

Letters to the Editors

angle of 25 degrees for the distance of $\frac{1}{4}$ in., is inserted into the tympanic orifice of the Eustachian tube. If one instils at the same time a 2-per cent. solution of cocain the operation will be practically painless. Even without cocain there is little discomfort.

This procedure will effectively seal the tube and insure a cessation of the discharge. The milliamperage used is the same as for ionisation and for a similar period, *i.e.*, the maximum a patient will bear without discomfort for fifteen to twenty minutes. Insulation of the wire can be effected by rubber tubing or a solution of shellac in methylated spirit.

Another common site of trouble is above and behind the remains of the "bridge" where there has been incomplete removal of the mucous membrane of the aditus and antrum. This membrane usually grows rapidly and forms a small pocket and secretes continuously. The remedy consists in cleaning out all debris and applying a cotton-covered pure zinc rod soaked in zinc solution, and then ionising. This will destroy the secreting membrane with a milliamperage of 2 to 4 for fifteen to twenty minutes; more should not be used, as we do not wish to destroy the underlying bone.—Yours truly,

F. H. B. NORRIE.

CALCUTTA, 4th May 1926.

THE EDITORS,

Journal of Laryngology and Otology.

SIRS,—Dr Jobson in his paper on zinc ionisation in the treatment of chronic otorrhœa has clearly pointed out:

- (a) The conditions which preclude treatment by this method.
- (b) The cases in which a rapidly successful result may be expected.
- (c) The reasons underlying suitability or unsuitability.

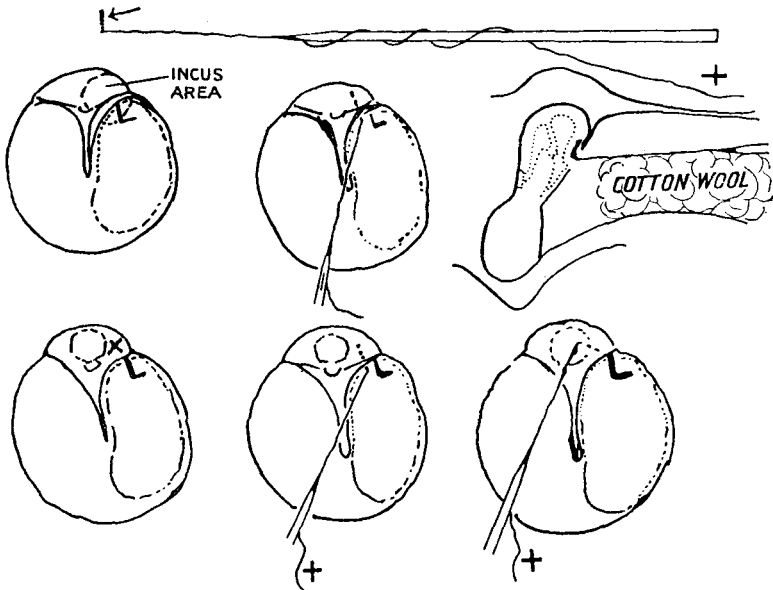
In practice we try to convert cases which are not suitable, when first seen, into those which are suitable. May I draw attention to a small intratympanic electrode useful in those cases where there is a septic confined space difficult to fill with zinc solution and to the walls of which the electric current cannot be readily conveyed. Such a space is the incus area. The aim in using this electrode is to make this space open by destroying a certain amount of tissue.

The electrode consists of zinc wire to which is soldered some thin copper wire. The wire is fastened to a light wooden handle, and in order to limit the action to the part desired the wire is varnished except at the spot which is placed in contact with the tissue to be destroyed. (See Diagram.) The current deposits zinc in the tissue and the zinc coagulates and kills the tissue. In a short time the necrosed part vanishes and the space becomes open. Bonain's

Letters to the Editors

solution is used as a local anæsthetic. The patient sits in a chair with the indifferent electrode on the arm, while the current flows for ten to twenty minutes at a strength of 1 to 2 milliamperes.

Taking all the cases of chronic otorrhœa into consideration, we have at one extreme those in which the area of sepsis is readily accessible and in which no other factor besides sepsis is present to keep up the discharge. These are the cases in which treatment by zinc



ionisation is so successful. At the other extreme we have those cases in which the area of sepsis is totally inaccessible. Such are most cases of disease in the mastoid, and for these zinc ionisation is not successful. Between these two extremes are those which need treatment either to reduce the factors keeping up the discharge to one factor only, namely sepsis, or, to convert spaces which are only accessible with difficulty into spaces which can be reached. In children, approximately 50 per cent. of all cases of chronic otorrhœa may be said to belong to the first category, 20 per cent. need an operation in hospital, and 30 per cent. need minor operations before success is attained.—I am, Sirs, yours faithfully,

A. R. FRIEL.

LONDON, *June* 1926.