Cryptogameæ predominate in this as they do in the Carboniferous epoch, but the species have changed, and many of the genera also are different; the *Cladephlebis*, the *Sphenopteris*, the *Coniopteris*, and *Pecopteris* predominate over the others in the number of species. The Equisetaceæ are more developed than in any other formation. One of the finest species, the *Calamites arenaccus* of Brongniart, must have formed great forests. The fluted trunks resemble immense columns, terminating at the summit in leafy branches, disposed in graceful verticillated tufts, foreshadowing the elegant forms of *Equisetum sylvaticum*. Growing alongside of these were a curious Equisetum and singular Equisetites, a species of which last, *E. columnaris*, raised its herbaceous stem, with its sterile articulations, to a great height.

"What a singular aspect these ancient rocks would present, if we add to them the forest-trees *Pterophyllum* and the *Zamites* of the fine family of Cycadeaceæ, and the Conifers, which seem to have made their appearance in the humid soil at the same time!

"It is during this epoch, while yet under the reign of the dicotyledonous angiosperms, that we discover the first true monocotyledons. The *Preissleria antiqua*, with its long petals, drooping and creeping round the old trunks, its bunches of bright-coloured berries like the *Smilax* of our own age, to which family it appears to have belonged. Besides, the Triassic marshes gave birth to tufts of *Palæoxyris Münsteri*, a cane-like species of the Gramineæ, which, in all probability, cheered the otherwise gloomy shore.

"During this long period the earth preserved its primitive vegetation; new forms are slowly introduced, and they multiply slowly. But if our present types of vegetation are deficient in these distant epochs, we ought to recognise also that the plants which in our days represent the vegetation of the primitive world are often shorn of their grandeur. Our Equisetaceæ and Lycopodiaceæ are but poor representatives of the Lepidodendrons; the Calamites and Asterophyllites had already run their race before the epoch of which we write."

The principal features of Triassic vegetation are represented in PLATE XIV., page 198. On the cliff, on the left of the ideal landscape, the graceful stems and lofty trees are groups of *Calamites arenaceus;* below are the great "horse-tails" of the epoch, *Equisetum columnare*, a slender tapering species, of soft and pulpy consistence, which, rising erect, would give a peculiar physiognomy to the solitary shore.

The Keuper formation presents itself in Europe at many points,