

ference; enormous claws and toe bones have also been discovered. Mr. Mantell, in his interesting work, the "Fossils of Tilgate Forest," justly observes, "Were this thigh bone clothed with muscles and integuments of suitable proportions, where is the living animal that could rival this extremity of a lizard of the primitive ages of the world?"

Mr. Mantell concludes his "Illustrations of the Geology of Sussex" with the following interesting observations:—

"We cannot leave this subject without offering a few general remarks on the probable condition of the country, through which the waters flowed that deposited the strata of Tilgate Forest, and on the nature of its animal and vegetable productions. Whether it were an island or a continent, may not be determined; but that it was diversified by hill and valley, and enjoyed a climate of a higher temperature than any part of modern Europe, is more than probable. Several kinds of ferns appear to have constituted the immediate vegetable clothing of the soil: the elegant *Hymenopteris psilotoides*, which probably never attained a greater height than three or four feet, and the beautiful *Pecopteris reticulata*, of still lesser growth, being abundant every where. It is easy to conceive what would be the appearance of the valleys and plains covered with these plants, from that presented by modern tracts, where the common ferns so generally prevail. But the loftier vegetables were so entirely distinct from any that are now known to exist in European countries, that we seek in vain for any thing at all analogous without the tropics. The forests of *Clathrariæ* and *Endogenitæ*, (the plants of which, like some of the recent arborescent ferns, probably attained a height of thirty or forty feet,) must have borne a much greater resemblance to those of tropical regions, than to any that now occur in temperate climates. That the soil was of a sandy nature on the hills, and less elevated parts of the country, and argillaceous in the plains and marshes, may be inferred from the vegetable remains, and from the nature of the substances in which they are enclosed. Sand and clay every where prevail in the Hastings' strata; nor is it unworthy of remark, that the recent vegetables to which the fossil plants bear the greatest analogy, affect soils of this description. If we attempt to portray the animals of this ancient country, our description will possess more of the character of a romance than of a legitimate deduction from established facts. Turtles, of various kinds, must have been seen on the banks of its rivers or lakes, and groups of enormous crocodiles basking in the fens and shallows."

"The gigantic *Megalosaurus*, and yet more gigantic *Iguanodon*, to whom the groves of palms and arborescent ferns would be mere beds of reeds, must have been of such prodigious magnitude, that the existing animal creation presents us with no fit objects of comparison. Imagine an animal of the lizard tribe, three or four times as large as the largest crocodile, having jaws, with teeth equal in size