

of which both species and individuals are very numerous in the formation of this period.

Among the species of plants which characterise this formation, we may mention *Neuropteris elegans*, *Calamites arenaceus*, *Voltzia heterophylla*, *Haidingera speciosa*. The *Haidingera*, belonging to the tribe of *Abietinæ*, were plants with large leaves, analogous to those of our *Damara*, growing close together, and nearly imbricated, as in the *Araucaria*. Their fruit, which are cones with rounded scales, are imbricated, and have only a single seed, thus bearing out the strong resemblance which has been traced between these fossil plants and the *Damara*.

The *Voltzias* (Fig. 84), which seem to have formed the greater part of the forests were a genus of Cupressinacæ, now extinct, which are well characterised among the fossil Conifers of the period. The alternate spiral leaves, forming five to eight rows sessile, that is, sitting close to the branch and drooping, have much in them analogous to the *Cryptomerias*. Their fruit was an oblong cone with scales, loosely imbricated, cuneiform or wedge-shaped, and, commonly, composed of from three to five obtuse lobes. In Fig. 84 we have a part of the stem, a branch with leaves and cone. In his "Botanic Geography," M. Lecoq thus describes the vegetation of the ancient world in the first period of the Triassic age: "While the variegated sandstone and mottled clays were being slowly deposited in regular beds by the waters, magnificent Ferns still exhibited their light and elegantly-carved leaves. Divers *Protopteris* and majestic *Neuropteris* associated themselves in extensive forests, where vegetated also the *Crematopteris typica* of Schimper; the *Anomopteris Mongeotii* of Brongniart, and the pretty *Trichomanites myriophyllum* (Göppert). The Conifers of this epoch attain a very considerable development, and would form graceful forests of green trees. Elegant monocotyledons, representing the forms of tropical countries, seem to show themselves for the first time, the *Yuccites Vogesiacus* of Schimper constituted groups at once thickly serried and of great extent.

"A family, hitherto doubtful, appears under the elegant form of *Nilssonia Hogardi*, Schimp.; *Ctenis Hogardi*, Brongn. It is still seen in the *Zamites Vogesiacus*, Schimp.; and the group of the Cycads sharing at once in the organisation of the Conifers and the elegance of the Palms, now decorate the earth, which reveals in these new forms its vast fecundity. (See Fig. 72, p. 168.)

"Of the herbaceous plants which formed the undergrowth of the forests, or which luxuriated in its cool marshes, the most remarkable is the *Ætheophyllum speciosum*, Schimp. Their organisation approximates