

G. B. LYON.
EMBROIDERY FRAME.
APPLICATION FILED FEB. 29, 1908.

901,246.

Patented Oct. 13, 1908.

Fig. 1.

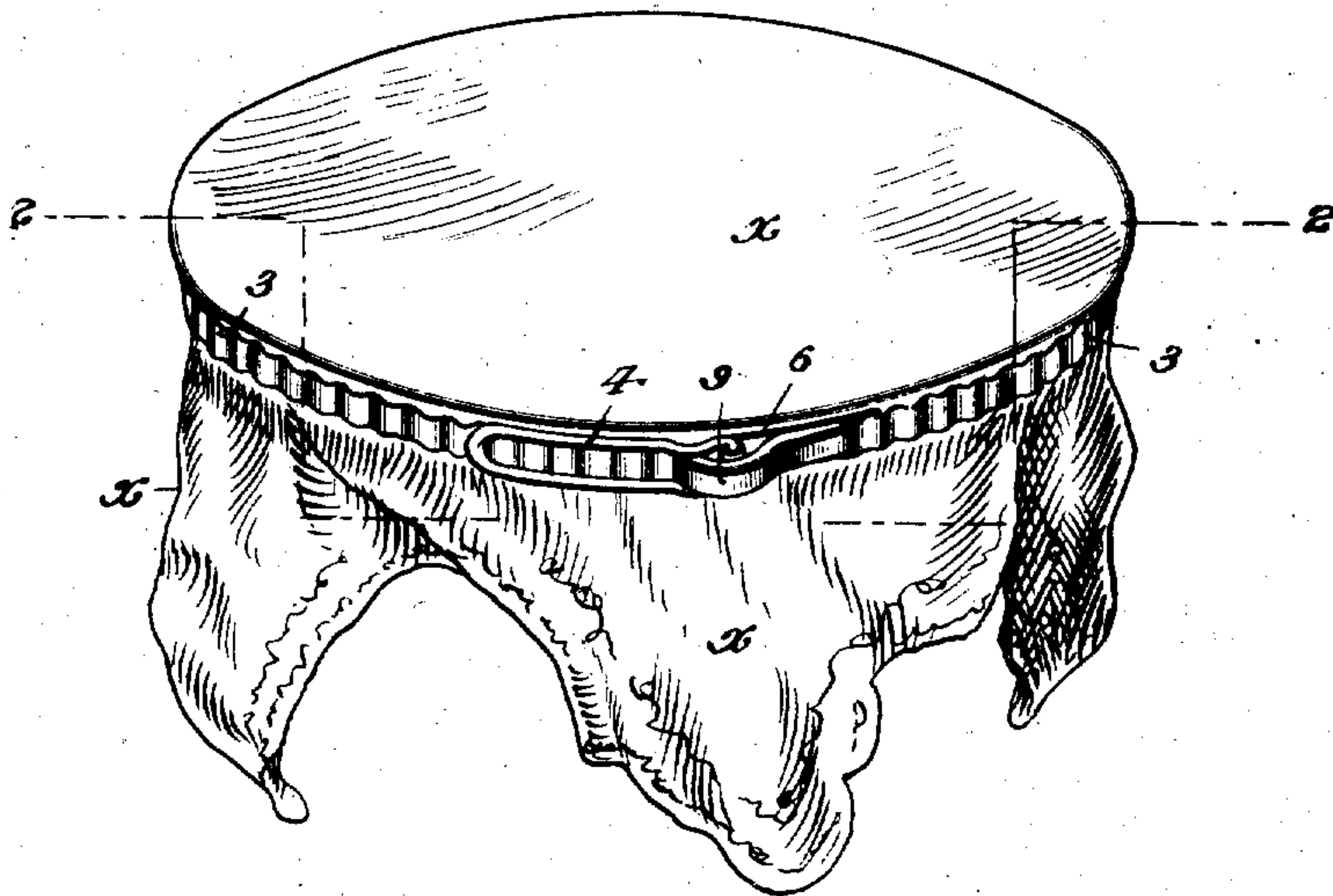


Fig. 2.

