Dr. Dench agreed with Dr. Holt's remarks regarding hearing in a noise. It seemed to be true, however, in cases in which the middle ear was involved, that there was paracusis, and that where the middle ear was not involved paracusis was not present. With reference to the reversal of the relative duration of bone conduction to air conduction, he would say that many mistakes had been made. The point at which air conduction became greater than bone conduction in cases of defective hearing due to a middle-ear lesion, depended entirely upon the degree of deafness. If the hearing were slightly impaired, bone conduction would exceed air conduction for the lower notes of the scale only. The test should be made through a large part of the musical scale.

Dr. Scheppegrell stated that there is one view of the subject which had not been referred to, and that is the faculty of lip-reading, which is usually early developed in persons with defective hearing. When speaking in a noise persons articulate more deliberately and distinctly, which facilitates this lip-reading; and where a person with defective hearing seems to hear better in a noise, it may only be apparent, as his faculty of lip-reading gives him advantage over persons with ordinary hearing.

ABSTRACTS.

DIPHTHERIA, &c.

Fullerton, Alexander G. R., and Williams, A. Llewellyn.—The Conveyance of Diphtheritic Infection by Apparently Healthy Individuals. "Lancet," Oct. 23, 1897.

THE nature of the observation is fully indicated in the title. The authors further observe that the Klebs-Löffler bacillus may be found in the throat of an apparently healthy individual under two sets of conditions. Of these, the cases of more frequent occurrence are those in which the bacillus persists in and about the throat for a more or less lengthened period after complete convalescence from an attack of diphtheria. The other class of cases comprises those in which the bacillus exists in the throat of an individual, such as a nurse, who has been exposed to the risk of infection, but has escaped an actual attack of the disease. Cases which come within the first class are not by any means rare. But it is difficult to know the precise value to be attached to any figures bearing on the subject, unless one at the same time knows the treatment which has been adopted in the various cases, since the persistence of the bacillus is without doubt largely influenced by the method of local treatment adopted during the acute stage of the disease and afterwards. The most striking instance recorded is a French case in which the bacillus was still to be found in the throat at the end of fifteen months. But so prolonged an infection as this must be quite exceptional. Out of some four thousand bacteriological examinations in cases of diphtheria, or of suspected diphtheria, which have been carried out at the British Institute of Preventive Medicine, the case in which the longest duration of the bacillus has been noted is one in which it was found by Dr. Hewlett at interval, during twenty-two weeks. In this case, as in the present one, the virulence of the culture was proved by experimental

inoculation. Cases, again, in which the bacillus is still present three weeks or so after convalescence are in the experience of the Institute of not infrequent occurrence.

The recognition of these cases is, it is scarcely necessary to say, of extreme importance from the public health point of view. They explain, for example, that recrudescence of diphtheria which is sometimes coincident with the reopening of schools. They explain also the occurrence of a series of outbreaks with irregular intervals at schools, such as the instance this article particularly refers to. And in passing it may be pointed out that it is such outbreaks as those mentioned which, in the absence of obvious evidence of the conveyance of infection from one patient to another, led in the past to the belief in the intimate causative relation between defective drainage and diphtheria—a belief now discarded because of the greater exactness in tracing causation which we owe to bacteriology. Medical men generally are now quite aware of the necessity for a bacteriological examination before a convalescent diphtheria patient can for the sake of others be safely released from isolation, however perfect the recovery may appear to be clinically. To this a further rule might with advantage be added: that after a school has been closed temporarily because of an outbreak of diphtheria, no scholar should be readmitted without a bacteriological examination of the throat, whether there is a previous history of diphtheria or not. StClair Thomson.

McAlister, Alex.—Diphtheria Antitoxin. "New York Med. Journ.," Sept. 25, 1897.

