

(No Model.)

E. R. BARNES.

EAR MUFF.

No. 352,798.

Patented Nov. 16, 1886.

FIG. 1.

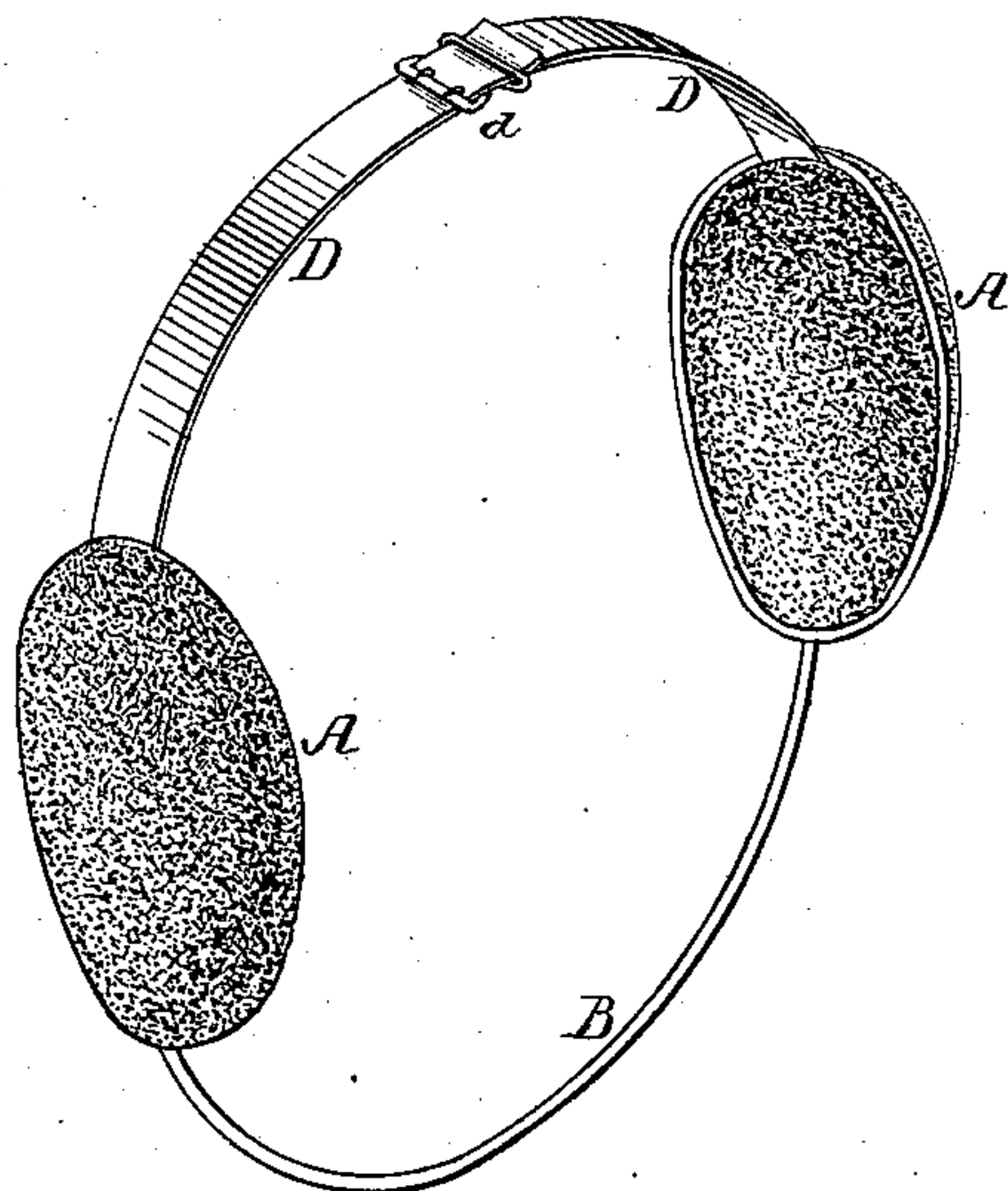


FIG. 2.

