

THE EOCENE PERIOD.

DURING this period *terra firma* has vastly gained upon the domain of the sea ; furrowed with streams and rivers, and here and there with great lakes and ponds, the landscape of this period presented the same curious mixture which we have noted in the preceding age, that is to say, a combination of the vegetation of the primitive ages with one analogous to that of our own times. Alongside the birch, the walnut, the oak, the elm, and the alder, rise lofty palm-trees, of species now extinct, such as *Flabellaria* and *Palmacites* ; with many evergreen trees (Conifers), for the most part belonging to genera still existing, as the *firs*, the *pin*es, the *yews*, the *cypresses*, the *junipers*, and the *thuyas* or tree of life.

The *Cupanioides*, among the Sapindaceæ ; the *Cucumites*, among the Cucurbitaceæ (species analogous to our bryony), climb the trunks of great trees, and hang in festoons of aerial garlands from their branches.

The Ferns were still represented by the genera *Pecopteris*, by the *Tæniopteris*, *Asplenium*, *Polypodium*. Of the mosses, some *Hepaticas* formed a humble but elegant and lively vegetation alongside the terrestrial and frequently ligneous plants which we have noted. *Equiseta* and *Charæ* would still grow in marshy places and on the borders of rivers and ponds.

It is not without some surprise that we observe here certain plants of our own epoch, which seem to have had the privilege of ornamenting the greater watercourses. Among these we may mention the Water Caltrop, *Trapa natans*, whose fine rosettes of green and dentated leaves float so gracefully in ornamental ponds, supported by their spindle-shaped petioles, its fruit a hard coriaceous nut, with four horny spines, known in France as *water-chestnuts*, which enclose a farinaceous grain not unpleasant to the taste ; the pond-weed, *Potamogeton*, whose leaves form thick tufts of green, affording food and shelter to the fishes ; *Nympheaceæ*, which spread beside their large round and hollow leaves, so admirably adapted for