are A. accipitris, A. alternans, A. Beaugrandi, A. flexuosus, A. Kapfii. A. lallerianus, A. mutabilis, A. Thurmanni, A. triplex. Among the belemnites are B. abbreviatus, B. excentricus, B. explanatus, B. nitidus. The Kimeridge Clay derives its chief palæontological interest from the fact that it has supplied the largest number of the Mesozoic genera and species of reptiles yet found in Britain. The huge deinosaurs are well represented by Bothriospondylus, Cetiosaurus, Cryptodraco, Gigantosaurus, Iguanodon (Camptosaurus), Megalosaurus, Omosaurus; the pterosaurs by Pterodactylus; the plesiosaurs by Plesiosaurus and Pliosaurus; the ichthyosaurs by Ichthyosaurus and Ophthalmosaurus; chelonians by Enaliochelys and Pelobatochelys; and crocodilians by Dakosaurus, Steneosaurus, and Teleosaurus.<sup>72</sup>

In the sea-cliffs of Speeton, Yorkshire, a thick group of clays occurs, the lower part of which contains Kimeridgian fossils, while the higher portions are unmistakably Cretaceous. Traces of a representative of the Kimeridge Clay, and possibly of the Portlandian, above, are found even as far north as the east coast of Cromarty and Sutherland, at Eathie and Helmsdale.

(2) Portlandian, so named from the Isle of Portland, where it is typically developed. This group, resting directly on the Kimeridge Clay, consists of two divisions, the Portland Sand and Portland Stone. At Portland, according to Mr. J. F. Blake, it presents the following succession of beds in descending order:<sup>73</sup>

Shell limestone (Roach), containing casts of Cerithium portlandicum (very abundant), Sowerbya, Dukei, Buccinum naticoides, and casts of Trigonia.
"Whit-bed"—Oolitic Freestone, the well-known Portland stone (Ammonites giganteus).

"Curf," another calcareous stone, Ostrea solitaria.

- "Base-bed," a building stone like the whit-bed, but sometimes containing irregular bands of flint.
- Limestone, "Trigonia bed": Trigonia gibbosa, Fig. 392, Perna mytiloides.
- Bed, 3 feet, consisting of solid flint in the upper and rubbly limestone in the lower flat.

Band, 6 feet, containing numerous flints: Serpula gordialis, Ostrea multiformis.

Thick series of layers of flints irregularly spaced: Ammonites boloniensis, Trigonia gibbosa, T. incurva.

Shell-bed abounding in small oysters and serpulæ: Ammonites pseudogigas, A. triplex, Pleurotomaria rugata, P. Rozeti, Cardium dissimile, Fig. 392, Trigonia gibbosa, T. incurva, Pleuromya tellina.

Portland Stone.

<sup>&</sup>lt;sup>12</sup> Etheridge, Q. J. Geol. Soc. 1882, Address, p. 221.

<sup>&</sup>lt;sup>73</sup> Q. J. Geol. Soc. xxxvi. p. 189.