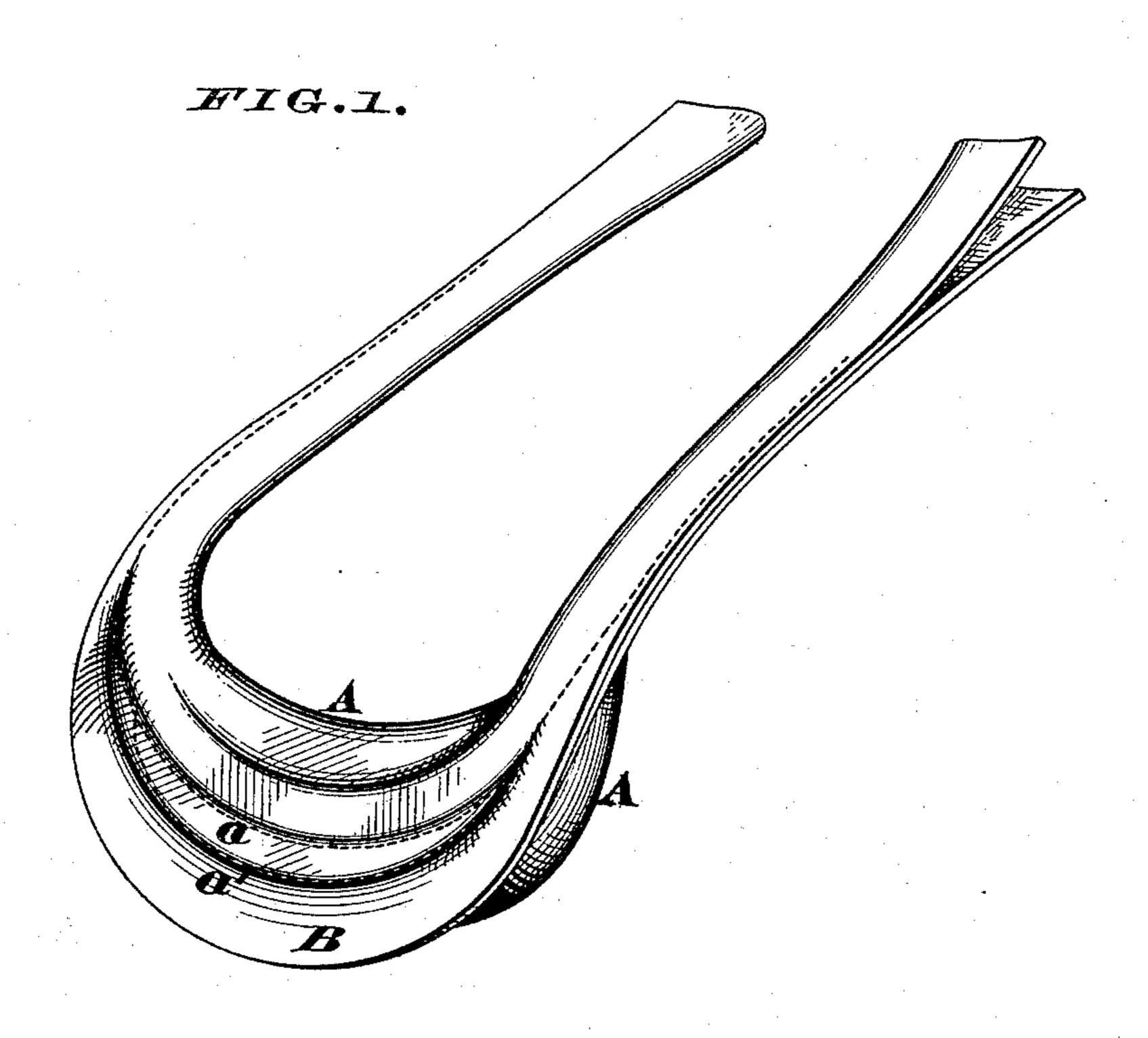
(No Model.)

