disinfection of the tympanum; (4) regeneration of the tympanic mucous membrane; (5) closure of the perforation.

(1) To dissolve the discharge.

In order that we may scientifically do this we must know of what constituents the discharge consists Mr. Wingrave, of the Central London Nose, Throat and Ear Hospital, after a careful analysis of aural discharges states that it consists of a small amount of mucin and gas globules, and a large amount of globulins. Then our object is to find something nonirritating which will dissolve these substances. Mr. Wingrave has found that a solution af sodium sulphate 2%, and sodium carbonate 2%, to be the only neutral salts to do this, leaving out of consideration the mucin which is but a small element. Moreover, they are practically the only neutral salts which when mixed with a solution of bisulphide of mercury will not precipitate the globulins.

(2) Disinfection, still quoting Mr. Wingrave, bisulphide of mercury in 1-1000-1-2000 solution is by far the most potent antiseptic, and does not precipitate the globulins when mixed with the above mentioned solvents. Bi-chloride of mercury used as a disinfectant forms the albuminate of mercury, a very insoluble compound. Boracic acid is used so extensively, and advised by so many authorities, that I shall devote some attention to That it is but feebly antiseptic and slightly astringent is universally admitted. It is only in those cases where there is a very large perforation, in reality a mere rim of drum membrane, that the boracic powder blown into the external auditory meatus reaches the tympanum. But supposing it should reach the tympanic cavity, its insolubility in serum or pus simply renders the exit of the discharge more difficult, besides acting as a mechanical obstruction to the canal. Two cases may be cited as illustrations of the dangers of the boracic powder insufflution. numbered A and B at the conclusion of this paper. They are

But boracic acid used as a very fine dusting to the tympanic cavity when free exit is present and simply a moistening of the tympanic structures remains, is admissable. Here the mere presence of a fine layer of powder may be a sufficient stimulus to ensure healing. At any rate if pulv. acid borici is used, it certainly should be used by the physician himself and a lotion of borax given for subsequent syringing since the powder is soluble in a solution of borax. In my own practice I do not use boracic acid at all, unless it be in a solution of absolute alcohol.

I attach great importance to the patient's being shown how he should use the solutions in his ear. Many patient's simply get the solution in the outer part of the canal while the bony portion is never cleansed. Again having, as they think, washed the ear out well, they will tilt their head to one side and have a few drops poured in the ear and immediately get up and place a piece of absorbent wool in the canal which succeeds, is absorbing the drops that have not run out, the tympanic cavity being left severely alone. To properly use drops, one must insist on the patient's lying down with the affected ear uppermost and while gently drawing the ear upward and backward have the medicine, previously warmed by heating the spoon, poured into the canal and allowed to remain there for at least twenty minutes. Occasionally inflating the ear by Valsalva's

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