

(No Model.)

R. M. MATHES.  
DEVICE FOR ASSISTING THE HEARING.

No. 426,508.

Patented Apr. 29, 1890.

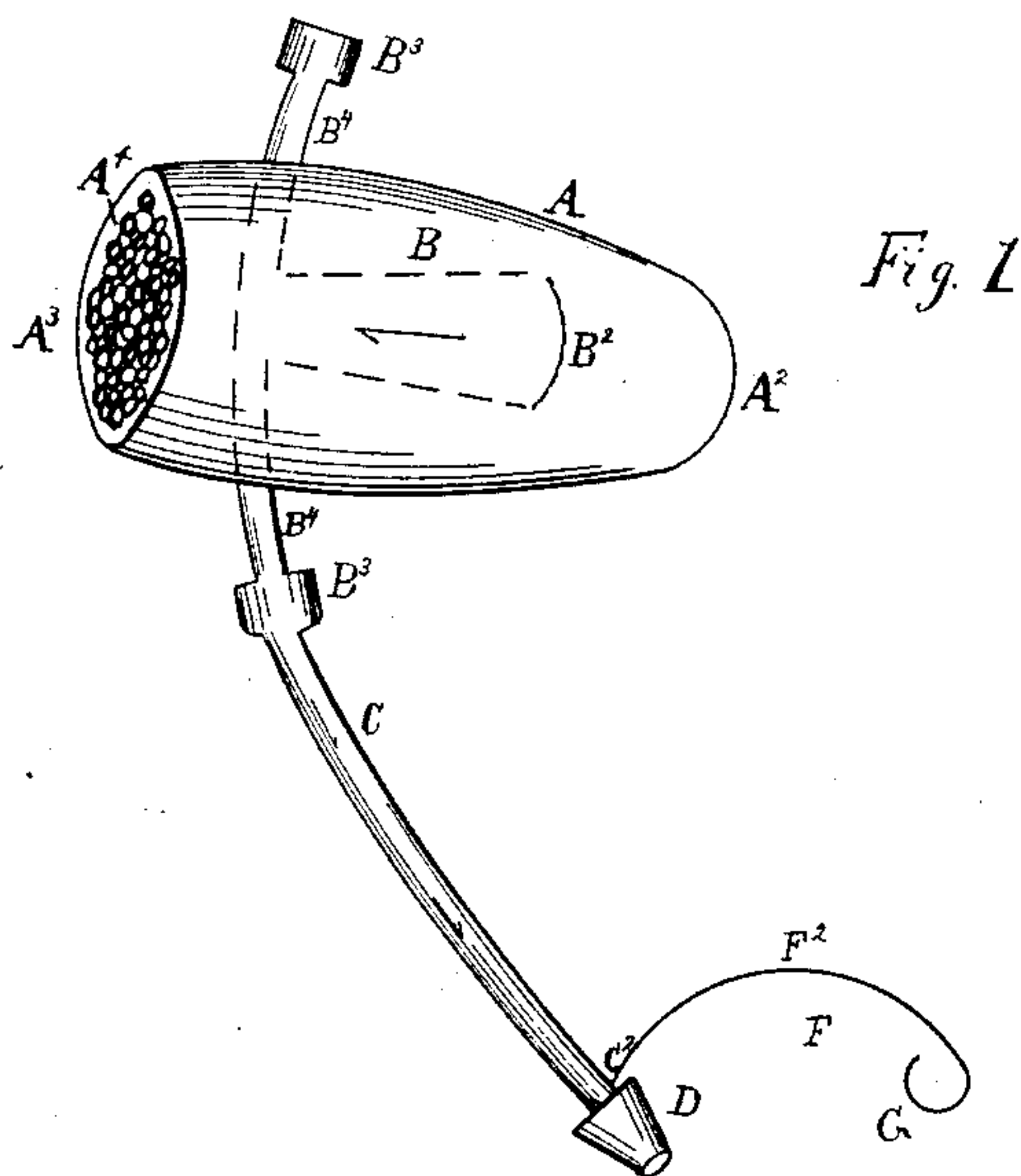


Fig. 1

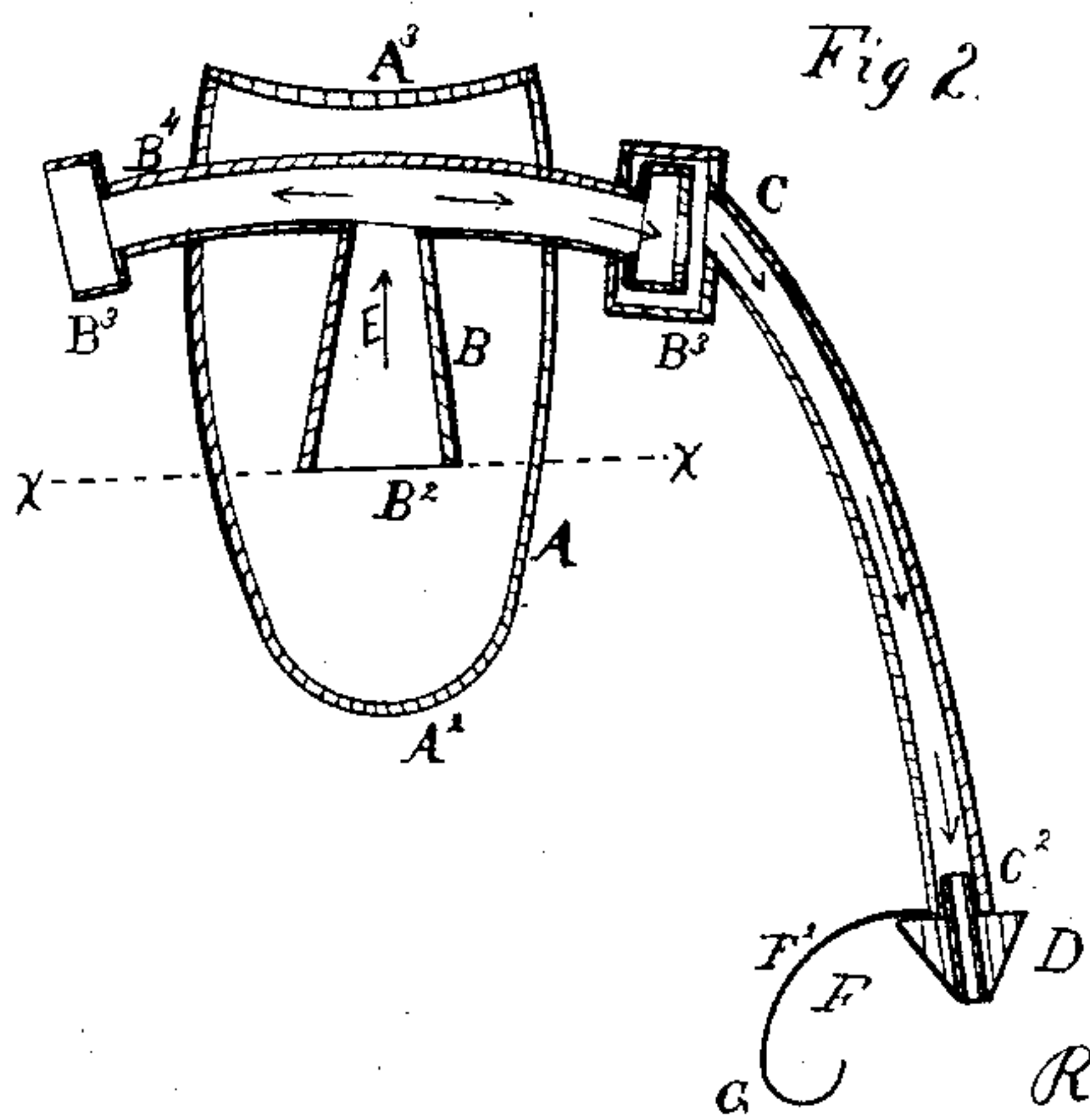


Fig. 2

Witnesses

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# UNITED STATES PATENT OFFICE.

RICHARD M. MATHES, OF NEOSHO, MISSOURI.

## DEVICE FOR ASSISTING THE HEARING.

SPECIFICATION forming part of Letters Patent No. 426,508, dated April 29, 1890.

Application filed June 22, 1889. Serial No. 315,255. (No model.)

*To all whom it may concern:*

Be it known that I, RICHARD M. MATHES, a citizen of the United States, residing at Neosho, in the county of Newton and State of Missouri, have invented certain new and useful Improvements in Devices for Assisting the Hearing; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in devices for assisting the hearing, or ear-trumpets, the object of which is to provide a small, cheap, simple, and convenient device for being placed in the pocket or in the hat, and with a flexible tube to connect the same with the ear to assist in conveying the sound to the ear. These objects I attain by means of the device illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a view in elevation of the entire device. Fig. 2 is a section of the same. Similar letters of reference represent corresponding parts in both figures.

A is a tube of any desired size and length, one end  $A^2$  being made rounding and closed, being concave on the inside. From this end the tube tapers outward to a larger end  $A^3$ , said end  $A^3$  being provided with a perforated plate  $A^4$ , which is made concave on the outside.

