

*phyton linckii*, M. and T., from Mr. Gwyn Jeffreys' dredgings in 1870. Deep-sea forms dredged round our coast identical with northern species have been usually regarded as 'boreal outliers' (Forbes), or at all events as species which have extended their distribution from northern centres. This idea probably arose in a great measure from their having been discovered and first described in Scandinavia. We actually know nothing about their centres of distribution; all we know of them is that they are the inhabitants of an enormously extended zone of special thermal conditions, which 'crops out,' as it were, or rather comes within range of the ordinary means of observation, off the coasts of Scandinavia.

Edward Forbes pointed out long ago the kind of inverted analogy which exists between the distribution of land animals and plants and that of the fauna and flora of the sea. In the case of the land, while at the level of the sea there is, in temperate and tropical regions, a luxuriant vegetation with a correspondingly numerous fauna, as we ascend the slope of a mountain range the conditions gradually become more severe; species after species belonging to the more fortunate plains beneath disappear, and are replaced by others whose representatives are only to be found on other mountain ridges, or on the shores of an arctic sea. In the ocean, on the other hand, there is along the shore line and within the first few fathoms, a rich and varied flora and fauna, which participates and sympathises in all the circumstances of climate which affect the inhabitants of the land. As we descend, the conditions gradually become more rigorous, the temperature falls, and alterations of temperature are less felt.