(Model.)

F. M. BLODGETT.

EAR TRUMPET.

No. 439,099. Patented Oct. 28, 1890.

Fig. 1.

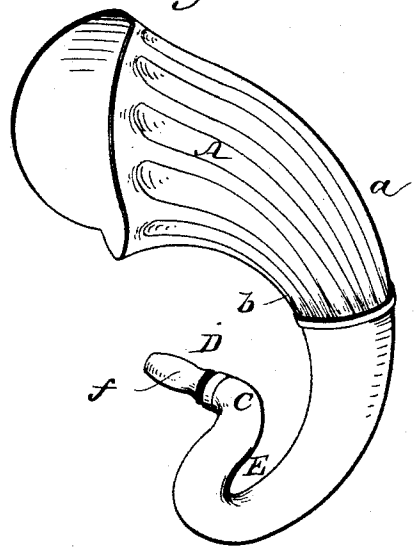

Fig. 3.

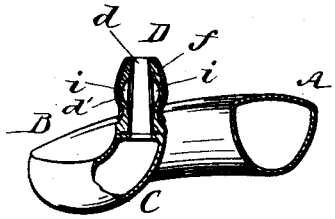

Fig. 4.

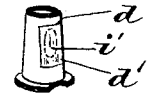

Fig. 2.

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FRANK M. BLODGETT, OF NEW YORK, N. Y.

EAR-TRUMPET.

SPECIFICATION forming part of Letters Patent No. 439,099, dated October 28, 1890.

Application filed July 15, 1889. Serial No. 317,500. (Model.)

To all whom it may concern:

Be it known that I, FRANK M. BLODGETT, of the city, county, and State of New York, have invented a new and Improved Ear-Trumpet, of which the following is a full, clear, and exact description.

My invention relates to improvements in ear-trumpets; and it consists in the peculiar construction and combination of parts, as hereinafter fully described, and pointed out in the claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of my new ear-trumpet. Fig. 2 illustrates the application of the same to the ear. Fig. 3 is a sectional view of the tip, and Fig. 4 is a separate view of the metal tube to which the diaphragms are applied.

The receiver or bell A of the ear-trumpet is of volute form, exhibiting the outer curve *a*, of gradually-increasing radius, and inner curve *b*, eccentric to the curve *a* and of a size to fit around the back and over the top of the external human ear, as illustrated in Fig. 2. At B the body is bent to form a parabolic curve whose plane is nearly on a line with the center line of the bell A, and this curve B merges into the parabolic curve C, whose plane is at right angles to the center line of the receiver or bell, and this curve terminates in the horizontal tip D to enter the ear-orifice. The curves B C form the space E for the lower portion of the external ear, and the tip is elevated to properly enter the ear. The curve *b* is of appropriate size to fit snugly around the back and over the top of the ear, as shown in Fig. 2, so that the trumpet stays in place without holding. The interior of the tip D is formed with cavities *i*, and in it is placed a small metal tube *d*, formed with side apertures *i'*, over which are placed diaphragms *d'* of rubber or other tissue. These diaphragms cover the spaces or chambers *i* and serve to modify or augment the sound-waves as they pass through the trumpet and enter the ear. Upon the outer surface of the tip D is placed a covering *f*, of soft india-rubber or other suitable material, to protect the ear-orifice and in a degree adhere to it to assist in holding the receiver in place.

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

The curved and tapering receiver A, having the parabolically-curved portion B C, the latter terminating in a horizontal tip D, formed with internal chambers *i*, lateral to the main passage through the tip, in combination with the tube *d*, fitted in the tip and having apertures *i'*, and diaphragms *d'*, covering the chambers *i*, substantially as described.

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Witnesses:
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