

elucidate the developmental phases of the floras of past time in the sense of the theory of evolution.

In his *Cours de la Botanique fossile* (Paris, 1881-85), M. B. Renault describes the fossil cycads, cordaites, sigillarias, lepidodendrons, stigmarias, ferns, and conifers. His classification adheres closely to the systematic arrangement of living plants. The same plant-groups, together with thallophytes, mosses, calamarias, and equisetes, are ably described in a German work which appeared about the same time, *Einleitung in die Palæophytologie*, by Count von Solms-Laubach (Leipzig, 1887).

Upon the whole, botanists have always taken a more important part than geologists in the advance of palæophytology, and in recent years the purely botanical treatment has become even more predominant. The severe strictures passed by Schenk on the uncritical palæontological papers that appeared so numerous in the middle of the last century have had their influence; now the author of a paper on any department of palæophytology is expected to have a sound knowledge of systematic botany.

It cannot be said that palæozoology has yet arrived at this desirable standpoint. Just as palæophytology has come to be regarded and treated scientifically as a branch of botany in the only true and wide sense, so should palæontology be regarded as a branch of zoology in its wide sense. But while the greatest scientific successes have been achieved by those research students who have treated their particular subject from this wider aspect, we find in the universities that palæontology is often relegated to the care of a geological specialist. Cuvier and Lamarck in France, and Richard Owen, Wallace, Huxley, Ray Lankester, Alleyne Nicholson have been brilliant exponents in Great Britain of the higher and wider scope of zoology. But comparatively few individuals have such a thorough grasp of zoological and geological knowledge as to enable them to treat palæontological researches worthily, and there has accumulated a dead weight of stratigraphical-palæontological literature wherein the fossil remains of animals are named and pigeon-holed solely as an additional ticket of the age of a rock-deposit, with a wilful disregard of the much more difficult problem of their relationships in the long chain of existence.

The terminology which has been introduced in the innumer-