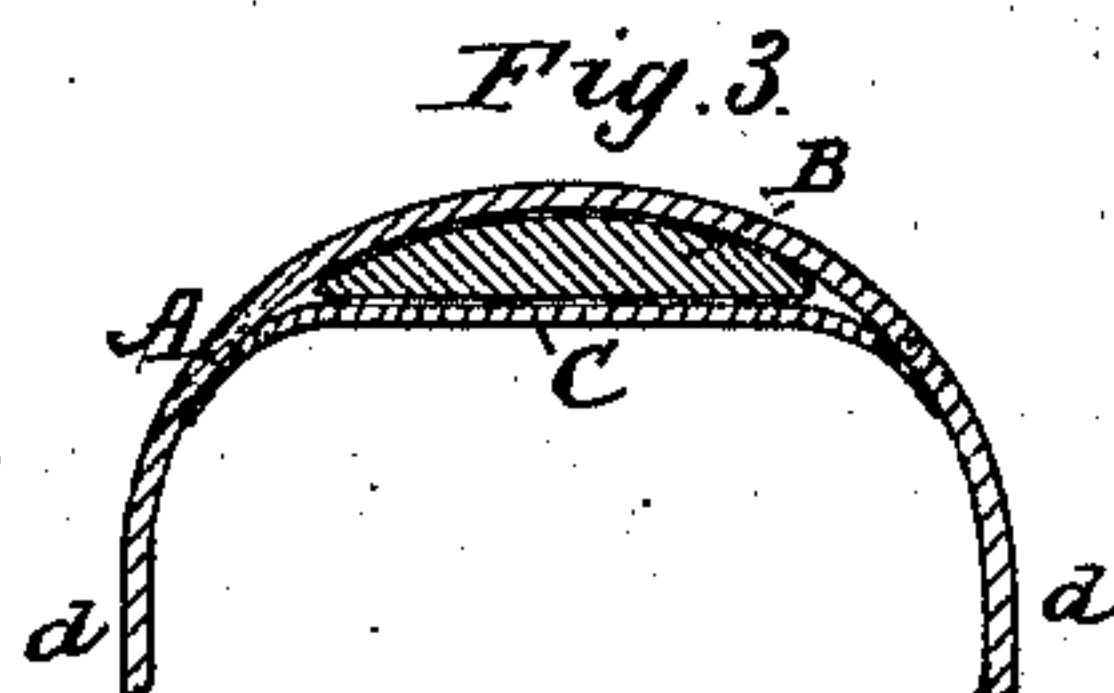
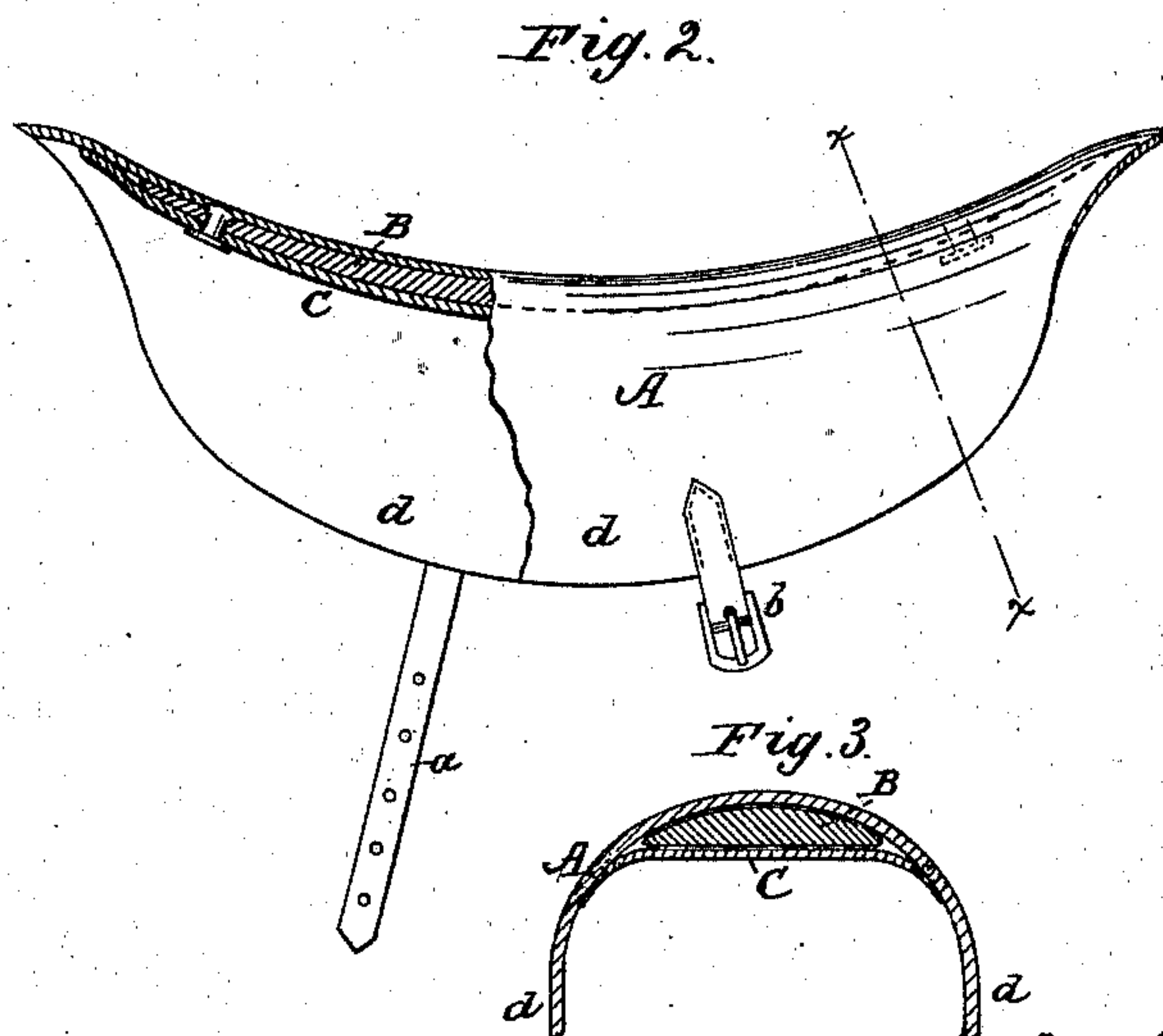
