

BRITISH MEDICAL ASSOCIATION.

Sixty-fifth Annual Meeting will be held at Montreal, Canada, on August 31st, September 1st, 2nd, and 3rd, 1897.

SECTION I.—LARYNGOLOGY AND OTOTOLOGY.

President—Dr. GREVILLE MACDONALD (London).

Vice-Presidents—Dr. W. TOBIN (Halifax); Dr. G. A. S. RYERSON (Toronto); Dr. H. S. BIRKETT (Montreal); Dr. G. R. McDONAGH (Toronto).

Hon. Secretaries—Dr. A. CHRETIEN (Montreal); Dr. H. D. HAMILTON (Montreal); Dr. W. PERMEWAN (7, Rodney Street, Liverpool).

THE annual meeting will this year be held at Montreal, and it is hoped that there will be a fully representative attendance from this country.

Subjects for formal discussion will be arranged after consultation with the officers of the section in Canada, and will subsequently be announced. In the meantime the secretaries request that readers of papers will forward to them as soon as possible the name of any communication they may wish to make.

ABSTRACTS.

DIPHTHERIA, &c.

Dennig.—*On the Infectiousness of Diphtheria.* "Münchener Med. Woch.," Feb. 9, 1897.

DENNIG holds that the value of antitoxin in the treatment of diphtheria is well established, but that its value as a prophylactic is doubtful. Results apparently in favour of the prophylactic use of antitoxin have been published, but little reliance can be placed in them because of the great variation in the infectiousness of different epidemics. Two epidemics of diphtheria are compared in tables, giving the families, numbers in each family, and numbers attacked in each family, with the age and sex. In Epidemic I., occurring in a village near Tübingen, twenty-nine families were attacked. These families contained one hundred and ninety-one individuals—one hundred and ten children under fifteen years, and eighty-one over fifteen years. Forty-six children and four adults were attacked. Families in which only one case occurred were seventeen (58.6 per cent.); families in which several cases occurred were twelve (41.4 per cent.). There were five deaths (10 per cent.). In Epidemic II., occurring under less favourable circumstances, in Tübingen, thirty-six families were attacked, with one hundred and forty-seven under and sixty-six over fifteen years old. There were forty-two cases—forty-one

children and one adult. Families with only one case were thirty-two (89 per cent.); with more than one case, four (11 per cent.). In two of these four families the children attacked turned ill on one and the same day. The mortality was 14·3 per cent. No prophylactic injection was given in either epidemic.

Arthur J. Hutchison.

Dobezynski.—*Antidiphtheritic Serum in Village and Country Practice.*
"Deutsche Med. Woch.," Feb. 4, 1897.

A REPORT of thirteen cases of diphtheria treated with antitoxin, and of nineteen prophylactic injections.

In one case the writer had so little serum on hand that he doubts whether it could have had any influence on the disease: in a second case the diagnosis was doubtful. Therefore, omitting these two cases, there were treated eleven cases, with one death. This occurred in a septic case (*i.e.*, a case not suitable for treatment by diphtheria antitoxin alone). Of the nineteen immunized children only one was said to have had an attack of diphtheria; and even that was doubtful, because the illness was so slight that no doctor was called in.

Joint pains did not occur, but in one case an erythema occurred, starting from the point of injection. The effect of the serum on the general condition was most striking; the improvement always seemed to go along with a fall of temperature. The local effect was not so marked, but only once did the membrane continue to spread. Improvement generally started with a profuse sweating.

No bacteriological examination was made, but the writer is of opinion that he can diagnose diphtheria clinically as accurately now as he could before the Loeffler bacillus was discovered.

Arthur J. Hutchison.

Engel, G. S.—*Examination of Blood as an Aid to Prognosis in Diphtheria.*
"Deutsche Med. Woch.," Feb. 18 and 25, 1897.

