

back the history of the world to these myriads of centuries? Do they, by the extension of the period to infinity, explain how the 'Original' materials were created? But," he adds, "geologists are by no means agreed in their assumed geological periods! The so-called glacial period has been computed by some to be equal to about eighty-three thousand years, and by others at even as much as twelve hundred and eighty millions of years! Were we to ask for a *demonstrative proof* of any given deposit being more than four or five thousand years old, they could not give it. Where is Babylon, the glory of the kingdoms? Look at Thebes, and behold its colossal columns, statues, temples, obelisks, and palaces desolated; and yet those great cities flourished within the last three thousand years. Even Pompeii and Herculaneum were all but lost to history! What," he asks after these brief allusions to the past—"what, as a matter of fact, have geologists discovered, as regards the great terrestrial changes, more than was known to Pythagoras and the ancient philosophers who taught, two thousand three hundred and fifty years ago, 'that the surface of the earth was ever changing—solid land converted into sea, sea changed into dry land, marine shells lying far distant from the deep, valleys excavated by running water, and floods washing down hills into the sea?'"

In reference to the argument of the vast antiquity of the earth, founded on elevation of coasts at a given rate of upheaval, he adduces many facts to show that upheavals of equal extent have occurred almost within the memory of man. Two hundred and fifty years ago Sir Francis Drake, with his fleet, sailed into Albemarle Sound through Roanoke Outlet, which is now a sand-bank above the reach of the highest tides. Only seventy years ago it was navigable by vessels drawing twelve feet of water. The whole American coast, both on the Atlantic and Pacific, have undergone great changes within the last hundred years. The coast of South America has, in some places, been upheaved twenty feet in the last century; in others, a few hundred miles distant, it has been depressed to an equal extent. A transverse section from Rio Santa Cruz to the base of the Cordilleras, and another in the Rio Negro, in Patagonia, showed that the whole sedimentary series is of recent origin. Scattered over the whole at various heights above the sea, from thirteen hundred feet downwards, are found recent shells of *littoral* species of the neighbouring coast—denoting upheavals which might have been effected during the last three thousand years.

Coming nearer home, he shows that in 1538 the whole coast of Pozzuoli, near Naples, was raised twenty feet in a single night. Then, with regard to more compact crystalline or semi-crystalline