

formed. And the bulk to which, in the more extreme cases, they attained, appears to have been regulated, as in the higher mammals now, with reference to the force of gravity at the earth's surface. The Megatherium and the Mastodon, the Dinotherium and the extinct elephant, increased in bulk, in obedience to the laws of the specific constitution imparted to them at their creation; and these laws bore reference, in turn, to another law, — that law of gravity which determines that no creature which moves in air and treads the surface of the earth should exceed a certain weight or size. To very near the limits assigned by this law some of the ancient quadrupeds arose. It is even doubtful whether the Dinotherium, the most gigantic of mammals, may not have been, like the existing sea-lions and morses, mainly an aquatic quadruped; — an inference grounded on the circumstance that, in at least portions of its framework, it seems to have risen beyond these limits. Now, it does not seem wonderful that, with apparent reference to the point at which the gravity of bodies at the earth's surface *bisects* the conditions of texture and matter necessary to existence among the sub-aerial vertebrata, the *reptiles* of the Secondary periods should have grown up in some of their species and genera to the extreme size. A world of frogs, newts, and lizards would have borne stamped upon it the impress of a tame and miserable mediocrity, that would have harmonized ill with the extent of the earth's capabilities for supporting life on a large scale. There would be no principle of adaptation or rule of proportion maintained between an animal kingdom composed of so contemptible a group of beings, and either the dynamic laws under which matter exists on our planet, or the luxuriant vegetation which it bore during the Secondary ages. And such was not the character of the group which composed the