

of the ice-foot also, an enormous quantity of earth and stones is every year borne away from the shore on the disrupted ice, and is strewn over the floor of the sounds, bays, and channels.

(4) **Reproduction.**—The sea, being the receptacle for the material worn away from the land, must receive and store up in its depths all that vast amount of detritus by the removal of which the level and contours of the land are in the course of time so greatly changed. The deposits which take place within the area covered by the sea may be divided into two groups—the inorganic and organic. It is the former with which we have at present to deal; the latter will be discussed with the other geological functions of plants and animals (see pp. 800, 807 *et seq.*). The inorganic deposits of the sea-floor are (i.) chemical and (ii.) mechanical.

(i.) Of **Chemical** deposits now forming on the sea-floor we know as yet very little. At the mouth of the Rhone a crystalline calcareous deposit accumulates, in which the débris of the sea-floor is enveloped. Bischof estimated that no precipitation of carbonate of lime could take place from sea-water until after $\frac{1}{2}$ of the water had evaporated.²⁹¹ No deposit of lime in the open sea is possible from concentration of sea-water. But the calcareous formation on the sea-bottom opposite rivers like the Rhone, if not the result of the precipitation of lime by plants or animals, may perhaps be explained by supposing that as the layer of river-water floats and thins out over the surface of the sea in warm weather with rapid evaporation, its comparatively large proportion of carbonate of lime may be partially precipitated. It has been observed near Nice, as well

²⁹¹ "Chem. Geol." i. p. 178.