

portions of the island than it is in the western, while it is absent or nearly so from the central parishes of Sault-au-Recollet and St. Laurent. In other words and to be more definite, proceeding eastward from the city of Montreal I found that at Longue Pointe and Pointe aux Trembles 1.5 per cent., or 15 per 1,000 of the population, are afflicted with goitre. At the opposite side of the island in the parish of Riviere des Prairies, the condition is present in 2 per cent. of the inhabitants; while in the parish of St. Leonard lying wholly inland between the parishes of Pointe aux Trembles and Riviere des Prairies, 4 per cent., or 40 per 1,000, of the people are goitrous. Dr. Deschatelets informed me that years ago, when the inhabitants of Pointe aux Trembles depended almost entirely upon wells for their water supply, goitre was quite as prevalent there as in the internal parish of St. Leonard. Afterwards a system of water pipes was introduced in the village of Pointe-aux-Trembles and the water supply was derived from the river St. Lawrence, then goitre rapidly decreased in frequency until it fell to the present ratio of 1.5 per cent. No falling off in frequency has been noted in the same interval in the parish of St. Leonard. In all other respects save the water supply the conditions surrounding the people of both parishes are, and have been, the same.

Passing now to the back of the island, to the parishes of Sault-aux-Recollet and St. Laurent, in the former goitre is almost unknown, while in the latter the ratio is less than one per cent. of the population. This negative district extends for several miles to the westward along the Riviere des Prairies as far as the parish of St. Genevieve. Here again goitre is prevalent in the eastern portion to the extent of 1.5 per cent. of the population becoming rapidly more frequent towards the western confines of the parish. On the south shore of the island in the parish of Cote St. Paul, immediately to the west of the City of Montreal, we find that 3 per cent. of the population are goitrous. Passing up the river, the neighbouring parish of Lachine shows an average ratio of 3.5 per cent.; further up in the parish of Valois this ratio has increased to 4.5 per cent.; and the condition becomes steadily more frequent until, in the parish of St. Annes de Bellevue at the western extremity of the island, it has risen to 7 per cent. of the entire population. Thus, in passing from the east to the west along the south shore of the island, exclusive of the city of Montreal, a gradual increase in ratio has been encountered from 1.5 per cent. to 7 per cent. of the population.

The question naturally arises. What is the explanation of this variation in frequency? Does it bear any relationship to (1) general