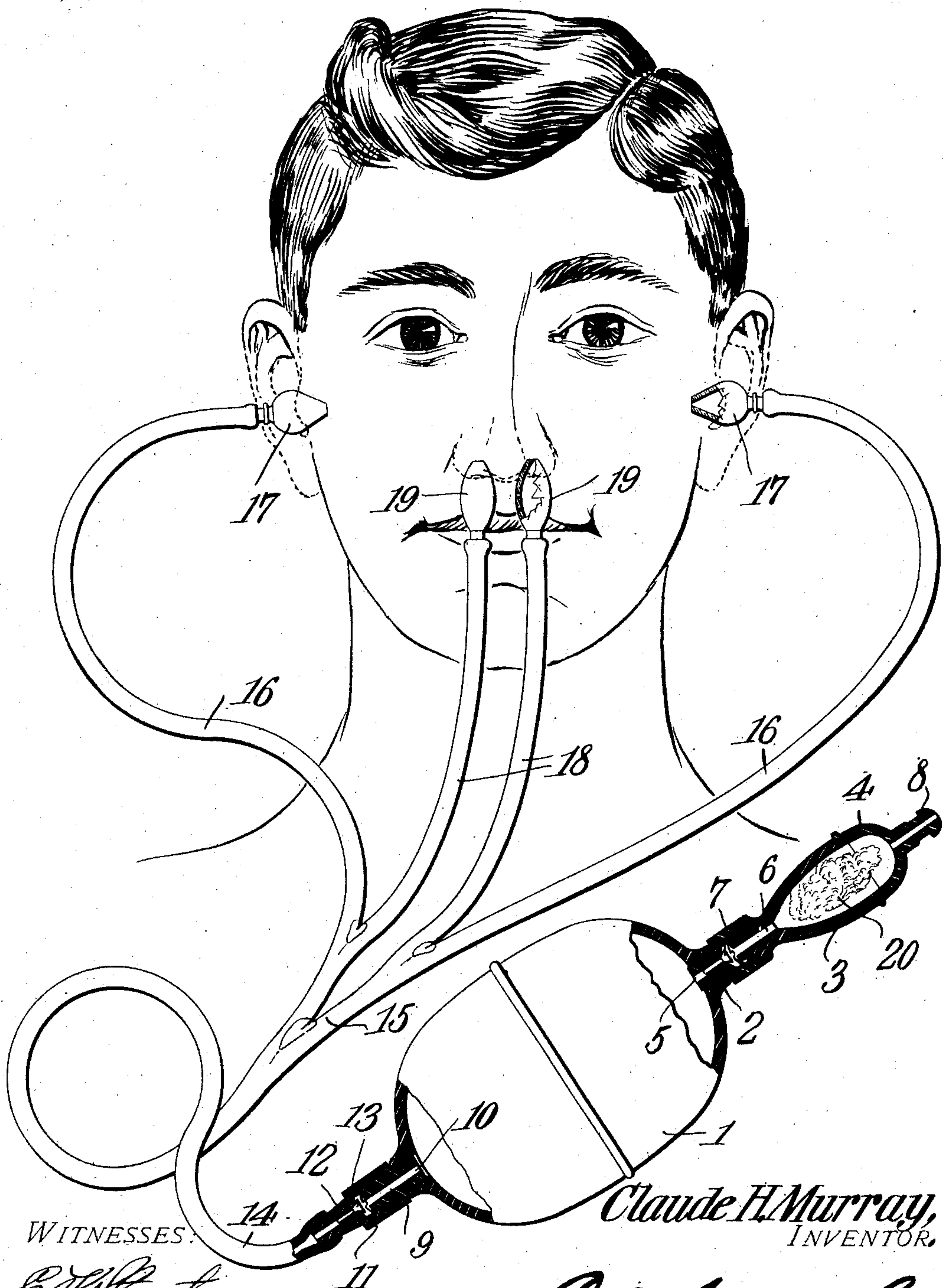


No. 883,329.

PATENTED MAR. 31, 1908.

C. H. MURRAY.
DOUBLE MASSEUR AND MEDICATOR.
APPLICATION FILED APR. 20, 1907.



WITNESSES.

E. J. Stewart
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UNITED STATES PATENT OFFICE.

CLAUDE HOWE MURRAY, OF MACON, GEORGIA.

DOUBLE MASSEUR AND MEDICATOR.

No. 883,329.

Specification of Letters Patent.

Patented March 31, 1908.

Application filed April 20, 1907. Serial No. 369,358.

To all whom it may concern:

Be it known that I, CLAUDE HOWE MURRAY, a citizen of the United States, residing at Macon, in the county of Bibb and State of Georgia, have invented a new and useful Double Masseur and Mediator, of which the following is a specification.

This invention relates to apparatus for the treatment of the ear to remedy defective hearing and its object is to provide simple apparatus which can be readily manipulated for massaging the inner ear or the organs thereof so as to increase the flow of blood in the organs and to separate any of the members of the ear which improperly adhere to each other.

