

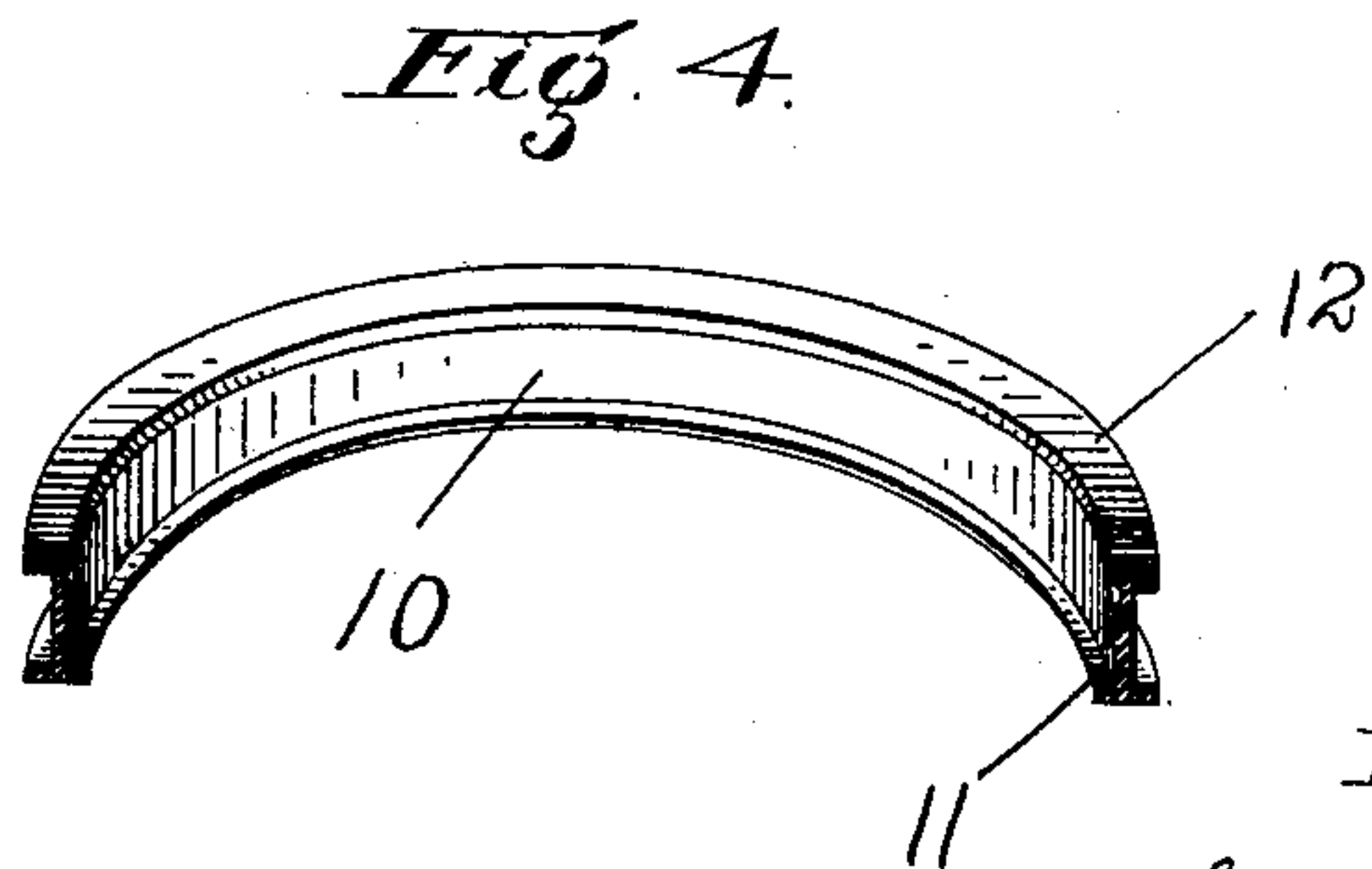
