

Scorpions are referred by Scudder to three species belonging to two genera.<sup>1</sup>

In the previous paper we have considered the mode of accumulation of Coal, and it may be useful here to note the light thrown on this subject by the Air-breathers of the coal formation and their mode of occurrence.

In no part of the world are the coal measures better developed, or more fully exposed, than in the coast sections of Nova Scotia and Cape Breton; and in these, throughout their whole thickness, no indication has been found of any of the marine fossils of the Lower Carboniferous Limestone. Abundant remains of fishes occur, but these may have frequented estuaries, streams and ponds, and the greater part of them are small ganoids which, like the modern *Lepidosteus* and *Amia*, may have been specially fitted by their semi-reptilian respiration, for the impure waters of swampy districts. Bivalve mollusks also abound; but these are all of the kinds to which I have given the generic name *Naiadites*, and Mr. Salter those of *Anthracomya* and *Anthracoptera*. These shells are all distinct from any known in the marine limestones. Their thin edentulous valves, their structure consisting of a wrinkled epidermis, a thin layer of prismatic shell and an inner layer of imperfectly pearly shell, all remind us of the Anodons and Unios. A slight notch in front concurs with their mode of occurrence in rendering it probable that, like mussels in modern estuaries, they attached themselves to floating or sunken timber. They are thus removed, both in structure and habit, from truly marine species; and may have been fresh-water or brackish-water mussels closely allied to modern Unios.

The crustaceans (*Eurypterus*, *Diplostylus*, *Cyprids*), and the

<sup>1</sup> *Mazonia Acadica*, and a second species of *Mazonia*, with fragments of a third species, generally distinct. Proceedings Royal Society of London, 1822.