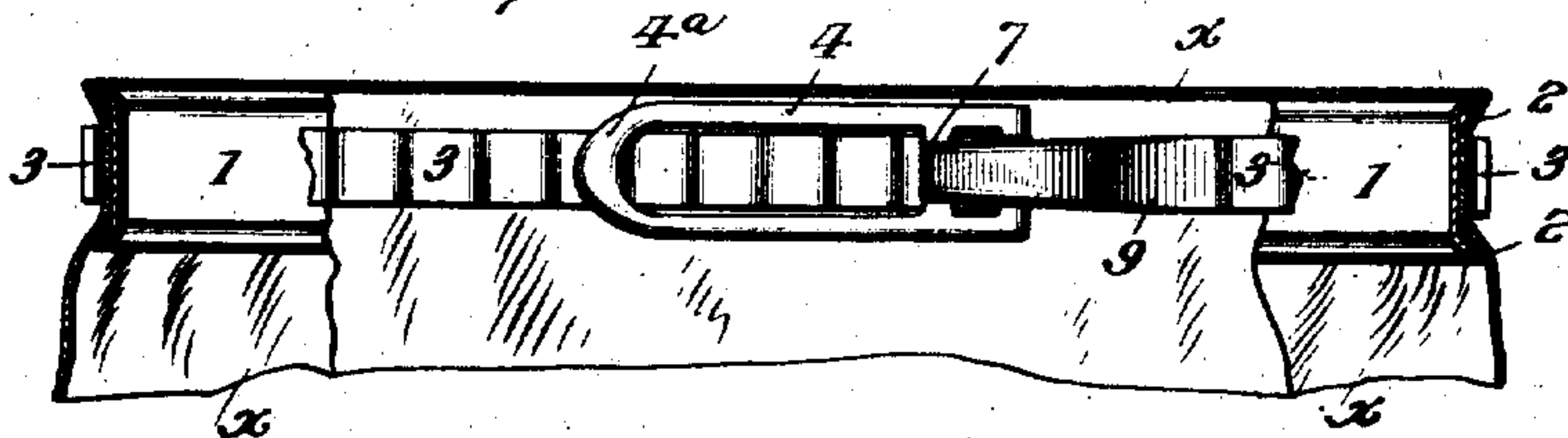


Fig. 3.

