

No. 879,654.

PATENTED FEB. 18, 1908.

F. E. KOHLER.
EMBROIDERY HOOP.
APPLICATION FILED NOV. 29, 1907.

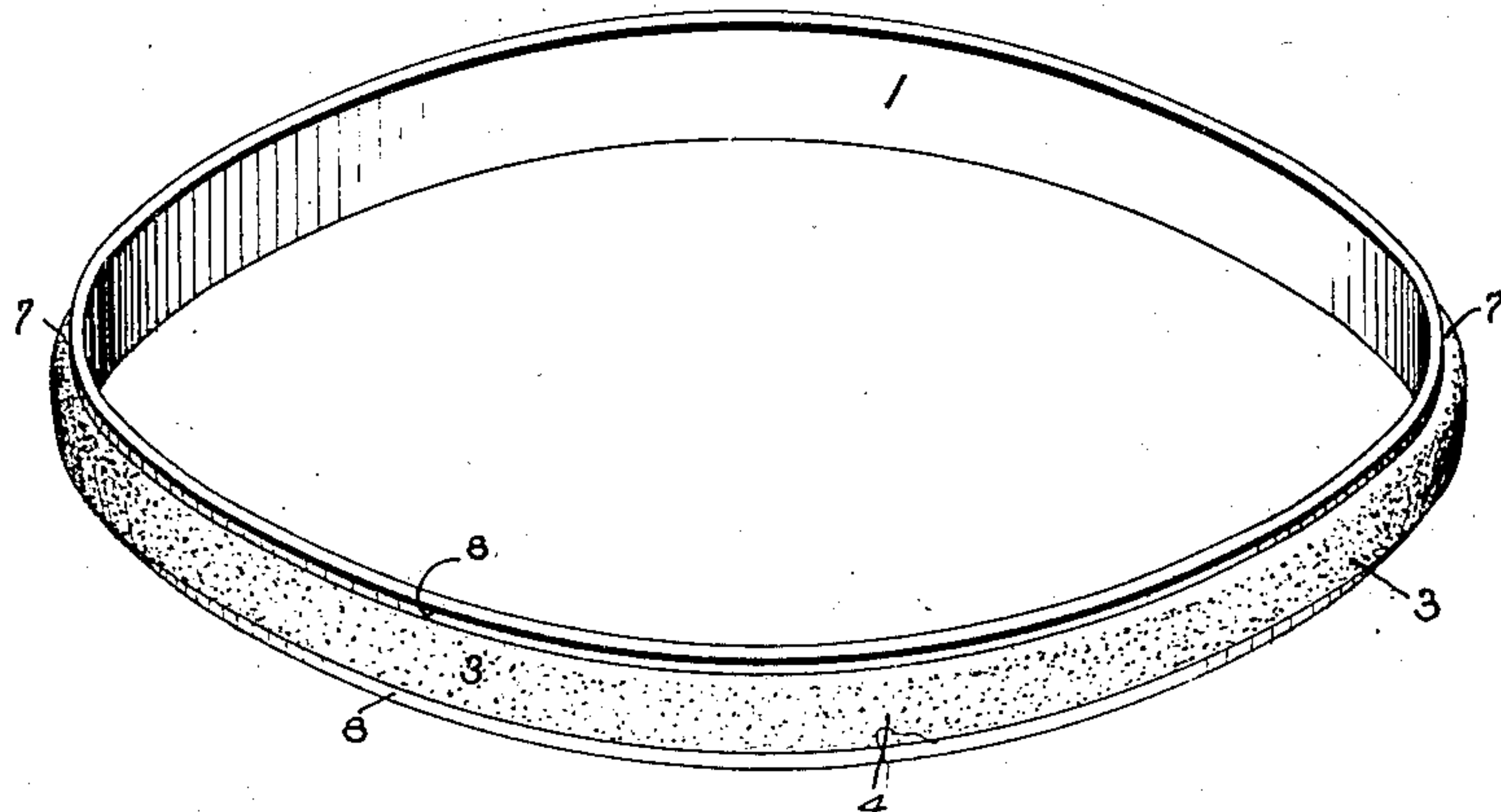


Fig. 1.

