

PREFACE.

The chief part of the information upon which this report is based was gathered during the field season of 1913, some of it in 1912. In addition to direct observations, information has been obtained at second hand from a great many people, more especially within the City of Montreal. I wish to express my thanks to the many construction engineers and contractors, who have willingly proffered such information as to the thickness and character of the drift overlying bed-rock, as they had gathered in the past, and which was obtainable in no other way. To the courtesy of the city officials of Montreal, Westmount, Outremont, and Maisonneuve, my best thanks are due for supplying such information, and also details of bench-marks.

Dr. F. D. Adams placed in my hands notes taken from time to time during the past years; Messrs. Milton Hersey Co. Ltd., have allowed me to make use of their report on the deposits at the filtration plant, which was in course of construction in 1913; Mr. J. Keele of the Geological Survey has sent to me his report on the physical characters of the Leda clay at Lakeside; and Mr. E. Ardley has given me much information regarding exposures, now no longer to be seen; to these gentlemen my warmest thanks are tendered for their help.

All work on the Pleistocene of the St. Lawrence valley must, of necessity, be based upon the extensive and excellent work done by Sir J. W. Dawson. He it was who established the main subdivisions of the Pleistocene, and who made the study of the fauna of the Canadian Pleistocene especially his own field. The faunal lists for the Leda clay and Saxicava sand have been taken from his 'Canadian Ice Age,' and only two or three additions have to be made to the lists obtained from that source.

With regard to the beach elevations, it may be stated that they were obtained by levelling from and to city or railway bench-marks, using a hand-level mounted on a tripod. Care was taken to have the distances covered as short as possible and to use only such bench-marks as had been checked within the last few years. The checks on the levels thus run were