to the Lycopodiaceæ and Thyphaceæ, the *Ætheophyllum stipulare*, Brongn., and the curious *Schizoneura paradoxa*, Schimp. Thus we can trace the commencement of the reign of the Dicotyledons with naked seeds, which afterwards become so widely disseminated, in a few Angiosperms, composed principally of two families, the Conifers and Cycadeaceæ, still represented in the existing vegetation. The former, very abundant at first, associated themselves with the cellular Cryptogams, which still abound, although they are decreasing, then with the Cycadeaceæ, which present themselves slowly, but will soon be observed to take a large part in the brilliant harmonies of the vegetable kingdom."

The engraving at page 191 (PLATE XIII.) gives an idealised picture of the plants and animals of the period. The reader must imagine himself transported to the shores of the Muschelkalk sea at a moment when its waves are agitated by a violent but passing storm. The reflux of the tide exposes some of the aquatic animals of the period. Some fine Encrinites are seen, with their long flexible stems, and a few Mytili and Terebratulæ. The Reptile which occupies the rocks, and prepares to throw itself on its prey, is the *Nothosaurus*. Not far from it are other reptiles, its congeners, but of a smaller species. Upon the dune on the shore is a fine group of the trees of the period, that is, of *Haidingeras*, with large trunks, with drooping branches and foliage, of which the cedars of our own age give some idea. The elegant *Voltzias* are seen in the second plane of this curtain of verdure. The Reptiles which lived in these primitive forests, and which would give to it so strange a character, are represented by the *Labyrinthodon*, which descends towards the sea on the right, leaving upon the sandy shore those curious tracks which have been so wonderfully preserved to our days.

The footprints of the reptilian animals of this period prove that they walked over moist surfaces; and, if these surfaces had been simply left by a retiring tide, they would generally have been obliterated by the returning flood, in the same manner that is seen every day on our own sandy shores. It seems more likely that the surfaces, on which fossil footprints are now found, were left bare by the summer evaporation of a lake; that these surfaces were afterwards dried by the sun, and the footprints hardened, so as to ensure their preservation, before the rising waters brought by flooded muddy rivers again submerged the low flat shores and deposited new layers of salt, just as they do at the present day round the Dead Sea and the Salt Lake of Utah.