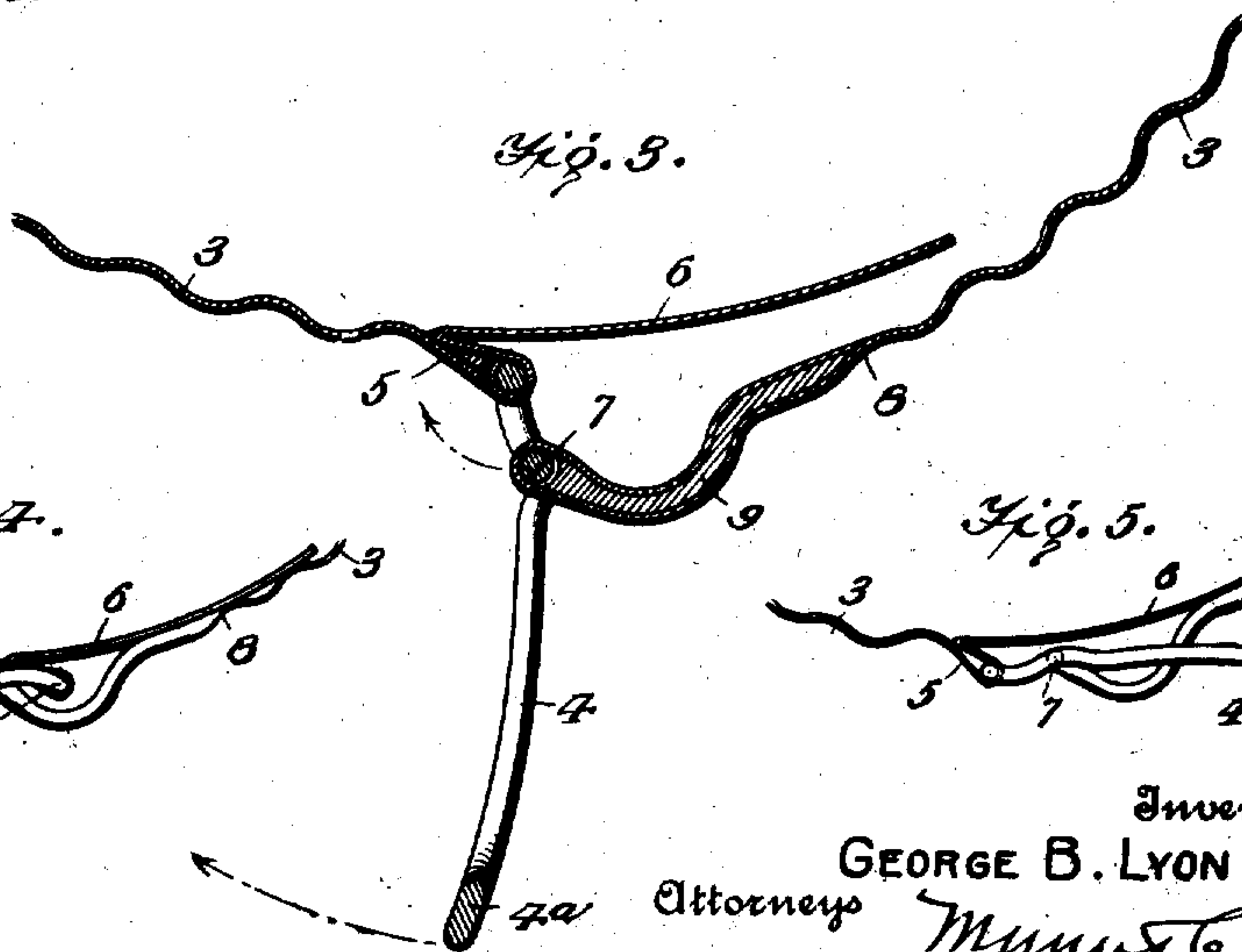


Fig. 4.

