

(No Model.)

G. H. WILSON.
ARTIFICIAL EAR DRUM.

No. 476,853.

Patented June 14, 1892.

Fig. 1.

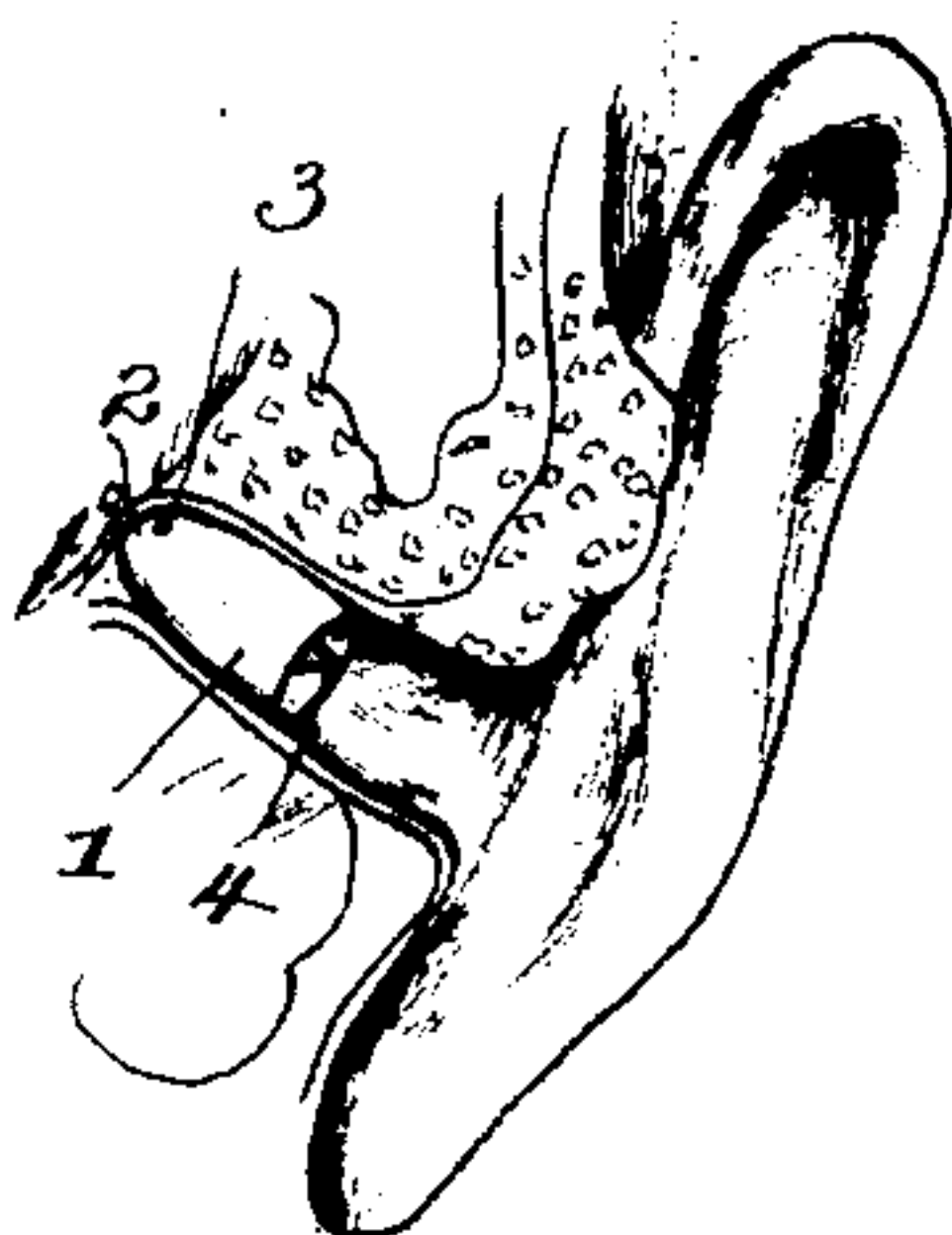


Fig. 2.