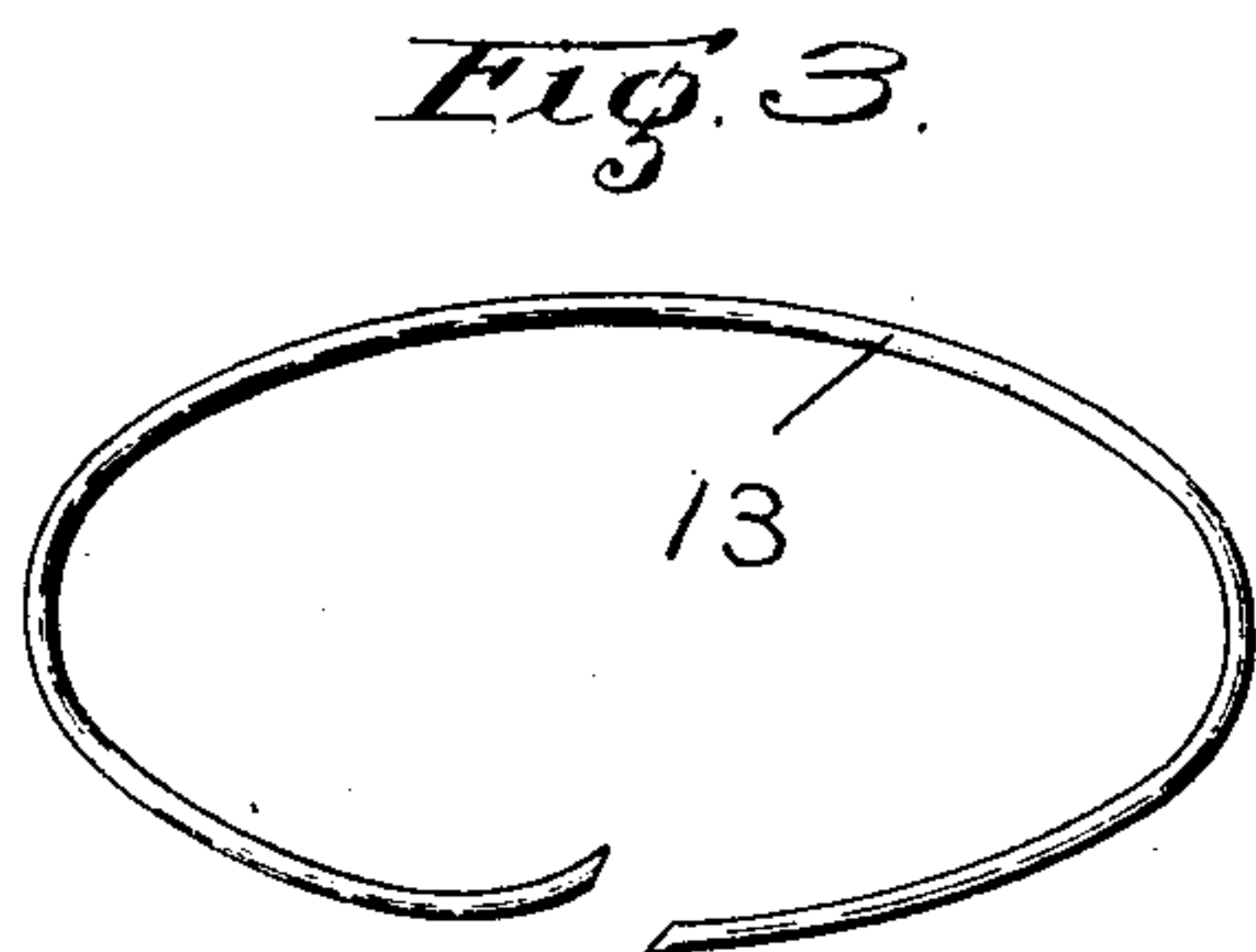
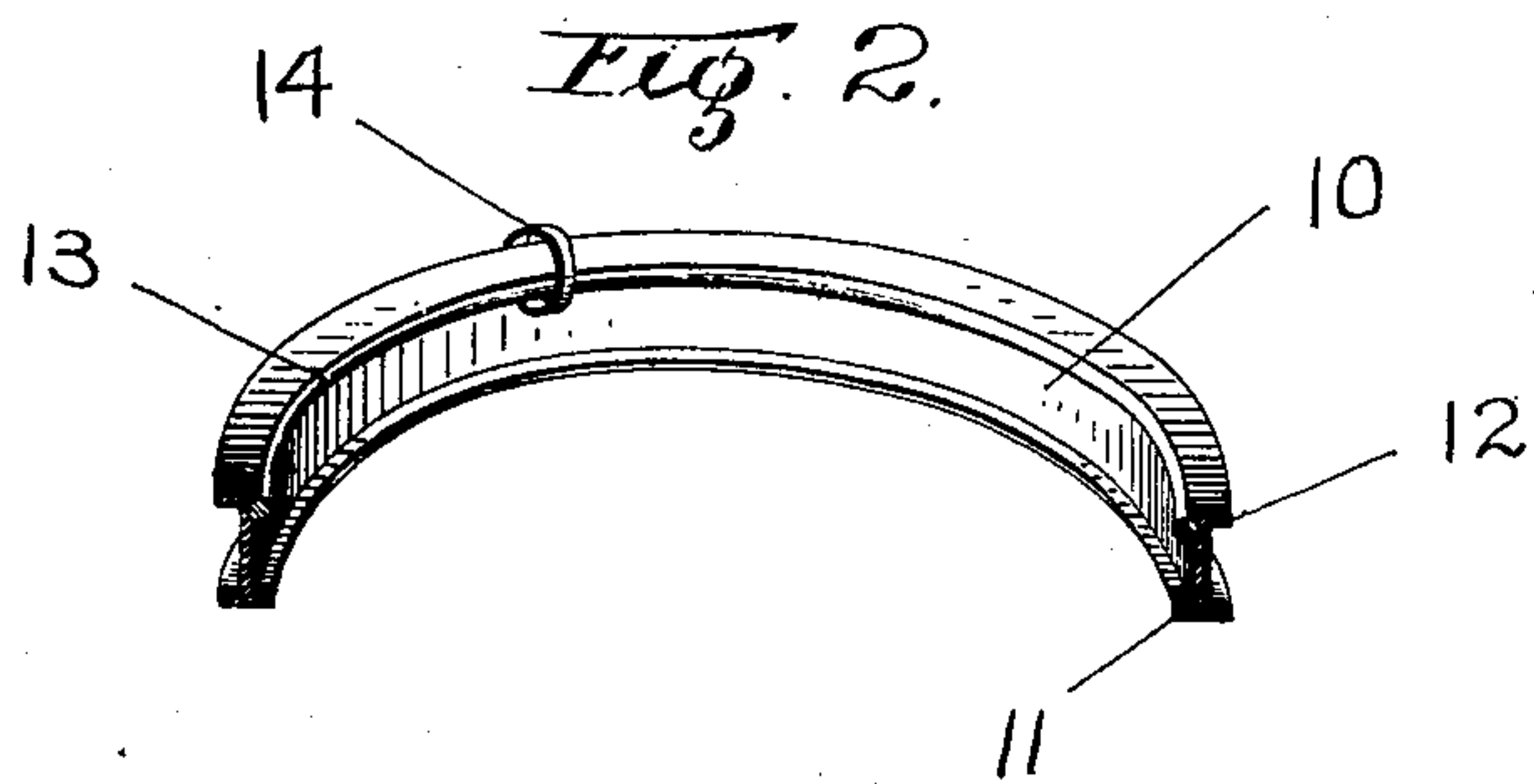