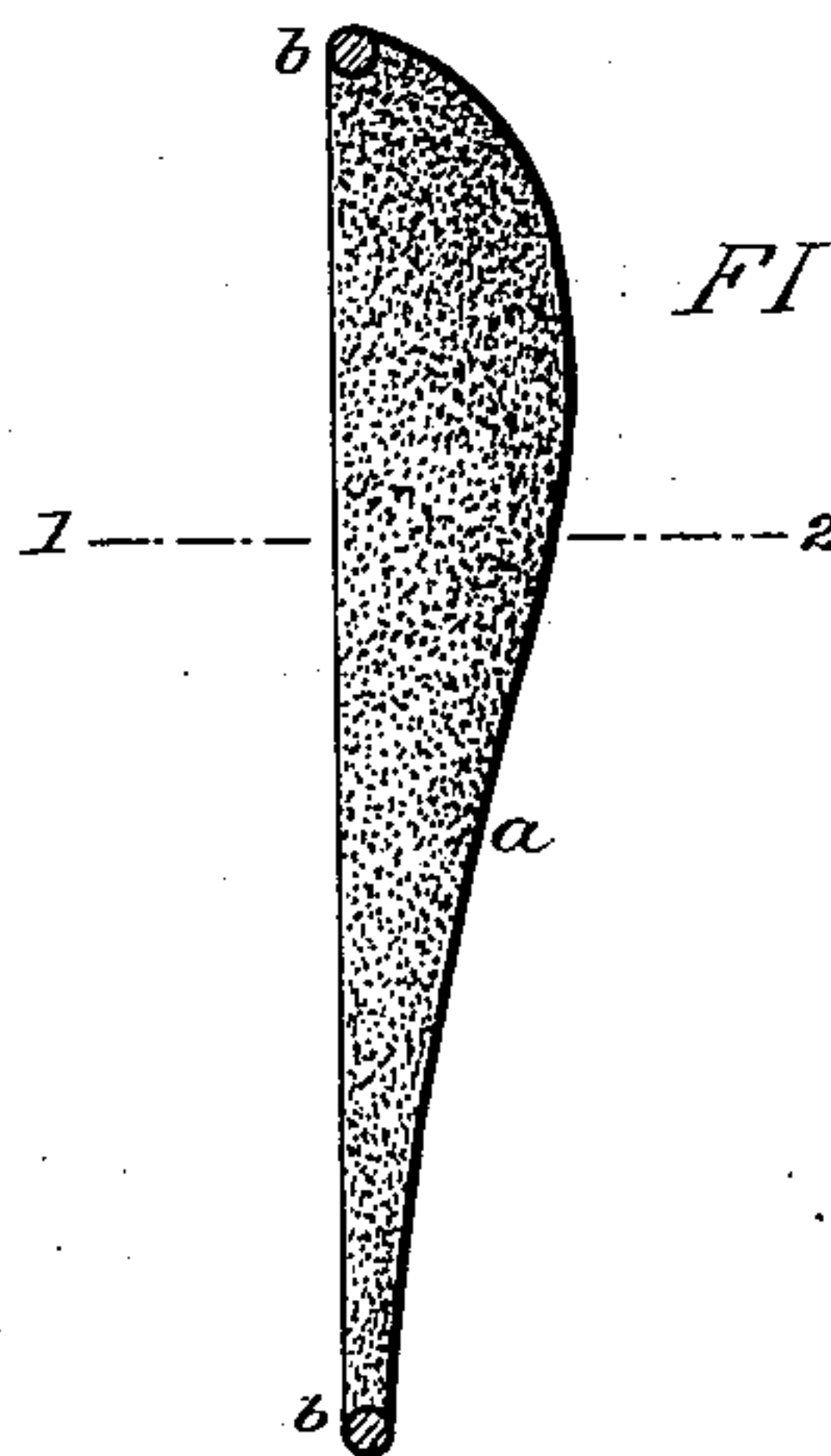
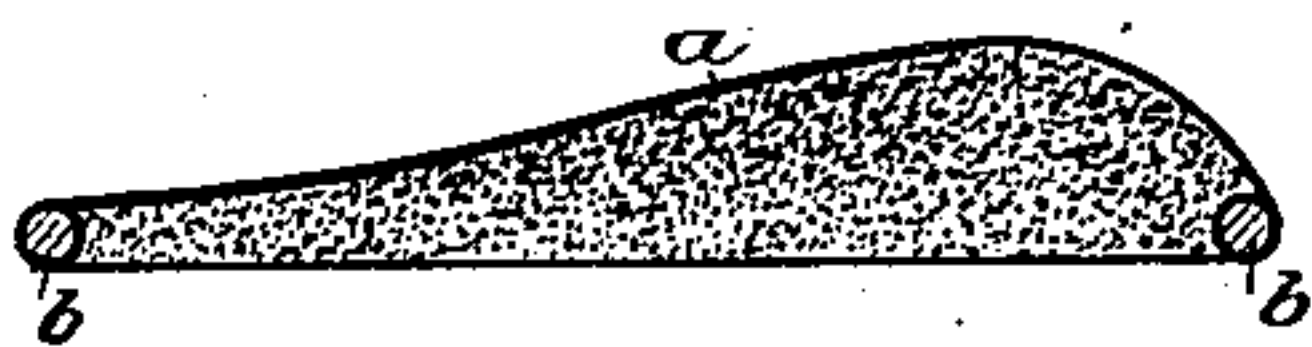


FIG. 3.



