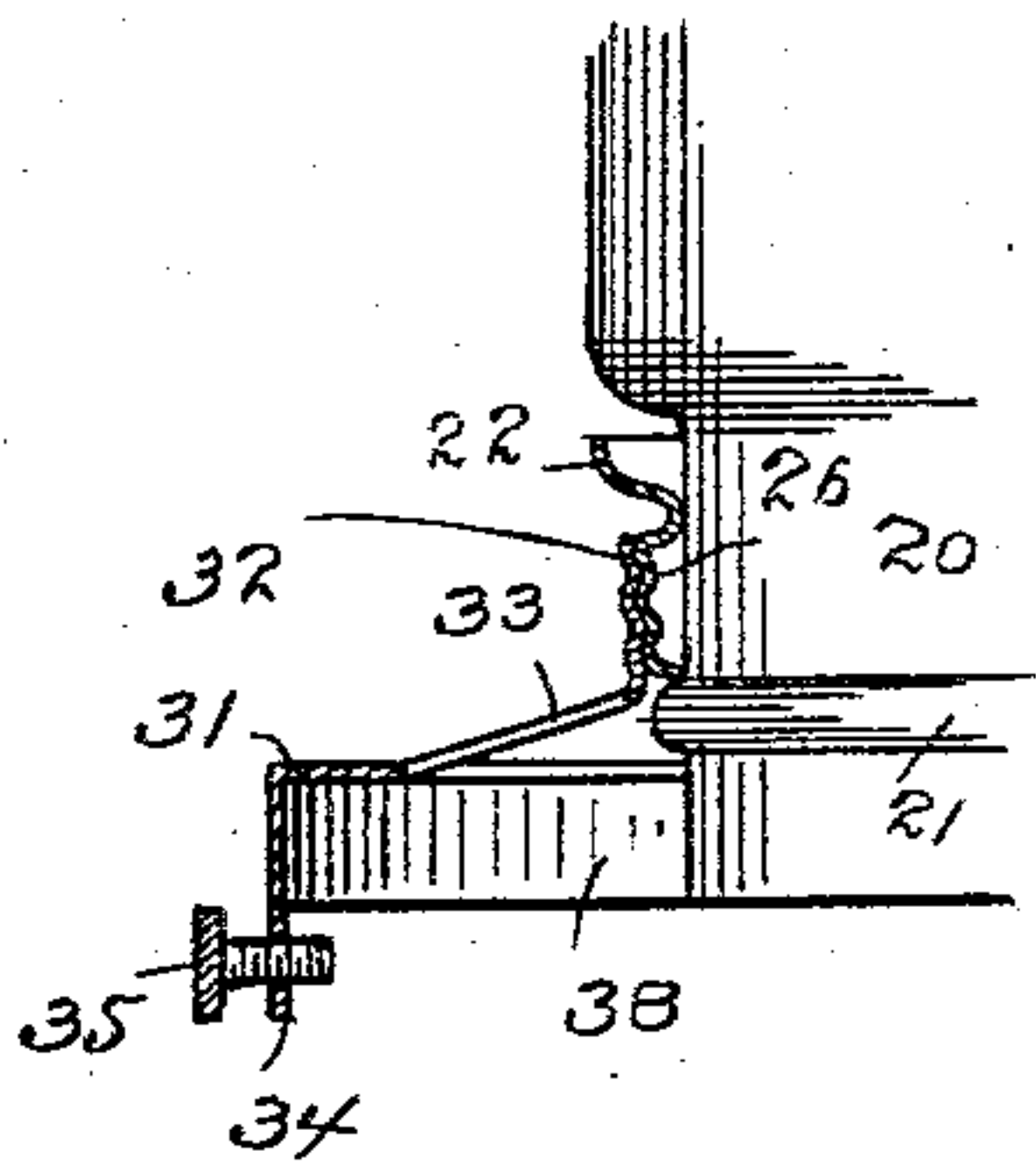


Fig. 11.

