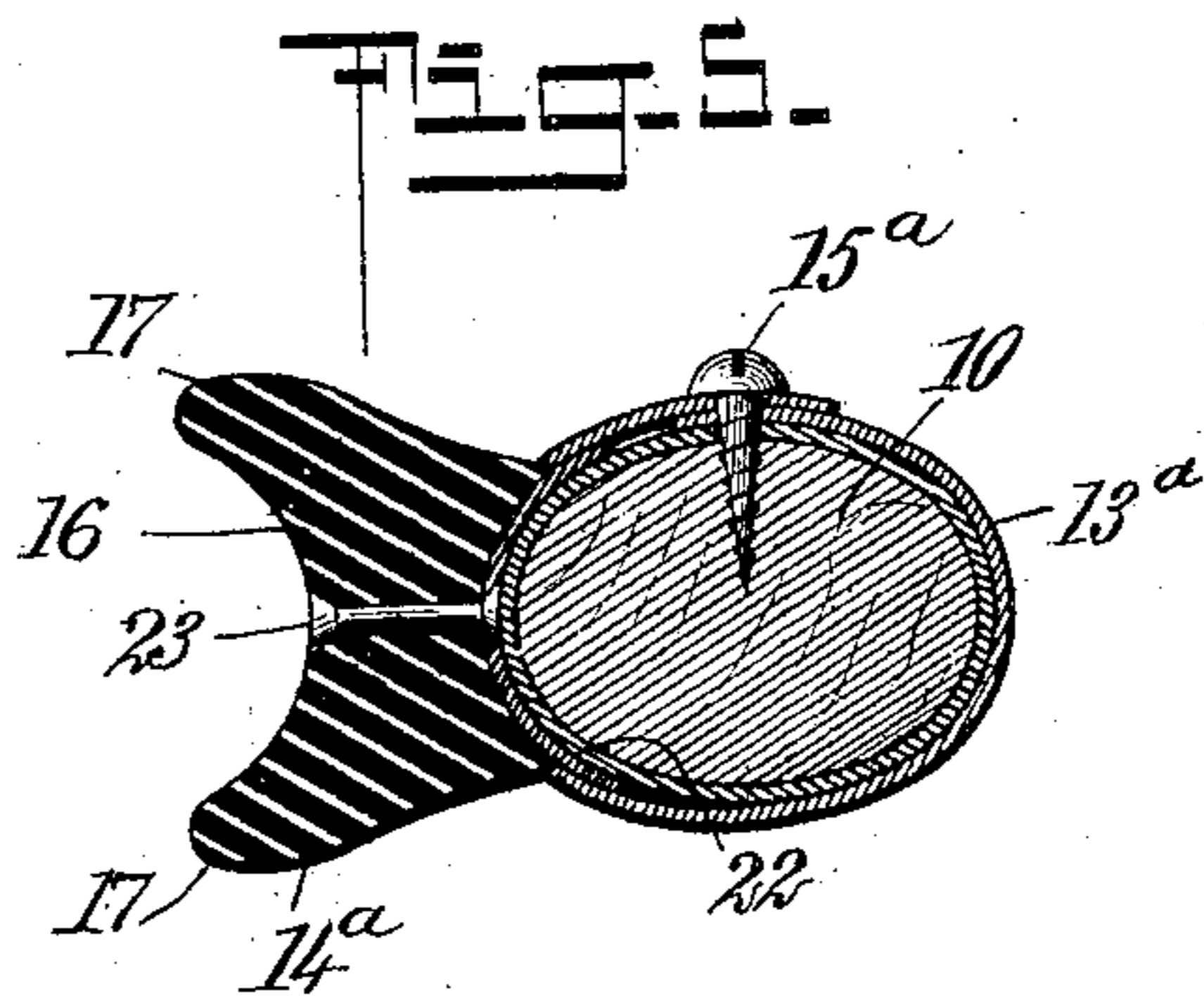