B is a conical-shaped tube placed on the inside of the tube A, the end  $B^2$  placed toward the concave side of the large tube A about the middle of the same, the smaller end of the cone being connected to the tube  $B^4$ . To the ends of this, which are outside of the tube A, as shown at  $B^3$ , tubes C are secured by any suitable means. Said tubes C are preferably made of rubber or other suitable flexible material, and made long enough so that the

tube A may be placed in the hat or pocket and the ends  $C^2$  of the tubes placed at the ears. The ends  $C^2$  are provided with an ear-piece D to fit the orifice of the ear. The arrows E indicate the sound passing through the device.

F is any suitable attachment for securing the part D to the ear. It consists of a wire  $F^2$ , formed to fit over the ear, bent, as at G, to fit around the ear.

One of the tubes C may be removed and the end of the arm  $B^4$  closed when desired to use the device for one ear only; or, when desired, the tube B may be made with but one arm.

Thus I have a device for assisting the hearing that may be placed in any desired position for receiving sound, and by means of the flexible tubes C and the fastenings it will stay in place without the necessity of constant holding, as the ordinary ear-trumpet, when desiring to listen.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a device for assisting the hearing, the combination of a tube C, having at one end an ear-piece D and fastening F, bent as at G, and at the other tapering tubes B and A, all constructed, arranged, and to operate substantially as specified.

2. The combination, with a large tapering tube A and a tapering tube B, of arms  $B^4$ , flexible tubes C, ear-pieces D, and fastenings F, bent as at G, substantially as shown and described, for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

RICHARD M. MATHES.

Witnesses:

J. L. POWELL,  
DAN HEALY.