

Let us add, to remove any remaining doubts, that in the basin of a modern European sea—the Baltic—a curious assemblage of phenomena, bearing on the question, is now in operation. The bed and coast-line of the Baltic continue slowly but unceasingly to rise, and have done so for several centuries, in consequence of the constant deposit which takes place of calcareous shells, added to the natural accumulations of sand and mud. The Baltic Sea will certainly be filled up in time by these deposits, and this modern phenomenon, which we find in progress, so to speak, brings directly under our observation an explanation of the manner in which the cretaceous rocks were produced in the ancient world, more especially when taken in connection with another branch of the same subject to which Sir Charles Lyell called attention, in an address to the Geological Society. It appears that just as the northern part of the Scandinavian continent is now rising, and while the middle part south of Stockholm remains unmoved, the southern extremity in Scania is sinking, or at least has sunk, within the historic period; from which he argues that there may have been a slow upheaval in one region, while the adjoining one was stationary, or in course of submergence.

After these explanations as to the manner in which the cretaceous rocks were formed, let us examine into the state of animal and vegetable life during this important period in the earth's history.

The vegetable kingdom of this period forms an introduction to the vegetation of the present time. Placed at the close of the Secondary epoch, this vegetation prepares us for transition, as it were, to the vegetation of the Tertiary epoch, which, as we shall see, has a great affinity with that of our own times.

The landscapes of the ancient world have hitherto shown us some species of plants of forms strange and little known, which are now extinct. But during the period whose history we are tracing, the vegetable kingdom begins to fashion itself in a less mysterious manner; Palms appear, and among the regular species we recognise some which differ little from those of the tropics of our days. The dicotyledons increase slightly in number amid Ferns and Cycads, which have lost much of their importance in numbers and size; we observe an obvious increase in the dicotyledons of our own temperate climate, such as the alder, the wych-elm, the maple, and the walnut, &c.

“As we retire from the times of the primitive creation,” says Lecoq, “and slowly approach those of our own epoch, the sediments seem to withdraw themselves from the polar regions and restrict themselves to the temperate or equatorial zones. The great