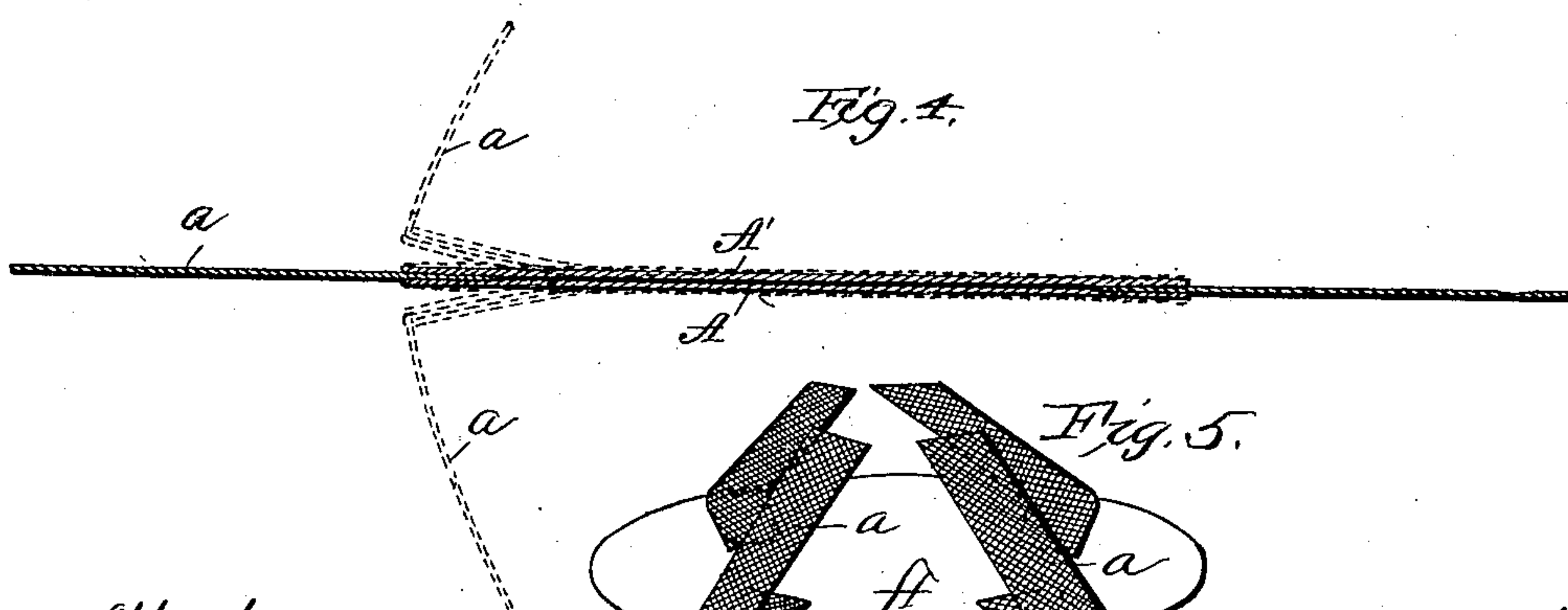
