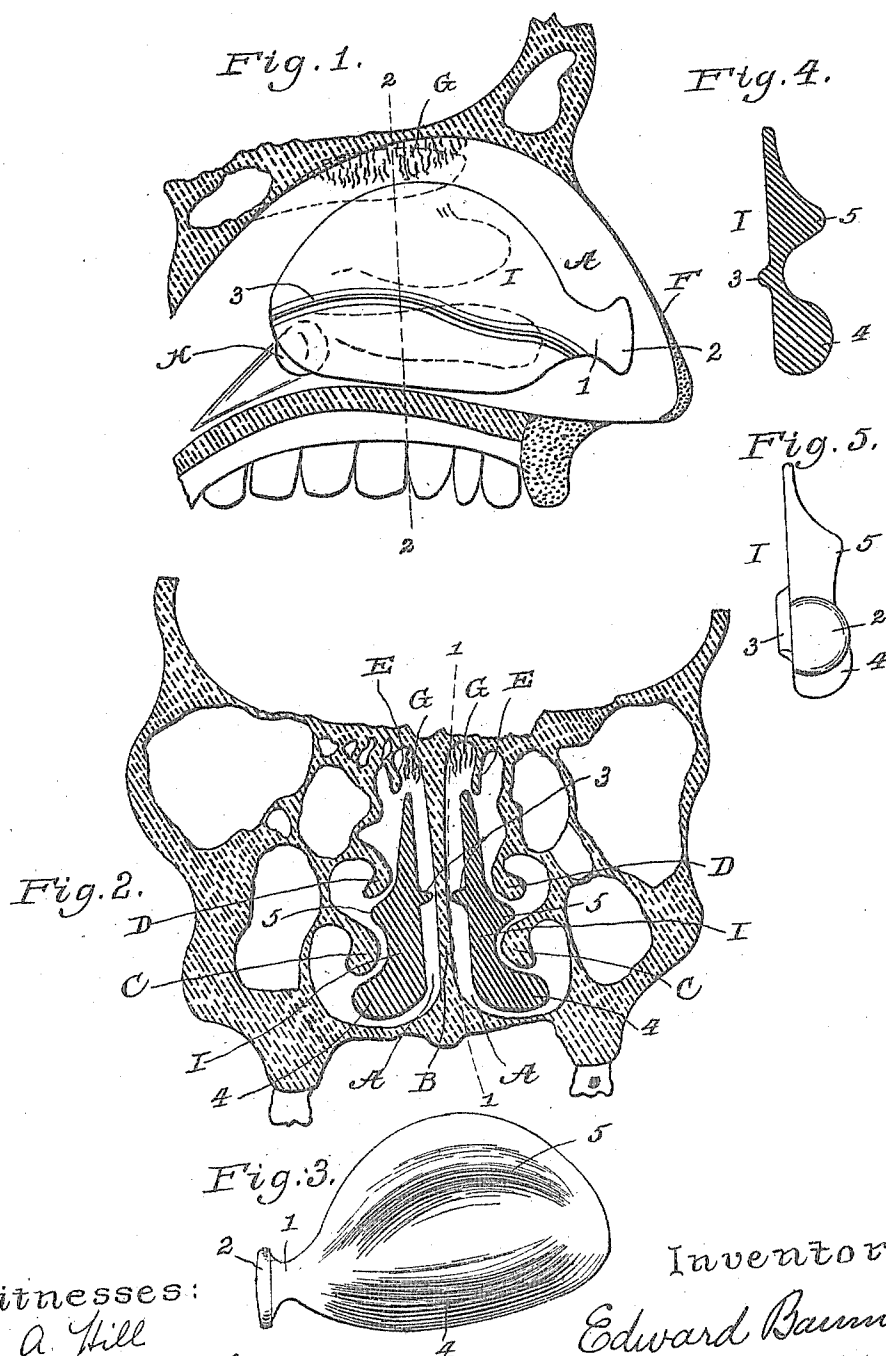


No. 820,948.

PATENTED MAY 22, 1906.

E. BAUM.
DEVICE FOR TREATING THE NASAL PASSAGES.
APPLICATION FILED JAN. 23, 1905.



Witnesses:

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DEVICE FOR TREATING THE NASAL PASSAGES.

No. 820,948.

Specification of Letters Patent.

Patented May 22, 1906.

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To all whom it may concern:

Be it known that I, EDWARD BAUM, a citizen of the United States, residing at Knoxville, in the county of Knox and State of Tennessee, have invented a new and useful Improvement in Devices for Treating the Nasal Passages, of which the following is a specification, reference being had to the accompanying drawings.

My improvement relates particularly to devices to be inserted into the nose for the treatment of the nasal passages and portions of the head and throat communicating with the nasal passages.

The object of the invention is to provide a device to be inserted into the nose for the application of medicinal remedies or for the treatment of portions of the nasal passages by mechanical pressure. For the latter purpose no medicines need be used.

If medicines are used, they may be applied to the exterior of the device which is inserted into the nose, or they may be incorporated into the substance of said device, or said device may consist entirely of the medicinal agent or agents.