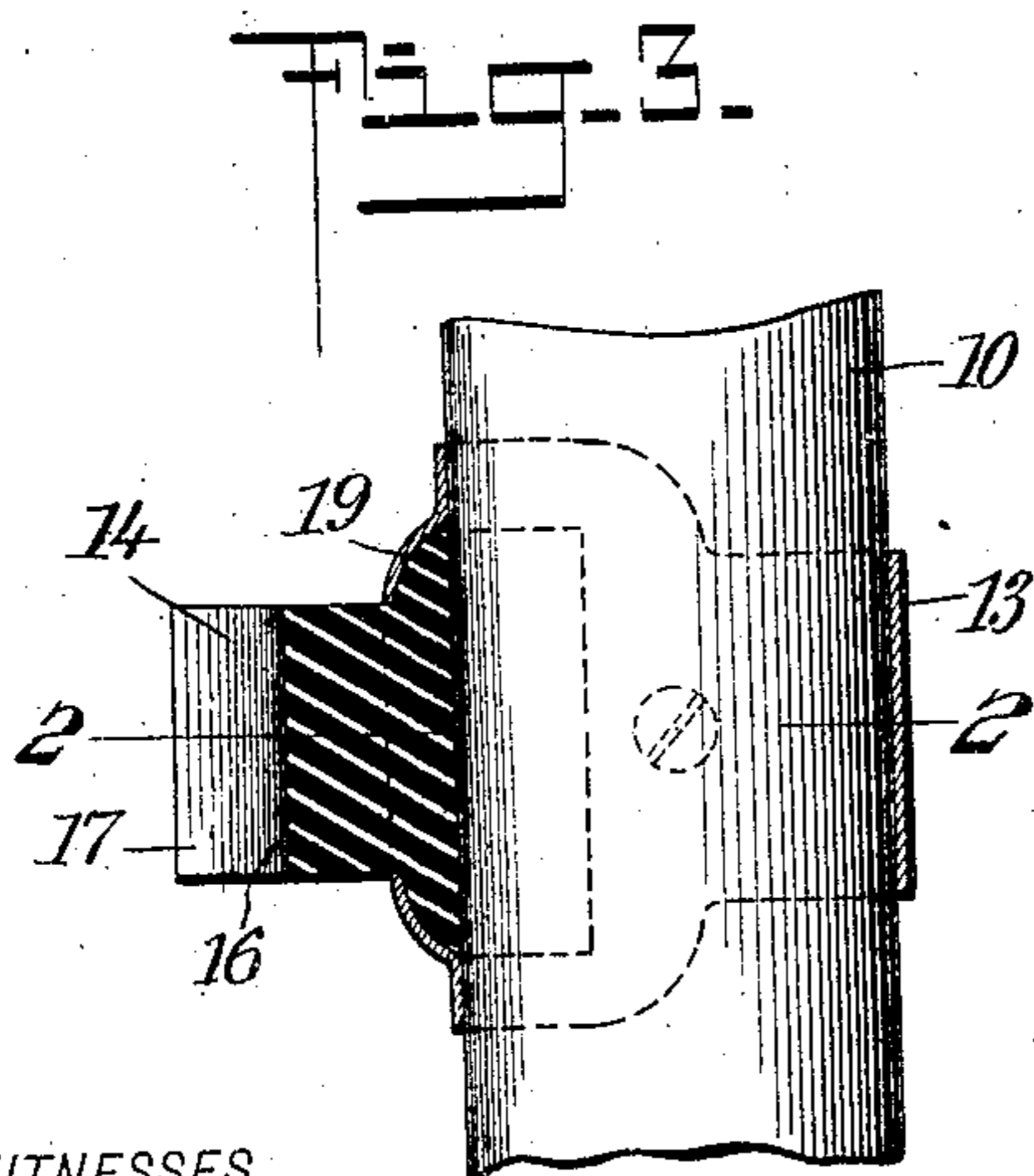
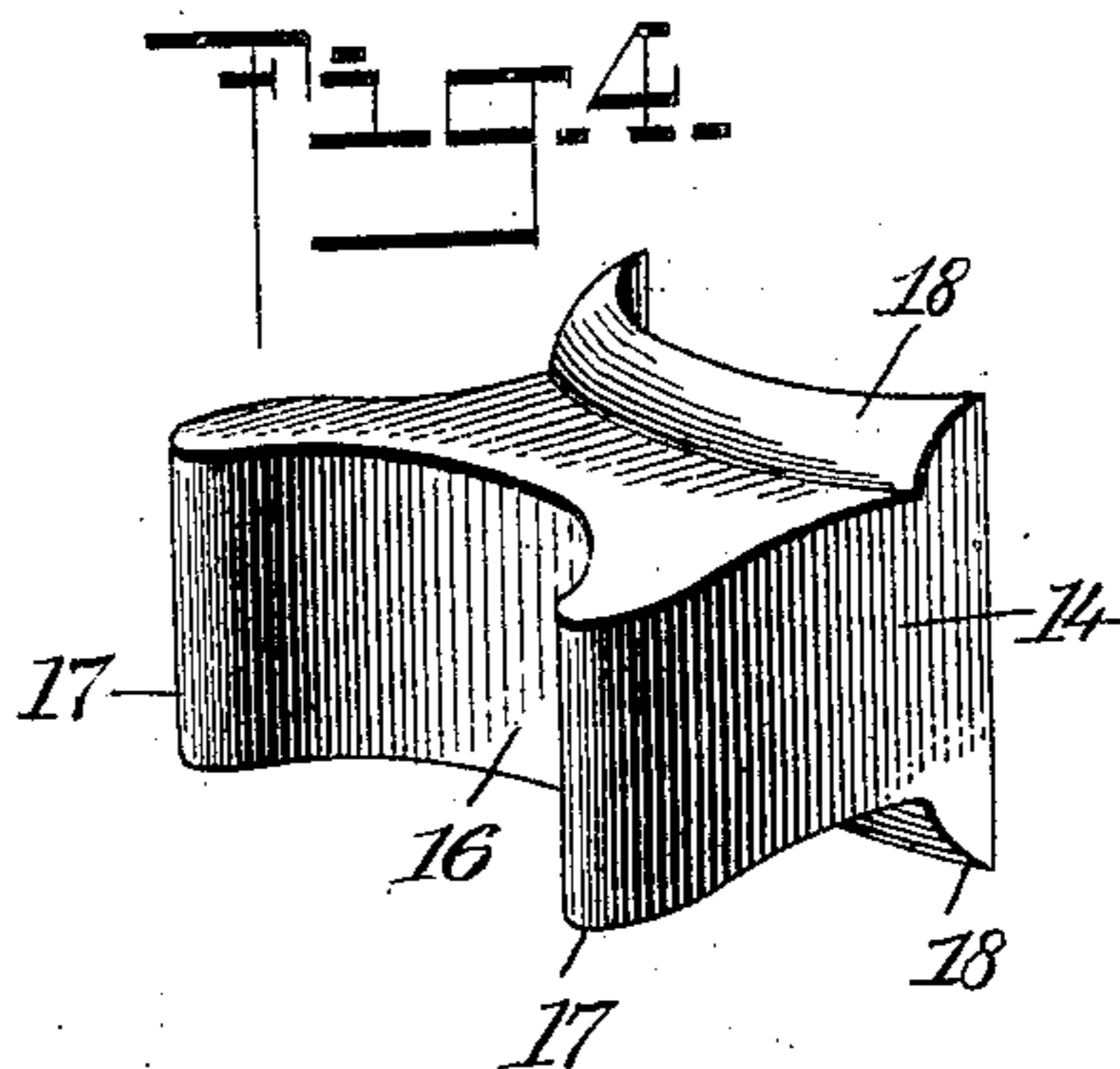
