

dant; a fossil unknown as yet in the English tertiary strata, but when young much resembling *Leda amygdaloides* of the London clay proper (see fig. 227, p. 218). Among other characteristic shells are *Pecten Hoeninghausii*, and a species of *Cassidaria*, and several of the genus *Pleurotoma*. Not a few of these testacea agree with English Eocene species, such as *Actæon simulatus*, Sow., *Cancellaria evulsa*, Brander, *Corbula pisum* (fig. 170, p. 193), and *Nautilus ziczac*. They are accompanied by many teeth of sharks, as *Lamna contortidens*, Ag., *Oxyrhina xiphodon*, Ag., *Carcharodon heterodon* (see fig. 211), Ag., and other fish, some of them common to the Middle Eocene strata. The same deposit, B. 1, is very imperfectly seen at Kleyn Spawen, where the lower divisions B. 2 and B. 3 are much better developed. B. 2 consists of several alternations of sands and marls, in which a greater or less intermixture of fluviatile and marine shells occurs, implying the occasional entrance of a river near the spot, and possibly oscillations in the level of the bottom of the sea. Among the shells are found *Cyrena semistriata* (fig. 171, p. 193), *Cerithium plicatum*, Lam. (fig. 172, p. 193), *Rissoa Chastelii*, Bosq. (fig. 174), and *Corbula pisum* (fig. 170), four shells all common to the Hempstead beds in the Isle of Wight, to be mentioned in the sequel. With the above, *Lucina Thierensii*, and other marine forms of the genera *Venus*, *Limopsis*, *Trochus*, &c., are met with.

In B. 3, or the Lower Limburg, more than 100 marine shells have been collected, among which the *Ostrea ventilabrum* is very conspicuous. Species common to the underlying Brussels sands, or the Middle Eocene, are numerous, constituting a third of the whole; but most of these are feebly represented in comparison with the more peculiar and characteristic shells, such as *Ostrea ventilabrum*, *Mytilus Nystii*, *Voluta saturalis*, &c.

In none of the Belgian Upper Eocene strata, could I find any nummulites; and M. D'Archiac had previously observed that these foraminifera characterize his "Lower Tertiary Series," as contrasted with the Middle, and would therefore serve as a good test of age between Eocene and Miocene, if the line of demarcation be drawn according to his method, or equally so between Upper and Middle Eocene, according to the plan adopted in this work. The same naturalist informs us that one nummulite only has ever yet been seen to penetrate upwards into the middle tertiary, viz., *Nummulites intermedia*, an Eocene species. It has been found in the hill of the Superga near Turin,* in beds usually classed as Miocene, but probably somewhat older than the falunian type.

Hermsdorf, near Berlin.—Professor Beyrich has described a mass of clay, used for making tiles within seven miles of the gates of Berlin, near the village of Hermsdorf, rising up from beneath the sands with which that country is chiefly overspread. This clay is more than forty feet thick, of a dark bluish-gray color, and, like that of Rupelmonde, contains septaria. Among other shells, the *Leda Deshayesiana* before mentioned (fig. 167) abounds, together with many species of *Pleurotoma*, *Voluta*, &c.,

* Archiac, Monogr. pp. 70, 100.