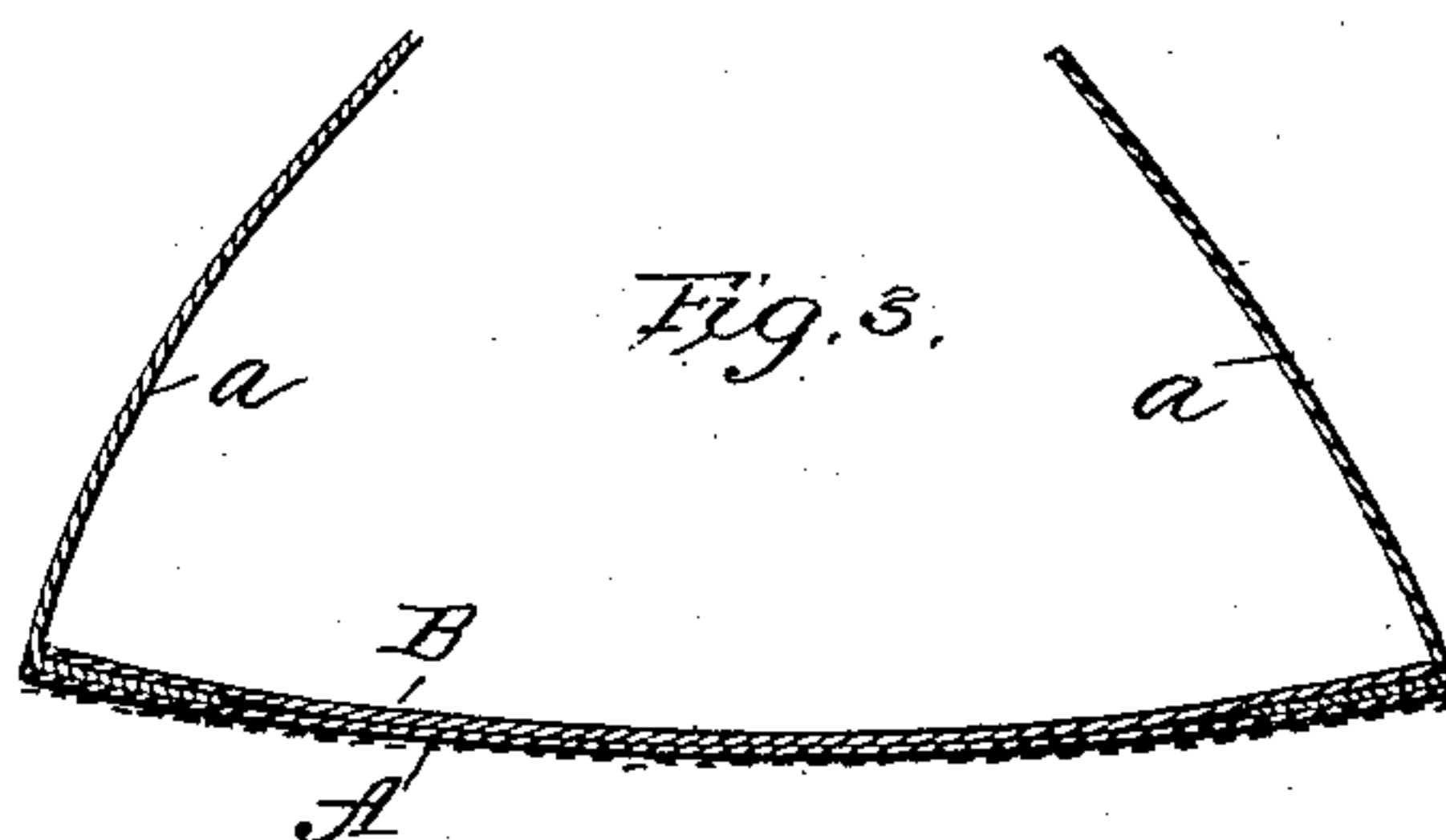
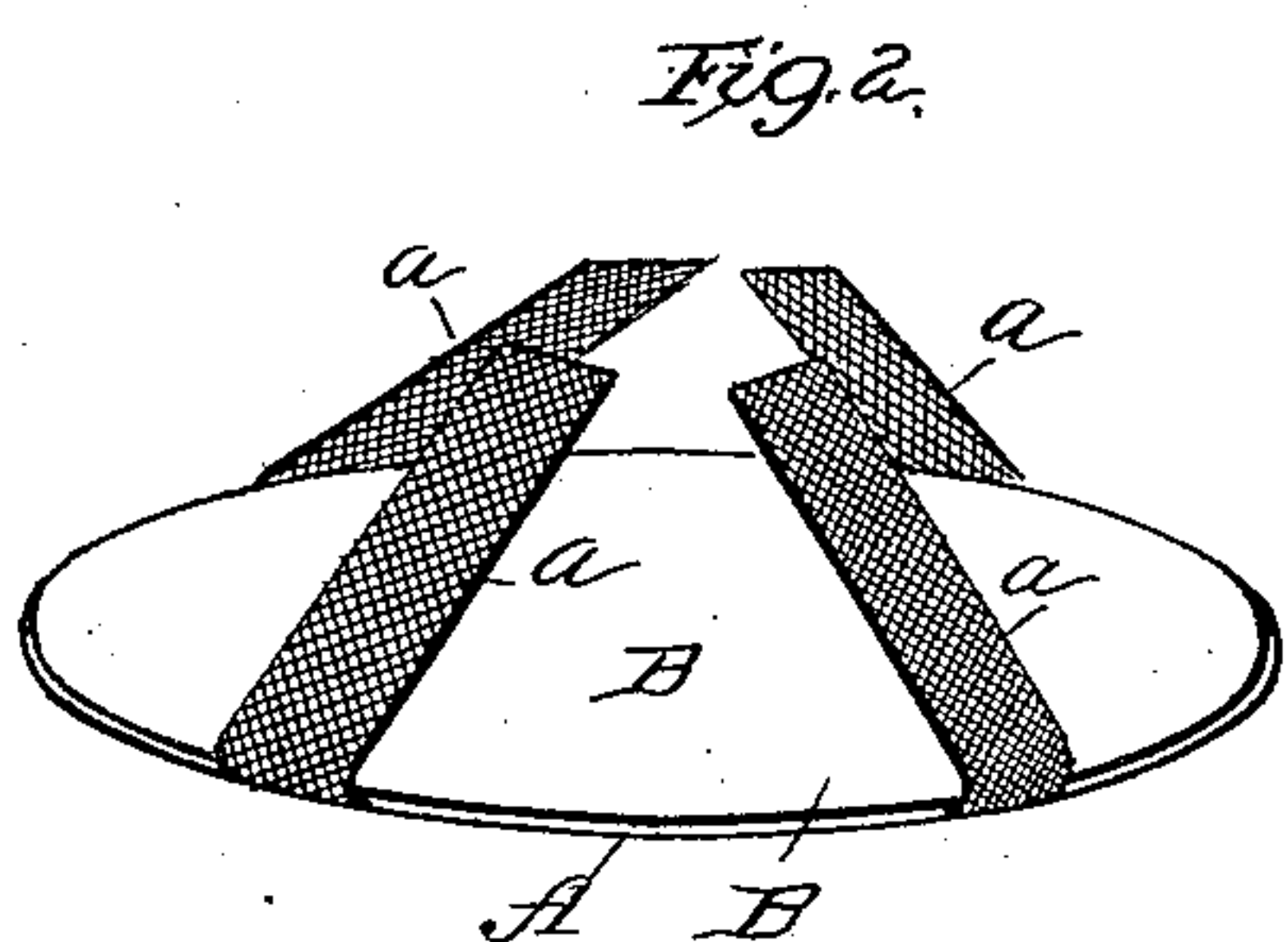