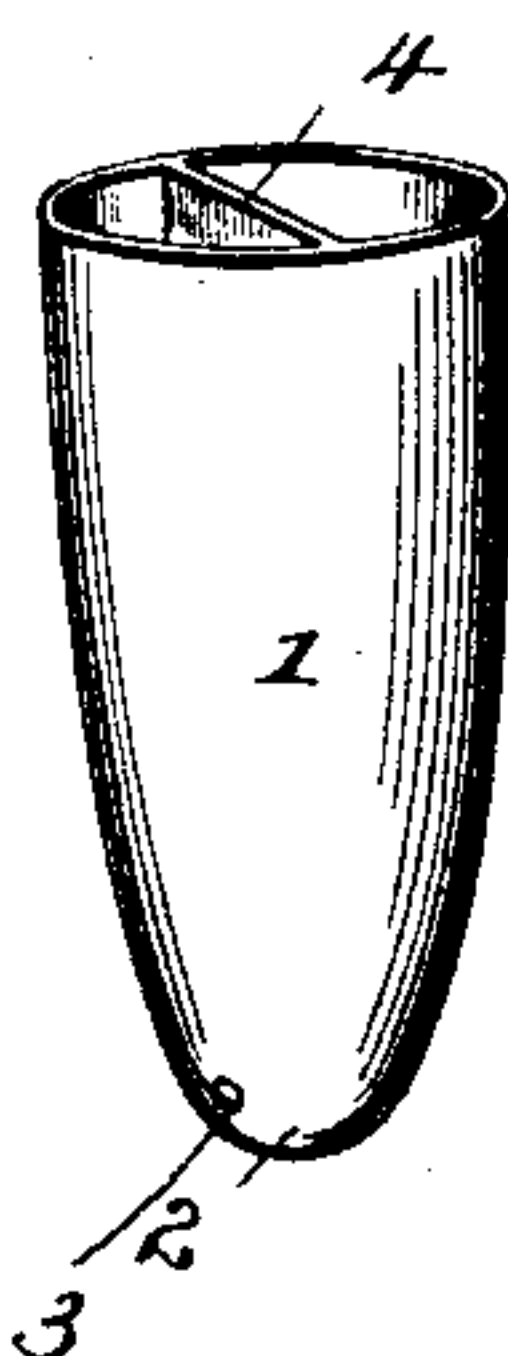


Fig. 3.

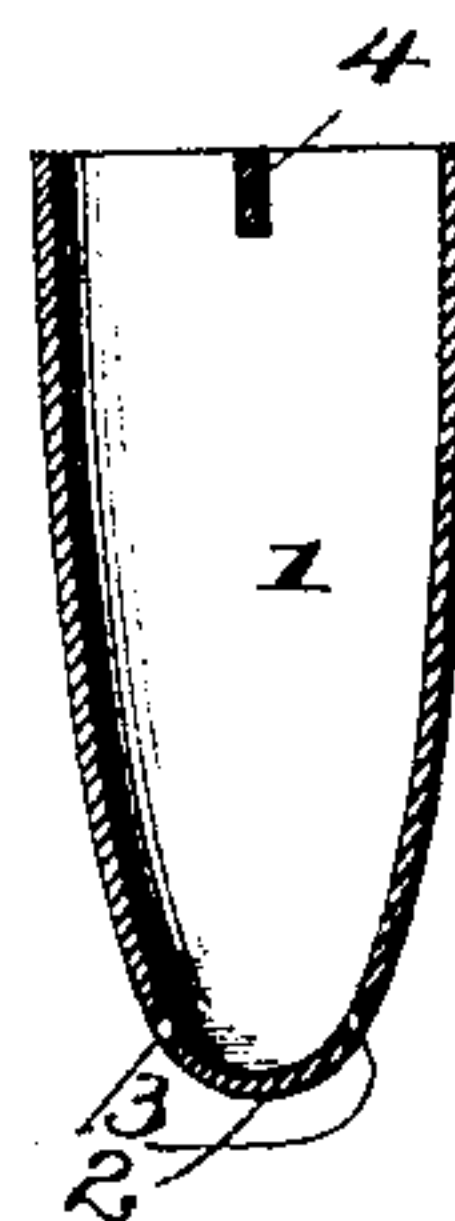
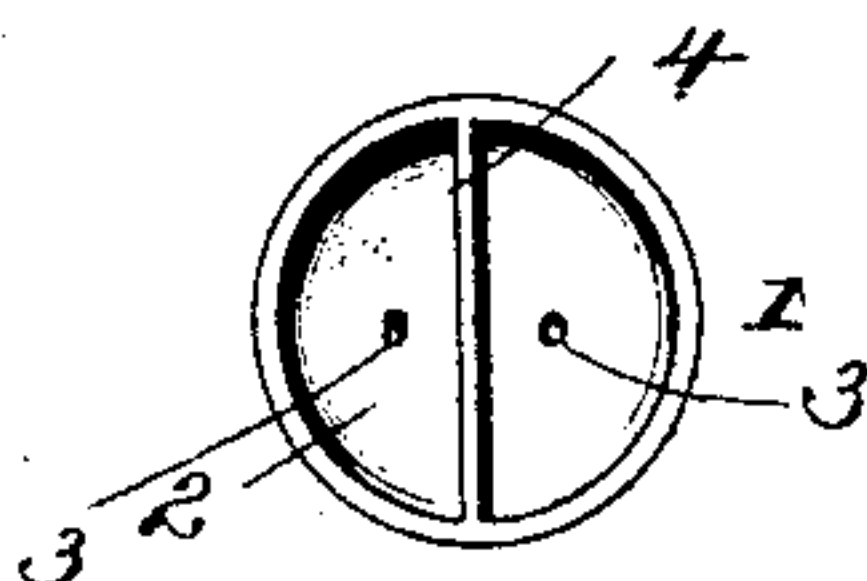


