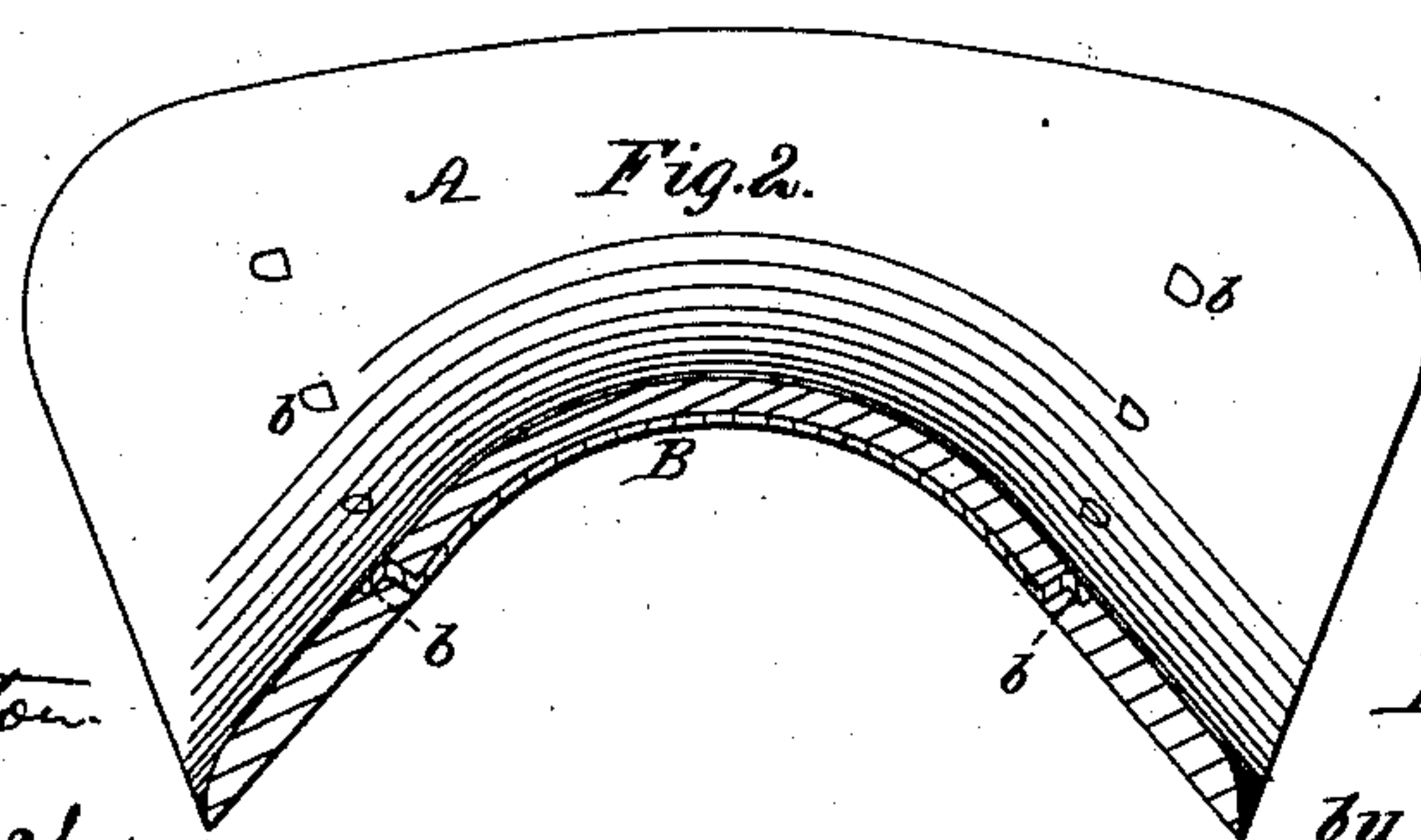
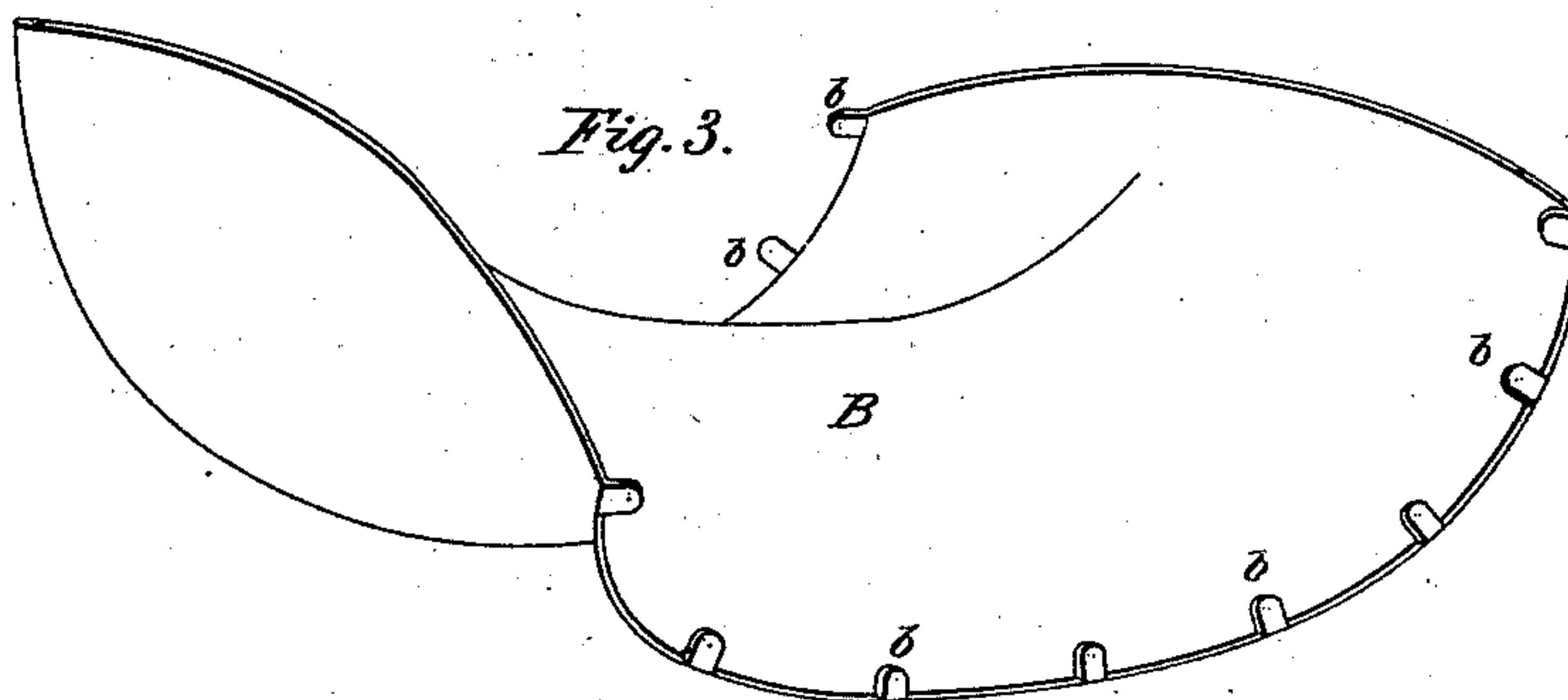
