H. L. TOTTEN & T. F. SNYDER.

EMBROIDERY HOOP.

APPLICATION FILED APR. 5, 1911.

1,010,534. Patented Dec. 5, 1911.

Fig. 1.

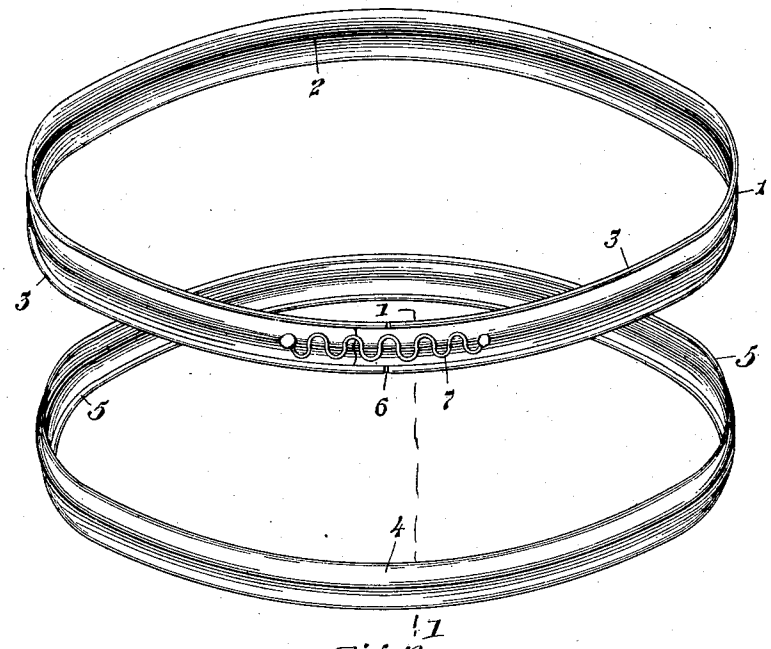
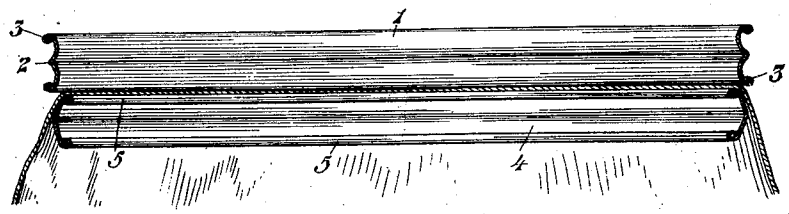



Fig. 2.



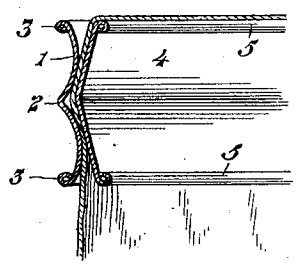




Fig. 3.

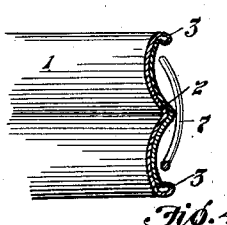



Fig. 4.

Witnesses

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# UNITED STATES PATENT OFFICE.

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## EMBROIDERY-HOOP.

1,010,534. Specification of Letters Patent. Patented Dec. 5, 1911.

Application filed April 5, 1911. Serial No. 619,096.

*To all whom it may concern:*

Be it known that we, HOMER L. TOTTEN and THOMAS F. SNYDER, citizens 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.

Our invention relates to improvements in devices for holding or supporting cloth or other fabric upon which it is desired to embroider designs or do similar work and particularly relates to a device wherein two rings or hoops are provided, the relative adaptation of said hoops or rings being such that the one may be arranged within the other, the fabric to be worked upon being held and supported in a taut condition across the inner ring or hoop, the edges of said fabric being clamped between two rings, and the objects of our improvements are, to more firmly and securely hold the fabric in place and to provide a device of simple construction which will be easily manufactured and cheap in cost, while proving thoroughly efficient and more perfectly adapted to fully accomplish its objects in a satisfactory manner than devices which have heretofore been used.

