

just reach the level of the waters, for the polyyps perish as soon as they are so far above the surface that neither the waves nor the flow of the tides can reach them. In the Oolitic rocks these banks are frequently found from twelve to fifteen feet thick, and many leagues in length, and preserving, for the most part, the relative positions which they occupied in the sea while in course of formation.

The rocks which now represent the Middle Oolitic Period are usually divided into the *Oxford Clay*, the lower member of which is an arenaceous limestone, known as the *Kellaways Rock*, which in Wiltshire and other parts of the south-west of England attains a thickness of eight or ten feet, with the impressions of numerous Ammonites, and other shells. In Yorkshire, around Scarborough, it reaches the thickness of thirty feet; and forms well-developed beds of bluish-black marl in the department of Calvados, in France. It is the base of this clay which forms the soil (*Argile de Dives*) of the valley of the Auge, renowned for its rich pasturages and magnificent cattle. The same beds form the base of the oddly-shaped but fine rocks of La Manche, which are popularly known as the *Vaches Noires* (or black cows)—a locality celebrated, also, for its fine Ammonites transformed into pyrites.

The *Oxford Clay* constitutes the base of the hills in the neighbourhood of Oxford, forming a bed of clay sometimes more than 600 feet thick. It is found well-developed in France, at Trouville, in the department of the Calvados; and at Neuvisy, in the department of the Ardennes, where it attains a thickness of about 300 feet. It is a bluish, sometimes whitish limestone (often argillaceous), and bluish marl. The *Gryphæa dilatata* is the most common fossil in the Oxford Clay. The *Coral Rag* is so called from the fact that the limestone of which it is chiefly composed consists, in part, of an aggregation of considerable masses of petrified Corals; not unlike those now existing in the Pacific Ocean, supposing them to be covered up for ages and fossilised. This coral stratum extends through the hills of Berkshire and North Wilts, and it occurs again near Scarborough. In the counties of Dorset, Bedford, Buckingham, and Cambridge, and some other parts of England, the limestone of the Coral Rag disappears and is replaced by clay—in which case the Oxford Clay is overlaid directly by the Kimeridge Clay. In France it is found in the departments of the Meuse, of the Yonne, of the Ain, of the Charente Inférieure. In the Alps the *Diceras limestone* is regarded, by most geologists, as coeval with the English Coral Rag.