and terrestrial shells. Among them are about 200 species of gasteropods, about 125 lamellibranchs, and fifty polyzoa, besides numerous foraminifers (Quinqueloculina), and calcareous algæ (Dactylopora, Acicularia, etc.). Two conspicuous features in this deposit are the extraordinary proportion of its new and peculiar species, and the resemblance of its fauna, especially its numerous Cerithiums and Turritellas, to that of the Middle Eocene beds of Belgium and the Paris basin rather than to that of the Lower Eocene. The Mons limestone has thus been cited as an illustration of Barrande's doctrine of colonies.[37]

Above this deposit comes the "Système Heersien," so named from its development at Heers, in Limbourg. With a total depth of about 100 feet, it consists of (1) a lower division of sandy beds, with Cyprina planata, C. Morrisii, Modiola elegans, and other marine shells, some of which occur in the Thanet Sand of England and the Sables de Bracheux; and (2) an upper division of marls, containing, besides some of the marine shells found in the lower division, numerous remains of a terrestrial vegetation (Osmunda eocenica, Chamæcyparis belgica, Poacites latissimus, and species of Quercus, Salix, Cinnamomum, Laurus, Viburnum, Hedera, Aralia, etc.).[38]

The "Système Landien," corresponding to the Thanet and Woolwich and Reading beds of England and the Sables de Bracheux, Argile plastique, and Lignites du Soissonnais of France, is divisible into two stages: 1st, Lower marine gravels, conglomerates, sandstones, marls, etc., with badly preserved fossils, among which are Turritella bellovacina, Cucullæa decussata (crassatina), Cardium Edwardsii, Cyprina planata, Corbula regulbiensis, Pholadomya Koninckii; 2d, Upper fluvio-marine sands, sandstones, marls, and lignites containing Melania inquinata, Melanopsis buccinoides, Cerithium funatum, Ostrea bellovacina, Cyrena cuneiformis, with leaves and stems of terrestrial plants.

The "Système Yprésien" consists of a great series of clays and sands answering generally to the London Clay, but not represented in France. It is divided into two stages: 1st, Lower stiff gray or brown clay (Argile de Flanders ou d'Ypres), sometimes becoming sandy, and

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[37] Briart and Cornet, Mem. Couronn. Acad. Roy. Belg. xxxvi. 1870; xxxvii. 1873; xliii. 1880. Mourlon, "Geol. Belg." 1880, p. 192. Hébert (Ann. Sciences Geol. iv. 1873, p. 15) has noticed an affinity to the uppermost Cretaceous fauna of Paris.

[38] De Saporta and Marion, Mem. Cour. Acad. Roy. Belg. xli. 1878.