

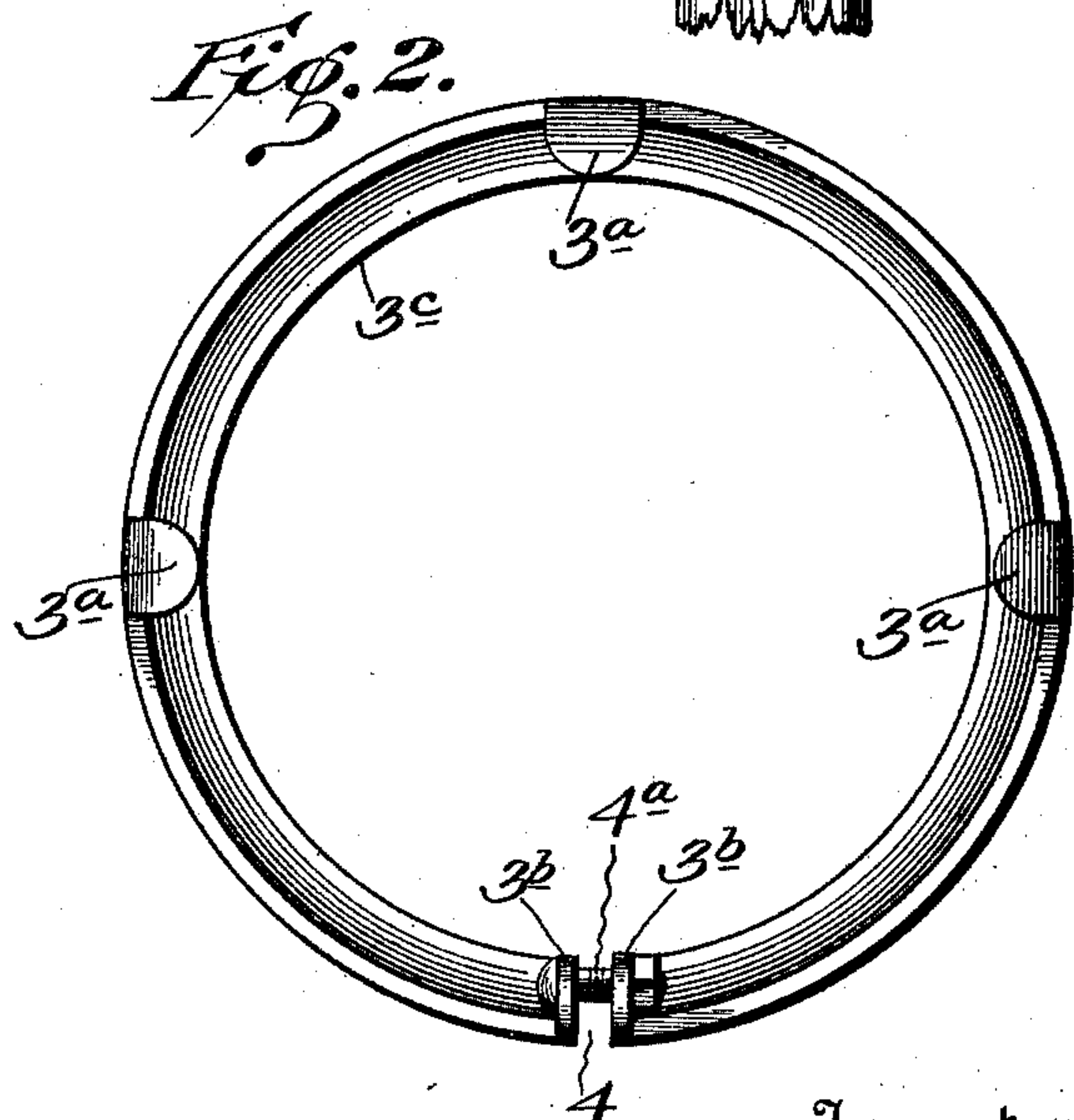