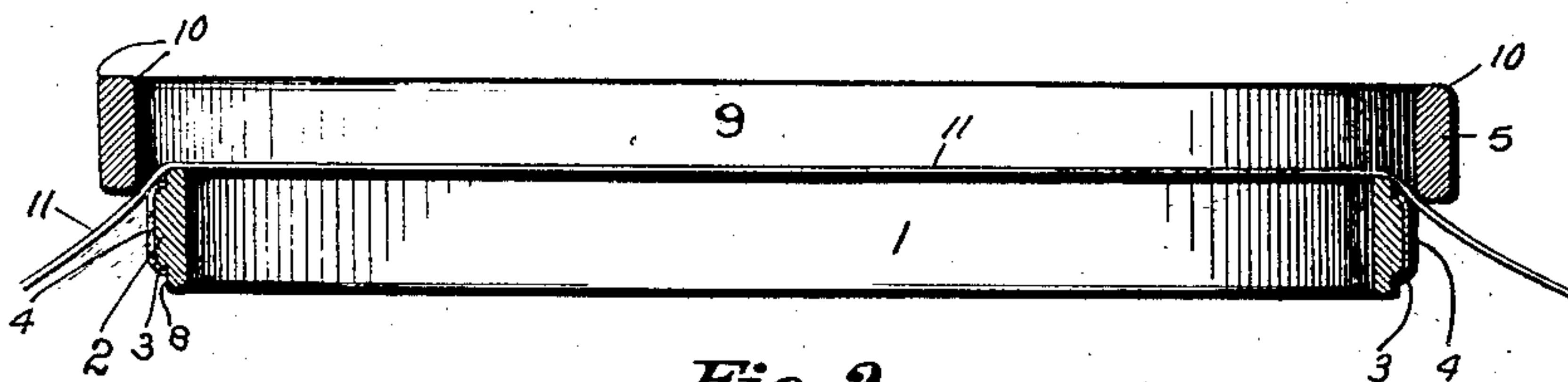


Fig. 2.

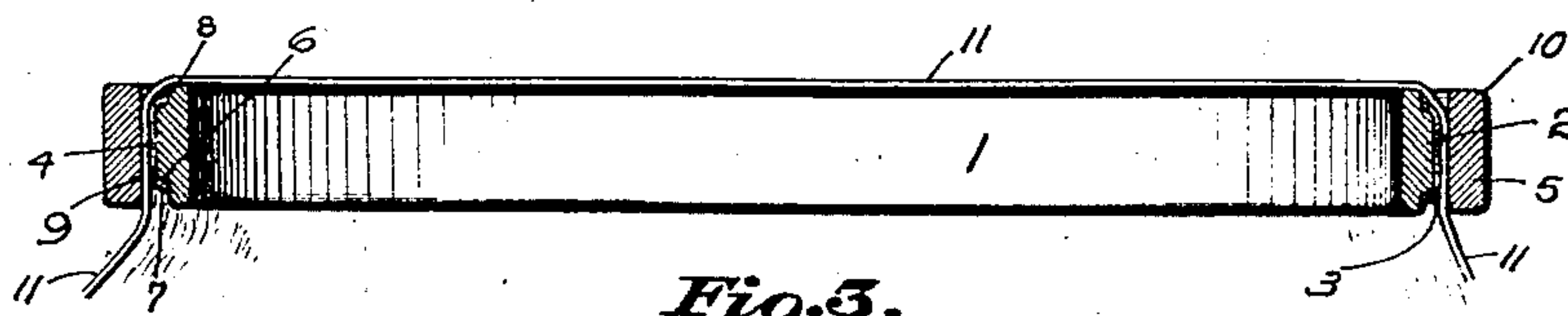


Fig. 3.

