

of the *Yprésien* and the *Panisélien* in Belgium; the Middle Bracklesham and Bagshot strata were the equivalents of the "Coarse limestone" of the Paris basin and the *Bruxellien* and *Laekenien* in Belgium. The Upper Bracklesham strata and the Barton Clay corresponded with the middle marine sand near Paris. Hébert in 1873 emended the synchronous table of Prestwich on a few points, but for the sub-division of the English Tertiary deposits the results obtained by Prestwich are the recognised standard at the present day.

The upper fluvio-marine division was described in detail by Edward Forbes in 1856, and the fossil riches of the Tertiary deposits have formed the subject of some of the greatest classics in palæontological literature. The earlier contributors to the knowledge of the English Tertiary faunas included Sir Richard Owen, Agassiz, Thomas Davidson, Edward Forbes, Milne-Edwards, Haime, and Duncan (Chap. V.).

The Miocene and Pliocene deposits of Italy were investigated by Brocchi and Bronn, and afterwards by several Italian authors and by the two Germans Hoffmann and Philippi. The *Enumeration of the Tertiary Fossils in Sicily* by Philippi appeared in 1846, and formed a valuable supplement to Deshayes' investigations, in so far as it showed that the number of living Mediterranean types represented in the Pliocene deposits of Sicily gradually increases from the lower to the upper horizons of the series, until in the highest horizons very few extinct species are present. Agassiz questioned the results obtained by Philippi, and wrote a monograph in 1845 with the special intent of proving that no living species is completely identical with the forms in Pliocene deposits, and that each individual formation contains a fauna entirely peculiar to itself. This opinion, as has been said above (p. 507), was shared in a modified measure by D'Orbigny.

A sub-division of the Tertiary deposits into four stages (*Suessonien*, *Parisien*, *Falunien*, *Subapennin*) was proposed in 1852 by D'Orbigny, and was rapidly adopted in France. The *Suessonien* and *Parisien* correspond with Lyell's Eocene formation. The *Falunien* is again divided into two sub-stages, the older of which (*Tongrien*) begins in the Paris basin with the Fontainebleau sandstone, and includes the fresh-water limestone and millstone quartz, while the younger horizon of *Falunien* comprises the *Faluns* of Touraine, of Aquitanien and Languedoc, the *Crag* of Suffolk and Antwerp, the *Molasse* and *Nageflue*