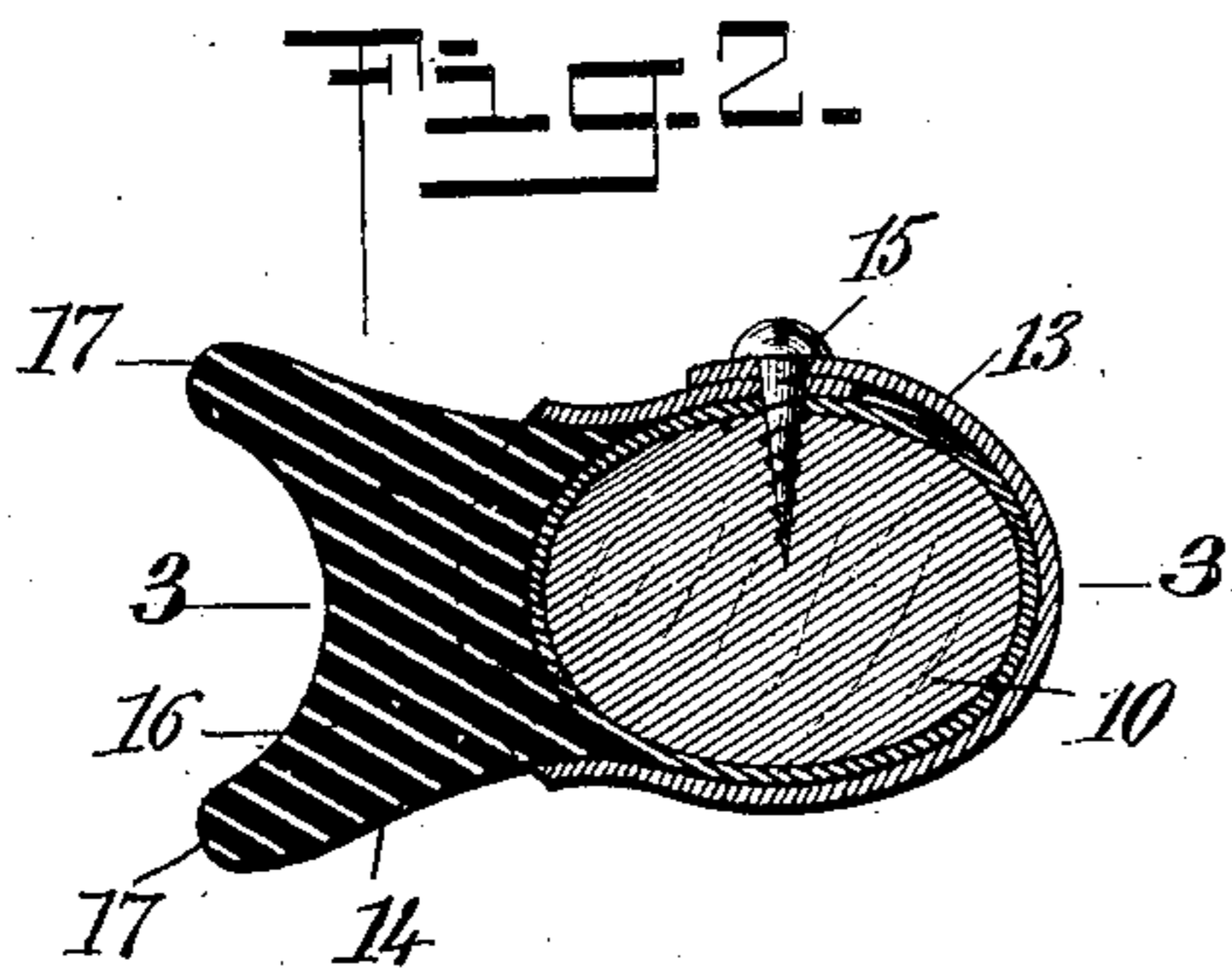