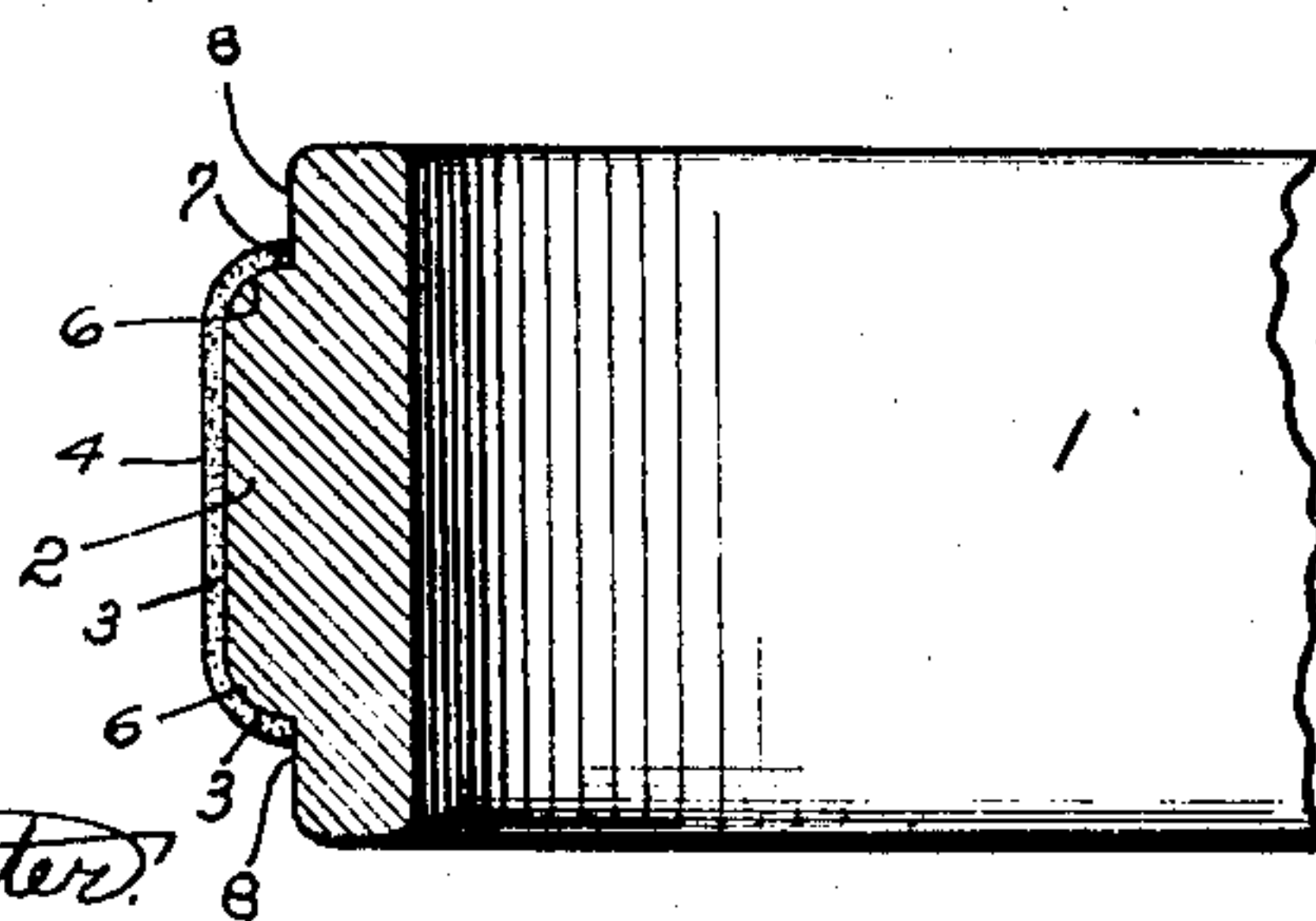


Fig. 4.

Witnesses
Harry O. Rastetter
Mary A. Cavanaugh.

Inventor
Frederick E. Kohler
By Harry Freese
attorney

UNITED STATES PATENT OFFICE.

FREDERICK E. KOHLER, OF CANTON, OHIO.

EMBROIDERY-HOOP.

No. 879,654.

Specification of Letters Patent.

Patented Feb. 18, 1908.

Application filed November 29, 1907. Serial No. 404,206.

To all whom it may concern:

Be it known that I, FREDERICK E. KOHLER, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented a new and useful Improvement in Embroidery-Hoops, of which the following is a specification.

The invention relates to a hoop composed of two rings, one adapted to telescope loosely outside the other for the purpose of holding a piece of fabric taut over the inner ring for conveniently embroidering the same. When the rings are made entirely out of wood or other relatively hard and smooth material, and no means are provided for a change in the diameter of either ring, such hoop is not well adapted to hold fabrics of different thicknesses and consistencies; and for the purpose of increasing the resilience and friction of the holding surfaces, a rubber band has been wrapped around or applied longitudinally along the holding surface of one or both of the rings, and a flexible fibrous band or cord has also been partially countersunk in the same. Serious objections pertain to each of these appliances. When a rubber band is wrapped around a ring, it makes the hoop quite cumbersome and takes away the neat and light condition so desirable in a hoop of this character, and the band is apt to wear off at the edges of the ring and requires frequent renewal. When a band of soft rubber is applied longitudinally along the flat surface of the ring, the edges become loosened from the wood by use and stretch or fold out of place, and the hoop soon loses its efficiency. And finally, when a resilient frictional band or cord is partially countersunk in the face of the ring, the hoop soon becomes inefficient by reason of the ordinary wear and use which either abrades the protruding portion of the countersunk material down to the plane of the hard body of the ring, or overcomes the resilient qualities of the frictional material and compresses it entirely into the countersink in the ring; and furthermore, when a band is countersunk, unless and until the protruding edges of the same are worn off by the abrasion of use, they are apt to be loosened and either stretched or folded out of place like the edges of a band which is merely laid on a flat surface.

