

and are thus intimately related to the physical geography of the time in which we live.

Thus ends my brief sketch of the geographical range of the geological formations of Britain, in which, for obvious reasons, I have largely directed the attention of the reader to the subject of the Physical Geography of the British area during the epochs in which they were deposited.

It took a long time, by analyses of the order of deposition of stratified rocks and their contents, for geologists to establish the facts and reasonings now generally accepted, and the chief advances have been made in the last eighty years, beginning with the work of Hutton and William Smith. Notices occur in the pages of Herodotus, Aristotle, Strabo, and Pliny, which scarcely amount to geological ideas, but which show that they were cognisant of the occurrence of shells far inland, and high on the mountains; and they also reasoned on the mutability of the relative levels and positions of sea and land.

In the fifth century, Orosius, a Spanish divine, recognised the true nature of fossil shells, but referred them to the Deluge; and this opinion for long prevailed among such men as Lister (1683), Burnet (1690), Woodward (1695), and many more besides. Others in Italy (Olivi, 1584, Scilla, 1670, &c.), France, and England (Dr. Plot, 1677), held the absurd opinion that they were 'sports of nature,' the result of the fermentation of a '*materia pinguis*, or fatty matter'; or that 'petrified shells were stones in disguise, formed by the influence of the heavenly bodies.' A few remarkable men held more correct views on the subject. In 1580, 'a potter,' says Fontenelle, 'who knew neither Latin