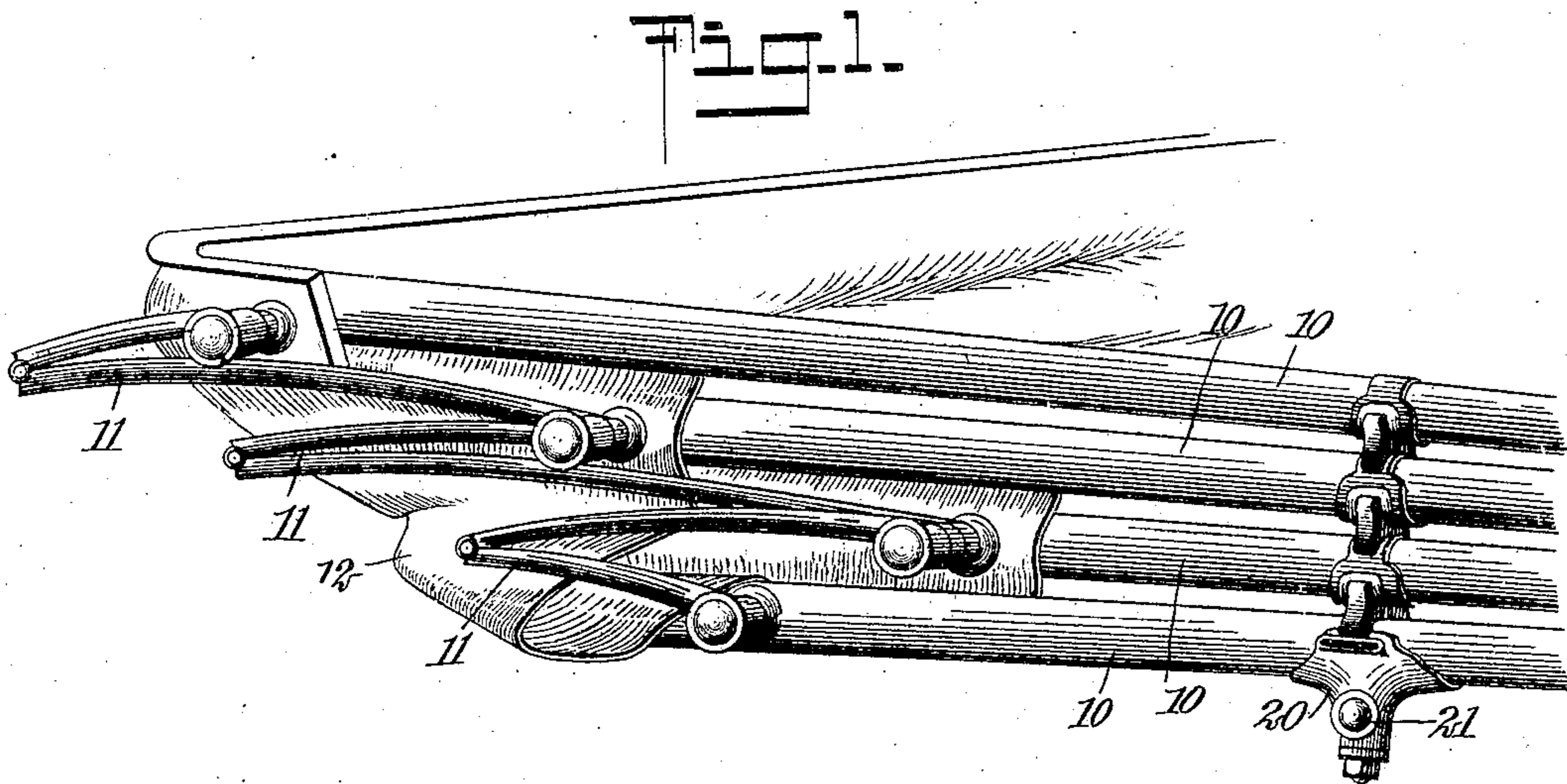


