inflammation, though often limited to the mastoid, may in reality affect the squamous portion of the tympanic portion, and often be limited to that.

There is, therefore, some reason for the view that pathology shows a certain relation of continuity with the primitive anatomical divisions. The temporal bone may have only one of its parts undergoing pathological disturbance independently of the others. This localization is exceptional, and the cases are rare in which intervention has to be limited to one of these parts. Most frequently in chronic cases the affection is situated at the point of coalescence of the three divisions of the bone at the level of the antrum. It is to this that we ought, in the first instance, to direct our energies, in order to work from that point downward and backward toward the mastoid forward, upward toward the squamous, forward toward the tympanic.

Dundas Grant (Trans.).

ABSTRACTS.

DIPHTHERIA, &c.

Atkinson, T. P. (Surbiton). — Diphtheria and its Causation. "Lancet," August 31, 1895.

THE author draws attention to deficiency in flushing drains being a possible factor in the spread of diphtheria.

St. George Reid.

Biggs, H. N.—Antitoxic Serum as a Preventative of Diphtheria. "Med. News," Nov. 30, 1895.

The antitoxin used was prepared by the New York Health Department, and the amount used varied from 50 to 600 antitoxin units. These observations seem to show thirty days to be the period of immunization. The following table shows the number, etc., of cases.

	No.	No. of Cases of Diph. div. between 1 and 30 days	Within 24 hrs.	After 30 days.	No. of Cases previous to immunization.
New York Asylum, First imm, Second imm Nursery and Children's Hospital. New York Juvenile Asylum New York Cath. Protect. Bellevue Hospital Health Dept. Insp. Total	245 136 81 114 11 232	r mild, r mild, r mild, r mild,	0 0 0 0 1 0 3	6 4 0 0 0 0 3	107 in 108 days. 6; 12; 146; 90; 12; 3; 3; 5; 3; 3; 2; 10; 10; 10; 10; 10; 10; 10; 10; 10; 10
particle of the second		-			R. Lake.

Henry.—Croup; Prolonged Tubage. "Bulletin Méd. du Nord," Nov. 22, 1895.

RELATION of interesting case of tubage, where the tube had to be retained in the larynx for months for approa without apparent cause. The patient was a

young girl, four and a half years of age, with severe diphtheria; she was the only one left of five children, dead from meningitis or athrepsia, and she had constantly been sickly. Father died of tuberculosis. The bacteriological examination revealed true diphtheria associated with streptococcus. Injections of antitoxic serum; consequently rash and exanthem. During the first days, complete asphyxia occurred when the tube was removed. Subsequently the girl could breathe gently, but after half an hour tubage was again necessary. Later, bronchopneumonia occurred – treated by anti-streptococcal serum; and an abscess arose in the place of injection. The suppuration contained streptococci. Gradual and complete cure resulted without paralysis. The larynx, inspected with the laryngo-scope, showed no affection and no paralysis. The tube could not be removed, and at the time of exit from the hospital the tubage was still permanent (from July 16 to November 8).

The author believes the apnœa is similar to those rare cases of impossibility of removal of the canula after tracheotomy, and is the result of nervous hysterical troubles.

A. Cartaz.

Peck, Herbert (Ormskirk).—The Transmission of Diphtheria by Non-Sufferers. "Lancet," Dec. 14, 1895.

Notes of eight cases occurring in four houses about a mile apart, where, after careful inquiry, the disease appears to have been transmitted by one of the inmates who did not himself suffer from the disease.

St. George Reid.

Shuttleworth, E. B. (Toronto). — Laboratory Notes on the Bacteriology of Diphtheria. "Lancet," Sept. 14, 1895.

The author deals with the arrangements adopted at the laboratory in Toronto for bacteriological examination in cases of diphtheria. He draws attention to the important fact that a quarter of the cases admitted to the hospital as diphtheria were really not so, and insists on the necessity of "suspect" wards for doubtful cases.

