age, but, probably owing to his being younger, not to so great an extent. He could say one or two words more than his brother, and could still have his attention attracted by a loud sound. His membranes had practically the same appearance, and his naso-pharynx was well occupied by adenoids of a dense consistence. None of the supposed hereditary causes of deaf-mutism could be ascertained, and neither had suffered from any illness which could account for deafness.

A third case, somewhat similar, was that of a little girl, aged four years, but she had some slight indications of hereditary syphilis, and I was unable to convince myself that she possessed perception of sound to bone-conduction. Her naso-pharynx was small and full of adenoids. Removal of these did not restore hearing, and I failed also to cause improvement by perforating one of the membranes in its posterior segment with an electro-cautery point. In the cases of the two brothers I would not be satisfied that everything had been done to improve hearing until their membranes had been perforated.

The case of a lad with unilateral deafness associated with adenoids, which, while pressing firmly upon the tubal orifice of the deaf side, were separated by a sulcus from the tubal orifice of the other side, lends support to this view. The adenoids were found to be of very dense consistence, and the ear of the side against whose Eustachian tube they pressed was in a condition similar to those of the deaf-mute brothers. The other ear had half of natural hearing. This ear improved to normal quickly after removal of the adenoids; the other ear hardly improved at all, although its Eustachian tube recovered its normal patency. His perception for bone-conduction was excellent. He had been deaf on that side as long as he could remember.

It seems to me that these cases point very decidedly to the importance of examination of the naso-pharynx in very young children who show signs of deafness or of being mouth-breathers, as the removal of adenoids in infancy may prevent them from becoming incurable deaf-mutes, not to speak of preventing the other dangers which are run by mouth-breathers. The youngest child from whom I have removed adenoids was aged seven months; they were numerous, but were easily removed by the unarmed finger-nail.

ABSTRACTS.

DIPHTHERIA, &c.

Anfrecht (Magdeburg).—An Early Fatal Complication of Diphtheria. "Therap. Monats.," March, 1894.

If diphtheritic patients die during the first days of the disease, without a progressing bronchial diphtheria, the cause is generally parenchymatous nephritis. Therefore the urine should be examined in all cases for albumen or decrease in amount, especially in cases in which the mind is

disturbed at an early period. Free administration of alkaline waters, as Wildungen, is the best treatment for this nephritis. *Michael.*

Townsend, C. W.—Primary Nasal Diphtheria. "Boston Med. and Surg. Journ.," May 24, 1894.

FIVE primary and two secondary cases, with charts, are reported. In all the Klebs-Loeffler bacilli were demonstrated—in one case, indeed, having them demonstrated in the nose five weeks after the discharge ceased, and at the previous culture none were found, though they must have been present. The fever was always slight, the temperature being rarely higher than 100° Fahr. Attention is drawn to the frequency of mild attacks; the likelihood of confusing the cases with the ordinary coryza.

R. Lake.

McPhedran, A. (Toronto).—Diphtheria—Death from Embolism of Basilar Artery. "Canadian Practitioner," Oct. 1, 1892.

A CHILD, twelve years old, developed pharyngeal diphtheria on May 30th. By June 4th she was convalescing satisfactorily. At three o'clock on the morning of the 5th she took nourishment, and desired her nurse to rest. A few minutes later she breathed deeply, and before the nurse could reach the bed she was unconscious. Coma deepened and she died at nine a.m. At the autopsy a firm white embolism was found lodged at the bifurcation of the basilar artery; its origin could not be ascertained.

George W. Major.

Ehrlich, Kossel, Wassermann (Berlin). — Fabrication and Application of Diphtheria Heil-serum. "Deutsche Med. Woch.," 1894, No. 16.

In the Institute for Infectious Diseases the author made experiments on the preparation of serum for treatment of diphtheria. The best animals for this purpose are goats, which are naturally immune, and can also bear strong intoxications with diphtherin without damage. They are rendered immune by increasing doses of cultures of virulent bacilli. By this method the toxic dose is injected at the same time as the curative serum. As a toxine, test fluid prepared by Behring of diphtheria bacillus is used. In these animals they obtained the result that 1.5 serum and 0.075 milk were sufficient to neutralize one cubic centimètre of Behring's test poison. With this new fluid two hundred and twenty cases were treated, with 76.4 cures. Of the tracheotomized cases, thirty (equal 55.1 per cent.) were cured. Of those children on whom the treatment was begun on the first day of the disease, one hundred per cent. were cured; on the fifth day, fifty-six per cent. The earlier the treatment begins the better the chances for cure. It may be hoped that by application of larger doses of serum the statistics will be improved. The authors conclude that the prognosis of the sick children depends on the treatment in the first days of the disease. The serum therapy must be begun in the first Michael. days.

Behring and Ehrlich (Berlin). — Diphtheria Immunization and Cure. "Deutsche Med. Woch.," 1894, No. 20.

POLEMIC on Schering's antidiphtherin by Dr. Ahronson.

Michael.

Schubert (Reinerz).—Chlorine-water a specific against Diphtheria. "Deutsche Medicinalzeitung," 1894, No. 29.

The author concludes that chlorine-water is the best medicament against diphtheria; it is a specific; it is also the best protective agent, and should be given as two liq. chlori to one part water, one teaspoonful every three hours; as a prophylactic, three teaspoonfuls a day.

Michael.

Behring (Berlin). — Cure of Diphtheria. "Deutsche Med. Woch.," 1894, No. 15.

POLEMICAL article against Dr. Ahronson's recommendation of the diphtheria antitoxin solution (Schering).

Michael.

Ahronson.—Cure of Diphtheria. "Deutsche Med. Woch.," 1894, Nos. 17 and 19.

Answers to the paper of Prof. Behring.

Michael.

Behring.—Cure of Diphtheria. "Deutsche Med. Woch.," 1894, No. 17.
REPLY to the paper of Dr. Ahronson. Polemical articles concerning Schering's preparation.

Seibert (New York). — Submembranous Local Treatment of Pharyugeal Diphtheria. "Jahrb. für Kinderheilk.," Band 37, Heft 1.

The author injects twice a day two to six syringefuls of aqua chlorata (four per cent.) under the mucous membrane by aid of a curved Pravaz syringe. Of one hundred and eighty-nine cases of diphtheria (Loeffler's bacilli were found in all), only seven per cent. died. The general mortality of this epidemic was thirty-eight (nine per cent.) The number of injections depend on the extension of the pseudo-membrane and the general health. The patient also must gargle with a solution of tr. iod. 2'0; pot. iodat. 1'0; acid carbol. gtt. x.; aq. dest. 120'o. Michael.

PHARYNX, &c.

Unna (Hamburg).—Hygiene of the Mouth and Chlorate of Potash. "Monats. für Prakt. Dermat.," Band 17, No. 9.

THE author recommends the application of this drug, as a tooth paste, in fifty per cent. solution.

Michael.

Rosinski (Königsberg).—Gonorrhaal Discases of the Mouth. "Zeitschrift für Ohrenheilkunde und Gynakologie," Band 22.

The author has examined five cases of gonorrhæa of the mucous membrane in newborn children. Macroscopically, there was a white-yellowish discoloration of the palate on both sides of the raphé. It was not a true pseudo-membrane, but a superficial purulent infiltration of the tissue. Between the connective tissue and the epithelium the specific micro-organisms could be found. Spontaneous cure followed after some weeks without any cicatrices.

Michael.