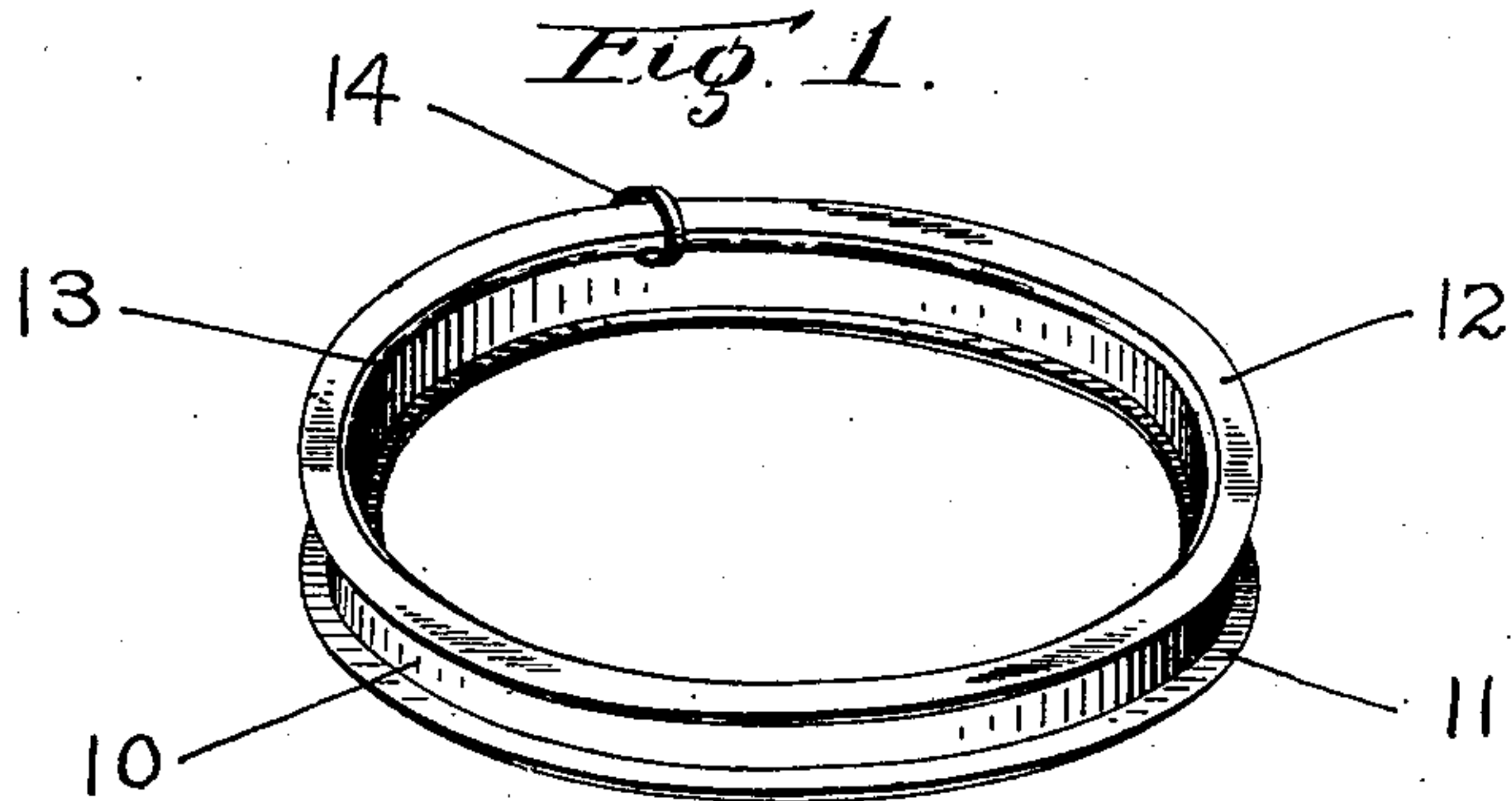
No. 678,266.

