

In Canada, in the Pleistocene beds known as the Leda clays, intervening between the lower boulder clay and the Saxicava sand, which also holds boulders, there are beds holding fossil plants, in some places intermixed with sea-shells and bones of marine fishes, showing that they were drifted into the sea at a time of submergence. These remains are boreal rather than arctic in character, and with the remains of drift-wood often found in the boulder deposits serve to indicate that there were at all times oases of hardy life in the glacial deserts, just as we find these in polar lands at the present day. I condense from a paper on these plants* the following facts, with a few additional notes :

The importance of all information bearing on the temperature of the Post-pliocene period invests with much interest the study of the land-plants preserved in deposits of this age. Unfortunately, these are few in number, and often not well preserved. In Canada, though fragments of the woody parts of plants occasionally occur in the marine clays and sands, there is only one locality which has afforded any considerable quantity of remains of their more perishable parts. This is the well-known deposit of Leda clay at Green's Creek, on the Ottawa, celebrated for the perfection in which the skeletons of the capelin and other fishes are preserved in the calcareous nodules imbedded in the clay. In similar nodules, contained apparently in a layer somewhat lower than that holding the ichthyolites, remains of land-plants are somewhat abundant, and, from their association with shells of *Leda glacialis*, seem to have been washed down from the land into deep water. The circumstances would seem to have been not dissimilar from those at present existing in the northeast arm of Gaspé Basin, where I have dredged from mud now being deposited in deep water, living

* "Canadian Naturalist," 1866.