THE writer comments on the extensive use of the antidiphtheritic serum within the past few years, and notes the marked and significant withdrawal of the fierce opposition that met its first introduction into therapeutic science. The scrum he regards as a specific in the full sense of the term, and he quotes Holt in support of his statement. Investigation has shown that, under antitoxin treatment, seventythree per cent. of operative cases of laryngeal diphtheria recovered, and that only thirty-nine per cent. of cases so treated required operation; while under calomel there were only twenty-seven per cent. of recoveries, and ninety per cent. required intubation. Unsatisfactory results are, in many cases, due to a weak antitoxin, while a reliable and concentrated product given in suitable doses, and repeated, if necessary, within twelve hours, will reduce the general mortality of diphtheria to less than four per cent., and that of laryngeal diphtheria to less than ten per cent. The fear of untoward results from the injections of the serum is utterly groundless, for of the upward of two million injections made in all parts of the civilized world, it is admitted that only five deaths occurred that could not be satisfactorily explained, and, on the other hand, they cannot be proved to have been caused by the serum. A great deal of the success of the serum treatment depends on the proper adjustment of the dose, and the author recommends the following rules:-In ordinary pharyngeal cases, one thousand units to be given immediately on making a diagnosis. If the case comes under observation late, or if the disease is laryngeal or one of membranous croup, double this quantity must be administered; and in every case, if the disease is not arrested or there is evidence of an insufficient amount having been given, the dose is to be repeated or doubled within twelve hours.

Payne, Fra D. (Linden, Iowa).—The Treatment of Forty-three Cases of Diphtheria with Antitoxin. "Med. News," Oct. 9, 1897.

Notes of forty-three cases of diphtheria treated by antitoxin, the initial dose employed being in no case less than a thousand units. The author believes the

rapidity of the action depends greatly on the freshness of the preparation of antitoxin. Forty-two out of the forty-three cases recovered without any serious symptoms.

St George Reid.

MOUTH, &c.

Gerhardt. - Macroglossia. "Münchener Med. Woch.," Nov., 1897.

The author reports a case of macroglossia congenital in a child, who afterwards died from exhaustion, the hypertrophy interfering with nourishment. Two forms of macroglossia: (1) hypertrophy of connective tissue and muscle, and (2) hypertrophy of lymphatics and blood vessels.

Gleitsmann, J. W.—The Treatment of Chronic Affections of the Faucial Tonsils; with Demonstration of Instruments. "New York Med. Journ.," Sept. 4, 1897.

In chronic tonsillar inflammations characterized by the presence of a white exudate plugging the crypts on the surface, the author insists on thorough exposure of the whole of the diseased surface, and for this purpose speaks highly of a small so-called "palate hook," by means of which the anterior pillar is readily pushed aside. Mere removal of the exudates with subsequent applications is not sufficient; the crypt must be enlarged to effectually prevent their re-formation. For this latter purpose the author was in the habit of using Moritz Schmidt's blunt hook, but, as the use of this instrument is often very painful, he has had its side sharpened, retaining its blunt tip. In another much rarer affection, where the tonsil is more or less extensively covered by a flap of a dense membranous formation, he has devised a tonsillar clipper for the removal of the latter. This instrument is a modification of Ruault's punch, the blades being reversed, and cutting in a horizontal instead of in a vertical plane.

Sandford.

Lewis, Robert.—Angio-neurosis of Tongue due to Application of Chromic Acid to Tympanic Membrane. "New York Med. Journ.," Oct. 9, 1897.

The patient, a woman of forty-eight, was of average good health, not neurotic, and certainly with no hysterical tendency. She was suffering from left chronic otitis media for a number of years. The author cauterized with chromic acid some granulations on the upper and posterior parts of tympanic membrane, and about twelve hours after the application the patient's tongue began to swell rapidly, and for a few hours seriously embarrassed her breathing. The swelling, however, subsided after some hours. Six months later she again consulted the writer for the ear trouble, and chromic acid was again employed for the same purpose as before. In about twelve hours after her tongue, for the second time, began to swell, and to such an extent interfered with her respiration that a tracheotomy was seriously considered. The swelling, fortunately, yielded to milder measures. The case was evidently one of angio-neurotic ædema, and for various reasons the author feels warranted in concluding that the ædema must in some way be due to active stimulation of the chorda tympani nerve.

Sandford.

Raugé.—Traumatic Paralysis of the Soft Palate. "Arch. Intern. de Lar., Otol., et Rhinol.," Sept. and Oct., 1897.

THE case of a perfectly healthy man of fifty-nine, who accidentally fell, striking the side of the neck on the edge of a box. Consciousness was lost for about an hour, and, immediately on its return, the voice was found to have a nasal quality, and fluids were rejected through the nose on swallowing. There was slight