

water, where also grows the *Cyperites tertiaris* (Unger), where floats *Dotamogeton geniculatus* (Braun), and where we see submerged *Isocetes Brunni* (Unger). Great Conifers still form the forests. This fine family has, as we have seen, passed through every epoch, and still presents us with its elegant forms and persistent evergreen foliage; *Taxodites*, *Thuyoxylum*, *Abietites*, *Pinites*, *Eleoxylon*, and *Taxites* being still the forms most abundant in these old natural forests.

“The predominating character of this period is the abundance of the group of the Amentaceæ; whilst the Conifers are thirty-two in number, of the other we reckon fifty-two species, among which are many European genera, such as *Alnus*; *Quercus*, the oak; *Salix*, the willow; *Fagus*, the beech; *Betula*, the birch, &c.

“The following families constitute the arborescent flora of the period besides those already mentioned:—Balsaminaceæ, Lauraceæ, Thymelæaceæ, Santalaceæ, Cornaceæ, Myrtaceæ, Calycanthaceæ, Pomaceæ, Rosaceæ, Amygdaleæ, Leguminosæ, Anacardiaceæ, Juglandaceæ, Rhamnaceæ, Celastrinaceæ, Sapindaceæ, Meliaceæ, Aceraceæ, Tiliaceæ, Magnoliaceæ, Capparidaceæ, Sapoteaceæ, Styracaceæ, Oleaceæ, Juncaceæ, Ericaceæ.

“In all these families great numbers of European genera are found, often even more abundant in species than now. Thus, as Brongniart observes, in this flora we reckon fourteen species of Maple; three species of Oak; and these species proceed from two or three very circumscribed localities, which would not probably, at the present time, represent in a radius of several leagues more than three or four species of these genera.”

An important difference distinguishes the Pliocene flora, as compared with those of preceding epochs, it is the absence of the family of Palms in the European flora, as noted by Lecoq, which forms such an essential botanical feature in the Miocene period. We mention this, because, in spite of the general analogy which exists between the vegetation of the Pliocene period and that of temperate regions in the present day, it does not appear that there is a single species of the former period absolutely identical with any one now growing in Europe. Thus, the European vegetation, even at the most recent geological epoch, differs specifically from the vegetation of our age, although a general resemblance is observable between the two.

The terrestrial animals of the Pliocene period present us with a great number of creatures alike remarkable from their proportions and from their structure. The Mammals and the batrachian Reptiles are alike deserving of our attention in this epoch. Among the former the Mastodon, which makes its first appearance in the Miocene