respect essentially different; I must persist in believing that our planet was greatly more plastic and yielding than in these later times; and that the molten abyss from which all the Plutonic rocks were derived,—that abyss to whose existence the earthquakes of the historic period and the recent volcanoes so significantly testify,—was enveloped by a crust comparatively thin. Like the thin ice of the earlier winter frosts, that yields under the too adventurous skater, it could not support great weights,—table-lands such as now exist, or mountain chains; and hence, apparently, the existence of vast swampy plains nearly level with the sea, and ever-recurring periods of subsidence, wherever a course of deposition had overloaded the surface. The yet further fact, that as we ascend into the middle and earlier Palæozoic periods, the traces of land become less and less frequent, until at length scarce a vestige of a terrestrial plant or animal occurs in entire formations, seems charged with a corroborative evi-I shall not say that in these primeval periods

## 'A shoreless ocean tumbled round the globe,'

for the terrestrial plants of the Silurians show that land existed in even the earliest ages in which, so far as the geologist knows, vitality was associated with matter; but it would seem that only a few insulated parts of the earth's surface had got their heads above water at the time. The thin and partially-consolidated crust could not bear the load of great continents; nor were the 'mountains yet settled, nor the hills brought forth.' It would seem that not until the Carboniferous ages did there exist a period in which the slowly-ripening planet could exhibit any very considerable breadth of land; and even then it seems to have been a land consisting of immense flats, unvaried, mayhap, by a single hill, in which dreary swamps, inhabited by doleful creatures, spread out on every hand for hundreds and thousands of miles, and a gigantic and monstrous vegetation