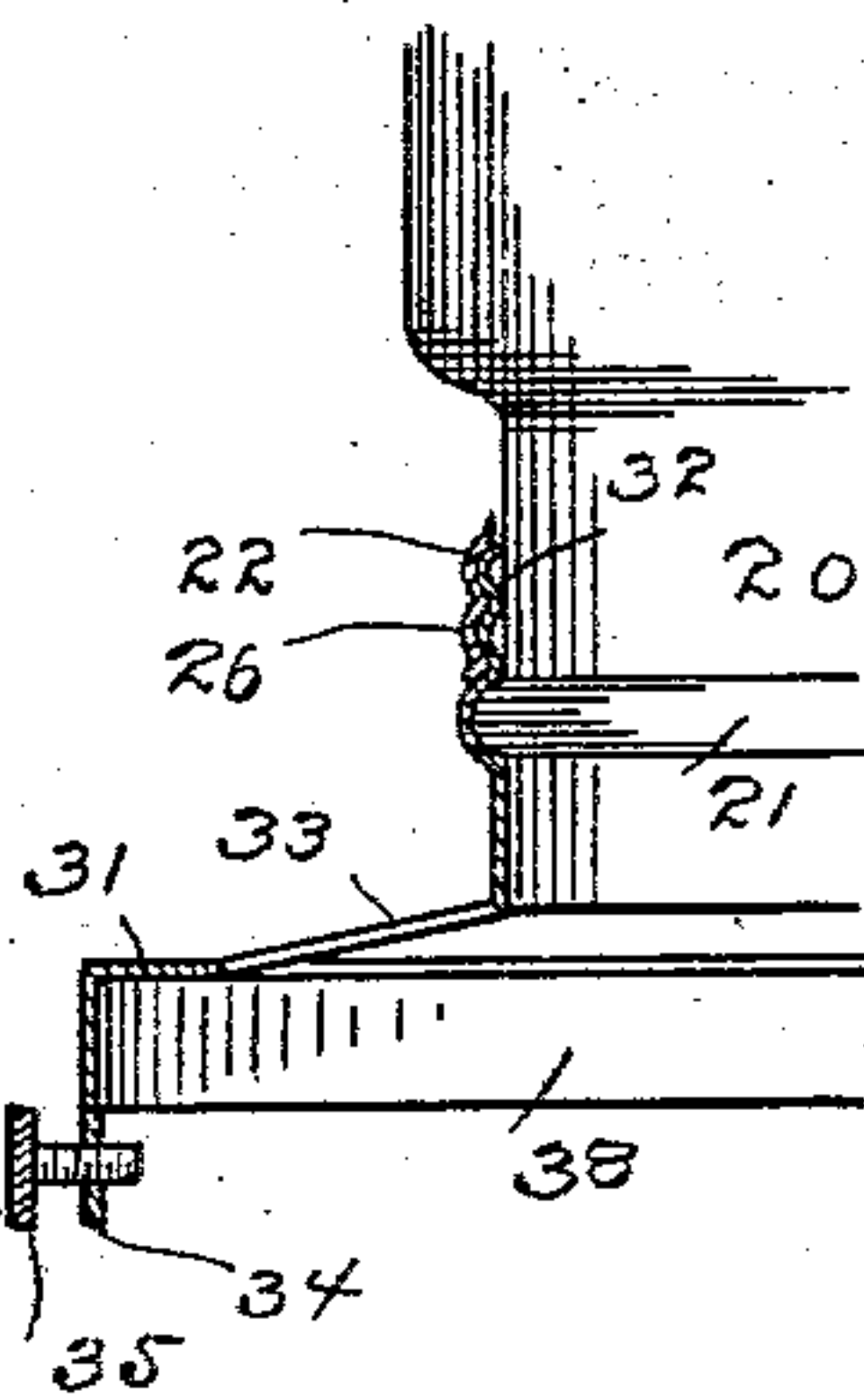
