

Lake Temiscaming, the level of which at high water is five hundred and ninety-six feet above the sea. Perhaps the most remarkable thing about this clay is the scarcity of marine shells even where it is known to be far below the level reached by the sea during the Champlain subsidence. Marine fossils are recorded at Montreal at a height of five hundred and sixty feet, at Smith's Falls four hundred and twenty feet, near Galetta four hundred and seventy-five and Chelsea four hundred and twenty-five, so that the land in this valley during the time the Leda clay was laid down must have been six hundred feet lower than at present. We can therefore, I think, fairly assume that the stratified clays which are not more than five hundred or six hundred feet above sea level are marine. The marked resemblance of the clays on the higher levels to those on the lower, where fossils are found, is strong corroborative evidence of a similar origin. Even at the lower levels fossils are by no means common in this clay. In the city of Ottawa where excavations are frequently made and large quantities of clay are thrown out, I have seen fossils in two places only. At Mohr's Corners, about a mile from the village of Galetta, there is a sand terrace abounding in marine shells. Underlying the sand there is a bed of this clay, well stratified, twenty to thirty feet deep, and although there was a section ten feet deep on the roadside for a quarter of a mile, a careful examination revealed no fossils. Sir J. W. Dawson says: "Where the Leda clay is thick and well developed it admits of sub-division into a lower Leda clay, unfossiliferous or with only shells of *Leda glacialis* and *Macoma Grænländica*, and an upper Leda clay, usually more sandy and holding a rich boreal fauna identical with that of the northern part of the Gulf of St. Lawrence at present."* Mr. F. B. Taylor in a recent article says "Near the city of Ottawa the upper limit

* Canadian Ice Age, p. 60.