associated a few palms, coniferæ allied to the auracariæ, and dicotyledonous plants approaching to the cacteæ, and euphorbiaceæ. The vast preponderance and magnitude of the vegetables bearing an analogy to the tribes of *ductulosæ*, but differing from existing species and genera, constitute the most remarkable botanical feature: thus we have plants related to the mare's tail (*calamites*), eighteen inches in circumference, and ten or twelve feet high; tree-ferns (*sigillariæ*) fifty feet in height; and arborescent club-mosses (*lepidodendra*) attaining an altitude of sixty or seventy feet. The contrast which such a flora presents to that afforded by the woods and forests of dicotyledonous trees, and the verdant turf, which now grow on the surface of the carboniferous districts of England, is as striking as the discrepancy between the zoology of the secondary formations, and that of the present day. The restoration of some of the vegetable forms which flourished in the carboniferous era, will perhaps prove more illustrative of this phenomenon than mere description. (See Tab. 129.)

To arrive at any satisfactory conclusions as to the nature of the countries which supported the plants of the carboniferous strata, we must consider the geographical distribution of the related existing genera, and the circumstances which conduce to their full development. It is now well known that a hot climate, humid atmosphere, and the unvarying temperature of the sea, are the circumstances which