IN this paper the proper methods of preparing the blood for examination, the methods of staining and the values of different stains, the classifications of leucocytes adopted by different writers, etc., are discussed in considerable detail. Only one point bearing directly on the prognosis of diphtheria seems to have been established by the author to his own satisfaction, *viz.*: If the myelocytes—*i.e.*, mono-nuclear white blood corpuscles, with neutrophil granules (excluding both the mono-nuclear leucocytes poor in chromatin, considered by Fränkel as characteristic of leukemia, and also the large mono-nuclear eosinophil cells of Müller and Rieder)—are present in quantities of two per cent. or more in the blood of a diphtheria patient, the patient will die; but a smaller percentage does not of itself justify a favourable prognosis. The highest percentages found in diphtheria patients who recovered were 1·5 per cent., 1·4 per cent., and 1·3 per cent., and these were present only at the height of the illness, sinking back very shortly to 0·7 per cent., 0·1 per cent., and 0 per cent. respectively.

The maximum of myelocytes found in the blood of those who died of diphtheria was 16·4 per cent. On the other hand, eight cases died without any noticeable increase in the quantity of myelocytes. The author cannot yet state at what day of the illness a bad prognosis may be made, but in one case in which he was able to examine the blood on the fourth day he found 12·8 per cent. myelocytes, and in another examined on the third day 4·3 per cent. myelocytes. The first case died seven days later; the second, eighteen days later.

Interesting observations are recorded with regard to the numbers of other white cells, eosinophil cells, etc.; but apparently no very definite conclusions can be formed with regard to them.

Arthur J. Hutchison.

Gottstein, A.—*On the Serum Treatment of Diphtheria.* "Munchener Med. Woch.," Feb. 16, 1897.

TRUSTWORTHY statistics undoubtedly prove that since the introduction of serum treatment there has been a decided decrease in the mortality from diphtheria in Germany, France, Denmark, Belgium, and a great part of Austria. This is attributed by some to the serum treatment; by others to the natural history of the present epidemic. The height of the epidemic was reached in 1883-86, and there has been a rapid, though not quite steady, decline since then.

M. Funck, chief of the institute for serumtherapy in Brussels, recently published the results obtained there with diphtheria antitoxin. In his earlier cases the mortality was 12.3 per cent. Later this was still further reduced, so that during 1895 the total mortality (in two hundred and forty cases of bacteriologically verified diphtheria) was only 7.5 per cent. The great improvement in his results was obtained by Funck only after he had commenced to preserve his serum by filtration through a Chamberland's filter.

Now, whereas the experiments of various investigators left the question unsettled whether antitoxin can pass through such a filter, L. de Martini, director of the bacteriological laboratory in Milan, has proved that it cannot do so (at least to any extent), and that to obtain a concentrated serum Funck's method must be reversed—in other words, the residue left in the filter is the concentrated serum, whereas Funck's serum, to which such brilliant results are credited, really contains little or no antitoxin at all.

Arthur J. Hutchison.

Watson, A.—*Intubation and Tracheotomy in Diphtheria.* "Glasgow Med. Journ.," April, 1897.

THIS is a very practical paper on the treatment of dyspnoea during diphtheria.

The writer classifies these cases into—

1. Those requiring intubation alone—(a) ordinary cases; (b) spasmodic cases; (c) moderate dyspnoea in infants, or in cases of extreme prostration.
2. Those requiring intubation, followed by "subsequent" tracheotomy.
3. Those requiring intubation, followed by "immediate" tracheotomy.
4. Those requiring primary tracheotomy.

In an appendix to the paper, tables are given showing the number of cases falling under each of the above headings and the points of special interest in each case.

Six cases are classed as 1 (a)—ordinary intubations; all were treated with antitoxin; intubation in nearly all cases had to be repeated (in one case seven times).

Three cases were 1 (b)—spasmodic; one introduction of the tube sufficed to remove the spasm, though in all three cases the tube was immediately expelled.

Three cases were 1 (c)—moderate dyspnoea in infants of from seven to seventeen months old. The object of intubation here was to allow the patient to die peacefully, the prostration in each case being too great to leave any hope of recovery.

Two cases came into Class 2. The tube being repeatedly expelled after repeated insertions, and the breathing continuing obstructed, tracheotomy had to be performed.

Four cases came into Class 3. In them—intubation either failing to relieve or actually increasing the dyspnoea—tracheotomy had to be performed at once.

Ten cases came under Class 4—*i.e.*, cases in which tracheotomy, and not intubation, was indicated. In two of these no membrane was found in the trachea, and it is therefore probable that intubation would have relieved the dyspnoea.

Arthur J. Hutchison.