

outlines of true coniferous trees ; and would mayhap have differed no more in appearance from their successors of the same order that now live in our forests, than these differ from the conifers of New Zealand or of New South Wales. We have thus, in the numerous ferns and numerous coniferous trees of the Coal Measures, known objects by which to conceive of some of the more prominent features of the flora of which they composed so large a part. We have not inadequate conceptions of at once the giants of its forests and the green swathe of its plains and hill-sides,—of its mighty trees and its dwarf *underwood*,—of its cedars of Lebanon, so to speak, and its hyssop of the wall. But of an intermediate class we have no existing representatives ; and in this class the fossil botanist finds puzzles and enigmas with which hitherto at least he has been able to deal with only indifferent success. There is a view, however, sufficiently simple, which may be found somewhat to lessen, if not altogether remove, the difficulty. Nature does not dwell willingly in mediocrity ; and so in all ages she as certainly produced trees, or plants of tree-like proportions and bulk, as she did minute shrubs and herbs. In not a few of the existing orders and families, such as the Rosaceæ, the Leguminosæ, the Myrtaceæ, and many others, we have plants of all sizes, from the creeping herb, half-hidden in the sward, to the stately tree. The wild dwarf strawberry and minute stone-bramble are of the same order as our finer orchard-trees,—apple, pear, and plum,—or as those noble hawthorn, mountain-ash, and wild cherry trees, that impart such beauty to our lawns and woods ; and the minute spring-vetch and everlasting pea are denizens of the same great family as the tall locust and rosewood trees, and the gorgeous laburnum. Did there exist no other plants than the Rosaceæ or the Leguminosæ, we would possess, notwithstanding, herbs, shrubs, and trees, just as we do now. And in plants of a greatly humbler order we have instances