A very peculiar class of Vertebrate animals, long since extinct, and which appears to have lived only during the secondary epoch, is formed by the remarkable Seadragons (Halisauria, or Enaliosauria, also called Nexipoda, or Swimming-footed animals). These formidable animals of prey inhabited the mesolithic oceans in great numbers, and were of most peculiar forms, sometimes from thirty to forty feet in length. From many and excellently preserved fossil remains and impressions, both of the entire body of Sea-dragons as well as of single parts, we have become very accurately acquainted with the structure of their bodies. They are usually classed among Reptiles, whilst some anatomists have placed them in a much lower rank, as directly allied to Fish. Gegenbaur's recently published investigations, which place the structure of their limbs in a true light, have led to the surprising conclusion that the Sea-dragons form quite an isolated group, differing widely both from Reptiles and Amphibia as well as The skeleton of their four legs, which are from Fish. transformed into short, broad, paddling fins (like those of fish and whales) furnishes us with a clear proof that the Halisauria branched off from the main-stock of Vertebrata at an earlier period than the Amphibia. For Amphibia, as well as the three higher classes of Vertebrata, are all derived from a common primary form, which possessed only five toes or fingers on each leg. But the Sea-dragons have (either distinctly developed or in a rudimentary condition as parts of the skeleton of the foot) more than five fingers, as have also the Selachians or Primæval fish. On the other hand, they breathed air through lungs, like the Dipneusta, although they always swam about in the sea. They,