

DIPHTHERIA AS A SEPTIC DISEASE.

WITH the present prevalence over all parts of the American continent of this disease, which has been well termed "the world's pest," the attention of practitioners everywhere is almost daily being directed to its real nature, a question which has been matter for discussion since the early part of the present century, and which is not at present by any means settled. Since the apparently well-supported evidence of there being present in the diphtheritic membrane a bacillus, whose characters have been described by Loeffler, the disease has been generally accepted as belonging to the zymotics, and its contagious nature lends the strongest countenance to this theory. But the very varied circumstances under which the disease is known to occur, and its almost constant occurrence, when not by direct contact, in those situations where decomposing organic matter, both of vegetable and animal origin, is present, inclines many to the opinion that, though it be true that a specific bacillus has been proven by experimental inoculation to be present in membrane, yet there are probably several species of micro-organisms which, finding a *nidus* outside the body in decomposing organic matter, produce, when received into the system, an exudation in mucous membranes, commonly called diphtheria. The often slight exudation, with mild constitutional symptoms, which is in Ontario so frequently seen in cases of sore throat, its brief life, and the short period of constitutional disturbance has, however, led, and we have no doubt will so continue, to constant discussion as to whether or not such cases are diphtheria.

The old question as to whether cases of laryngitis with exudation where no faucial exudation is present are diphtheritic has apparently been settled in the affirmative, and still more generally it is agreed that in young children there often is diphtheritic exudation present in the post-nasal region when no faucial exudation on ordinary examination can be recognized. That other condition where constitutional disturbance with the peculiar congestion characteristic of the fauces, tonsils, uvula, etc., but without exudation is present, is at present a *questio vexata* in the minds of many who, from either limited experience or the general description which in text-books has in the past been given of diphtheria, are accustomed to consider the disease rather as of a local than a con-

stitutional character. The matter is one, however, of the greatest practical importance, whether viewed from the preventive or the curative standpoint. Holding as we do strongly to the belief in the constitutional character of diphtheria, it appears to us that no satisfactory knowledge of the disease will ever be obtained until it is everywhere recognised that diphtheria is a septic disease. In an article on "Putrefaction in Relation to Infectious Diseases," appearing elsewhere in this number, is set forth in an admirable manner the most recent views on the subject of zymotic diseases, and applying the argument therein set forth we are in a position to understand that, whether from the growth of bacteria in the buccal mucous tract, or in the intestinal mucous membrane, the presence of the poisonous substances, ptomaines, elaborated by them, must naturally, where of a pathogenic character, produce specific effects when introduced into the blood. The process is practically the same as where a sapremia is produced by the absorption of the products of putrefaction in gangrenous tissue, due to frost-bite or other destructive process. The fact that the diphtheritic exudation appears most commonly on the buccal mucous membrane is illustrative simply of the well-known law of growth, by which different vegetable micro-organisms by a selective process develop most rapidly in the soil most suited to them; but the well-known instances where in severe cases the diphtheritic exudation appears in the larynx and bronchi, in the post-nasal and even in the anterior nares, and on abraded surfaces, as seen in tracheotomy cases, make it abundantly plain that the disease is a true septicaemia with local manifestations. But the condition which in practice becomes the most difficult to deal with is in such a case as the following: A child, after a day or two, sickens and shows some evidence of sore-throat; the tongue on examination is found to be coated, the tonsils swollen and congested, sometimes with a cheesy exudation at first seen in mouths of the granular follicles, apparently amygdaloid tonsillitis. This exudate, on further examination, however, will be found often to have extended somewhat, appearing in the *subul* formed by the pillars of the fauces. Here it may persist several days. In other instances, notably in children of two or three years, little will be seen but a thickish mucus, of a partially organized character, or one in which cellular elements pre-