

*Marine Deposits.*

1. Deep-Sea Deposits, beyond 100 fathoms.	}	Red Clay.	}	I. Pelagic Deposits, formed in deep water removed from land.
		Radiolarian Ooze.		
		Diatom Ooze.		
		Globigerina Ooze.		
		Pteropod Ooze.		
2. Shallow-Water Deposits, between low-water mark and 100 fathoms.	}	Blue Mud.	}	II. Terrigenous Deposits, formed in deep and shallow water close to land masses.
		Red Mud.		
		Green Mud.		
		Volcanic Mud.		
		Coral Mud.		
3. Littoral Deposits, between high and low water marks.	}	Sands, gravels, muds, &c.	}	
		Sands, gravels, muds, &c.		

In the above classification of Marine Deposits it will be observed that those forming in the shallow-water and littoral zones surrounding the land masses are not included in the term Deep-Sea Deposits, and in consequence the deposits of these zones do not fall to be considered in detail in this Report. Shallow-water and littoral formations had rounded, siliceous, calcareous, &c. The same terms have been applied also to Deep-Sea Deposits, with the addition of further modifying expressions. Murray in his preliminary report adopted various new names for the deep-sea deposits collected by the Challenger Expedition, and these were more fully defined in a subsequent paper by Murray and Renard. Schmelck applies the following terms to the deeper deposits of the Norwegian Sea—*Biloculina Clay*, *Transition Clay*, and *Grey Clay*; and to the shallower deposits—*Rhabdammina Clay* and *Volcanic Clay*. Delesse used the terms—*Calcaire tendre ou crayeux*, *Vase*, *Vase sableuse*, *Vase calcaire*, *Sable vaseux*, *Vase graveleuse*, *Argile*, *Gravier*, &c. Agassiz makes use of the terms—*Volcanic Shore Deposit*, *Siliceous Shore Deposit*, *Coral Ooze*, *Clay*, *Modified Globigerina Ooze*, *Modified Pteropod Ooze*, *Fine Telluric Silt*. (See Murray, *Proc. Roy. Soc.*, vol. xxiv. pp. 471-532, 1876; Murray and Renard, *Proc. Roy. Soc. Edin.*, vol. xii. pp. 495-529, 1884; Schmelck, *Norwegian North Atlantic Expedition, Chemistry*, part ix., Christiania, 1882; Delesse, *Lithologie du Fond des Mers*, 2 vols. and atlas, Paris, 1871; Agassiz, *Three Cruises of the "Blake,"* 2 vols., Boston and New York, 1888; Issel, *Note geologiche sugli alti fondi marini*, *Bull. Soc. belge de Geologie*, etc., 1888, p. 19; Thoulet, *Océanographie (Statique)*, Paris, 1890; Gümbel, *Die mineralogisch-geologische Beschaffenheit der auf der Forschungsreise S.M.S. "Gazelle" gesammelt Meeresgrund-Ablagerungen*, *Forschungsreise S.M.S. Gazelle*, Theil ii., Physik und Chemie, Berlin, 1890.) Nearly all the above terms are more or less indefinite and uncertain in their application, and, with the exception of our own nomenclature, no systematic attempt has been made to define the sense in which they should be used; the same is the case with other terms not here referred to. The classification which we have adopted was suggested some years ago in our joint paper, and generally accepted in the principal text-books of geology (Geikie, de Lapparent, Credner, etc.); this nomenclature is by no means all that could be desired as to the choice of the terms employed, for sometimes these indicate the composition of the deposit, sometimes only the colour. We believe, however, that it is better, in the present state of our knowledge, to retain terms now in use than to introduce new ones, to which it would be difficult to attach more definite meanings. With the help of the definitions given in this work future observers should have no difficulty in recognising any specimen from the deep sea as belonging to one or other of the types named in the above classification and described in detail in this chapter.