

currents sweep along a coast yielding much detritus, long bars or shoals may form parallel with the shore. On these the shingle and sand are driven coastwise in the direction of the prevalent current.²⁹⁶ They not infrequently accumulate as long barriers, completely protecting the shores from which they are separated by a channel or lagoon of fresh or brackish water (p. 675). Into this lagoon sediment is washed from the land and aquatic vegetation takes root there, until not infrequently a salt marsh or swamp is formed. Extensive accumulations of this kind are to be found along the eastern coast of the United States.²⁹⁷

Among the deposits cast ashore by the sea, not the least interesting are the masses of driftwood which, carried down by rivers, are borne by marine currents, sometimes for hundreds of miles, and thrown down in huge accumulations in protected bays. It is in the Arctic seas that this phenomenon obtains its greatest development. Prodigious quantities of terrestrial vegetation are swept by the Siberian rivers into these waters and are carried westward until stranded in sheltered bays of the coast and of the islands. Every shoal-coast of Spitzbergen presents examples of these heaps of driftwood.²⁹⁸

β. Infra-Littoral and Deeper-Water Deposits.—These extend from below low-water mark to a depth of sometimes as much as 2000 fathoms, and reach a distance from land varying up to 200 miles or even more. Near land, and in comparatively shallow water, they consist of banks or sheets of

²⁹⁶ See the authorities cited on p. 756, regarding the Chesil Bank.

²⁹⁷ N. S. Shaler on sea-coast swamps, 6th Ann. Rep. U. S. Geol. Surv. 1884-85, p. 353. F. J. H. Merrill on barrier beaches of Atlantic coast, Popular Science Monthly, Oct. 1890.

²⁹⁸ Nordenskiöld's "Vega Expedition." Petermann, Geograph. Mittheil. Ergänzungsheft, No. 16, where a map of these accumulations on the Arctic coasts is given.