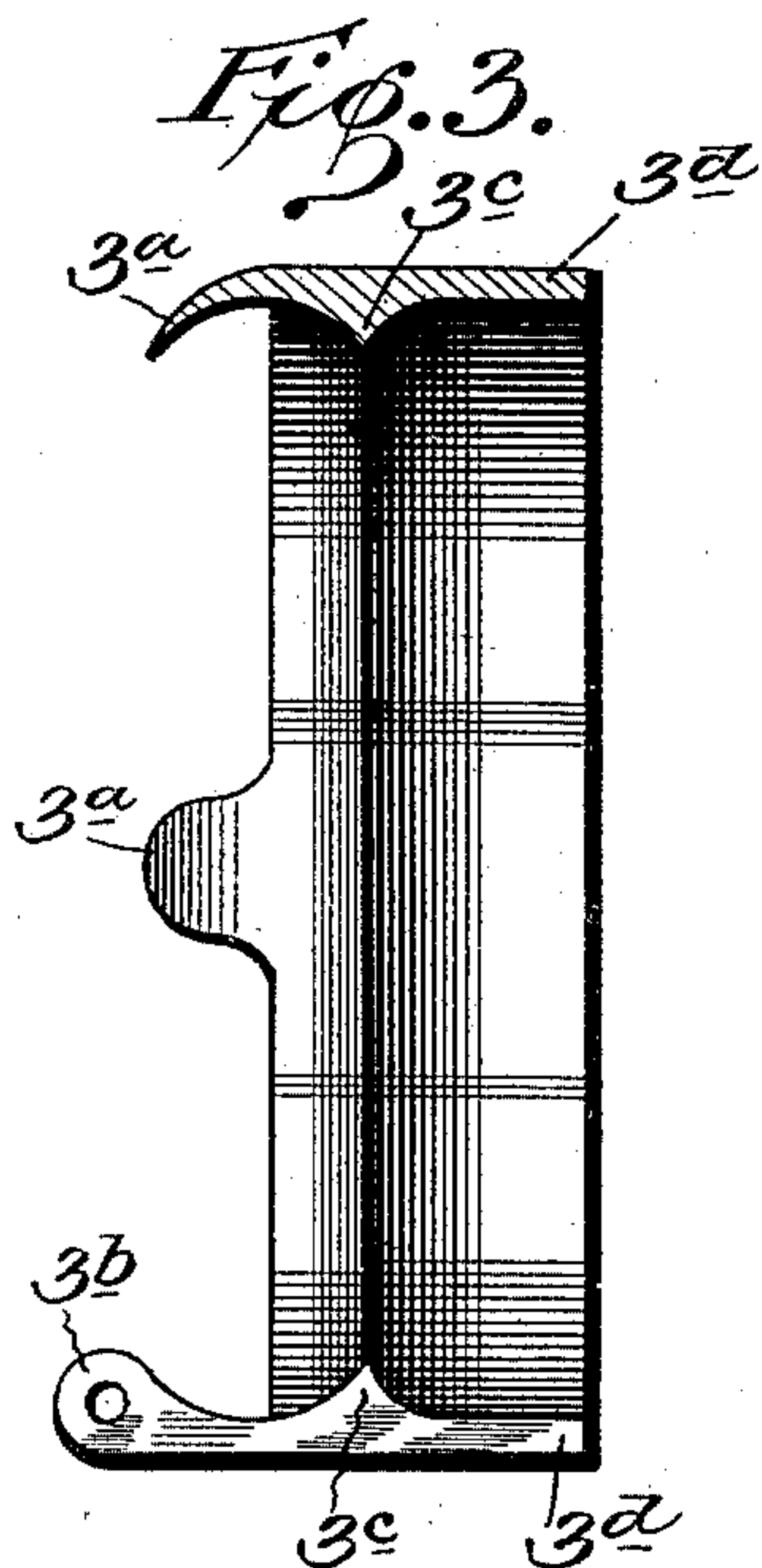
