

rugosa. In the midst of the shells, I found a single isolated boulder of gneiss, six inches in diameter. The *Mytilus*, although so abundant in this bed, is by no means of common occurrence in the drift of Lower Canada. The colour of the layers containing the *Mytilus* reminded me of those purple marls which I had seen in the boulder formation of Sweden, produced by the decomposition of countless numbers of these same shells.*

At the Côte St. Pierre, near the house of Mr. Brodie, forty feet above the section in the road last mentioned, and about ninety feet above the river, gravelly beds appeared, in which the *Tellina grælandica* and *Mya arenaria* were abundant, retaining both valves; they were also accompanied by *Saxicava rugosa*. The shelf (*d, e*) containing these remains is intersected here and there by deep narrow gullies, one of which terminates at the Tanneries. In the channels of the small streams draining these gullies I found fossil shells, washed out of the clay and sand, among which were a new species of *Astarte* (*A. Laurentiana*), *Saxicava rugosa*, and *Tellina grælandica*, yet nowhere could I see a single shell *in situ*. At some points, the upper beds of sand and gravel, at the same level as the shelly beds with *Mytilus*, before alluded to, become very coarse, and contain boulders of gneiss and syenite three feet in diameter, showing the inseparable connection between the fossils and the ordinary boulder formation of Canada.

As I could find no organic remains at any points higher than the terrace *d, e*, *fig. 13*, or none that were

* Phil. Trans. 1835, p. 7.