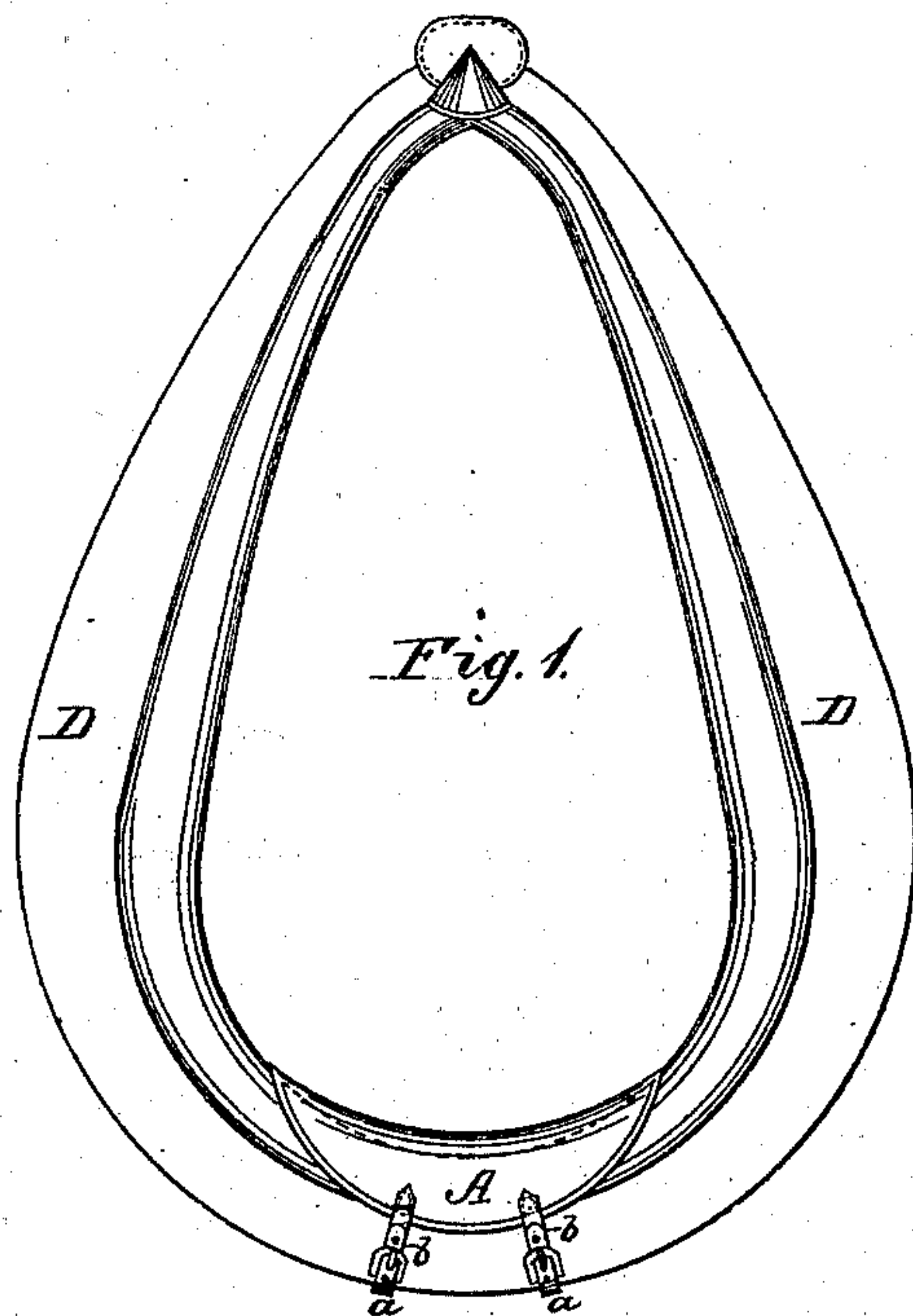