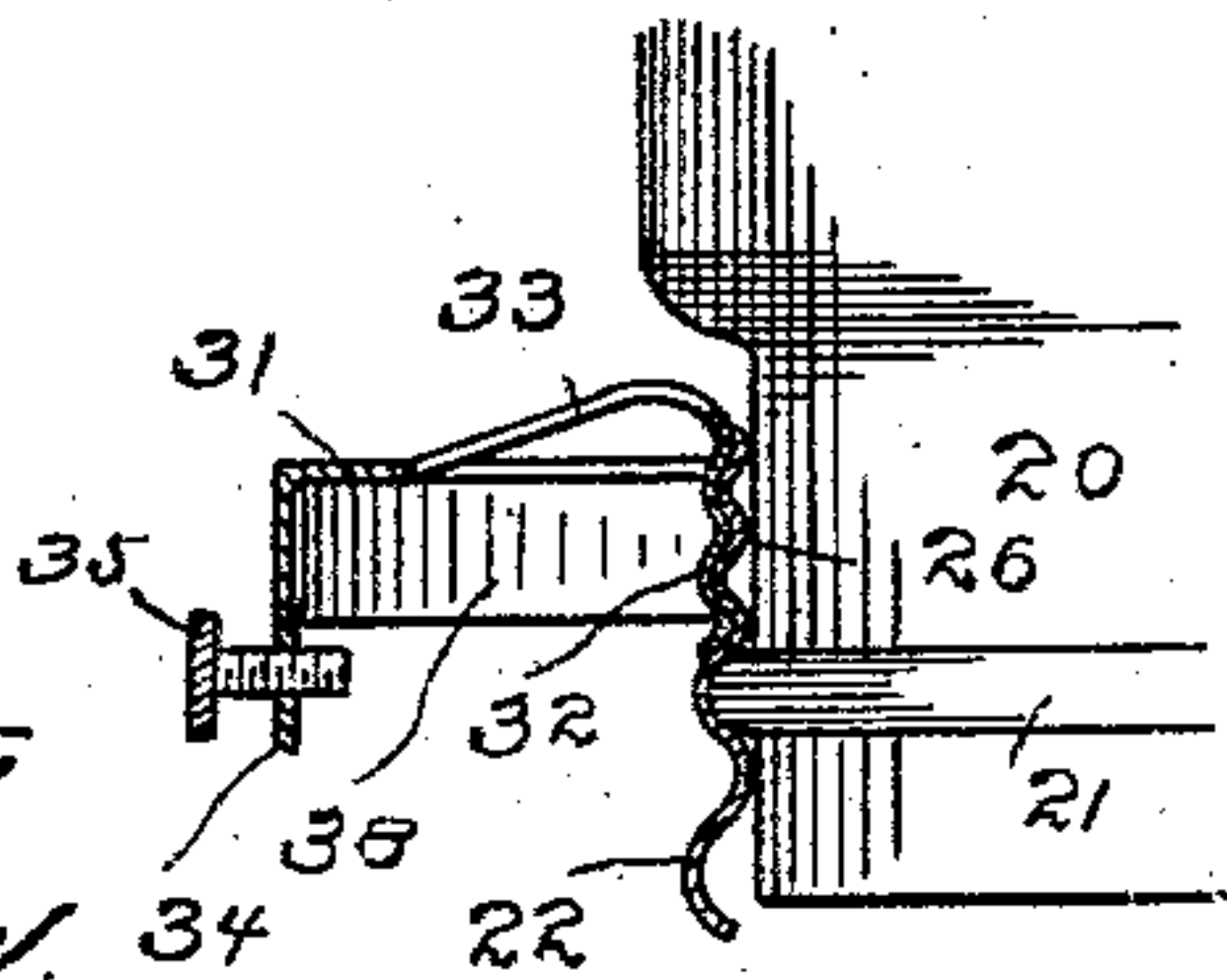


