

(Model.)

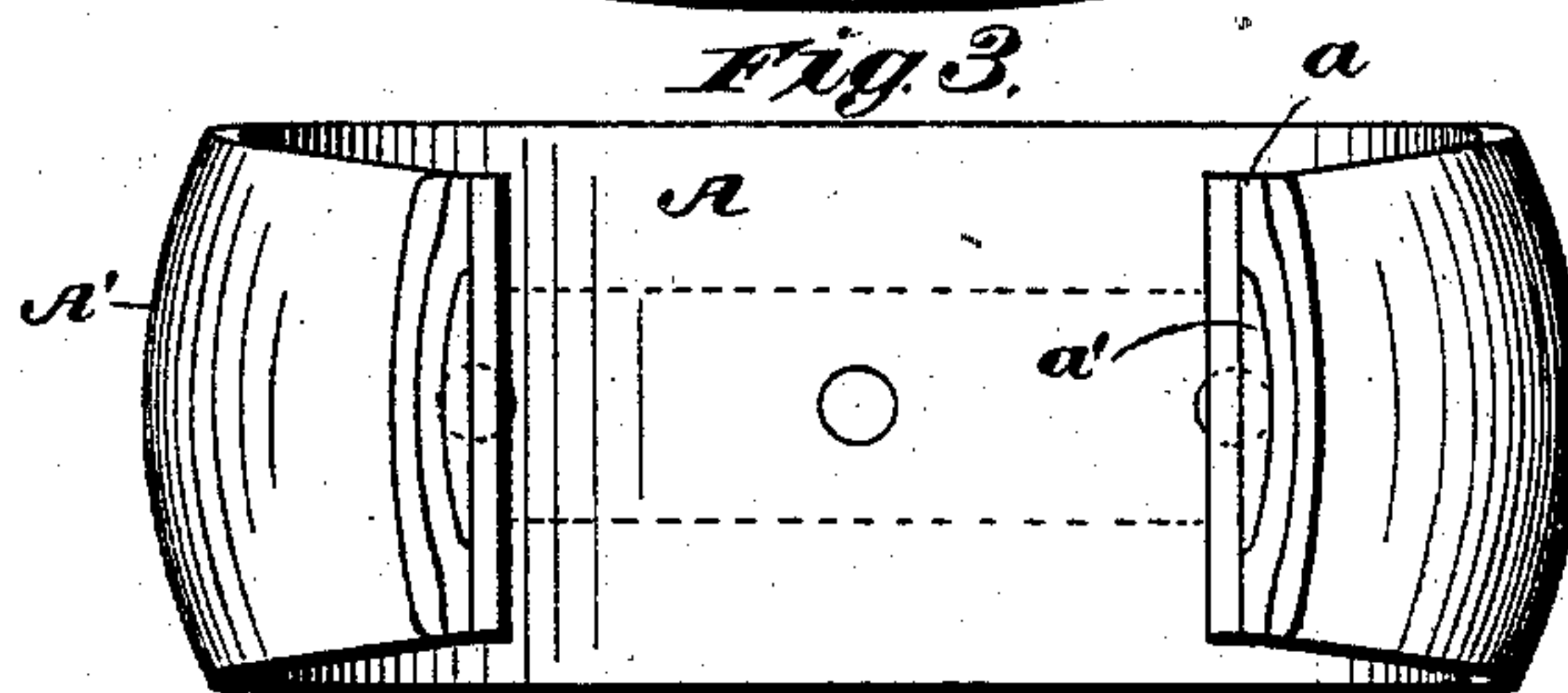
