## THE CANADIAN JOURNAL OF

Pathology. S UN CHARGE OF ... W. H. PEPLER, M.D., C.M., AND J. J. MACKENZIE, BA., M.B.

## A SYSTEMATIC BACTERIOLOGICAL EXAMINATION OF THE FAUCES IN SCARLET FEVER AS A MEANS OF PREVENTING POST-SCARLATINAL DIPHTHERIA.

BY G. C. GARRATT, M.B. (CANTAB.), Assistant Resident Medical Officer to the London Fever Hospital,

J. W. WASHBOURN, M.D., F.R.C.P., Physician to Guy's Hospital; Physician to the London Fever Hospital, etc.

In hospitals for infectious diseases patients convalescing from scarlet fever are not infrequently attacked with diphtheria. The cause of this has been the subject of considerable discussion; but a prevalent theory is to attribute it to the introduction into the scarlet fever wards of unrecognized cases of diphtheria. If this view be correct, it follows that post-scarlatinal diphtheria could be prevented by the early recognition and isolation of such cases. The great difficulty encountered is that the clinical diagnosis of diphtheria is often impossible, especially in patients who are in the acute stage of scarlet fever.

The only other method available for the recognition of the disease is the detection of diphtheria bacilli in the fauces by bacteriological examination. It has, however, been urged that diphtheria bacilli are so frequently present in the throats of scarlet fever patients as to render the isolation of such cases impracticable. F. Ranke<sup>1</sup> found diphtherie bacilli present in the throats of 53.7 per cent. of scarlet fever patients in Munich. Goodall<sup>2</sup> made a bacteriological examination of 87 cases of scarlet fever admitted into the Eastern Fever Hospital. The examination was made immediately after admission. In 6 diphtheria bacilli of the long variety were found, and in 13 bacilli of the short variety. The cases with bacilli were mild, and would not have been recognized clinically as diphtheria. One of the cases with the long variety of bacillus subsequently developed post-scarlatinal diphtheria, and so did 4 other cases in whom no bacilli were found on admission. Sverensen<sup>3</sup> examined 1,547 scarlet fever patients on admission into the fever hospital at Copenhagen, and found diphtheria bacilli in 2.5 per cent. Beggs<sup>4</sup> found diphtheria bacilli in the throats of 51 out of 140 cases of scarlet fever examined, but the examination was made at various periods after the admission of these patients.

82