The organisms present in thirty-two fatal cases were as follows:-

With regard to the relation between organisms present and the severity of the attack, he finds the most severe cases are those in which the staphylococci are combined with Loeffler's bacillus, and the mildest cases where Loeffler's bacillus is present with both staphylo and streptococci.

St. George Reid.

Symes, J. V. (London).—Notes on the Bacteriological Examination of the Throat in some Fevers. "Lancet," Aug. 24, 1895.

The author publishes the notes of one hundred cases admitted into the London Fever Hospital suffering from scarlet fever, diphtheria, rubeola, etc., where a bacteriological examination was made of the exudation from the throat. In sixty-eight cases of scarlet fever, fourteen showed streptococci, twenty-five streptococci and staphylococci, two staphylococci, one staphylococci and Loeffler's bacilli long, nine staphylococci and Loeffler's bacilli brev., fourteen various forms of cocci and bacilli, and three various forms of bacilli. The bacillus most frequently found was a short, thick bacillus, non-staining central portion liquefying blood serum in three to six days, forming chains or groups. In the case of scarlet fever showing the long variety of Loeffler's bacillus there was rhinorrhea, but no membrane

could be seen; the pure culture proved virulent to guinea-pigs. The discharge ceased in seventeen days, and a culture showed cocci only; there was no albumen, and no paralysis followed.

In eighteen cases sent in as suffering from diphtheria the long variety o bacillus was present in ten; in two combined with the short (cases one and seven). In case one the short variety was present twelve weeks after admission, but a pure culture was not virulent to guinea-pigs.

In the eight cases where Loeffler's bacillus was not found, five showed streptococci, staphylococci, and cocci; one streptococci and a short liquefying bacillus; and one streptococci and one staphylococci only. In cases one and two there was considerable exudation on tonsils and palate; and case three, where there was an acrid nasal discharge, proved scarlet fever. In none of the cases was there any loss of knee jerk or following paralysis. Five of the above cases were regarded as tonsillitis. In fourteen cases of rubeola, a short liquefying bacillus was found in three, in two of which there was exudation on the fauces; in four staphylococci and the same bacillus; in three strepto and staphylococci; and in one streptococci only. In the remaining three the short diphtheria bacillus was found accompanied by various cocci. In case one, showing bacillus Loeffler brev. and cocci, a pure cultivation proved non-virulent to guinea-pigs. In conclusion the author draws attention to the value of bacteriological examination, and points out that in none of the eighteen cases certified as suffering from diphtheria was the short variety of bacillus found [alone?], and that in the nine scarlet fever and three rubeola cases where it was present only one presented clinically the features of diphtheria. Dr. Washbourne, who had tested pure cultures of the short diphtheria bacillus obtained from some of the above cases, had found them non-virulent to guinea-pigs. St. George Reid.

Thresh, J. C. (Chelmsford).—Infectious Sore Throats. "Lancet," Aug. 17, 1895.

The author raises the question as to the infectiousness of some forms of tonsillitis, and the advisability of isolating cases occurring in schools. He draws attention to the low mortality—five per cent.—of the cases of diphtheria occurring in the Chelmsford Rural Sanitary District as compared with previous years, when it has been twenty per cent.; and states that the last thirty cases of diphtheria have all terminated favourably, but that in only one was Loeffler's bacillus found. He believes the bacilli present were the pseudo variety described by Klein.

St. George Reid.

NOSE AND NASO-PHARYNX.

Barr, Thomas (Glasgow).—The Treatment of Adenoid Growths in the Naso-Pharynx. "Lancet," Sept. 14, 1895.

The lecturer deals with the importance of early removal, the modes of operating, and the question of anæsthetics. With regard to the latter point, his experience has led him to prefer chloroform, lightly administered, to either ether or nitrous oxide. He emphasized the importance of rest, and the dangers of chill and of any injudicious nasal treatment after the operation. Where the post-adenoid growths are accompanied by hypertrophy of the tonsils, the lecturer is in favour of dealing with the tonsils first, and of removing the adenoid growths at some subsequent sitting.

St. George Reid.