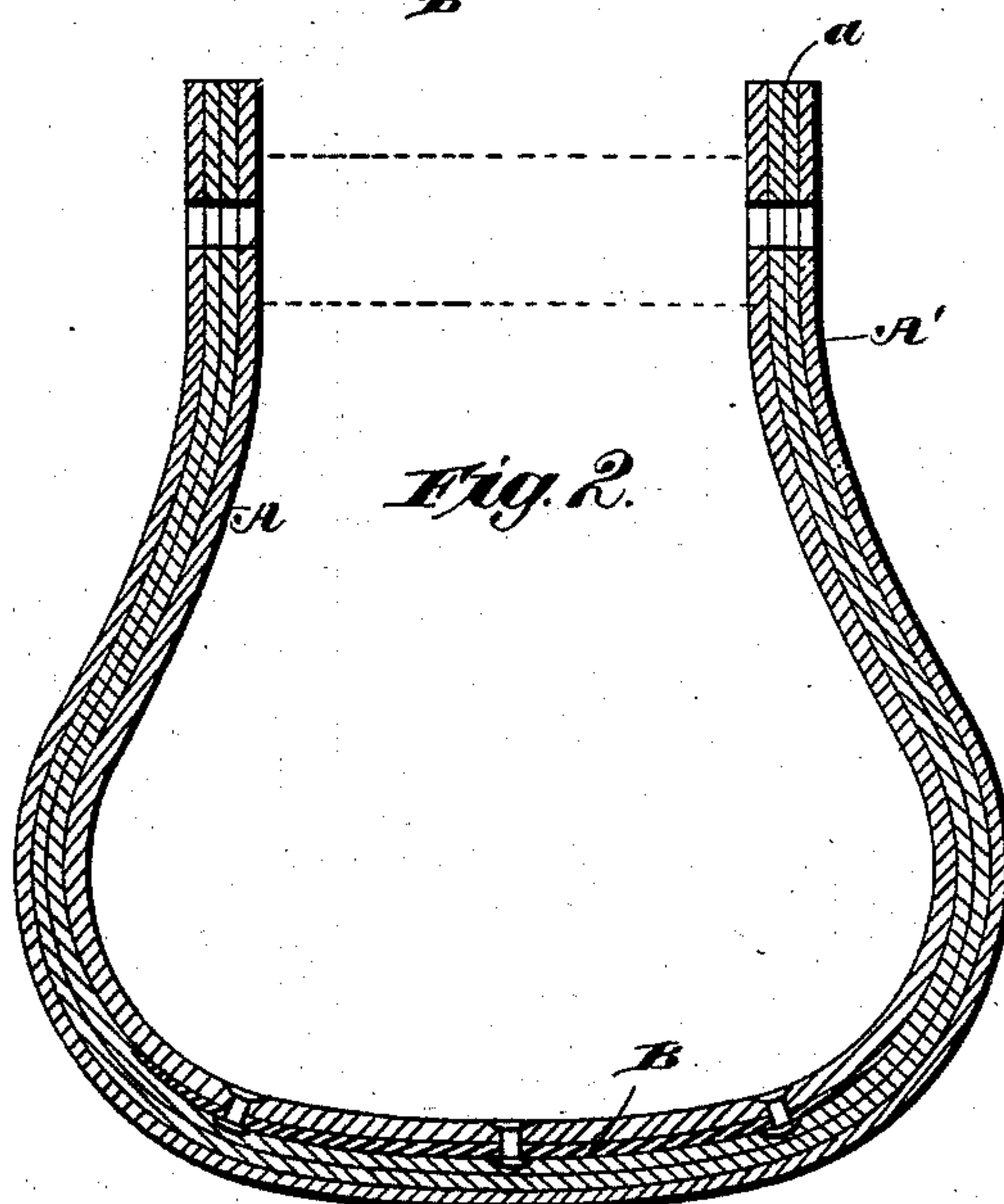
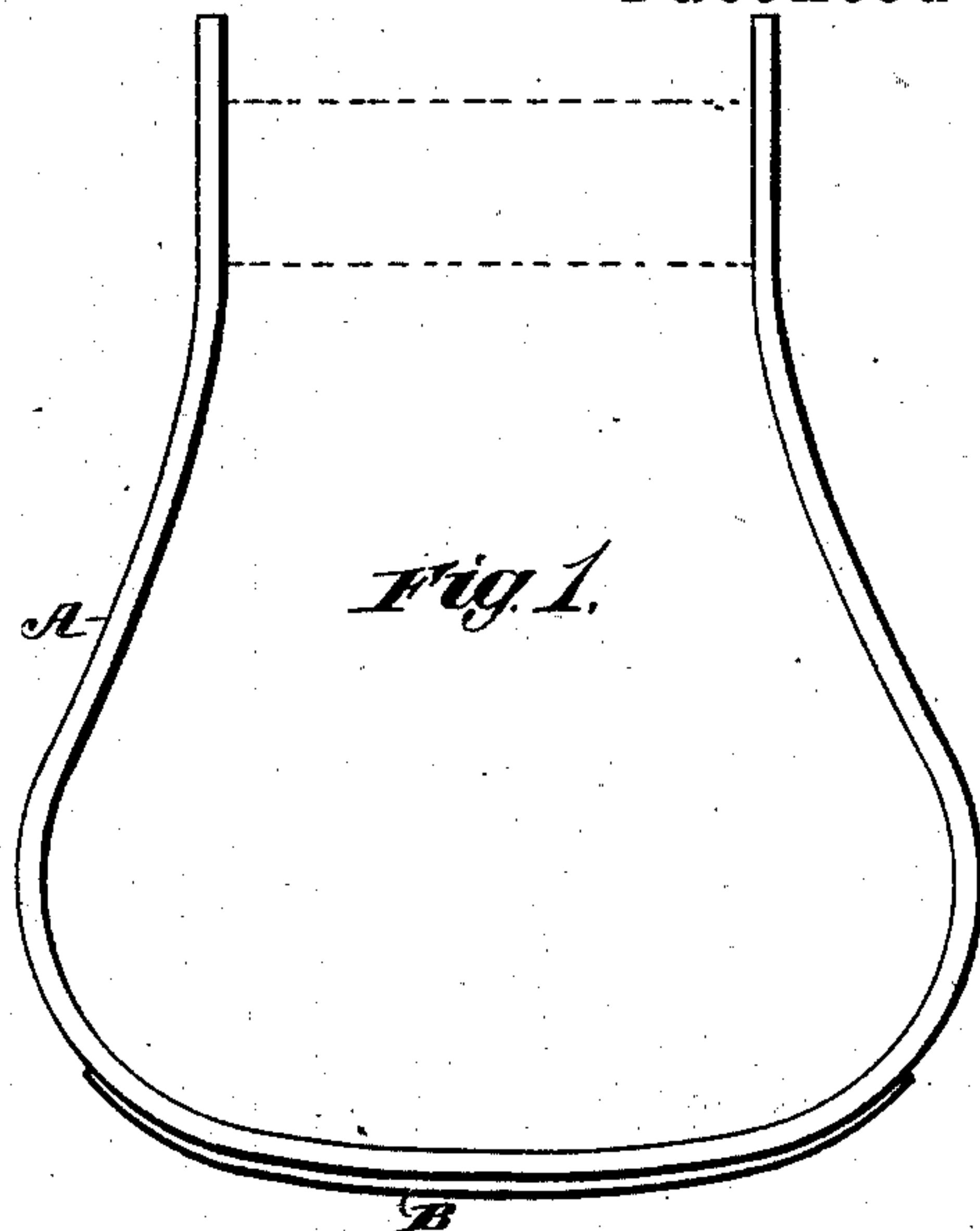
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B. F. WILLIAMSON.

