found many evidences leading to the conclusion that there had been enormous denudation of Jurassic deposits in certain areas. These few examples suffice to show how cautiously one must use the present disposition of geological formations as a basis for the reconstruction of maps portraying the distribution of continent and ocean in past geological epochs. It is almost impossible in the case of the older sedimentary deposits to ascertain the amount of denudation they have incurred in past ages.

Mechanical Sediments in the Ocean.—In the eighteenth century, De Maillet had investigated the deposition of sediment on the floor of the ocean. Early in the following century, the writings of De la Beche, Lyell, and Élie de Beaumont provided able chapters on sedimentation, and explained the deposition of detritus over alluvial tracts, and on the floor of fresh-water lakes, inland seas, or the ocean. The observations of these authors were made chiefly on the English, French, and Mediterranean coasts.

A classical work on the subject, *The Lithology of the Sea-Floor*, was published in 1871 by the engineer and geologist, M. Delesse. Beginning with a full exposition of the origin and constitution of the material transported from Continent to Ocean, Delesse next describes the sediments throughout the whole sea margin of France, and then depicts those in the other seas of Europe and along the coasts of North and Central America. Three coloured maps show the distribution and the petrographical character of the marine sediments in these areas, and illustrate for the first time the great variety in the nature of the deposit on one and the same coast. Delesse, applying his knowledge of the modern formations of sediments, was enabled to reproduce in cartographical form the probable distribution of land and sea in France during the Silurian, Triassic, Liassic, Eocene, and Pliocene periods. Rough sketches of a similar kind had been previously prepared by Élie de Beaumont, by Lyell and Dana. Those of Delesse have been a model for all subsequent efforts in this direction, and have never been surpassed. The Atlas by Canu, published in 1895, provides more geological detail, but the maps are less clear.

While the work of Delesse comprises all the important facts known up to the year 1871 about the constitution of littoral