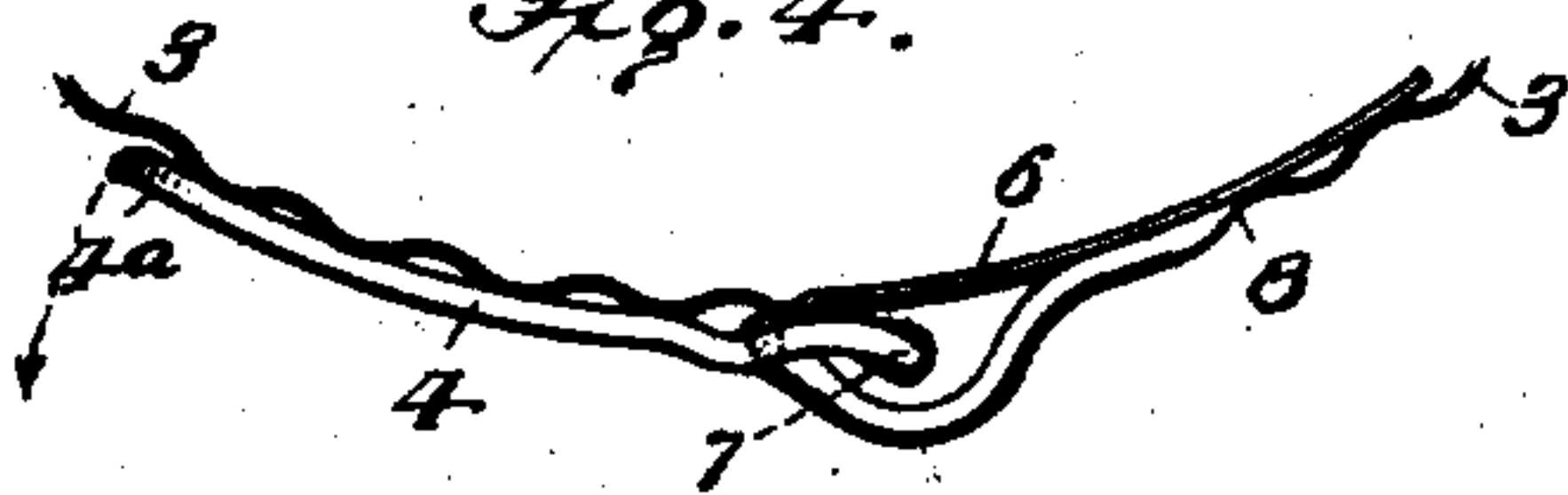
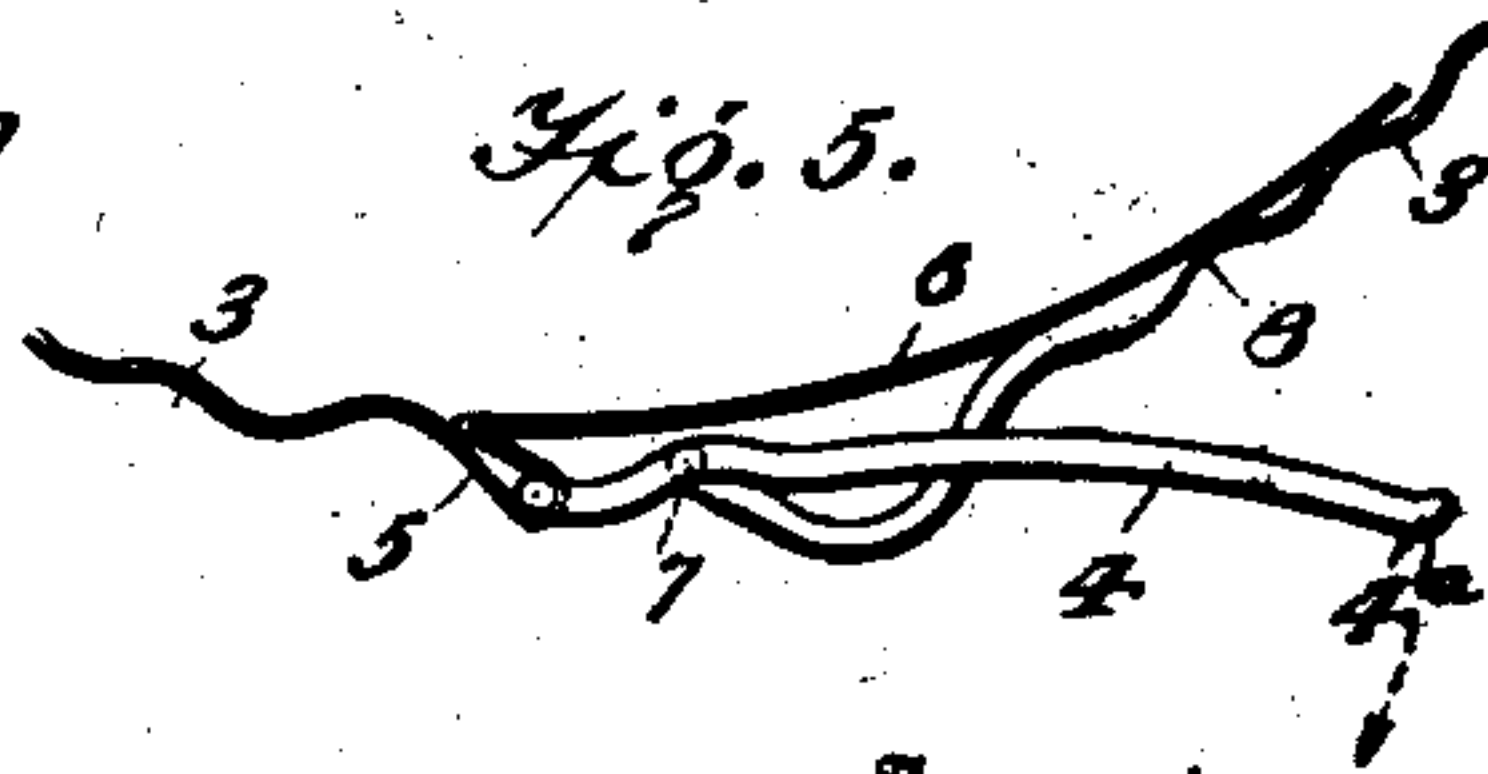


Fig. 5.



Witnesses
L. H. Schmidt.
Amos W. Hart

Inventor
GEORGE B. LYON,
Attorneys
Munn & Co.

UNITED STATES PATENT OFFICE.

GEORGE B. LYON, OF ITHACA, NEW YORK.