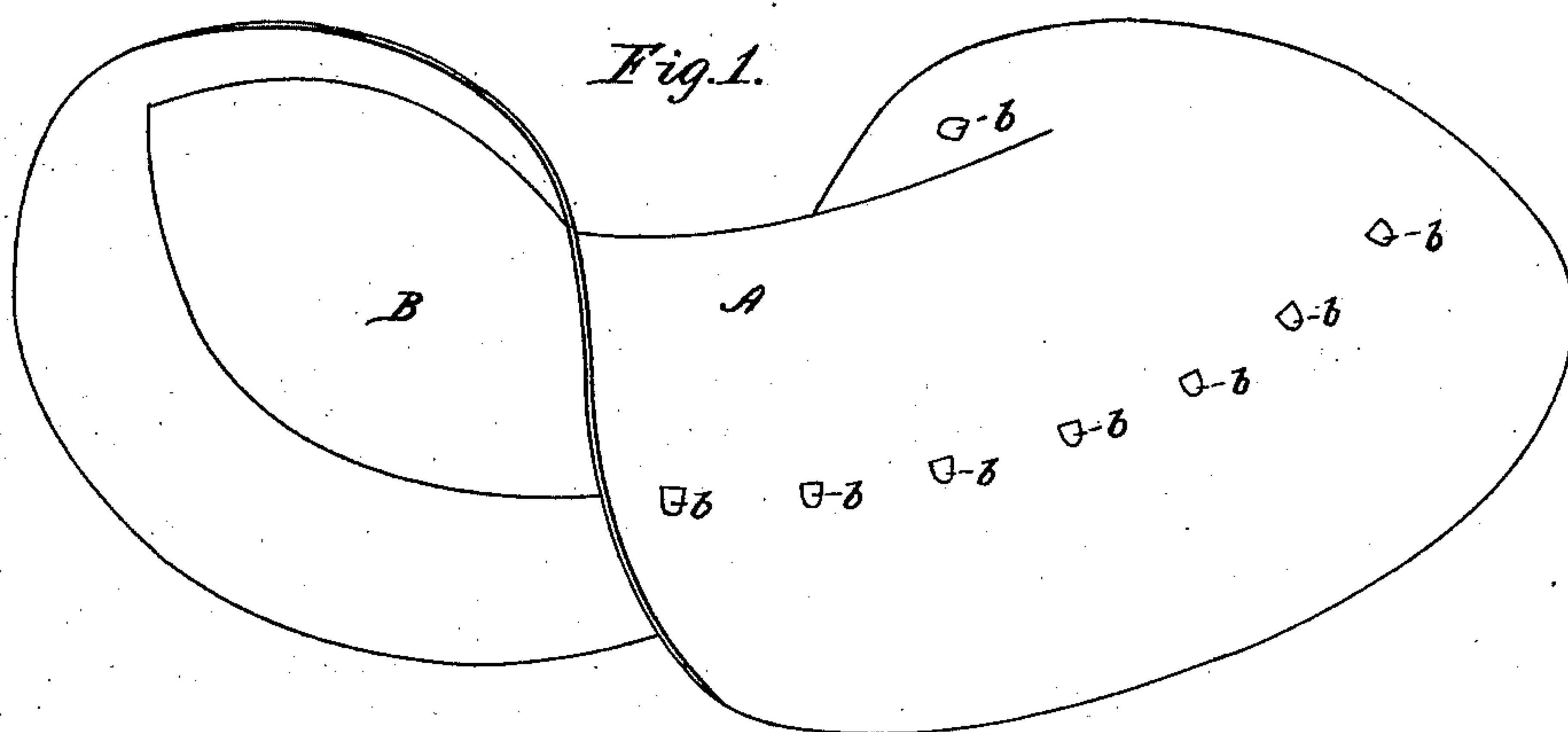


