Browne—to use only harmless ingredients. (To my own satisfaction, and mostly to that of my patients, I generally prescribe a solution of about half per cent. of chloride of ammonia, with about one per cent. of salt.)

It is rather remarkable that, according to Von Tröltsch, Celsus already recommended gargles in ear disease, although it is not known that he knew anything of the Eustachian tube.

LATENT EMPYEMA OF THE MASTOID ANTRUM.

Dr. PAUL RAUGE, in an article on "Otitis and Mastoiditis" ("Bulletin Médicale," June 24th, 1896), draws an interesting analogy between suppurations of the mastoid antrum and those in the antrum of Highmore. Just as of late rhinologists have learnt to recognize latent empyema of the latter cavity, so, says Dr. Paul Raugé, aurists now see in many cases of prolonged intractable suppuration of the middle ear a latent empyema of the mastoid antrum. In the typical cases there are "no phenomena of retention, pain, no swelling, no fistula, no abscess of the soft parts—nothing but a simple discharge, which is so much the more insignificant that it reaches the orifice of the meatus mixed with the discharge from the tympanum, and that it is very difficult to recognize how much in the total of the otorrhœa is due to the tympanic cavity and how much to the mastoid." He attaches little or no value to the lamentable attempts which have been made within the last few years with the laudable intention of arriving at the detection of pus in the mastoid cavities: percussion (Koerner, Moos, Eulenstein); transillumination (Caldwell, Urbantschitsch) by means of an electric lamp introduced into the meatus or applied on the posterior surface of the mastoid; exploratory puncture (Ferreri); lastly, auscultation of the mastoid by means of an otoscopic tube applied to different points on its surface while a tuning-fork vibrates on the vertex (Okunnef)." He holds "that the existence of this suppuration can in reality only be determined by a somewhat uncertain collection of probable signs: increase of discharge, slight painful tension, some general symptoms, These are the least vague of the indications which lead to a suspicion of a latent mastoiditis." He concludes that "whenever an otorrhœa persists and proves intractable to simple treatment, one may almost certainly affirm that the mastoid is affected. Operators know it well, and they are so certain that by perforating the mastoid they will find what they are looking for, that they no longer make a useless *détour* (Schwartz, Luc, Zaufal). Instead of entering through the meatus and timidly following the course that the pus has taken, they attack the antrum straight away, ready to return on their steps and to carry their operative procedure as far as the tympanum, when the extent of the lesions—as is most ordinarily the case—requires a complete operation."

The dangers of analogy are well known, and it would be, in our opinion, somewhat risky to be led by this specimen of that figure of speech—to apply, in consequence, identical principles of treatment to the case of the mastoid antrum when it must be admitted the circumstances are

considerably different, and the risks attending the operation so very much greater. At the present time the indications for opening the mastoid antrum on account of chronic otorrhœa, as such, can certainly not be said to be complete, but Dr. Raugé's analogy is in many respects a happy one, and in time we believe its correctness will force itself more and more on the minds of otologists. It cannot, however, be accepted as a practical guide until it has been tested by actual clinical results—not simply by *a priori* conviction.

Dundas Grant.

ABSTRACTS.

DIPHTHERIA, &C.

Bazin, A. T.—*Diphtheria: Notes on Treatment by Antitoxin.* "Montreal Med. Journ.," Apr., 1896.

THIS paper, which deals with a series of 103 cases treated with antitoxin, ten of which ended fatally, contains several points of much practical interest. The author considers that it is better to give an over than an under dose, inasmuch as any toxin remaining unneutralized by the first injection speedily increases to the amount originally present. With regard to the local lesion, it is usual to have the throat perfectly clean in four days, and the author lays stress on the importance of using sprays of bland solutions as soon as the membrane has ceased to be thick and dirty; more powerful applications, such as peroxide of hydrogen, having a tendency to cause persistence of membrane.

Whereas in diphtheria not treated with antitoxin the percentage of albuminuria is from 50 to 70 per cent., only 36 of the series of 103 exhibited this complication, and in only five of these was any increase of albumen noticed after injection. In only two cases did pains in the joints occur with the erythematous or urticarial rashes. Of 50 cases traced, twelve suffered from paralysis. In the case of a nurse full doses of antitoxin were administered twenty-four and thirty-eight hours respectively after the onset of faucial symptoms, with rapid recovery. On the seventeenth day paralysis of the palate and neuritic pains in the limbs supervened and persisted for a month.

Ernest Waggett.

Nyulasy, Frank A.—*Diphtheria in an Infant eleven months old; Tracheotomy; Antitoxin; Recovery.* "Australasian Med. Gaz.," March 20, 1896.

IN this infant tracheotomy for diphtheria was successfully performed at probably an earlier age than in any previous case in the colony.

Antitoxin was injected on the second day after the larynx had become involved. The same night the condition was such as to demand tracheotomy. After the membrane had been removed from the trachea the breathing was easy. The following morning there was a little dyspnoea and an absence of secretion. In consequence of the ominous character of the latter feature a full dose of Behring's No. 2 serum was injected. Tracheal secretion became free the next morning, and a piece of membrane an inch long was coughed up, giving great relief. A full dose of No. 1 serum was now injected, after which the child gradually improved and is now quite well. The tube was removed on the fifth day after operation. The author attributes the ultimate cure of the diphtheria to the use of antitoxin, for in his experience a "dry tracheotomy" was formerly always fatal. *A. B. Kelly.*