The device is of solid or semisolid form, and its composition may be such as that it will gradually dissolve or vaporize in the nose.

A peculiarity of the device is that it is so shaped as to permit breathing through the nostril in which the device is placed.

In the accompanying drawings, Figure 1 is an upright section through and parallel to the length of the left-hand nostril, adjacent to the septum, on the dotted line 1 1 of Fig. 2, a nasaloid being in position in said nostril. Fig. 2 is a section on the line 2 2 of Fig. 1 through both halves of the portion of the skull adjacent the nasal passages. Fig. 3 is an elevation of the side of the nasaloid opposite the side shown in Fig. 1. Fig. 4 is a cross-section of the nasaloid. Fig. 5 is an elevation of the right-hand end of the nasaloid, as shown in Fig. 1.

Inasmuch as my device is made to approximately conform to the walls of the nasal passages, said passages will be first described.

A A, Fig. 2, are the nasal passages. They are separated by the septum B, which is an approximately straight upright partition the lateral faces of which are substantially planes. On the side of each passage opposite the septum are the three turbinates—the lower, C, the middle, D, and the upper, E. These are of substantially the form shown in

Fig. 2. The lower and middle of said turbinates are the largest, and they present curved or rounded faces toward the septum.

F is the front wall of the nose. In the upper portion of each passage adjacent the upper turbinate are the olfactories G. From the lower portion of each nostril adjacent to the rear portion of the lower turbinate the Eustachian tube H extends outward to the middle ear, and from the portions of the nasal passages adjacent the turbinates there is communication with the lacrymal duct, the frontal sinus, the ethmoidal sinus, and the antrum of Highmore, all of which at times require treatment.

The device I is shaped with reference to the various anatomical portions of the interior of the nostril. In general terms the device is flat and oval in outline and has at one end a relatively small neck 1, terminating in a head 2. Said head is preferably below the horizontal median line of the body of the device. One side of said body—the side which is to be adjacent the septum—is substantially smooth and flat, excepting that it has a longitudinal and approximately median rib 3, which when the device is in position bears against the septum and prevents said flat face from bearing against the septum. Thus an air-passage is left below and above said rib, so that notwithstanding this relatively large solid or semisolid body rests in the nasal passage the patient may breathe by inhaling and expelling air through the passages above and below said rib, and even the sense of smell is not impaired, for the passage above said rib extends to the olfactories G. Along the lower edge of said body is a relatively large rib 4, adapted to extend beneath the lower turbinate, and above said rib is another rib 5 of proper form and in proper position to extend between the lower and middle turbinates. The upper edge of said body extends to approximately to the upper turbinate. The head 2 is used as a handle for the insertion of the device, and said head also aids in retaining the device after it has been inserted, for if the device slides forward in the nostril said head will abut against the front wall F of the nose.

The form shown adapts the device to be securely seated within the nasal passage. Furthermore, said form adapts the device to exert mechanical pressure upon the lower and middle turbinates, which pressure may be used for the reduction of inflammation.

Furthermore, the form of said device adapts it fully to use for the application of medicines directly to the surfaces of the turbinates even when the device itself is not composed of medicinal constituents which after melting or vaporizing flow over the surfaces of the nasal passage. Even the posterior nares and the throat may be thus medicated by the flow of the medicinal constituents in liquid or vapor form, and the Eustachian tube may be thus treated, for, as shown in Fig. 1, the rear end of the device may be directly opposite the inner opening of said tube and the sinuses above mentioned may also be thus treated, for they also have communication with the nostril adjacent the device.

The device is preferably composed of medicinal constituents forming a compound which is soluble or vaporizable in the warmth and moisture afforded in the nasal passage, so that after the device has been inserted it will slowly dissolve or vaporize and its constituents spread over the surfaces of the nasal passage, the Eustachian tube, the posterior nares, and the throat, and into said accessory sinuses, and when any portion of the medication of the device is volatile the resulting vapors may extend into the trachea and the lungs.

The device may be supported entirely by the engagement effected by the septum at one side and the turbinates at the other side, or the lower edge of the device may rest upon the floor of the nostril.

The devices will be manufactured in pairs, one of each pair being adapted to fit into a right-hand and the other into a left-hand nasal passage, and such pairs will be made of various sizes to fit noses of various sizes.

I claim as my invention—

1. A device for treating the nasal cavity, said device consisting of a body provided with an approximately flat side with a projection thereon for spacing it from the nasal septum, whereby breathing through the nose is permitted while the device is in position, substantially as described.

2. A device for treating the nasal cavity, said device consisting of a medicated body provided with an approximately flat side with a projection thereon for spacing it from the nasal septum, whereby breathing through the nose is permitted while the device is in position, substantially as described.

3. A device for treating the nasal cavity, said device consisting of a soluble medicated body provided with an approximately flat side with a projection thereon for spacing it from the nasal septum, whereby breathing through the nose is permitted while the device is in position, substantially as described.

In testimony whereof I have signed my name, in presence of two witnesses, this 19th day of January, in the year 1905.

EDWARD BAUM.

Witnesses:

CYRUS KEHR.

R. M. DOLL.