Fig. 12.



WITNESSES.

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UNITED STATES PATENT OFFICE.

HARVEY HUBBELL, OF BRIDGEPORT, CONNECTICUT.

SHADE-HOLDER.

SPECIFICATION forming part of Letters Patent No. 753,077, dated February 23, 1904.

Application filed June 11, 1903. Serial No. 161,017. (No model.)

To all whom it may concern:

Be it known that I, HARVEY HUBBELL, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented a new and useful Shade-Holder, of which the following is a specification.

My invention relates more especially to the class of shade-holders which are used to attach shades to incandescent-lamp fixtures. It has been a serious objection to this class of shade-holders as heretofore constructed that it was impossible to attach them to the shells of standard lamp-sockets except by means of ears and clamping-screws. The preferable means of attaching shade-holders to socket-shells is by means of a rolled screw-thread. "Standard socket-shells," so called, are not, however, provided with threads. It has therefore been necessary heretofore either to have specially made socket-shells provided with screw-threads or else to attach the shade-holders to the shells by the objectionable ears and clamping-screws. The result has been that shade-holders having a rolled-thread attachment have not gone into general use, although that means of attachment is far preferable, for the reason that the standard-sockets which are generally in use are not provided with threads.

It is one of the objects of this invention to provide a yielding threaded collar which will automatically engage standard socket-shells and which will permit the convenient attachment thereto of threaded shade-holders, thereby doing away with the objectionable ears and clamping-screws as a means of attaching shade-holders to socket-shells.

It is a further object of the invention to provide means for attaching shades to shade-holders by which I am enabled to entirely dispense with the unsightly ears and clamping-screws as a means of attaching shades to shade-holders.

With these and other objects in view the invention consists in certain constructions and in certain parts, improvements, and combinations which will be hereinafter fully described and then specifically pointed out in the claims hereunto appended.

In the accompanying drawings, forming a part of this specification, in which like charac-

ters of reference indicate the same parts, Figure 1 is a sectional elevation illustrating my novel mode of attaching shade-holders to standard socket-shells and my novel and preferred mode of attaching shades to shade-holders. Fig. 1^a is an enlarged detail view corresponding with Fig. 1; Fig. 2, an elevation of a standard socket-shell, the cap being removed; Figs. 3, 4, and 5, views illustrating variant forms of my novel self-attaching threaded collars; Fig. 6, a plan view of a threaded shade-holder detached; Fig. 7, a section on the line 7 7 in Fig. 6; Fig. 8, a plan view, and Fig. 9 a side elevation, of my novel shade-locking ring detached; and Figs. 10, 11, and 12 are detail sectional views, partly in elevation, illustrating obvious modifications in the form of my novel self-attaching threaded collars and of the corresponding threaded collars upon shade-holders, it being understood, of course, that the essential principle in all the forms is a threaded collar that will automatically engage a standard socket-shell and a shade-holder having a threaded collar that will engage the first-mentioned collar.

20 denotes a standard socket-shell, which is provided near its lower end with a circumferential rib 21; 22, my novel automatically-engaging threaded collar; 31, a shade-holder which may be of any ordinary or preferred design and is provided with a double-threaded collar 32; 24, a shade which may of course be of any ordinary or preferred design and is provided with an attaching-neck 25, and 23 my novel shade-locking ring.

The exact form of the threaded automatically-engaging collars is not of the essence of the invention. It is simply required that they be made large enough to pass over the lower end of a standard socket-shell, that they be made yielding, so as to automatically engage the shell by contraction thereupon at or above the rib on the shell, and that each be provided with a screw-thread, which I have indicated by 26. The collars 22 may be made to attain the result of automatically gripping the shell by dividing them vertically across, as in Fig. 5, in which the opening between the ends of the collar is indicated by 27, or by a vertical opening in connection with a tongue and recess, as in

Figs. 1 and 3, in which one end of the collar is shown as provided with a tongue 28 adapted to pass into a corresponding recess 29 in the other end or by vertical slots 30 extending from the top nearly to the bottom, as in Fig. 4, it being obviously a matter of no special consequence whether the collars are made yielding, so as to allow them to be expanded to be slipped over the rib on the socket, and then self-retaining by contractile force by vertical slots extending from the top downward or by an opening extending entirely across the ring.