Patented July 9, 1901.

F. M. MARCY.
SPINNING RING.

(Application filed Mar. 11, 1901.)

(No Model.)



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UNITED STATES PATENT OFFICE.

FRANK M. MARCY, OF WORCESTER, MASSACHUSETTS.

SPINNING-RING.

SPECIFICATION forming part of Letters Patent No. 678,266, dated July 9, 1901.

Application filed March 11, 1901. Serial No. 50,577. (No model.)

To all whom it may concern:

Be it known that I, FRANK M. MARCY, a citizen of the United States, residing at Worcester, in the county of Worcester and State of Massachusetts, have invented a new and useful Spinning-Ring, of which the following is a specification.

This invention relates to a spinning-ring which may be constructed from old worn-out or partially worn-out spinning-rings or which may, if desired, be constructed of new materials; and the especial object of this invention is to provide a form of spinning-ring which having once been assembled or put together can be readily repaired or have its track-section renewed without removing the ring from the spinning-frame and which will be provided with a track-section which will wear more evenly and oppose less resistance to the motion of the traveler than in the forms of spinning-rings ordinarily employed.

To these ends this invention consists of the spinning-ring and of the combinations of parts therein, as hereinafter described, and more particularly pointed out in the claim at the end of this specification.

In the accompanying drawings, Figure 1 is a perspective view of a complete spinning-ring constructed according to this invention. Fig. 2 is a similar view thereof, partially in section; and Figs. 3 and 4 are perspective views of the parts which constitute my spinning-ring, Fig. 3 being a perspective view of the split spring-ring which forms part of the track-section, the ends of the ring being moved out of line with each other, and Fig. 4 being a perspective view, partially in section, of the body portion of the spinning-ring.