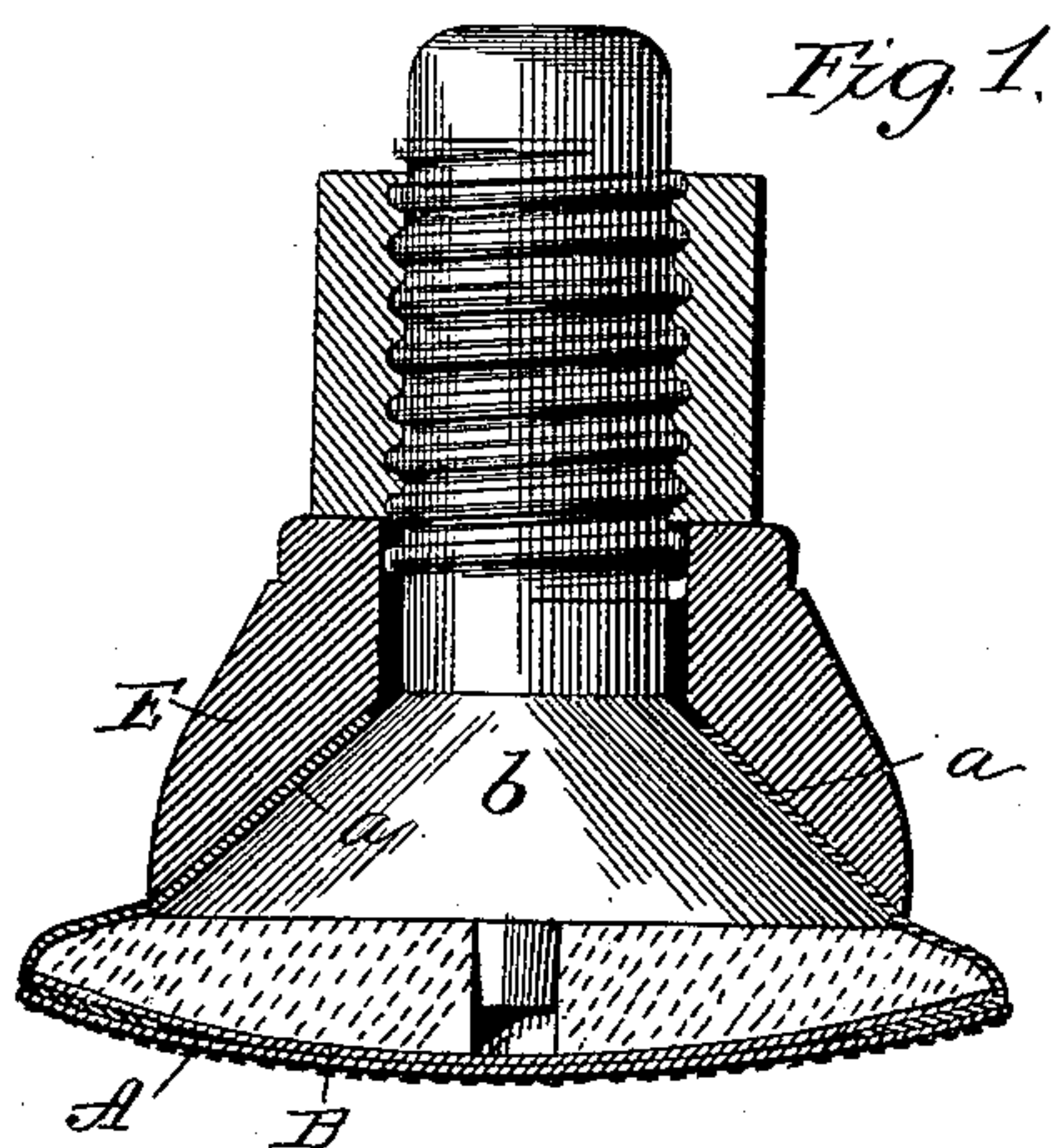