M. R. DOWLIN.
Horse-Collar Protector.

No. 211,229.

Patented Jan. 7, 1879.



WITNESSES:

W. W. Hollingsworth
Amos W. Hart

INVENTOR:

M. R. Dowlin

BY

Allen L. G.

ATTORNEYS.

UNITED STATES PATENT OFFICE.

MARSHALL R. DOWLIN, OF NORTH ADAMS, MASSACHUSETTS.

IMPROVEMENT IN HORSE-COLLAR PROTECTORS.

Specification forming part of Letters Patent No. **211,229**, dated January 7, 1879; application filed October 14, 1878.

To all whom it may concern:

Be it known that I, MARSHALL R. DOWLIN, of North Adams, in the county of Berkshire and State of Massachusetts, have invented a new and useful Improvement in Attachments for Horse-Collars; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to an improved attachment for flexible leather-covered horse-collars of double harness, for the purpose of protecting the throat of or lower end of the collars from wear, and from being drawn or bent out of shape by the tension of the pole-strap. The attachment is constructed and applied as hereinafter described, and as shown in accompanying drawings, in which—

Figure 1 is a front view of a collar provided with my attachment. Fig. 2 is a side view of the device detached, and with part in section. Fig. 3 is a cross-section on line *x x*, Fig. 2.

The said attachment is formed of (1) a leather piece or plate, A, provided with straps and buckles *a b*; and (2) a narrow curved stiffening plate or rib, B, which is riveted to the under side of said plate A, along its transverse middle, and (3) a leather strip or piece, C, which covers and protects the rib. The piece A is oblong, and has rounded ends and sides. The strengthening-rib, whose ends are riveted to the under piece C, is constructed of steel, and made of uniform width. The edges of the leather piece C, which covers it, are skived on the upper side to adapt them to form a smooth joint with the plate A, and to enable the flaps *d* of the latter to be bent or drawn downward for imparting the desired semi-cylindrical shape to the attachment. The piece C is attached to the plate A (after

the rib has been riveted thereto) by stitching it along each side between its edges and the rib B.

The attachment is applied to the upper side of the throat of the collar D, and firmly secured thereto by means of the straps and buckles *a b*. The curvature of the rib B corresponds to that of the collar, and its rigidity preserves the form of the latter, so that it is neither elongated nor contracted in width, nor otherwise distorted in shape, by the tension of the pole-strap. Said plate also prevents wear and abrasion of the collar by the pole-strap.

I am aware that a metallic plate has been applied to a metallic horse-collar for the purpose of covering the joint between the ends of the two sections or halves thereof, the plate being held in place by the device which connects the sections.

I am also aware a chafing-pad for protecting the neck of a horse has been attached to the upper portion of a collar, the same being constructed of a broad metallic plate covered with leather.

What I claim is—

In combination with the throat of a flexible leather-covered horse-collar, for the purpose of protecting the same and preserving its shape, the attachment hereinbefore described, formed of a leather plate, A, having straps and buckles *a b*, the narrow stiffening-rib B, having its ends curved upward and riveted to the upper side of piece C, said piece C covering the rib and having skived edges, which are sewed to the under side of plate A, all as shown and described.

MARSHALL R. DOWLIN.

Witnesses:

LYMAN M. FLAGG,
WALTER J. LEMOIN.