

From a comparison of the results of the dredgings made in recent years in all parts of the oceans, it is impossible to resist the conclusion that there is little in the character of the deep-sea deposits which finds a parallel among the marine geological formations visible to us on land. It is only among the comparatively shallow-water accumulations of the existing sea that we encounter obvious analogies to the older formations. And thus we reach, by another and a new approach, the conclusion which on other and very different grounds has been arrived at, viz. that the present continental axes have existed from the remotest times, and that the marine strata which constitute so large a portion of their present mass have been accumulated not as deep-water deposits, but in comparatively shallow water along their flanks or over their submerged ridges.³¹⁰

§ 7. DENUDATION AND DEPOSITION.—The results of the action of Air and Water upon Land³¹¹

It may be of advantage, before passing from the subject of the geological work of water, to consider the broad results achieved by the co-operation of all the forces by which the surface of the land is worn down. These results naturally group themselves under the two heads of Denudation and Deposition.

1. *Subaerial Denudation—the general lowering of land*

The true measure of denudation is to be sought in the amount of mineral matter removed from the surface of

³¹⁰ Proc. Roy. Geograph. Soc. July, 1879.

³¹¹ This section is mainly taken from an essay by the author, Trans. Geol. Soc. Glasgow, iii. p. 153. The subject has been discussed anew on the basis of more exact knowledge of the interior of the continents and the depths of the sea by Dr. John Murray, Scottish Geograph. Mag. 1887. See also a note by Mr. C. Davison, Geol. Mag. 1889, p. 409. A. De Lapparent, Bull. Soc. Geol. France, xviii. 1890, p. 351.