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE H. WILSON, OF LOUISVILLE, KENTUCKY.

ARTIFICIAL EAR-DRUM.

SPECIFICATION forming part of Letters Patent No. 476,853, dated June 14, 1892.

Application filed May 3, 1892. Serial No. 431,677. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. WILSON, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented new and useful Improvements in Artificial Ear-Drums, of which the following is a specification.

This invention has for its object to provide a novel artificial ear-drum, which is rimless, self-ventilating, and possesses such simplicity of construction and is so shaped that it can be quickly and readily removed and replaced without pain, and when in position is invisible, not liable to irritate, and is a good sound-conductor.

To accomplish this object my invention consists in an artificial ear-drum composed of a conical rimless body formed with a pair of divergent passages through its contracted end and provided at its hollow base with an internal transverse diaphragm flush with such base and adapted to be grasped by a pair of tweezers for the convenient insertion and removal of the drum.

The invention is illustrated by the accompanying drawings, in which—

Figure 1 is a view showing my improved ear-drum applied for use. Fig. 2 is a detail perspective view of the ear-drum drawn on an enlarged scale. Fig. 3 is a longitudinal central sectional view of the same, and Fig. 4 is an end view looking at the base of the ear-drum.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, wherein—

The numeral 1 indicates the body of the ear-drum, which is conical in configuration and is composed of rubber or its compounds, or any other material which is elastic and compressible and by its resiliency will resume its normal expanded form. The conical body is in practice about one-half inch in length, more or less, and its contracted or small end 2 is rounded. The elastic and compressible body is formed with a pair of divergent passages 3, which extend through the contracted or small end thereof, and within the hollow portion of the body is arranged a transverse diaphragm 4, having its outer edge flush with such base.

The artificial ear-drum constructed as described is in practice inserted about one inch and one-fourth into the ear-orifice. The divergent passages render the ear-drum self-ventilating, and the transverse elastic diaphragm braces the tubular base portion of the drum and serves as a medium for inserting and removing the drum by the employment of a pair of tweezers which are caused to grip the diaphragm, so that the drum can be conveniently manipulated. The conical form of the body and the fact that it is entirely rimless effectually avoids irritation when the drum is in use, while it constitutes a good sound-conductor to the auditory nerves. The transverse diaphragm is formed integral with the conical body, and since it is located wholly within the base of the ear-drum and is flush with such base it not only serves to brace the base portion of the drum, but constitutes a part which can be easily grasped by a pair of tweezers for the convenient insertion or removal of the drum.

The divergent arrangement of the passages 3 serves to distribute the sound-waves and at the same time facilitates ventilation and prevents that feeling of fullness in the head which is so incident to the employment of ordinary artificial ear-drums.

The simplicity of construction recommends the device, and its structure is such that it can be quickly and readily removed or replaced without pain, and when in position is invisible, and by reason of its rimless form is not liable to irritate when in use.

Having thus described my invention, what I claim is—

An artificial ear-drum composed of a conical rimless body formed with a pair of divergent passages through its contracted end and provided at its hollow base with an internal transverse diaphragm flush with such base and adapted to be grasped by a pair of tweezers for the convenient insertion and removal of the drum, substantially as described.

In testimony whereof I have hereunto set my hand and affixed my seal in presence of two subscribing witnesses.

GEORGE H. WILSON. [L. S.]

Witnesses:

CHARLES H. ALLEN,
MATT. J. CASSIN.