The object of the present invention is to overcome each and all of the objections which have been noted as pertaining to the devices which have been employed to in-

crease the resilience and friction of the holding surfaces of the rings, and this object is attained by forming at least one ring, preferably the inner ring, with the middle portion of its holding surface crowned or raised outside the plane of the remaining edges thereof, with the sides of the raised portion rounded; and then by gluing or otherwise securely attaching a resilient frictional band, preferably of somewhat soft and pliable leather, on the crowned or raised portion of the ring, with the edges of the band extended over the rounded sides of the raised portion and abutted against the flat portions of the ring; as illustrated in the accompanying drawing, in which—

Figure 1 is a perspective view of the improved inner ring showing the resilient frictional band applied thereon; Fig. 2, an axial-sectional view showing the fabric laid over the inner ring and the outer ring in position for telescoping over the same; Fig. 3, a similar view showing the outer ring telescoped over the inner ring with the fabric stretched and held taut over the inner ring; and Fig. 4, an enlarged sectional view of the inner ring showing the details of construction.

Similar numerals refer to similar parts throughout the drawing.

The inner ring 1 is made of wood, hard rubber or other relatively hard material, and is formed with the raised portion 2 in the middle part of its periphery. The raised portion, as shown, extends over the greater part of the width of the ring and is preferably formed flat so that when the leather band 3 is glued or otherwise attached thereon the flat surface 4 is presented to the inner face of the outer ring 5. The sides of the raised portion are rounded as at 6, and the edges 7 of the leather band are curved over these rounded sides of the raised portion and abutted against the comparatively narrow faces 8 formed along the respective edges of the ring. The outer ring 5 is likewise made of wood or other suitable material, and as shown, is preferably formed with its inner face 9 smooth or flat, excepting only as the corners 10 may be slightly chamfered or rounded, and when the fabric 11 is placed over the inner ring, as shown in Fig. 2, the outer ring is placed over and then forced downward around the inner ring, which stretches and holds the fabric taut over the inner ring. The resilience and friction of the

leather band on the inner ring serves to give a resisting pressure against the outer ring, and to prevent a slipping of the fabric as against an ordinary strain, but nevertheless permits the fabric to be forcefully pulled and adjusted into any desired position.

It is evident that by reason of the edges of the leather band being abutted against the flat faces on the edges of the inner ring in the angle formed by the sides of the raised portion, these edges will be protected from any contact which will tend to loosen or detach them from the ring. It is also evident that the leather band will continue to be effective until it is worn entirely off the ring, for its edges are protected against being loosened from the ring, and there is no countersink in the ring into which the leather can be compressed.

It will be understood that the exact form and shape of the raised portion of the inner hoop which is herein illustrated and described is not essential to the general idea of the invention; excepting only that the sides must be sufficiently rounded or beveled to form an angle with the flat faces on the edges of the hoop, into which angle the edges of the leather band are adapted to be abutted; and it will also be understood the invention is not limited in scope to the use of leather as the material for the resilient frictional band, nor to the application of the invention to hoops having rings of unvarying circumferences.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. An embroidery hoop comprising two rings one adapted to telescope within the other, one of the rings having a raised portion with rounded sides on its holding face, and a leather band attached on the raised portion and having its edges curved over and abutted in the angles of the rounded sides.

2. An embroidery hoop comprising two rings one adapted to telescope within the other, one of the rings having a raised por-

tion with rounded sides on its holding face, and a resilient frictional band attached on the raised portion and having its edges curved over and abutted in the angles of the rounded sides.

3. A ring for an embroidery hoop having a raised portion with rounded sides on its holding face, and a leather band attached on the raised portion and having its edges curved over and abutted in the angles of the rounded sides.

4. A ring for an embroidery hoop having a raised portion with rounded sides on its holding face, and a resilient frictional band on the raised portion and having its edges curved over and abutted in the angles of the rounded sides.

5. An embroidery hoop comprising two rings one adapted to telescope within the other, one of the rings having a raised portion on its holding face, and a leather band attached on the raised portion and having its edges extended over and abutted in the angles of the sides thereof.

6. An embroidery hoop comprising two rings one adapted to telescope within the other, one of the rings having a raised portion on its holding face, and a resilient frictional band attached on the raised portion and having its edges extended over and abutted in the angles of the sides thereof.

7. A ring for an embroidery hoop having a raised portion on its holding face, and a leather band attached on the raised portion and having its edges extended over and abutted in the angles of the sides thereof.

8. A ring for an embroidery hoop having a raised portion on its holding face, and a resilient frictional band on the raised portion and having its edges extended over and abutted in the angles of the sides thereof.

FREDERICK E. KOHLER.

Witnesses:

MARY A. CAVANAUGH.
HARRY FREASE.