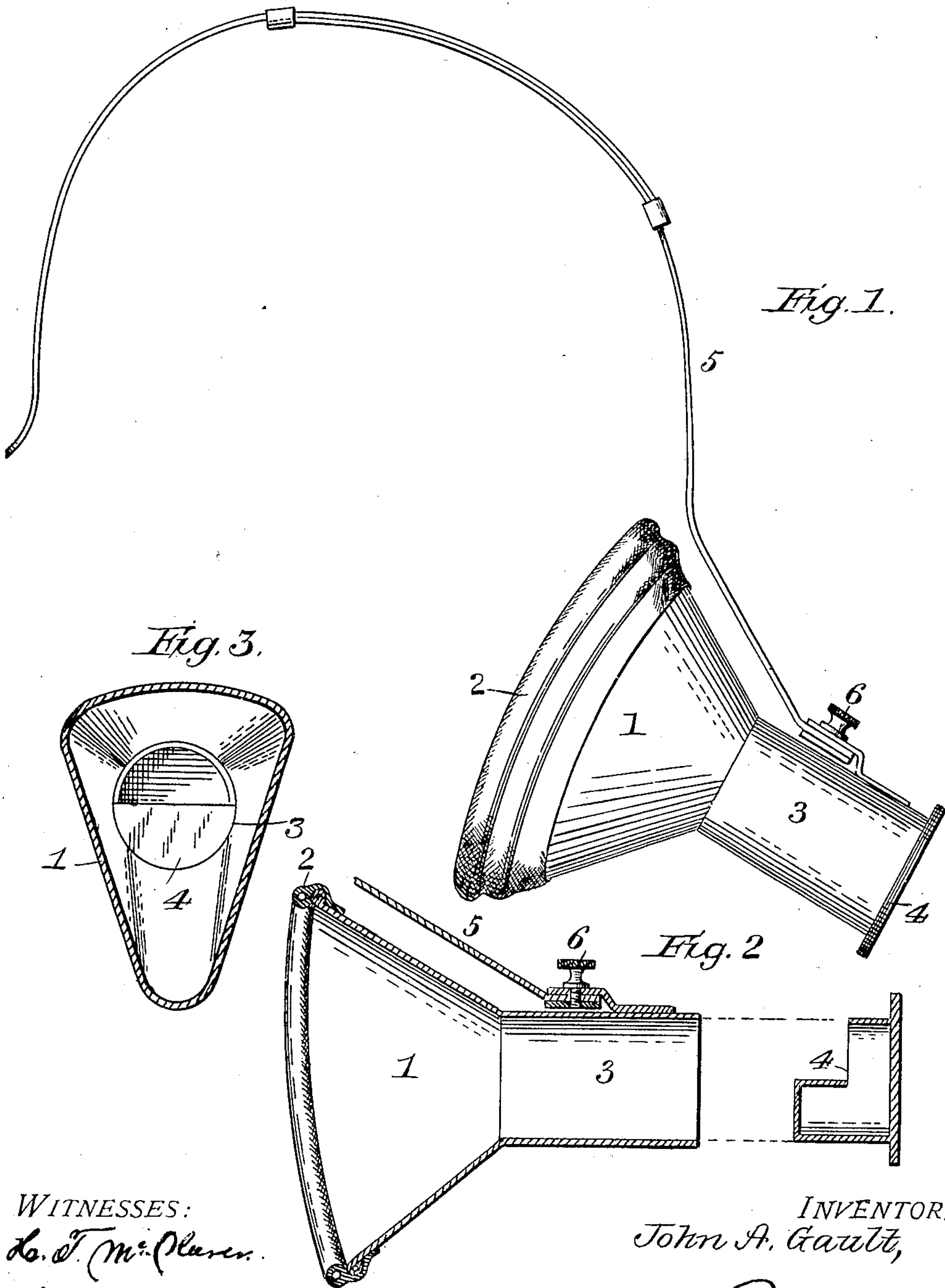


No. 888,398.

