floating on the water, now the deep-yellow flowers of the *Nénuphar*, now the pure white flowers of the *Nymphæa*. Listen to Lecoq, as he describes the vegetation of the period:—"The Lower Tertiary period," he says, "constantly reminds us of the tropical landscapes of the present epoch, in localities where water and heat together impress on vegetation a power and majesty unknown in our climates. The Algæ, which have already been observed in the marine waters at the close of the Cretaceous period, represented themselves under still more varied forms, in the earlier Tertiary deposits, when they have been formed in the sea. Hepaticas and Mosses grew in the more humid places; many pretty Ferns, as *Pecopteris*, *Tæniopteris*, and the *Equisetum stellare* (Pomel) vegetated in cool and humid places. The fresh waters are crowded with *Naiades*, *Chara*, *Potamogeton*, *Caulinites*, with *Zosterites*, and with *Halochloris*. Their leaves, floating or submerged, like those of our aquatic plants, concealed legions of Molluscs whose remains have also reached us.

"Great numbers of Conifers lived during this period. M. Brongniart enumerates forty-one different species, which, for the most part, remind us of living forms with which we are familiar—of Pines, Cypresses, Thuyas, Junipers, Firs, Yews, and Ephedra. Palms mingled with these groups of evergreen trees; the *Flabellaria Parisiensis* of Brongniart, *F. raphifolia* of Sternberg, *F. maxima* of Unger; and some *Palmacites*, raised their widely-spreading crowns near the magnificent *Hightea;* Malvaceæ, or *Mallows*, doubtless arborescent, as many among them, natives of very hot climates, are in our days.

"Creeping plants, such as the *Cucumites variabilis* (Brongn.), and the numerous species of *Cupanioïdes*—the one belonging to the Cucurbitaceæ, and the other to the Sapindaceæ—twined their slender stems round the trunks, doubtless ligneous, of various Leguminaceæ.

"The family of Betulaceæ of the order Cupuliferæ show the form, then new, of *Quercus*, the Oak; the Juglandeæ, and Ulmaceæ mingle with the Proteaceæ, now limited to the southern hemisphere. *Dermatophyllites*, preserved in amber, seem to have belonged to the family of the Ericineæ, and *Tropa Areturæ* of Unger, of the group Œnothereæ, floated on the shallow waters in which grew the *Chara* and the *Potamogeton*.

"This numerous flora comprises more than 200 known species, of which 143 belonged to the Dicotyledons, thirty-three to the Monocotyledons, and thirty-three to the Cryptogams.

"Trees predominate here as in the preceding period, but the great numbers of aquatic plants of the period are quite in accordance with the geological facts, which show that the continents and