

time accumulations, that of the Nile, that the Greeks gave the name delta, from its resemblance to their letter  $\Delta$ , with the apex pointing up the river, and the base fronting the sea. This shape being the common one in all such alluvial deposits at river mouths, the term delta has become their general designation. A delta consists of successive layers of detritus, brought down from the land and spread out at the mouth of a river, until they reach the surface, and then, partly by growth of vegetation and partly by flooding of the river, form a plain, of which the inner and higher portion comes eventually to be above the reach of floods. Large quantities of driftwood are often carried down, and bodies of animals are swept off to be buried in the delta, or even to be floated out to sea. Hence, in deposits formed at the mouths of rivers, we may always expect to find terrestrial organic remains.

A delta does not necessarily form at every river-mouth, even where there is plenty of sediment. In particular, where the coast-line on either side is lofty, and the water deep, or where the coast is swept by powerful tidal currents, there is no delta.<sup>180</sup> In some cases, too, the sediment spreads out over the sea-bottom without being allowed by the sea to build itself up into land, as happens at the mouths of some of the rivers in the northwest of France. Considerable influence may be exerted by tides and currents in arresting or facilitating the spread of sediment over the sea-floor. The deltas of the Rhone, Nile, Tiber, and Danube are formed in tideless or nearly tideless seas.<sup>181</sup>

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<sup>180</sup> Consult Admiral Spratt's memoir, "An investigation of the effect of the prevailing wave influence on the Nile's deposit," folio, London, 1859.

<sup>181</sup> For a discussion on non-tidal rivers, see *Min. Proc. Inst. Civ. Engin.* lxxxii., 1885, pp. 2-68, where information is given about the Tiber and some other rivers.