A still further object is to provide apparatus of this character capable of rarefying the air in the nasal passages or in the exterior auditory canal simultaneously or at different times so as to produce unequal or equal pressures upon the sides of the tympanic membrane and to separate any of the organs which may improperly adhere and to increase the flow of blood through the organs.

With the above and other objects in view the invention consists of a valved bulb having a series of tubes extending therefrom and having nozzles adapted to be placed within the nostrils and within the ears either separately or at the same time so that the expansion of the bulb will result in the agitation of the organs of the ear. An extension is arranged upon the bulb for holding a suitable medicine adapted to charge the air which it may be desired to force into the ear.

The invention also consists of certain other novel features of construction and combinations of parts which will be hereinafter more fully described and pointed out in the claims.

In the accompanying drawing which is a view partly in elevation and partly in section of the apparatus the preferred form of the invention has been shown.

Referring to the drawing by characters of reference, 1 is a bulb of suitable proportions having a socket 2 at one end in which is screwed one end of a cup 3 adapted to be closed by a screw cap 4. A passage extends through the socket as shown at 5 and also through that end of the cup seated within the socket as shown at 6 and arranged within the socket between the two passages is a valve 7 which is adapted to prevent the admission of air to the bulb from the cup. A

nipple 8 extends from the cap 4 for the purpose hereinafter described. Another nipple 9 is secured to the other end of the bulb and has a passage 10 extending through it and this nipple is adapted to screw into a socket 11 having a tubular extension 12 in which is arranged a valve 13 adapted to prevent the discharge of air from the bulb and through the extension 12. A distributing tube 14 is detachably secured upon the extension 12 and is forked as at 15 to form ear tubes 16 each of which terminates in a nozzle 17 preferably shaped so as to fit easily within the auditory canal of the ear.

Extending from the ear tubes 16 near their points of conjunction are nose tubes 18 each of which has a nozzle 19 at its end shaped to fit easily within the nose. The cup 3 is adapted to contain a small sponge which may be saturated with any suitable medicine.

In using the herein described apparatus the nozzles 19 are inserted into the nostrils and the nozzles 17 into the outer passages of the ears. By pressing the bulb 1 the air therein will be forced outward through the cup 3 and when the bulb is released the air will be withdrawn from the tubes and from the canal and external passage of the ear. By rarefying the air in the nasal passages the eustachian tube, the middle ear and the exterior auditory canal the pressure is removed from both sides of the tympanic membranes simultaneously and said membrane is therefore left passive. When the pressure is removed from the labyrinth the lymph expands and presses the stapes upward thereby raising the same in the oval window. This operation stimulates the secretory glands which supply lymph to the labyrinth and the foot of the stapes is thereby held in its raised position and if there should be any adhesion between the foot of the stapes and the oval window the same will be broken by this movement of the stapes. This operation will also produce the same result in connection with the other bones of the ear if there should be adhesion between said bones, because the movement of the stapes results in a corresponding movement of all the other bones of the ear and causes any adhesion between said bones to be removed and results in restoring them to their proper condition. The foregoing results are obtainable where the air is withdrawn from both the inner and outer passages of the ear at the

same time but the apparatus may also be employed for withdrawing the air only from the external passages by dispensing with the tubes 18 so as to leave the internal passages in their normal condition and this operation may be reversed by withdrawing the air only from the internal passages by dispensing with the tubes 16. Should the air be withdrawn from the external passages and admitted to the internal passages the drum of the ear and the parts connected thereto will of course be pressed outward and, when the operation is reversed, they will be forced inward. In either of these operations the circulation of the liquids of the ear including the circulation of the blood through the organs of the ear is increased thus reenergizing and vitalizing said organs. By the proper operation of the apparatus all of these results may be accomplished without in any way injuring the delicate organs of the ear, the pressure on said organs being always regulated by the manipulation of the bulb.

The cleansing of the ear passages may be effected by introducing suitable liquids into the passages and by sucking them therefrom by means of the bulb.

Instead of treating the ear by suction tube 14 may be connected to the nipple 8 and the pressure within the ear passages increased by forcing air thereinto. In using the apparatus in this manner medicated vapor may be discharged into the ear by saturating the sponge 20 so that the air discharged through the bulb 1 and through the cup 3 must necessarily pass through the

sponge and convey a portion of the medicine therewith.

Although an ordinary compressible bulb has been described as used in connection with this apparatus it will of course be apparent that any suitable ear pump or forcing device may be employed in lieu thereof.

What is claimed is:

1. An apparatus of the character described comprising ear and nose tubes and reversible means for directing air within the tubes toward or from the outlets thereof simultaneously.

2. An apparatus of the character described comprising ear and nose tubes and reversible means for directing air within the tubes toward or from the outlets thereof simultaneously, and means for medicating the air prior to its discharge through the nose and ear tubes.

3. The herein described apparatus comprising a distributing tube, branch tubes extending therefrom and arranged in pairs, one pair of tubes being insertible into the nasal passages and the other pair into the outer auditory canals of the ears, and means detachably connected to the distributing tube for withdrawing air therefrom or for forcing air thereinto.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

CLAUDE HOWE MURRAY.

Witnesses:

C. D. PEAVY,
J. D. MARSHALL.