favorable conditions for the accumulation of a thick mass of marine fossiliferous strata will arise when the area of deposit is undergoing a gradual subsidence. If the rate of depression and that of deposit be equal, or nearly so, the movement may conceivably continue for a vast period without producing any great apparent change in marine geography, and even without seriously affecting the distribution of life over the sea-floor within the area of subsidence. Hundreds or thousands of feet of sedimentary strata may conceivably be in this way heaped up round the continents, containing a fragmentary series of remains, chiefly forms of shallow-water life which had hard parts capable of preservation.

There can be little doubt that such has, in fact, been the history of the main mass of stratified formations in the earth's crust. These piles of marine strata have unquestionably been laid down for the most part in comparatively shallow water, within the area of deposit of terrestrial sediment. Their great depth seems only explicable by prolonged and repeated movements of subsidence, sometimes interrupted, however, as we know, by other movements of a contrary kind. These geographical changes affected at once the deposition of inorganic materials and the succession of organic forms. One series of strata is sometimes abruptly succeeded by another of a very different character, and we not uncommonly find a corresponding contrast between their respective organic contents.

It follows, from these conditions of sedimentation, that representatives of the abysmal deposits of the central oceans are not likely to be met with among the geological formations of past times. Thanks to the great work done by the "Challenger" Expedition, we know what are the leading characters of the accumulations now forming on the deeper