In the use of the ordinary spinning-rings employed in spinning or twisting frames the rings wear out first around the flange or track upon which the traveler is mounted.

In the use of the ordinary spinning or twisting rings it is now customary to discard the worn-out or partially worn-out spinning-rings as fast as wear becomes noticeable thereon and to replace said worn or partially worn spinning-rings with new spinning-rings.

One especial object of my present invention is to provide a form of construction which will permit me to utilize the worn-out or par-

tially worn-out spinning-rings to form parts of my improved spinning-rings. To accomplish this object, when a spinning-ring constructed according to my invention is to make use of a worn-out or partially worn-out old spinning-ring, I first anneal or soften the old spinning-ring, and then trim or cut out the inner flange of the track-section thereof, after which I turn or cut a circumferential groove on the inner surface thereof, and to complete the spinning-ring as thus constructed, a split wire ring having overlapping beveled ends is snapped into said groove so as to replace the inwardly-extending track-flange of the old spinning-ring, and in practice I have found that a spinning-ring as thus constructed not only has the advantage that it may thereafter be repaired or renewed as frequently as may become necessary by simply renewing the split spring-ring, which is preferably held in place by spring-pressure alone, not being soldered or otherwise permanently secured, but I have also found that the use of the split spring-ring to form a portion of the track-section of a spinning-ring is advantageous, as the grain or fiber of the wire causes the same to present a wearing-surface on which the traveler can move with less resistance than on a track-section which is cross-fibered or made simply by the ordinary drop-forging process, and this advantage may be secured whether a spinning-ring constructed according to my invention is made up in part from an old worn-out spinning-ring or from entirely new material.

Referring to the accompanying drawings and in detail, the spinning-ring constructed according to my invention, as herein illustrated, comprises the cylindrical body portion 10, having the base-flange 11 and the outwardly-extending top or track flange 12, substantially in the same manner as the ordinary form of spinning-ring. Formed or cut on the inside of the body portion 10, substantially opposite the outwardly-extending track-flange 12, is a groove, in which is seated a split spring-wire ring 13. The ends of the spring-wire ring 13 are beveled or cut off at an angle with respect to each other, and in practice I have found that the tension of the spring-wire ring will cause its ends to seat themselves so fully into the groove in the

body portion of the spinning-ring that the ends of the split spring-wire ring will in no way obstruct or interfere with the freesliding movement of the traveler 14.

5 By providing the spring-wire ring 13 with beveled ends I secure a construction which may be snapped into place in such a manner as to leave substantially no opening or crack between the ends of the ring—that is to say, in
10 compressing the bevel-ended ring 13, so as to insert the same into its groove, the beveled ends will simply be forced slightly out of line with each other and the expansion of the ring in snapping it into its socket will simply
15 bring the beveled ends back into line, so that said ends will still fit tightly together, and as the cut or slot separating the beveled ends is inclined with respect to the vertical plane of the traveler the traveler as it is moved will
20 be partially supported by one end of the split wire ring before leaving the other end, and this I have found to be an important point in practice, as I am thus enabled to secure a practically continuous track having substan-
25 tially no slot or groove therein which will prevent the traveler from operating at high speeds.

In the use of a spinning-ring as thus constructed the split spring-rings 13 may be re-
30 moved and replaced as often as the same become worn, and in actual practice I have found that the traveler will move or slide on the spinning-ring as thus constructed with

less resistance than on the ordinary form of spinning-ring, and I believe that this is due 35 to the fact that the grain or fiber of the split spring-ring extending around the track will provide a wearing-surface which presents less resistance than a track or wearing-surface which is stamped or pressed out as in ordi- 40 nary drop-forging.

I am aware that changes may be made in the relative shapes and proportions of the parts constituting a spinning-ring constructed according to this invention, and I do not 45 wish, therefore, to be limited to the construction I have herein shown and described; but

What I do claim, and desire to secure by Letters Patent of the United States, is—

As an article of manufacture, a spinning- 50 ring for spinning or twisting frames, comprising a cylindrical body portion having a groove in its inner face, and a split wire ring having beveled ends arranged to be forced out of line with each other when the ring is 55 compressed, so that said ring may be sprung into place in the groove and form a substantially continuous track, substantially as described.

In testimony whereof I have hereunto set 60 my hand in the presence of two subscribing witnesses.

FRANK M. MARCY.

Witnesses:

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