

prescribe frequent and forcible syringings for the removal of cerumen that is not present, or to blially grope for foreign bodies which have already escaped from the meatus, or possibly never entered it.

The Politzer apparatus—a large rubber bulb or bag with a rubber tube ending in a nose-piece attached to its nozzle—is very serviceable in diagnosis and prognosis, as well as treatment, to determine the patency of the Eustachian tube, the mobility of the membrana tympani, presence of perforations, &c. It is used as follows: a sip of water is taken, the nose-piece is put into one nostril, and both nostrils are tightly closed; then, as at a given signal, a nod *e.g.*, the patient swallows, the bag is suddenly and forcibly compressed. The air rushes up the Eustachian tubes, distends the middle ears, and causes an outward movement of the drum-heads. This procedure often effects a very marked relief of subjective symptoms and a decided improvement of the hearing. In cases of acute inflammation, after the acute stage has passed, it clears the tube and middle ear of secretions and restores the normal position and mobility of the drum-head, and also by preventing adhesions tends to preserve the functions of the tympanum. The periodic use of the air-bag is indispensable in the insidious progressive deafness (chronic aural catarrh) secondary to naso-pharyngeal catarrh, where the calibre and patency of the Eustachian tube are lessened and its functions otherwise impaired, and the drum-head is becoming stiff and abnormally concave. The Politzer method is no less valuable in the sub-acute and chronic aural catarrh of children, upon whom, moreover, the Eustachian catheter cannot be used. It is also useful in the cleansing of the middle ear prior to applying remedies, by forcing the secretions into the meatus, from which they can be removed by the douche or syringing; and also after instillations of medicated solutions to secure their proper entrance into the tympanum through perforations. In view of the commonness of ear disease and the great utility of the air-bag in its treatment, it is an additional merit that its use requires no special skill. It is now frequently put into the hands of the laity.

Though the Eustachian catheter,—a slender tube of about six inches in length, slightly curved at one end, and preferably of hard rubber, introduced through the nostril—yields the palm to the Politzer method for the convenience and wide range of its application, its great value is fully established, not only as an efficient adjunct of the air-bag, but for the direct treatment of the Eustachian tube and tympanum by vapours, astringents, &c. The tuning-fork is now generally used in diagnosis and prognosis. If the shank of a vibrating tuning-fork be placed on the vertex or forehead, the vibrations are heard most distinctly by the ear whose drum-membrane is thickened, or meatus or Eustachian tube obstructed; and it is not well heard by the healthy ear unless the meatus be closed. In pure nervous deafness (disease of labyrinth) it is not heard under any circumstances. The rhinoscope is, in some cases, a necessary supplement to the other appliances, furnishing the means of deciding, by ocular inspection, the condition of the posterior nares, vault of pharynx, and mouths of Eustachian tubes. The ear-tube is also employed, and is sometimes useful in auscultating the tympanum during its inflation. The examination and record of an ear case are not considered complete unless the hearing power be tested by the watch and voice; the rule being, to note the furthest distance at which they can be distinctly heard by each ear in turn. A very useful appliance is the aural douche, with which the meatus and drum-head (or middle ear) may be irrigated by a continuous stream of warm water, pure or medicated. It acts on the principle of the syphon, and can be extemporized by using a pitcher, basin, &c., as the reservoir into which is placed one end of a long piece of narrow vulcanized tubing, leaded or weighted; the other end, armed with a small blunt nozzle of bone, hard rubber, &c., being placed in the mouth of the meatus. A receptacle is placed closely under the auricle, and on raising the vessel a little above the head a gentle stream enters the ear. A gallon or more of liquid may be allowed to flow at one sitting, and this may be repeated at short intervals or *p. r. n.* Its use is generally attended by marked and speedy relief of pain, more especially in the so-called