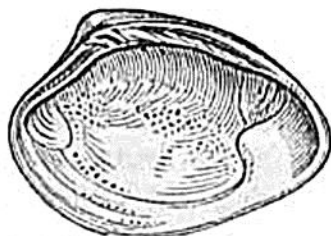


occasionally represented in one area by land, in another by an estuary, in a third by the sea, and even where the conditions were in both areas of a marine character, there was often shallow water in one, and deep sea in another, producing a want of agreement in the state of animal life.

But in regard to that division of the Eocene series which we have now under consideration, we find an exception to the general rule, for, whether we study it in the basins of London, Hampshire, or Paris, we recognize everywhere the same mineral character. This uniformity of aspect must be seen in order to be fully appreciated, since the beds consist simply of sand, mottled clays, and well-rolled flint pebbles, derived from the chalk, and varying in size from that of a pea to an egg. These strata may be seen in the Isle of Wight in contact with the chalk, or in the London basin, at Reading, Blackheath, and Woolwich. In some of the lowest of them, banks of oysters are observed, consisting of *Ostrea bellovacina*, so common in France in the same relative position, and *Ostrea edulina*, scarcely distinguishable from the living eatable species. In the same beds at Bromley, Dr. Buckland found one large pebble to which five full-grown oysters were affixed, in such a manner as to show that they had commenced their first growth upon it, and remained attached to it through life.

In several places, as at Woolwich on the Thames, at New Haven in Sussex, and elsewhere, a mixture of marine and freshwater testacea distinguishes this member of the series. Among the latter, *Melania inquinata* (see fig. 234) and *Cyrena cuneiformis* (see fig. 233) are very com-

Fig. 233.



Cyrena cuneiformis, Min. Con.
Natural size.

Fig. 234.



Melania inquinata, Des. Nat. size.
Syn. *Cerithium melanoides*, Min. Con.

mon, as in beds of corresponding age in France. They clearly indicate points where rivers entered the Eocene sea. Usually there is a mixture of brackish, freshwater, and marine shells, and sometimes, as at Woolwich,