(No Model.)

A. W. ROGERS.
ABRADING COVERING FOR BUFFERS.

No. 407,249.

Patented July 16, 1889.



Attest
Walter C. Keene.
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Inventor
A. Andrew W. Rogers
by Ellis Spar
Atty.

UNITED STATES PATENT OFFICE.

ANDREW W. ROGERS, OF BEVERLY, MASSACHUSETTS, ASSIGNOR TO SIDNEY W. WINSLOW, TRUSTEE, OF SAME PLACE.

ABRADING-COVERING FOR BUFFERS.

SPECIFICATION forming part of Letters Patent No. 407,249, dated July 16, 1889.

Application filed December 7, 1888. Serial No. 292,927. (No model.)

To all whom it may concern:

Be it known that I, ANDREW W. ROGERS, of Beverly, in the county of Essex and State of Massachusetts, have invented a new and
5 useful Improvement in Abrading-Coverings with Attaching-Strips for Buffers; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention, hereinafter described, is an
10 improved abrading-covering with attaching-strips for buffers used in finishing the soles of boots or shoes. It is intended for use in connection with the kind of buffer shown in an application filed by me in the United States
15 Patent Office of even date herewith, Serial No. 292,924, it being understood that the devices used to hold the projections on that buffer represent any suited to hold the attaching-strips.

20 The object of my invention is to provide, first, an economically-made covering; second, one that can be quickly and easily replaced or turned when worn, as these abrading-coverings wear out rapidly; third, to provide a
25 covering having an exposed edge which will work up to the breast of the heel without abrading its face, and, finally, to adapt the covering for use with a foot having a circular unmutilated edge.

30 To these ends my invention consists of an abrading-covering of stiff material having a non-abrading edge and flexible non-abrading attaching-strips fixed thereto at or near its outer edge and projecting outward and up-
35 ward over the foot; and, further, it consists of an abrading-disk having a stiffened edge and provided with flexible strips attached to the surface of the said disk and projecting outward and upward over the edge of the foot.

40 It consists, further, of a double reversible covering having the flexible strips fixed between the two parts thereof.

Heretofore abrading-coverings have been known, as in the United States patent to Buz-
45 zell, No. 248,020, of 1881, in which the edge of the covering-strip was cut with radial gores, leaving tongues which, when turned over the edge of the buffer-foot, formed a pouch and held the covering to the foot; but all these left
50 turned-up abrading portions exposed on the margins likely to mar the heel and involved,

also, a waste of material in forming the covering. Coverings have also been formed as in the patent of Trask, granted by the United States Patent Office in 1887 No. 364,688, in which
55 the edge of the covering is turned up at intervals in indented portions of the edge, and, as is well known, coverings have been used on such buffers in the form of pouches. I have also shown a stiff abrading-covering with
60 flexible (among other) attachments to the inner face of the covering in my application aforesaid.