Another object in the present invention is to provide means whereby the cloth or fabric remains without injury either while clamped or when the rings or hoops are placed in position to clamp the cloth or removed to release the cloth and at the same time to permit the cloth or fabric to be drawn between the clamping rings to shift the position of the cloth or to stretch the cloth or fabric in the event it becomes slack or is slack after the rings or hoops have been placed in proper position to hold the cloth or fabric.

I attain these objects together with other objects readily apparent to those skilled in the art by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of the inner and outer rings or hoops separated from each other to better disclose the construction. Fig. 2 is a sectional view upon a diametrical plane illustrating the inner ring, the fabric and the outer ring, the said outer ring being in position to be pressed or forced down over and upon the fabric and the inner hoop. Fig. 3 is an enlarged fragmentary view illustrating a transverse section of the two rings with the fabric properly clamped between them. Fig. 4 is a fragmentary view showing a section taken through line 1—1, Fig. 1.

Similar numerals of reference indicate corresponding parts in all the figures of the drawing.

In the accompanying drawing, 1 represents the outer ring or hoop, which is provided with a centrally disposed V shape bead 2, and is formed with an annular depression each side of said bead, the V shape bead forming an annular groove upon the inner periphery of the outer hoop 1. The outer hoop 1 is provided with the outward rolled or folded portions 3. The inner hoop 4 is substantially of the form shown in the drawings and as shown it is made up of what might be termed two plane faces located at an angle to each other, or in other words the hoop has inwardly extending portions, which inwardly extended portions are divided about mid-way between the top and bottom of said inner hoop. The inner hoop 4 is provided with the rolled or folded portions 5. The hoops 1 and 4 are formed of such a relative size with reference to each other that they can be located one within the other and for the purpose of providing means for frictionally holding the rings together and at the same time causing the outer ring to snugly hug the inner ring, said outer ring is provided with a joint 6, which joint is normally held closed by means of the spring 7, but said spring is attached to the outer hoop upon opposite sides of the joint in any convenient and well known manner.

It will be understood that by providing the outer hoop with the two depressed portions and dividing said portions by an outwardly extended V-shaped bead and by forming the inner ring with the two inclined plane surfaces that the contact points as between the inner and outer rings will be about mid-way intermediate each depressed portion of the outer hoop, thereby reducing the contact surface which in turn reduces the contact surface of the outer hoop upon the goods or fabric. This is of importance owing to the fact that in the placing of rings to clamp the cloth or fabric, only a small portion of the fabric comes in clamping contact with the surface of the inner and outer surfaces of the inner and outer hoops. It will be understood that by

providing the inner hoop with inclined plane portions, the outer hoop will be easily guided, the convexed portions of the outer hoop riding upon the plane faces of the inclined portions as the hoops are brought into proper position to clamp the goods, or in the position shown in Fig. 3.

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

An embroidery hoop, comprising outer and inner rings, the inner ring having a centrally disposed outwardly pointed annular bead, the outer surface of said ring being flat and inclined inwardly from the bead and the upper and lower edges being inside the vertical plane of the outer surface of the bead, said edges being rolled to form reinforcements, the outer ring having a centrally disposed outwardly extended pointed annular bead adjacent the annular bead on the inner hoop and of greater depth than the latter, the walls of the outer hoop each side the annular bead therein being concave inwardly, one part of the inner surfaces of said concaved portions being inside the vertical plane of the bead on the outer ring, and inside the vertical plane of the outer surface of the annular bead, on the inner ring whereby the inner concave portions of the outer ring will frictionally engage the flat oppositely inclined surfaces of the inner ring.

In testimony that we claim the above, we have hereunto subscribed our names in the presence of two witnesses.

HOMER L. TOTTEN.
THOMAS F. SNYDER.

Witnesses:
WILLIAM H. MILLER,
IRENE LUTZ.