STIRRUP.

No. 283,310.

Patented Aug. 14, 1883.



WITNESSES

Phil. Everett
J. A. Rutherford

INVENTOR

Benjamin F. Williamson.
By *James L. Norris*
Attorney

(Model.)

2 Sheets—Sheet 2.

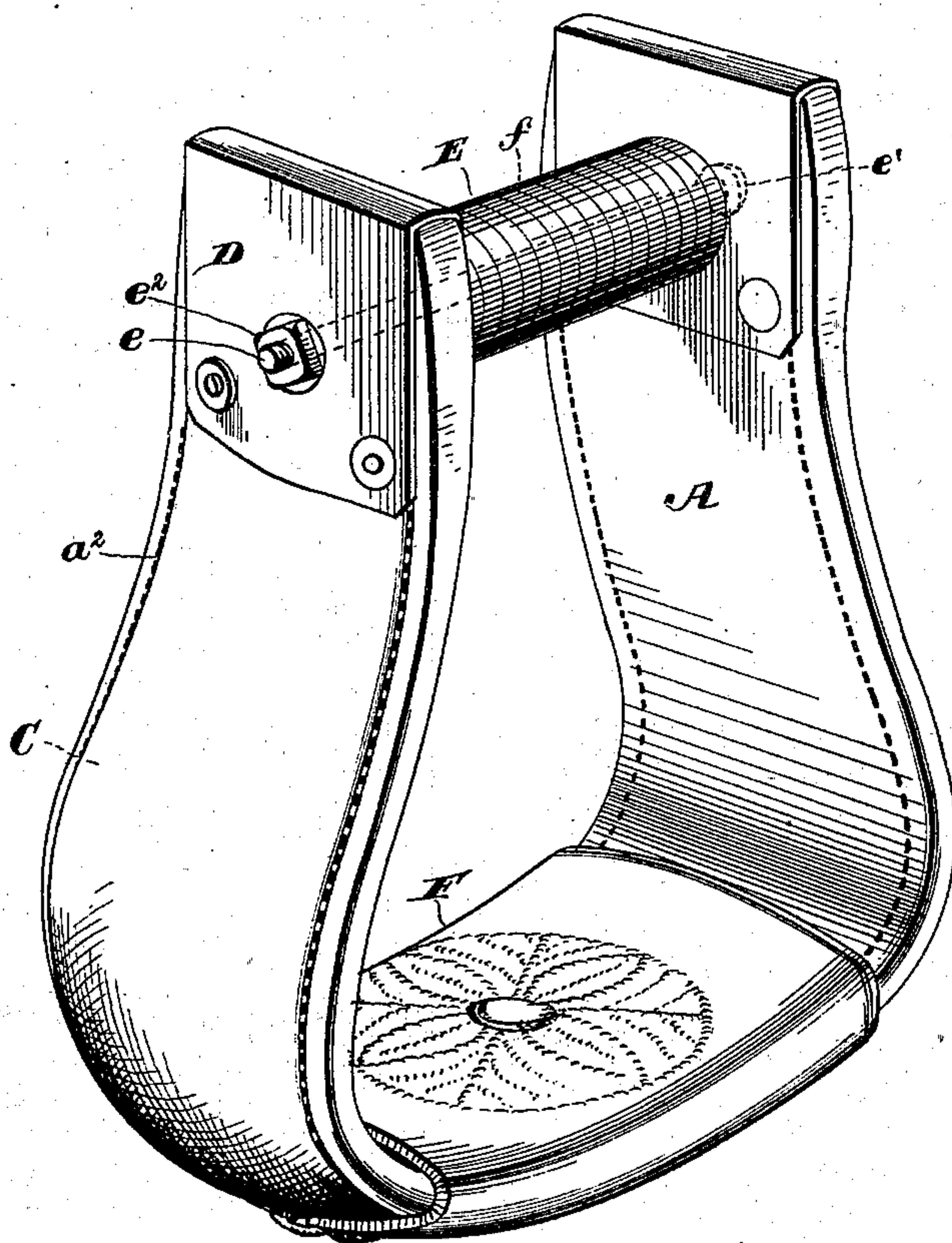
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Fig. 4.



WITNESSES
Robert Everett.
J. A. Rutherford.

INVENTOR
Benjamin F. Williamson.
By *James L. Norris.*
Attorney

UNITED STATES PATENT OFFICE.

BENJAMIN F. WILLIAMSON, OF ST. LOUIS, MISSOURI.

STIRRUP.

SPECIFICATION forming part of Letters Patent No. 283,310, dated August 14, 1883.

Application filed June 12, 1883. (Model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. WILLIAMSON, a citizen of the United States, residing at St. Louis, in the county of St. Louis and State of Missouri, have invented new and useful Improvements in Stirrups, of which the following is a specification.

My invention relates to stirrups, and has for its object to avoid the decay of the stitching by which the leather cover is attached to the frame or body of the stirrup, caused by the oxidation of the metal frame from which the latter is made.

Heretofore stirrups have been ordinarily made with an iron frame or body having a covering of leather stitched over the same; but it has been found that water or dampness will produce oxidation of the iron, which will in a short time destroy the stitching by rotting out the thread. The iron frame, moreover, is not only heavy, but is wholly inflexible, and cannot therefore be adapted to different widths of stirrup-strap, but must be made of different sizes with straps adapted to each.

For the purpose of obviating these objections, my invention consists in a riding-stirrup formed of solid leather, having the covering stitched on, and provided with a roller-block composed of a series of leather disks set side by side upon a supporting-bar, whereby the length of the roller-block may be adjusted to the width of the stirrup-strap.

Referring to the drawings, Figure 1 is an elevation of the frame of a riding-stirrup composed wholly of leather, with the exception of an exterior bottom stiffening-plate. Fig. 2 is a central vertical section of a leather stirrup-frame with filling-strips and an inner covering drawn over the same. Fig. 3 is a plan view of the device shown in Fig. 2. Fig. 4 is a perspective view of the finished stirrup with the covering stitched on and the foot-pad laced upon the foot-plate.

