Central America, both in the Atlantic and Pacific Oceans, hardly a single haul of the dredge failing to bring up much vegetable matter, and frequently logs, branches, twigs, seeds, leaves, and fruits.[303]

B. *Abysmal* or *Pelagic.*[304]—Passing over at present the organic deposits which form so characteristic a feature on the floor of the deeper and more open parts of the ocean, we come to certain red and gray clays found at depths of more than 2000 fathoms, down to the bottoms of the deepest abysses. These, by far the most widespread of oceanic deposits,[305] consist of exceedingly fine clay, colored sometimes red by iron-oxide, sometimes of a chocolate tint from manganese oxide, with grains of augite, felspar, and other volcanic minerals, pieces of palagonite and pumice, nodules of peroxide of manganese, and other mineral substances, together with *Foraminifera*, and in some regions a large proportion of siliceous *Radiolaria*. These clays result from the decomposition of pumice and fine volcanic dust, transported from volcanic islands into mid-ocean, or from the accumulation of the detritus of submarine eruptions. The extreme slowness of deposit is strikingly brought out in the tracts of sea-floor furthest removed from land. From these localities great numbers of sharks' teeth, with ear-bones and other bones of whales, were dredged up in the "Challenger" expedition—some of

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303 "Three Cruises of the 'Blake,'" and Bull. Mus. Comp. Zool. xxiii. No. 1, 1892, p. 11.

304 For information regarding the fauna and deposits of the ocean-abysses, besides the works quoted on page 761, note 293, consult the various writings of Prof. A. Agassiz, especially his "Three Cruises of the 'Blake,'" and papers in Bull. Mus. Comp. Zool. xxi. No. 4, and xxxiii. No. 1; also Haeckel's "Plankton-Studien," 1890.

305 They are estimated to cover upward of 50,000,000 square miles of the sea-floor. Murray and Irvine, Proc. Roy. Soc. Edin. xvii. 1889, p. 82.