The literature on fossil air-breathing Arthropods is, like that on the Crustacea, in recent years passing more and more into the hands of the zoologists, and it is in consequence vastly increasing in its intrinsic interest and merit. Myriopod remains were first discovered in the amber layers and gypsum series of Aix, and in 1845 were also found by Westwood in the British Carboniferous deposits; in 1854, C. L. Koch and J. C. Berendt published the first important monograph on the Crustacea, Myriopoda, Arachnida, and Apterida fauna contained in these deposits, and this was afterwards followed by the excellent works of W Dawson (1859), H. Woodward (1871), Peach, and Scudder.

Palæontologists have contributed a large number of memoirs descriptive of fossil insects. A handsome monograph by E. F. Germar (1844-53) was devoted to the remains of insects occurring in the Carboniferous formation of the Halle neighbourhood. Dana drew attention to the Carboniferous insect fauna of the Illinois district, and the same fauna was afterwards more carefully examined by Scudder. The most important addition to our knowledge of Palæozoic insects was made by C. Brongniart in his brilliant monograph on the remarkable and often gigantic forms discovered in the Carboniferous rocks at Commentry. The numerous fossil insects found in the lithographic shales of Solenhofen were described by Count Münster, Germar, Oppenheim, and Meunier. The British insects of the Mesozoic deposits were examined by Brodie and Westwood, and several authors have published accounts of the fossil insects in the Tertiary deposits of different countries.

Vertebrata.—Undoubtedly palæontology has achieved its greatest successes in the domain of vertebrate animals. In the very beginning of the nineteenth century, Cuvier had established such an admirable groundwork of research that it was made almost impossible for any one who lacked a thorough scientific training to attempt to continue a work so gloriously begun. Thus the number of authors who have occupied themselves with fossil Vertebrates is at once unusually small and exceedingly select, with the result that the average quality of the works in this department of palæontology is of a very high order. A general account of fossil Vertebrates will be found in Owen's *Palæontology* (1860), in