PATENTED MAY 19, 1908.

J. A. GAULT.
INSTRUMENT FOR MEDICATING THE MIDDLE EAR.
APPLICATION FILED MAY 15, 1907.



WITNESSES:
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UNITED STATES PATENT OFFICE.

JOHN A. GAULT, OF LANCASTER, WISCONSIN.

INSTRUMENT FOR MEDICATING THE MIDDLE EAR.

No. 888,398.

Specification of Letters Patent.

Patented May 19, 1908.

Application filed May 15, 1907. Serial No. 373,827.

To all whom it may concern:

Be it known that I, JOHN A. GAULT, a citizen of the United States, residing at Lancaster, in the county of Grant and State of Wisconsin, have invented certain new and useful Improvements in Instruments for Medicating the Middle Ear, of which the following is a specification.

My invention relates to improvements in devices for treating diseases of the middle ear and it differs in detail from my application concurrently filed Serial Number 373,826, which invention is especially constructed for the treatment of another organ of the body. Its objects are to provide for readily carrying out that end more especially by the use of medicaments volatilized and delivering the latter into the middle ear; and to accomplish the same in a simple, economic and effective manner.

Said invention consists of certain features or instrumentalities substantially as herein-after fully disclosed and claimed.

In the accompanying drawing—Figure 1 is a side view showing the parts of the same as assembled for actual use. Fig. 2 is a like view showing the parts of the device as disassembled. Fig. 3 is a cross-section through the receptacle for application to the ear.

The numeral 3 represents a tube and 1 is a flaring mouth integral with one end of the tube and adapted to receive the ear. A pneumatic rubber cushion 2 is placed over the open end of the mouth 1 to form a gas-tight joint at the point of contact between the mouth and the patient's head about the ear. Into the tube 3 a cup 4 is adapted to be inserted for receiving and containing the medicaments, which latter are suitably volatilized and which are then delivered into the middle ear and through any perforation of the ear drum which may have resulted from disease or from the surgeon's knife. This cup is cylindrical in form to enter and frictionally fit the end of the tube, and it preferably has a segment of its surface removed, which leaves remaining the extension or elongation 7 which has one flat surface to prevent the medicament itself from being carried to the treated parts, which would prove disastrous, while permitting the advantageous release of the vapors arising from the medicaments after volatilization for delivery to said parts.

The outer end of this cup is flanged to limit its insertion in place in the tube. 55

A spring arm 5 is suitably held by a set-screw 6 on the tube 3 for attachment to the head, it being made of slidably connected sections which render it extensible and conformable to heads of different sizes. 60

The medicament I preferably employ herein and which may be used either with or without the device, is the gas arising from formaldehyde, and all mixtures and compounds thereof, with other medicines, drugs or substances. 65

I claim—

1. A device as described, comprising a tube adapted for application to the human ear and having means for its attachment to the head, and a cup or holder insertible into said tube, for the reception of a medicament, and having a segment of its surface removed, the elongation or extension thus formed having a closed upper surface or top for the purpose stated and yet adapted to allow of the delivery of the gas resulting from the volatilization of said medicament. 70 75

2. A device as described, comprising a flared pyramidal-like tube having an extensible attaching means for application to the head, and a cup or holder insertible into said tube for the reception of a medicament and having a segment of its surface removed, the elongation or extension thus formed having a closed upper surface or top for the purpose stated and yet adapted to allow of the delivery of the gas resulting from the volatilization of said medicament. 80 85

3. A device as described, comprising a tube having one end flared in general outline longitudinally, it also being flared, in transverse section, upwardly from quite a contracted lower portion, means for the attachment of said tube to the head, and a cup or holder insertible into said tube for the reception of a medicament and having a segment of its surface removed for the liberation of the gas resulting from the volatilization of said medicament. 90 95 100

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

JOHN A. GAULT.

Witnesses:

BENNETT S. JONES,
J. W. MISTER.