

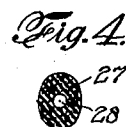
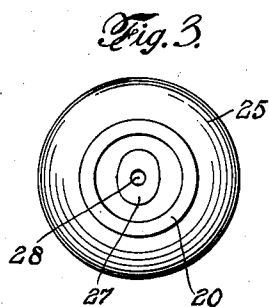
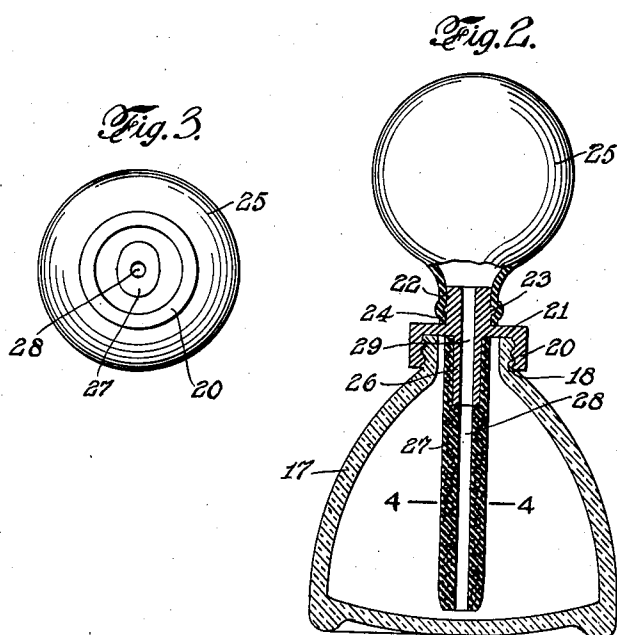
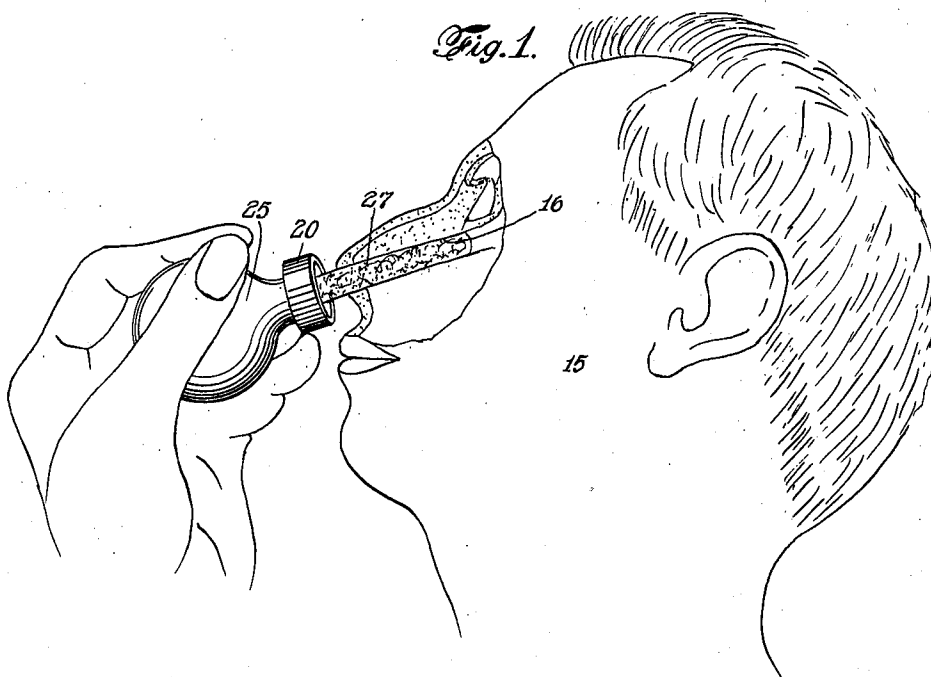
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MEDICAL APPLICATOR FOR THE NASAL PASSAGES

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MEDICAL APPLICATOR FOR THE NASAL PASSAGES

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1 Claim. (Cl. 128—232)

This invention relates to medical applicators for the nasal passages.