The accompanying drawings, which illustrate the invention, show in Figure 1 a cen-
65 tral vertical section of a circular rotary buffer of the class above referred to. Fig. 2 represents the covering in perspective. Fig. 3 represents a cross-section of Fig. 2 on an enlarged scale. Fig. 4 shows a double-faced covering
70 with its strips. Fig. 5 represents a perspective view of a cover without a re-enforcement.

In accordance with my invention the covering A is made of a plain or slightly-concaved form of disk. This consists of any suit-
75 able abrading-sheet, such as that technically known as "sand-paper" or "sand-cloth," with a re-enforcement of stiff material, such as paper of suitable rigidity or any other equivalent material, glued to the inner face of the
80 disk. This is shown at B, and it is glued to the inner face of the covering A and serves to stiffen the disk of sand paper or cloth and to aid in holding the interposed ends of the
85 straps. The thickness and quality of the stiffening re-enforcement will depend upon the kind of foot with which the covering is to be used, and whether or not the abrading-covering is to extend beyond the margin of
90 the foot.

The flexible strips or straps *a* are preferably of cloth, and as they extend outwardly, so as to be wrapped around the edge of the foot, and are therefore liable to come into con-
95 tact with the breast of the heel, they must have a non-abrading surface, such as that of cloth, which is the best material for the purpose. I have shown only four of these strips
100 attached to or near the margin at equal distances apart. They are attached to the disk by gluing to the inner surface with the ends projecting upward, and when another disk or

re-enforcement is fixed to the inner face of the abrading-disk the ends of the connecting-strips are inserted between the re-enforcement and the abrading-disk. When the covering is in place, the straps are turned up over the edges of the foot, and may be secured thereon in any convenient manner. As shown, they are held between the upper face of a base *b* and the lower face of a clamp *E*; but these form only one of many well-known means for holding such connections. Thus turned outward and upward the strips fit snugly over the edge of the foot, which with these requires no notching or holes.

The re-enforcing disk may be of slightly less diameter than the sand-paper, in which case the strips are turned up on the edge of the re-enforcement, and are consequently a little back of the edge of the sand-paper, and this may be in some cases an advantage; but where both sand-paper and re-enforcement are of the same diameter and the edge of the disk coincides evenly with the edge of the foot the flexible strips are drawn so closely to its face that practically no obstruction is offered by them in working. Their flexibility causes them to yield with the yielding foot, with which they are commonly used, and the buffer provided with these coverings will work on any part of the surface of a boot or shoe sole.

With the flexible strip as above described I am also enabled to use a double-faced covering by simply using an abrading-disk as a re-enforcement, its abrading-surface being on the upper side. This is shown in Fig. 4. In this the covering is composed, in fact, of two disks of sand-paper or emery-cloth *A A'*, of the same diameter, placed back to back and

glued together, with the ends of the strips held between them. One thickness acts as a re-enforcement and stiffens the other, and the covering may be used with the same effect with either side out, the edge of both being formed by cutting out the disks from the sheet and having them unsanded and non-abrading. In every case this non-abrading edge of the covering does not require turning up in any part, and is left exposed to work closely against the heel. I do not herein claim, broadly, the reversible covering, and here expressly disclaim the matters claimed by me in applications filed by me of even date herewith and having the serial numbers, respectively, of 292,924 and 292,925.

I claim as my invention--

1. An abrading-covering for buffers, consisting of a disk having an abrading-surface and non-abrading edges and flexible non-abrading connecting-strips secured to the inner face with the free ends projecting outward, substantially as described.

2. An abrading-covering for buffers, consisting of a disk having an abrading-surface and non-abrading edge, a re-enforcement on its inner face at or near the edge, and flexible non-abrading connecting-strips secured to the inner face between the abrading-disk and the re-enforcement with the free ends extending outward, substantially as described.

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

ANDREW W. ROGERS.

Witnesses:

SIDNEY W. WINSLOW,
FREEMAN H. WINSLOW.