No. 844,969.

PATENTED FEB. 19, 1907.

J. H. SPRAGUE.
BOW REST FOR VEHICLES.
APPLICATION FILED DEC. 20, 1906.



WITNESSES

H. J. Dieterich

C. W. Fairbank

INVENTOR
James H. Sprague
BY *Mum & Co*
ATTORNEYS

UNITED STATES PATENT OFFICE.

JAMES HARVEY SPRAGUE, OF NORWALK, OHIO.

BOW-REST FOR VEHICLES.

No. 844,969.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed December 20, 1906. Serial No. 348,703.

To all whom it may concern:

Be it known that I, JAMES HARVEY SPRAGUE, a citizen of the United States, and a resident of Norwalk, in the county of Huron and State of Ohio, have invented a new and Improved Bow-Rest, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in folding tops for automobiles and other vehicles, and relates more particularly to means for spacing the bows of said tops and holding them in a definite position in relation to each other when the top is folded back, said means being so constructed that all chafing and wearing of the bows or cover is prevented.

My improved bow-rests are so constructed that as the top comprising the bows is folded down each bow-rest serves to automatically bring its corresponding bow into alinement with the next adjacent bow, as well as to prevent all rattling or jarring of the adjacent parts.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, in which—

Figure 1 is a perspective view of a portion of a vehicle-top provided with my improved bow-rest and shown in its folded position. Fig. 2 is a transverse section through a bow and bow-rest, said section being taken on the line 2 2 of Fig. 3. Fig. 3 is a longitudinal section through the parts shown in Fig. 2 and taken on the line 3 3 of Fig. 2. Fig. 4 is a transverse view of the rubber bumper employed; and Fig. 5 is a transverse section similar to Fig. 2, but showing a somewhat modified form of construction.

To illustrate more clearly the construction and operation of my improved bow-rest, I have shown in Fig. 1 a portion of a vehicle-top having a plurality of bows 10, secured together by hinged braces 11 and carrying a flexible covering 12. As the top is folded or closed down the bows normally rest one above the other, as shown, and if special means are not provided these bows chafe against each other and wear the cover, due to the jarring of the vehicle, and not only become marred, but also rub against each other to produce an irritating noise.

