

relatives and *Ginkgo* leaves given by Saporta,¹ Ward,² Seward and Gowan,³ and Zeiller.⁴ The other circumstance, lending some minor colour of probability as to the relationship, is the occurrence, in especial abundance in the beds containing *Whittleseya* of numerous types of gymnospermic fruits, some of which represent genera closely analogous in structural characters to those of the living "maiden-hair tree," *Ginkgo biloba*. In the judgment of the writer the *Whittleseya* are the oldest representatives of the Ginkgoales stock that have yet been discovered. The fruits of this type are probably included in some of the American species of *Rhabdocarpus*, or possibly in *Cardiocarpon*. The plant from the Upper Coal Measures of Baie de Chaleur described by Dawson⁵ as *Næggerathia dispar*, although fragmentary and very incomplete, appears by its petiolate development, the basi-marginal nerves, and the banding of the parallel, longitudinal nervation to be also referable to the same stock, if not to the same genus. The *Næggerathia dispar* may perhaps, without too great an assumption, be regarded as a connecting link between the earlier Whittleseyas and the later *Saportea* of Fontaine and I. C. White,⁶ from the Dunkard or supposed Permian of the Appalachian trough. *Saportea*⁷ through its allied genera, *Baiera*, and *Ginkgophyllum*, may perhaps be safely regarded as belonging to the *Ginkgo* stock, while the two genera last named are not only closely related, but one of them is perhaps antecedent to the genus *Ginkgo*, which is unquestionably present with characteristic flowers and fruits in the earlier Mesozoic. During this epoch *Ginkgo*, which in the world of to-day is

¹ Évol. règ. vég., Phanérog., vol. I, 1885, pp. 142-146.

² Science, vol. V, 1885, p. 496.

³ Annals of Botany, vol. XIV, 1900, pp. 109-154.

⁴ Éléments de Paléobotanique, 1900, pp. 248-253.

⁵ Quart. Jour. Geol. Soc. London, vol. XXII, 1866, p. 153, Pl. XIII, fig. 91.

⁶ Permian Flora, pp. 99, 101, 102, pl. XXXVIII. figs. 1-4.

⁷ *Saportea*, F. and W., aptedates and is quite distinct from *Saportia*, a genus of Tertiary Algæ, named by Squinabol in 1891, Contr. Fl. Foss. Terz. Liguria, pt. 1, p. xx.