

ON THE FREQUENCY AND DISTRIBUTION OF GOITRE IN THE ISLAND OF MONTREAL.

BY

GEORGE A. CHARLTON, M.D.,

Resident Physician to the Hospital for Contagious Diseases, Montreal.

All are familiar with the existence of goitrous regions in the Old World, with the prevalence of goitre in Switzerland for example, in certain parts of France, in Norway and also in certain districts of Germany, and with its so very frequent occurrence in the Peat District in England, that there, in the Old Country, it is still spoken of as "the Derbyshire neck." Certain writers have described fully these endemic occurrences in Europe, bringing forward various theories in explanation. In Switzerland, Bircher¹ has advanced the geological theory, *viz.*, that goitre is limited to districts overlying Silurian and Devonian formations, and to the Carboniferous and Permian deposits. Johannessen² has reached practically the same conclusions in regard to Norway. Berry³ in England, finds goitre only where there are chalk and sandstones of Triassic development, while it is absent where there are eruptive rocks. Kocher has brought forward evidence to show that the water habitually drunk has to do with the development of goitre and that, therefore, Bircher's results are not wholly correct. As to what in the water leads to the disease, observations have so far given negative results. Lustig and Carle⁴ carried out certain experiments with animals, the results of which suggest that the water in so-called goitrous districts contains infective agents which are capable of inducing the disease in persons and animals hitherto free from the disease. Hirsch, A. von Humboldt, and Virchow held long years ago that some thing of a miasmatic nature must lead to the development of the condition. Still, an analysis of the numerous records of bacteriological examinations of goitre waters reveals nothing but what is most unsatisfactory. Lustig and Carle indicate a bacillus which liquefies gelatine as being constantly present in the goitrous waters examined by them; Kocher points out that goitre waters are distinguishable from non-goitrous in Switzerland by the relative abundance of bacteria which they contain. Klebs found certain infusoria, Bircher a diatom together