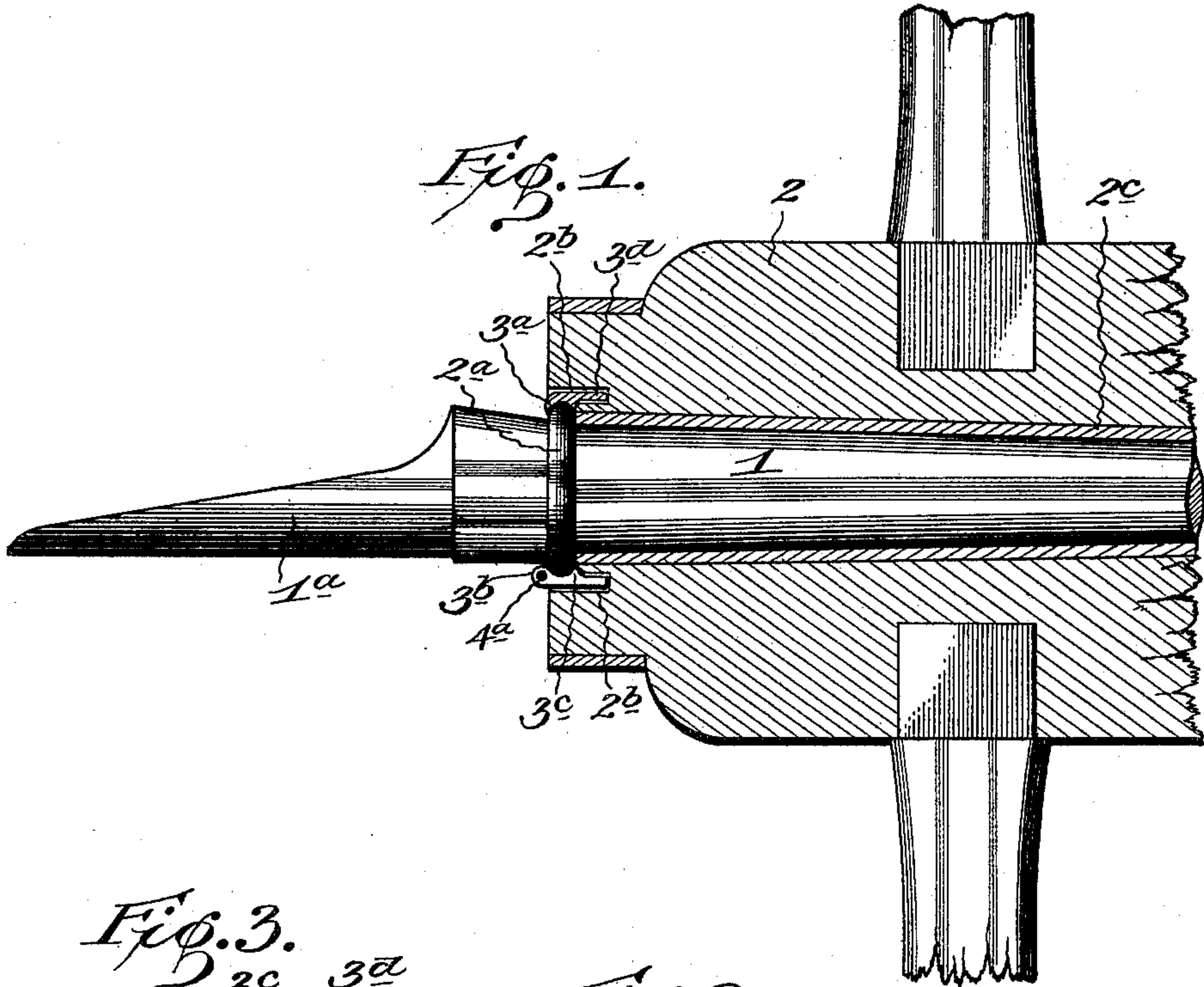
No. 619,082.