A in said drawings represents a frame or skeleton for a riding-stirrup, formed of a single strip of leather of suitable thickness to give the required rigidity and bent into the form shown. Upon the bottom of said frame is placed an exterior metal plate, B, riveted to the foot-plate, whereby the necessary stiffness is imparted to the latter. The edges of the

plate B do not closely approach the edges of the leather A, leaving ample room for the stitching by which the covering is secured to the frame. Upon the exterior of the leather frame A are placed filling-strips *a*, and over these is closely drawn the leather inner covering, A', a tapered piece, *a'*, being inserted upon the strip *a* at each end of the frame, in order to give the required curve outward, as shown in Figs. 2 and 3. After the inner covering, which is of the width of the frame, has been applied, it is drawn down upon both edges closely to the frame A, and its surface and edges may be trimmed off and sandpapered to give perfect uniformity and good finish. The leather covering A' may be glued, cemented, or otherwise fastened in place, and when it is properly shaped an outer covering, C, is applied, composed of burnished leather, and having a line of stitching, *a''*, run around not far from each edge. Upon the ends of the stirrup are placed metallic plates D, lapped upon both sides and fastened by rivets.

E indicates the roller-block, which consists of an iron rod, *e*, passing through from side to side at the top of the stirrup, and having a flanged head, *e'*, upon one end and a thread to receive a nut upon the other. Upon this rod I place washers or disks *f*, of leather, which may be connected together, and applying a nut, *e''*, to the threaded end of the rod, the sides of the stirrup are drawn closely up against the leather disks, as shown in Fig. 2. The surface of the said disks is trimmed down and polished neatly, and the stirrup-strap is passed around it in the usual manner.

It is evident that by adding to the number of leather disks upon the rod or bar *e* it may be used with a wider strap, and in a similar manner by removing one or more of said disks from the bar a narrower strap may be employed, the elasticity of the leather frame allowing of the adjustment of the nut upon said bar to any desired degree necessary to force the side bars of the stirrup-frame against the ends of the roller-bar.

A foot-pad, F, may be laced upon the foot-bar in the ordinary manner.

The stiffening-plate B does not approach the lines of stitching so closely as to injure the thread by the oxidation or rusting of the metal,

and by forming the skeleton or frame wholly of leather, as described, I am able to produce a stirrup more cheaply, having sufficient elasticity to enable the shortening or lengthening 5 of the roller-bar to adapt it to any width of stirrup-strap, and thus produce a more durable, convenient, lighter, and better article than the iron-frame stirrups heretofore used.

I am aware that stirrups have been heretofore 10 made in which a stirrup-block of wood or metal has been supported by two straps or webs of leather. I make no claim to such an invention, as it fails to accomplish the results aimed at in the present case, and, moreover, 15 presents a different construction, in which essential elements of my invention are omitted.

Having thus described my invention, what I claim is—

1. A stirrup having its frame composed of 20 a continuous strip or strips of leather, substantially in the manner described, said frame being bent into the proper form and having its ends connected by an adjustable roller-bar, as set forth.

25 2. A stirrup constructed wholly of leather, substantially in the manner described, said leather being bent into the required form, the ends of the side bars of the frame being connected by an adjustable roller-bar, constructed

substantially as set forth, and a stiffening-plate 30 being attached to the foot-bar between the stitching, as specified.

3. As an improved article of manufacture, a riding-stirrup consisting of a frame composed wholly of leather, one or more filling- 35 strips applied exteriorly, and a suitable leather covering, substantially as described.

4. The combination, with a leather stirrup having elastic side bars, of a roller-bar connecting the ends of said bars, and composed of 40 a rod having disks placed thereon in juxtaposition, and means for adjusting the ends of the side bars toward and from each other, substantially as described.

5. The combination, with the stirrup-frame, 45 of the roller-bar composed of separate disks *f*, of leather or other material, the rod *c*, having a flanged head at one end, and the nut turning upon the other threaded end of said rod, substantially as described. 50

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

BENJAMIN F. WILLIAMSON.

Witnesses:

H. W. ROBERTS,

S. L. BIGGERS.