In Figs. 1, 1^a, 3, 4, and 5 I have illustrated contractile threaded collars provided with a circumferential internal groove or depression 39 to receive the rib 21 on a standard socket-shell.

The operation of attaching a shade-holder to a standard socket-shell is simply to slip a collar 22 over the rib on the shell where it will automatically contract to place and then turn the shade-holder to place, the threaded collar 32 on the shade-holder engaging thread 26 on the contractile collar.

The form illustrated in Fig. 10 differs from the forms illustrated in Figs. 1, 1^a, 3, 4, and 5 in that the contractile collar is so shaped as to lie wholly above the rib on the shell, it being understood, of course, that in each form the threaded collar 32 on the shade-holder is made to engage the special form of contractile collar with which it is to be used.

The form illustrated in Fig. 11 differs in that threaded collar 32 upon the shade-holder is shown as passing under the contractile collar instead of on the outer side, as in the other forms.

The form illustrated in Fig. 12 differs from the form in Fig. 11 in that the threaded collar 32 upon the shade-holder lies below the arms 33, which support it, said collar 32 engaging the outer side of thread 26 on contractile collar 22, as in Fig. 11, it being, however, wholly immaterial in this form whether collar 32 on the shade-holder engages the contractile collar internally or externally.

34, Figs. 10, 11, and 12, denotes lugs upon the shade-holder, and 35 set-screws in said lugs for attaching the shade to the shade-holder. In the preferred form, however, lugs 34 and set-screws 35 may be dispensed with, and the shade may be attached to the shade-holder by means of shade-locking ring 23.

The essential features of this shade-locking ring are that it is provided with arms 36, which are adapted to engage the under side of attaching-neck 25 on the shade, said arms being of course sufficiently yielding to enable them to be sprung into the positions shown in Figs. 1 and 1^a, and with a threaded collar 37, which engages thread 26 on the contractile collar, as clearly illustrated in Figs. 1 and 1^a, it being immaterial which of the forms of contractile collars illustrated in Figs. 3, 4, and

5 is used. To attach a shade to a shade-holder by means of my novel shade-locking ring, the operator simply places the shade in position, the attaching-neck thereof lying in the usual socket 38 in the shade-holder which receives it and then turns collars 37 on the shade-locking ring to place upon threaded collar 32 on the shade-holder. This means of attaching a shade to a shade-holder holds the shade firmly in place, so that it will not move or rattle, avoids danger of breaking the shade, enables the attachment to be made much more quickly than where a plurality of screws must be turned in, and makes a much neater connection, as the objectionable lugs and set-screws are dispensed with.

Having thus described my invention, I claim—

1. A shade-holder comprising a contractile threaded collar adapted to engage a standard socket-shell and a holder having a threaded collar adapted to engage the said contractile collar.

2. A contractile collar for a shade-holder, said collar having external screw-threads and having a circumferential internal groove.

3. An internally and externally threaded collar divided across, whereby it is made capable of expansion and contraction, one end thereof being provided with a projecting tongue and the other with a recess to receive the tongue.

4. The combination with a standard socket-shell having a circumferential rib, of a contractile threaded collar retained in place by the rib and a shade-holder having a threaded collar which engages the contractile collar.

5. The combination with a shade-holder having a threaded collar and a socket, and a shade having an attaching-neck adapted to engage the socket, of a shade-locking ring having a threaded collar adapted to engage the collar upon the shade-holder and integral yielding arms which engage the under side of the neck of the shade and retain it in place in the socket.

6. The combination with a socket-shell having a circumferential rib and a contractile threaded collar engaging said shell and retained in place by the rib, of a shade-holder having a collar provided with a double thread adapted to engage the contractile collar and a socket, a shade having an attaching-neck adapted to engage the socket and a shade-locking ring having arms engaging the under side of the neck to retain the neck in the socket and a threaded collar to engage the collar of the shade-holder.

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

HARVEY HUBBELL.

Witnesses:

A. M. WOOSTER,
S. W. ATHERTON.