It has long been recognized by physicians, and others, that certain diseases, as coryza or common colds, catarrh, headaches, influenza and many like disorders of the nasal and olfactory tracts might be prevented if suitable medications were brought in contact with the mucous membranes lining the nasal passages and that alleviation is obtainable, even after the organisms of the disease have entered, and recently it is known that the dreaded infectious malady, called acute anterior poliomyelitis or infantile paralysis, is caused by microbes entering the system through the nose.

The nasal inhalers, known to the public, fail as proper applicators for nasal medicaments for several reasons: first, due to their construction they are unable to extend into the nostrils a sufficient distance to deliver the substance, allocated for treatment, to such depths as is desirable; second, by reason of their rigidity—and fragility if of glass—much discomfort attends their use, and in addition to the pain accompanying their insertion, may become broken and highly dangerous; third, their shape is seldom or never such as to fit the upper part of the nasal passage, and finally, it is difficult to deliver a charge of the selected medication through them without waste or messiness.

Having these matters in mind, it is an object of this invention to provide an applicator shaped to suit the interior of the nostril and adapted to be deeply inserted therein.

A further feature is in the provision of an applicator, the body of which, in addition to its ability of carrying a charge of medicament, is extremely flexible and yielding to the sinuities of the nasal passage, and, furthermore, is soft so that no abrasions can occur.

Another purpose is to produce an applicator for nasal medication that can be readily handled, and having means to gently force the substance with which it is charged into positive contact with the desired point of application, such means consisting of a detachable, compressible bulb for replenishing the selected substance.

These advantageous aims and objects are accomplished by the novel construction, combination and arrangement of parts hereinafter described and illustrated in the accompanying drawing, constituting a component of this disclosure, and in which:

Figure 1 is a general view showing an application of an embodiment of this invention.

Figure 2 is a longitudinal sectional view of the applicator as engaged with a container.

Figure 3 is an end elevational view of the applicator.

Figure 4 is a transverse sectional view of the medicament carrying element of the applicator.

Referring in greater detail to the drawing, the head of the person undergoing treatment is generally designated by the numeral 15 showing one of the nasal passages 16, the showing being purely conventional.

So, too, is the container 17, which may be of any preferred type suited to receive the medical composition selected for the purpose.

This container may be provided at its mouth with a screw thread 18 to receive an internally threaded annulus 20 having an integral stopper flange 21 provided with a raised hollow nipple 22 having an annular rib 23 by which may be engaged the stem 24 of an ordinary compressible bulb 25.

Reaching oppositely, downward from the flange 21 is a reduced plug 26 serving as a mandrel to which is attached the applicator element 27, the same having a straight axial passage 28 in open communication with the aperture 29 in the element 21.

The applicator is composed of flexible compressible material, as soft rubber and, as shown in Figures 3 and 4, is generally of an elongated rectangular cross section with rounded corners, approximating the cross section of a common nasal cavity, while its length is such as to fully extend to the cribriform plate or bone at the extreme inner end thereof.

The applicator tube 27 is capable of containing a considerable quantity of the medicament, and by reason of its shape, closely fitting the nasal cavity, convey the menstuum to the proper point of application, where, upon compressing the bulb, it is gently forced outward from the end of the tube.

It will be understood that in some forms of applicators, the bulb 25 may be eliminated and a collapsible tube substituted, such as is ordinarily used as a container for medical specialties, suited to the conditions, thus applying the remedy direct to the applicator element 27 in a positive manner.

It will be further noted that no possible injury can occur by reason of the smooth exterior and pliability of the applicator, as can readily be seen.

Having thus described the invention, and set forth the manner of its construction and appli-

cation, what is claimed as new and sought to secure by Letters Patents, is:

A nasal applicator of the class described comprising a medial rigid member including a substantially large extension and a reduced extension, said extensions having therein a bore, a compressible bulb and medicament container mounted on the large extension, and a nozzle constructed of soft flexible rubber and of elliptical cross section having one of its ends

mounted on the reduced extension, the bore of the nozzle being enlarged at one end to receive the reduced extension, said nozzle being adapted to enter the outer end of the nasal passage and being of considerable length and having its terminal rounded at the periphery, whereby the applicator may be advanced relatively high into the passage so as to reach an area in the vicinity of the cribriform plate.

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