Witnesses:  
William F Davis  
John E. Parker

Inventor:  
Ezra R. Barnes  
by his Attorneys  
Howson and Co



# UNITED STATES PATENT OFFICE.

EZRA R. BARNES, OF PHILADELPHIA, PENNSYLVANIA.

## EAR-MUFF.

SPECIFICATION forming part of Letters Patent No. 352,798, dated November 16, 1886.

Application filed December 12, 1885. Serial No. 185,492. (No model.)

*To all whom it may concern:*

Be it known that I, EZRA R. BARNES, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Ear-Muffs, of which the following is a specification.

The object of my invention is to so construct the devices whereby the muffs are confined to the head of the wearer that said muffs can be readily adjusted to the proper position, and when once adjusted will retain this position.

In the accompanying drawings, Figure 1 is a perspective view of a pair of ear-muffs provided with attaching devices made in accordance with my invention; Fig. 2, a longitudinal section of one of the ear-muffs on a larger scale than Fig. 1; and Fig. 3, a sectional plan of one of the muffs on the line 1 2, Fig. 2.

Each of the muffs is made of fur, plush, velvet, or other soft fabric, *a*, which is applied to a metallic frame, *b*, the latter being of oval shape, so as to fit round the base of the ear and bear against the side of the head.

The piece of fabric of which the muff is composed is considerably larger than the area of the space inclosed by the frame *b*, so that when the edge of the fabric is secured to the frame the muff will possess such an amount of fullness that when applied to the ear the fabric is free to yield at the top and rear, so as to readily accommodate itself to the ear when the latter is in its natural position, the muff thus serving to inclose and protect the ear without flattening it against the head or otherwise disturbing its natural position or interfering with the proper circulation of the blood.

The pair of muffs *A A* are connected at the bottom by an elastic cord, *B*, and at the top by an inelastic band, *D*, which is provided with a buckle, *d*, or with a retaining-slide or equivalent device, whereby it can be adjusted as to length. This band *D* is intended to pass over the top of the head, the elastic cord *B* passing beneath the chin, so that by shortening or lengthening the band *D* the muffs can be readily adjusted to suit the height of the wearer's ears, the cord *B* stretching or contracting as required, and serving under all circumstances to hold the muffs closely to the head.

Although I prefer the use of the elastic chin-cord *B*, an inelastic but adjustable band similar to the band *D* may be used in place of the same, if desired, or the positions of the band *D* and elastic cord *B* may be reversed, the cord

passing over the top of the head and the band beneath the chin. 55

I am aware that ear-muffs have been connected by a flexible steel band passing over the top of the head, but not adjustable as to length, and also that ear-muffs have been connected by a metal rod passing around the back of the neck and adjustable in length; but my invention is distinct from these, in that the muffs are connected both at top and bottom, both of these connections being adjustable in length. 60

I am aware, further, that ear-muffs have been provided with elastic head-bands, and chin-bands likewise elastic; but in my case one, at least, of the connections is inelastic, so that when the muffs are properly adjusted they will retain this position, whereas when both of the connections are elastic the muffs will assume and retain a position where the pull of both connections is uniform. 65

I therefore claim as my invention— 75

1. The combination of a pair of ear-muffs, a head-piece connecting the tops of said muffs together, and a chin-piece connecting together the bottoms of the muffs, one of said connections being inelastic, and both connections being adjustable as to length, whereby the muffs can be adjusted to suit the height of the wearer's ears, all substantially as specified. 80

2. The combination of a pair of ear-muffs with a head-piece connecting the tops of the muffs and a chin-piece connecting the bottoms of the muffs, one of said connections being elastic, and the other inelastic, but adjustable as to length, whereby vertical adjustment of the ear-muffs on the head is permitted, all substantially as specified. 85

3. The combination of a pair of ear-muffs, each having a rigid metallic frame, a head-piece connecting the tops of the muffs together, and a chin-piece connecting the bottoms of the muffs, one of said connections being inelastic, but both connections being adjustable as to length, whereby the muffs can be adjusted vertically on the wearer's head, all substantially as specified. 90

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EZRA R. BARNES.

Witnesses:

WILLIAM F. DAVIS,  
HARRY SMITH.