Patented Feb. 7, 1899.

J. MALLON & O. CREPEAU.
SAND BAND.

(Application filed Sept. 28, 1898.)

(No Model.)



Witnesses
A. Roy Appleman Jr.
Henry D. Bright

Inventors.
James Mallon,
Ovid Crepeau.
By *Frederick Benjamin* Attorney

UNITED STATES PATENT OFFICE.

JAMES MALLON AND OVID CREPEAU, OF SOUTH BEND, INDIANA.

SAND-BAND.

SPECIFICATION forming part of Letters Patent No. 619,082, dated February 7, 1899.

Application filed September 28, 1898. Serial No. 692,066. (No model.)

To all whom it may concern:

Be it known that we, JAMES MALLON and OVID CREPEAU, citizens of the United States, residing at South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Sand-Bands; and we 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.

Our invention relates to improvements in devices for excluding dust or sand from the spindle of a vehicle-axle and for preventing the lubricating-oil from escaping from the spindle onto the adjacent parts of the axle and wheel-hub, said devices being commonly designated as "sand-bands" or "spindle-protectors."

The objects of our improvements are to provide a device of this character which can be cheaply made, readily applied to all the ordinary forms of wagon-skeins, and which will be thoroughly effective as a dust and sand excluder.

Further objects are to provide means by which the device may be adjusted as the parts wear and whereby the removal of the wheel for the purpose of oiling the spindle will not be interfered with by the sand-band and the latter will not come away with the wheel.

The manner in which we obtain the objects above set forth will be hereinafter described in detail, and the construction of our invention in a preferred form is illustrated in the accompanying drawings, which form a part of this application, and in which—

Figure 1 is a sectional view of a portion of a wheel-hub and axle-box with our improved sand-band applied, said band being shown in vertical section and the axle-skein in side elevation. Fig. 2 is a front elevation of our improved sand-band, and Fig. 3 is a vertical section of the band on line $x x$ of Fig. 2.

Like reference-numerals indicate like parts in the several views.

Referring to the drawings, 1 represents an axle-skein of common form having the usual shank 1^a and dust-collar 2^a . 2 represents sufficient of a wheel-hub to illustrate the ap-

plication of our invention. Said hub is provided with a central longitudinal bore for the reception of the skein-box 2^c , into which fits the spindle 1, all of well-known form and arrangement. In the face of the inner end of the hub 2 is a horizontal annular groove or recess 2^b of sufficient depth and width to receive the flange 3^d of the sand-band 3. This sand-band consists of an annular metallic ring, which is split or divided at the point 4 and is formed with a plurality of lugs which extend from the periphery of the band opposite the flange 3^d and curve inwardly and downwardly. On the ends of the band are lugs 3^b , which are perforated for the reception of a small tie-bolt 4^a , having a suitable nut, by means of which the sand-band is tightened and securely held on the dust-collar 2^a , the latter being embraced by the lugs 3^a . On the inner periphery of the sand-band is an annular shoulder 3^c , which when the band is in position fits closely against the dust-collar, thus preventing the admission of dust to the spindle and also serving, with the lugs 3^a , to hold the sand-band on the skein.

It will be apparent that various modifications may be made in the form of our improved sand-band without altering the scope of our invention. The groove or recess 2^b may have slightly-curved instead of straight walls, the number of lugs may be increased, and the band may be formed of ductile material without the necessity of dividing it, as the lugs 3^a could be bent down over the dust-collar 2^a . The sand-band flange 3^d could be made wide enough to provide for considerable lateral play of the wheel. It is also apparent that as the portion of the hub between the sand-band and the axle-box becomes worn a close joint may at all times be maintained. It will be noted that the annoyance of having the sand-band drop off when the wheel is removed (a fault common to all of the ordinary sand-bands) is entirely prevented by the grip on the dust-collar, which is maintained in our invention by the lugs.

Having thus described our invention, what we claim as new, and desire to obtain by Letters Patent, is—

1. In combination with an axle-skein hav-

55

60

65

70

75

80

85

90

95

100

ing a dust-collar and a hub having an annular groove of a sand-band having a flange adapted to enter the groove of the hub, and with lugs adapted to embrace the dust-collar
5 of the spindle, substantially as set forth.

2. In combination with an axle-skein having a dust-collar and a hub having an annular groove, of a split or divided sand-band having a flange adapted to enter the groove
10 of the hub, and with lugs adapted to embrace the dust-collar of the spindle, and means for connecting the ends of the band whereby it may be adjusted to the dust-collar substantially as set forth.

15 3. A sand-band composed of a divided ring having an annular flange, an annular shoul-

der and inwardly and downwardly extending lugs, substantially as set forth.

4. A sand-band composed of a divided ring having an annular flange, an annular shoulder, inwardly and downwardly extending lugs, and means for connecting the ends of the band, substantially in the manner and for the purpose set forth.

In testimony whereof we affix our signatures in presence of two witnesses.

JAMES MALLON.
OVID CREPEAU.

Witnesses:

GEORGE OLTSCH,
HUGO OLTSCH.