EMBROIDERY-FRAME.

No. 901,246.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE B. LYON, a citizen of the United States, and a resident of Ithaca, in the county of Tompkins and State of New York, have invented certain new and useful Improvements in Embroidery-Frames, of which the following is a specification.

My invention is an improvement in the class of hand embroidery frames that are composed of a hoop and a clamping device for holding the fabric stretched thereon.

In my invention the hoop is constructed with double or parallel flanges between which the clamp is applied. The clamp is formed, as to its body portion, of a transversely corrugated strip of elastic metal, so that it is stretchable or adjustable in length, and a lever clamping device which is permanently but pivotally connected with the ends of the same.

In the drawing, Figure 1 is a perspective view showing the fabric applied to and clamped by my improved embroidery frame. Fig. 2 is in part a side view, and in part a section of the same parts on the line 2—2 of Fig. 1. Fig. 3 is an enlarged horizontal section of the clamping device, portions of the clamping ring, and the lever clamping device with which its ends are connected. Fig. 4 is a plan and edge view of the clamping device with the lever fastening in a closed position. Fig. 5 is a similar view of the same parts showing the lever fastening in an open position.

The hoop 1 is formed of sheet metal, preferably of brass and its edges are turned outward as shown at 2—2, thus forming annular flanges or ribs. The body of the clamping device comprises a ring 3, corrugated transversely, and preferably formed of brass. It is of such width that it is adapted—as shown in Figs. 1 and 2—to clamp the fabric between the flanges 2, 2, of the ring 1. It is obvious that by the provision of the said flanges the fabric may be held more securely than would be practicable if the ring were smooth or flat on the outer side. The securing or fastening device proper, indicated by 4, is a lever constructed as a double loop. One end of the corrugated band 3 is provided with a loop 5, which engages one end of the lever and is doubled back upon itself and soldered as shown in Fig. 3, the free end of the band being smooth or plain and extended, as shown at 6, beyond the point of

attachment to the lever. The other end of the band 3 is looped around the cross bar 7 of the lever and bent back upon itself and soldered at 8. A moderately thin metal piece 9 is inserted between the portions of the band thus looped and soldered in place. This filling piece is curved outwardly as required to complete the fastening and has such rigidity that it always retains its bent form.

In applying the clamping device, the fabric X, which is to be embroidered or worked in any required manner, is placed over the ring 1, and then the clamping device is passed down over the same, the lever 4 in such case being extended, or thrown backward, as shown in Fig. 5, so that the diameter of the corrugated band is enlarged to the required degree. Then, by pressing upon the outer end 4^a of the lever 4 in the direction of the arrow indicated in Fig. 3, said end is carried inward against the band as shown in Figs. 1 and 2, whereby it is obvious the ends of the band are secured to the lever so that the band is tightened around the hoop to the degree required to hold the fabric very securely.

By means of the outward bend or curve of the filling piece 9—see Fig. 3—a space is formed to receive the looped end 5 of the band as shown in Figs. 1 and 4, and the free and plain end 6 of the band extends underneath the same and lies in firm contact with the fabric. It is apparent that the looped end 5 must project farther outward from the hoop than the point of attachment of the band at 7, thus forming a toggle joint which is self locking and yet may be readily opened by pressing outward with slight force on the end 4^a of the lever 4.

It will be seen that not only does the corrugated band extend entirely around the hoop so as to inclose and bear upon the fabric but it is elastic and stretchable to a degree which adapts it to be applied for clamping fabrics or materials which vary widely in thickness.

The frame taken as a whole is light, ornamental in appearance, may be easily constructed, easily and quickly applied, and is adapted to hold the fabric more securely than others of its class. The fabric is also not drawn laterally and puckered in closing the fastening, since the flat end 6 of the band then underlies the corrugated part which slides thereon.

What I claim is:

The improved clamping device for embroidery frames comprising a divided band which is formed of elastic metal and corrugated transversely, and a fastening consisting of a loop lever having transverse portions around which the ends of the band are doubled, one end portion 6 being plain and

extended beyond its loop, and the other provided with a stiffening piece and curved outwardly, as shown and described.

GEORGE B. LYON.

Witnesses:

SOLON C. KEMON,
AMOS W. HART.