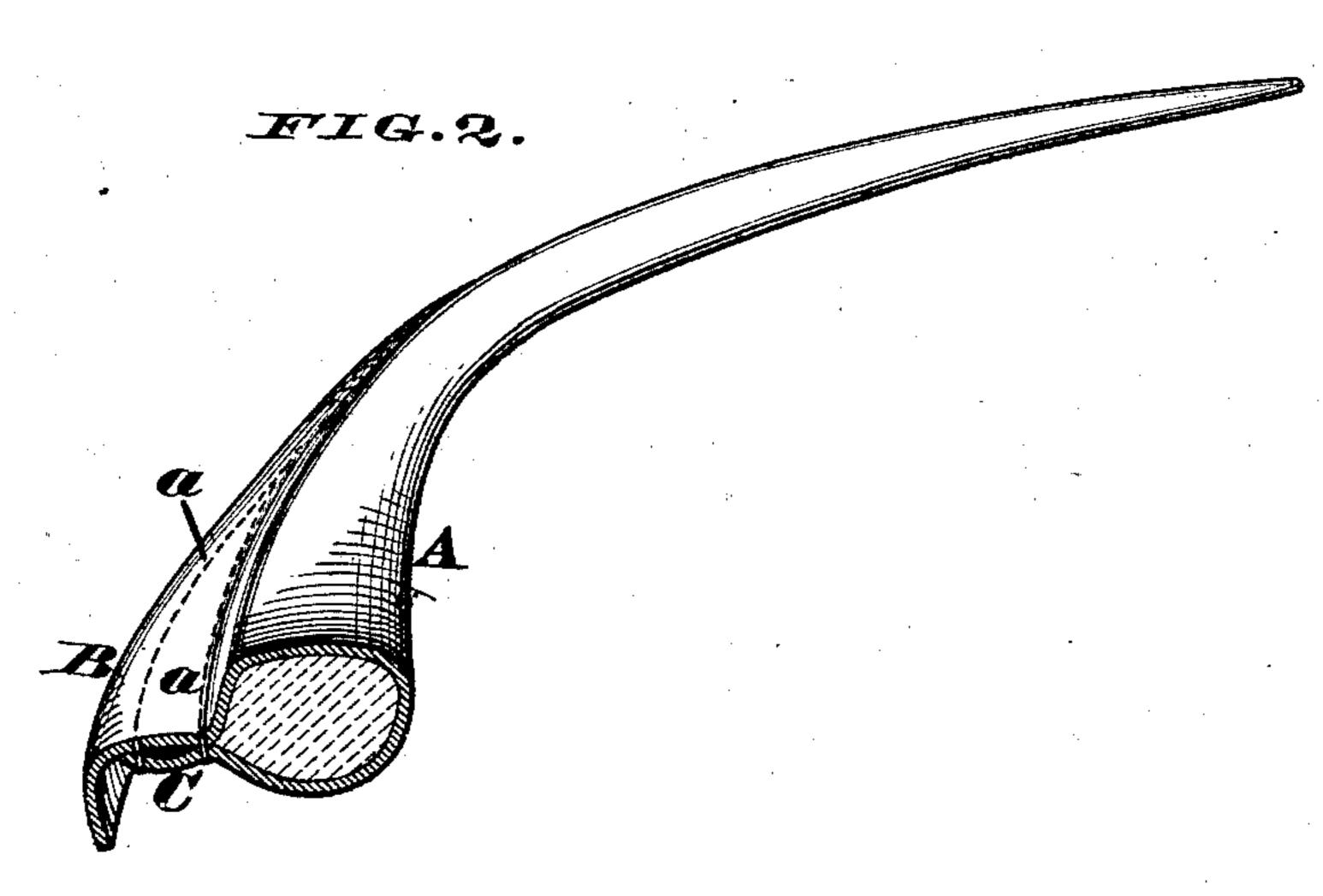
## J. SHAFFER.

CRUPPER FOR HARNESS.

No. 277,516.

Patented May 15, 1883.





Edward W. Rector Bus a Muyer. Joseph Shaffer Stewart Steek

## United States Patent Office.

JOSEPH SHAFFER, OF DAYTON, OHIO, ASSIGNOR OF ONE-HALF TO EDWARD F. COOPER, OF SAME PLACE.

## CRUPPER FOR HARNESS.

SPECIFICATION forming part of Letters Patent No. 277,516, dated May 15, 1883.

Application filed January 13, 1883. (No model.)

To all whom it may concern:

Be it known that I, Joseph Shaffer, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Cruppers for Harness, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making a part of this specification.

My invention relates generally to all classes of cruppers; and its object is to provide a rear skirt or extension for the following purposes, namely: first, to insure the horse's tail hanging in an easy and graceful position, and to correct any tendency of the same to hang to one side; secondly, to prevent rubbing and chafing of the tail, and to afford a means of ventilation; thirdly, to prevent the horse from holding his tail tight against his body and clamping the lines thereunder should they happen to be caught.

To this end the novelty consists, first, in the combination, with a crupper, of a rearward extension or skirt; secondly, in the combination, with a crupper, of a rearward extension or skirt formed of an integral piece with the crupper itself; thirdly, in the construction and arrangement of the parts, all as will be herewith set forth and specifically claimed.

In the accompanying drawings, Figure 1 is a perspective view representing my improved crupper. Fig. 2 is a sectional view taken transversely through the crupper at its mid-35 dle, showing one-half in perspective.

In constructing my improved cruppers I would prefer to use the process and machinery patented by me March 1, 1881, with only such modification in the form of the dies as to accommodate the skirt and its subjacent strengthening piece or support, though I do not purpose to limit myself to any process or machinery for making the cruppers.

In the drawings, A represents the crupper proper, and B the skirt, which in this instance 45 is a curved prolongation of the upper looped part of the crupper of the shape shown. This skirt or extension is strengthened and stiffened by an under projection, C, from the lower part of the body of the crupper. The lines of stitch- 50 ing which unite all parts of the crupper are represented by a a. In this particular instance I have represented the skirt as being of one piece with the crupper; but, if desired, these skirts can be attached separately in any suit- 55 able way to any class of cruppers. Also, the particular location of the skirt upon the rear of the crupper may be varied to one side or to the other to suit any peculiarities in the horse's manner of carrying his tail, so as to rectify the 60 same and make the tail hang straight.

The advantages of this construction are obvious, and I have stated the same at the beginning of the specification.

Having thus fully described my invention, 65 I claim—

1. The combination, with a crupper, of a rearward extension or skirt for the purpose specified.

2. The combination, with a crupper, of a rear- 70 ward extension or skirt formed integral with the crupper, for the purposes specified.

3. The combination, with a crupper provided with a rearward extension or skirt, of a stay-piece arranged beneath said skirt to stiffen 75 the same.

4. A crupper having an integral rearward extension or skirt, B, and an integral strengthening-piece or support, C, for and arranged under said skirt, substantially in the manner 80 and for the purpose specified.

JOSEPH SHAFFER.

Witnesses:

E. F. COOPER, QUINCY CORWIN.