tances from the land. The distance will depend on the size, form, and specific gravity of the sediment on the one hand, and on the velocity and transporting power of the marine current on the other. Babbage estimated that if, from the mouth of a river 100 feet deep, suspended limestone mud, of different degrees of fineness, were discharged into a sea having a uniform depth of 1000 feet over a great extent, four varieties of silt, falling respectively through 10, 8, 5, and 4 feet of water per hour, would be distributed as in the following table:[283]

No.	Velocity of fall per hour	Nearest distance of deposit to river	Length of deposit	Greatest distance of deposit from river
	feet	miles	miles	miles
1.	10	180	20	200
2.	8	225	25	250
3.	5	360	40	400
4.	4	450	50	500

It must be borne in mind, however, that mechanical sediment sinks faster in salt than in fresh water.[284] The chief part of the fine mud in the layer of river-water, which floats for a time on the salter and heavier sea-water, sinks to the bottom as soon as the two waters commingle. It has been ascertained, nevertheless, by direct observation that an appreciable amount of extremely fine clay is present in ocean-water even far away from land, the proportion so transported depending not only on the size and weight of the particles, but on the temperature and to a less extent on the salinity, being greater the lower the temperature and salinity. In specimens of surface-water taken from various oceans the

[283] Q. J. Geol. Soc. xii. 368.
[284] See ante, pp. 646, 673, and authorities there cited.