BIVALVES.

Ostrea gregarea, T. 111, fig. 3. O. crista galli, Smith, fig. 4.
Pecten fibrosus, T. 136, fig. 2. P. lens, T. 205, fig. 2. 3. P. arcuatus, T. 205, fig. 7. P. similis, T. 205, fig. 6.

Chama, same as in the Oaktree clay. Trigonia, casts of several species. Lima rudis. T. 214, fig. 1. Lithophaga. Mytilus. Modiola.

Fragments of a fibrous shell are common, but not sufficiently perfect to ascertain whether they belong to the same genus with the Inoceramus of the chalk formation.

Many beautiful Echinites occur in this formation; viz. of the division Cidaris, three species; 1. C. papillata, much resembling that of the chalk, (Parkinson, vol. 3, pl. 1, fig. 9.); 2. C. intermedia (same plate, fig. 6.); 3. C. diadema (same plate, fig. 4.): and of the genus Clypeus, two species; viz. 1. Clypeus sinuatus (the same which occurs in the Great and Inferior oolite) pl. 2, fig. 1.; and 2. the Clypeus clunicularis (a small oval variety) see Smith's plate of the fossils of this formation, fig. 6., where it is rightly restored to this genus, having been confounded by other writers with genera to which it did not belong. Here we may observe that a new genus, the Clypeus, makes its first appearance, and an old one formerly noticed, the Spatangus, is no longer found, not being known in any formation below the green sand.

This also is the first formation (in descending the series) in which in this country* any considerable number or variety of madrepores occur in a fossil state; the species occurring in the formations we have before described being few and scarce. We here notice several species of the divisions Caryophillia and Astrea, following the Lamarckian arrangement of this family, viz. 1. a Caryophyllia approaching to C. Carduus, but not muricated (Parkinson, vol. 2, pl. 5, fig. 5.); Caryophyllia cespitosa? a smaller branching madrepore clustering in groupes; and of the division Astrea one species, approaching to Astrea favosa (Smith's plate of coral rag fossils, fig. 1.); a second (Parkinson, pl. 7, fig. 11.), and a third approaching to Astrea annularis.

It must be stated, however, that the subject of fossil madre-

^{*} The Maestricht beds, which repose immediately on the chalk in the Netherlands, are however rich in madrepores.