

The depressions between these ridges are occupied with Post-pliocene deposits, not so regular and uniform in their arrangement as the corresponding beds in the great plains higher up the St. Lawrence, but still presenting a more or less definite order of succession. The oldest member of the deposit is a tough boulder-clay, its cement formed of gray or reddish mud derived from the waste of the shales of the Quebec group, and the stones and boulders with which it is filled partly derived from the harder members of that group, and partly from the Laurentian hills on the opposite or northern side of the river, here more than twenty miles distant. The thickness of this boulder-clay is, no doubt, very variable, and could not be ascertained in the neighborhood of Cacouna; but at Ile Verte it forms a terrace fifty feet in height.

Above the boulder-clay, where it has not been bared by denudation, there occurs a dark gray, soft, sandy clay, containing numerous boulders, and above this several feet of stratified sandy clay without boulders; while on the sides of the ridges, and at some places near the present shore, there are beds and terraces of sand and gravel, constituting old shingle beaches apparently much more recent than the other deposits.

All these deposits are more or less fossiliferous. The lower boulder-clay contains large and fine specimens of *Leda truncata* and other deep-water and mud-dwelling shells, with the valves attached. The upper boulder-clay is remarkably rich in shells of numerous species; and its stones are covered with Polyzoa and great Acorn-shells (*Balanus Humeri*), sometimes two inches in diameter and three inches high. The stratified gravel holds a few littoral and sub-littoral shells, which also occur in some places in the more recent gravel. On the surface of some of the terraces are considerable deposits of large shells of *Mya truncata*; but these are modern, and are the 'kitchen-middens' of the Indians, who in former times encamped here.

Numbers of Post-pliocene shells may be picked up along the shores of the two little bays between Cacouna and Rivière-du-Loup; but I found the most prolific locality to be on the banks of a little stream called the Petite Rivière-du-Loup, which runs between the ridge behind Cacouna and that of Mount Pilote, and empties into the bay between Rivière-du-Loup and the pier. In these localities I collected eighty-four species, about thirty-six of them not previously published as occurring in the Post-pliocene of Canada. A list of these fossils is appended to this paper; and