(No Model.)

D. CURTIS.  
HORSE COLLAR PAD.

No. 294,769.

Patented Mar. 11, 1884.



Witnesses:  
W. C. Jindumston  
Fred F. Lehnich

Inventor:  
Dexter Curtis

by  
Melville Lehnich  
his Attorney.

# UNITED STATES PATENT OFFICE.

DEXTER CURTIS, OF MADISON, WISCONSIN.

## HORSE-COLLAR PAD.

SPECIFICATION forming part of Letters Patent No. 294,769, dated March 11, 1884

Application filed August 29, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, DEXTER CURTIS, of Madison, in the county of Dane and State of Wisconsin, have invented certain new and useful Improvements in Metal-Lined Harness; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and to the figures and letters of reference marked thereon.

It has been the common practice for some years past to apply metal, and preferably zinc, to the various parts of a harness which bear with the greatest pressure upon the animal—such as the collar, collar-pad, saddle, breast-pads, back-pads, &c. In the application of the metal difficulty has been experienced in forming a smooth joint between the edges of the metal and the leather backing to which it was applied, such as would prevent the cutting or irritation of the animal.

In Letters Patent of the United States granted to me as assignee of Matthew W. Lynch January 23, 1883, No. 270,960, is shown and described the application of a bearing-plate of metal to a horse-collar pad in a manner tending to produce a close joint between the edges of the metal and the leather of the pad—that is to say, the metal is pressed by powerful pressure into the body of the leather, so that its edges shall be flush therewith. It has been found, however, after a practical trial covering a considerable length of time, that the means shown and described in said patent for holding the leather and metal together—to wit, two or more rivets applied through the leather and metal at opposite ends of the latter—are insufficient to prevent the separation of the leather from the metal along the edges of the latter after the pad has been some time in use.

It has therefore been the object of my present invention to so unite the metal to the leather in collar-pads, as well as in other parts of the harness, as that the positive union of the metal to the latter shall be effected all along the edges of the latter; and to that end it consists in form-

ing upon or fixing to the body of the metal a series of projecting tongues or lugs extending all along its edges, and adapted to be pressed through the leather backing and clinched or turned down on the opposite side, and thus hold the leather positively to the metal all along the edges and prevent the separation of the one from the other and the opening of the joint.

I have shown in the accompanying drawings, in Figure 1, a perspective view, and in Fig. 2 a sectional view, of a collar-pad embodying my invention, and in Fig. 3 a perspective view of the metallic lining of the pad detached from the leather body.

Similar letters of reference in the several figures denote the same parts.

The letter A indicates the leather body of the pad; B, the metal linings thereof, made preferably of zinc, and *b* the prongs or lugs formed upon or attached to the lining, but by preference formed upon and made integral with the same, as shown. In applying the lining thus formed its body is pressed into the leather until flush with the surrounding leather surface, and so as to project the prongs or lugs *b* through the leather and out at the opposite side. The connection is then completed by turning down the projecting ends of the prongs or lugs against the body of the leather, as indicated in Fig. 1.

The metal bearing-plates of other parts of the harness are to be provided with similar prongs or lugs and pressed into the leather and clinched thereto just as in the case of the collar-pad.

I claim as my invention—

The herein-described leather metal-lined collar-pad, consisting of a curved body of leather or like flexible material, and a narrow metal bearing-plate applied to the under side of the arch, and secured thereto by integral edge prongs or lugs, substantially as described.

DEXTER CURTIS.

Witnesses:

CHARLES F. HARDING,  
A. W. SIDELL.