My improved form of the bow-rest comprises, essentially, a steel band 13, adapted to encircle a bow and support and rigidly

hold in place a rubber bumper 14. The ends of the band are overlapped and rigidly secured together, as well as to the bow, by means of a suitable screw 15. The band is provided with a large aperture, and through this aperture extends the rubber bumper. The bumper is provided with a concave outer face 16, and intermediate the two prongs 17 and adjacent its inner face it is provided with flanges 18, adapted to extend longitudinally of the bow. The aperture in the steel band is of substantially the same size as the bumper at a point adjacent the flanges 18, and these flanges normally lie inside of the band. To accommodate the flanges and produce a tight fit, the two opposite edges 19 of the aperture longitudinally disposed in respect to the bow are bent outward to form recesses intermediate said edges and the outer surface of the bow. Into these recesses extend the flanges 18, and as the flanges are preferably made of very slightly greater thickness than are the recesses the bumper is firmly bound to the bow when the band is secured in place by the screw 15.

In use the body of the vehicle is provided with any suitable form of support 20, preferably mounted upon a pivot 21 and having a longitudinal socket adapted to receive the rear or lowermost bow. Each of the other bows is provided with one of my improved bow-rests, having the bumper thereof extending backward or downward and so disposed longitudinally of the bow that when the top is in its folded position each of the bow-rests comes directly above the one on the next adjacent bow. By means of the concave surface 16, which fits the curved surface of the next adjacent bow, the said bows are brought into perfect alinement when the top is in the position shown in Fig. 1, and as these bows are of rubber or other suitable resilient material and are firmly held in place there can be no rattling, jarring, or chafing of the bows or other adjacent parts.

It is evident that the rubber bumper may be secured to the bow by various other means than that illustrated in Figs. 1 to 4, inclusive. One modified form is illustrated in Fig. 5, in which a band 13^a is employed and secured in place by a screw 15^a; but the rubber bumper 14^a instead of being provided with flanges, as in the form above described, is provided with a steel plate 22 of a width slightly greater than the base of the bumper, so that the edges thereof extend beyond said

bumper to form flanges corresponding to the flanges 18. This plate 22 is rigidly secured to the bumper 14^a by means of one or more rivets 23, having their heads countersunk, so as to lie beneath the surface of the plate and bumper. The bumper 14^a, plate 22, and rivet or rivets 23 serve identically the same purpose as the bumper 14 and may even be found preferable to the bumper 14, as less rubber is employed and there is no liability of breaking the edges of the plate 22, which forms the flanges.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In combination, a plurality of bows, a band encircling each bow, and a bumper rigidly secured to each bow by means of said bands and adapted to engage with the next adjacent bow.

2. In combination, a plurality of bows, a metal band surrounding each of said bows, and a resilient bumper carried by each of said bows and rigidly secured thereto by means of said bands, each of said bumpers adapted to engage with the band of the next adjacent bow and hold the bows in alinement.

3. In combination, a plurality of bows, a metal band surrounding each of said bows, and a bumper of resilient material carried by each of said bows and rigidly secured thereto by means of said bands, each of said bumpers having a concave outer surface adapted to receive the band of the next adjacent bow.

4. In combination, a plurality of bows, a metal band surrounding each of said bows, and a bumper of resilient material carried by each of said bows and rigidly secured thereto by means of said bands, each of said bumpers having a concave inner surface adapted to engage with its supporting-bow and a concave outer surface adapted to engage with the next adjacent bow.

5. In combination, a plurality of bows, a metal band surrounding each of said bows and having an aperture therein, and a plurality of resilient bumpers, each of said bumpers having a flange adapted to be inserted through the aperture of the corresponding band and be rigidly held in place between the band and the bow.

6. In combination, a bow, a metal band surrounding said bow and rigidly secured thereto, said band being provided with an aperture, and a resilient bumper extending through said aperture and having a flange intermediate said band and said bow, whereby the bumper may be firmly held in place.

7. In combination, a bow, a metal band surrounding the same and having the ends thereof overlapped, means for securing said ends together and securing said band to said bow, said band having an aperture and having edges adjacent said aperture bent outwardly to form recesses, and a resilient bumper extending through said aperture and having flanges extending into said recesses.

8. In combination, a bow, a metal band surrounding the same and rigidly secured thereto, said band having an aperture and having the walls adjacent said aperture bent outward to form recesses intermediate said bow and said walls, a resilient bumper extending through said aperture and having a concave inner surface in engagement with said bow and a concave outer surface, and flanges carried by said bumper and extending into said recesses.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES HARVEY SPRAGUE.

Witnesses:

S. E. CRAWFORD,
JOHN A. STRUTTON.