

about 500 feet is by a succession of terraces, composed chiefly of beds of sand. I consider the whole of these strata to be upper members of the same deposit, doubtless all marine, although no shells have yet been met with at a greater height than forty feet above the lake.

At Burlington, in Vermont, on the opposite or east side of Lake Champlain, the drift consists chiefly of clay, laminated and micaceous, or unlaminated and without mica. In this clay, argillaceous concretions of curious forms occur. In some places beds of brick earth, sand, and gravel, are associated, pebbles and boulders being scattered sparingly through the loam. Professor Benedict pointed out to me several spots where this loam behind the town, at the height of thirty and forty feet above the lake, contains shells of the *Tellina grænlandica*, without any other species. In like manner, I afterwards observed this *Tellina* in a recent state, on the shores of the Bay of Fundy, in Nova Scotia, strewn for miles along the beach unmixed with other species. At the Falls of the Winouski or Onion River, near Burlington, the boulder clay attains a thickness of 200 feet. Although in great part marly and calcareous, it is barren of shells. There has evidently been great denudation of the drift around Lake Champlain, and I conceive that most of the large boulders of granite, syenite, and sandstone, which now rest upon the surface, may once have been dispersed through the mass. Nothing, however, is clearer than that here, as well as in the valley of the St. Lawrence, between Kingston and Quebec, the marine shells of recent species are referable to the