

- times with calcareous marls that abut against the sides of what were formerly coral-reefs. Some horizons in the Corallian stage are marked by the occurrence of remains of ferns and other land-plants (Saint Mihiel, in Lorraine; Dept. of Indre).
7. **Oxfordian**, divisible into (a) Callovian, with zones of *Amm. macrocephalus*, and *A. anceps*, and (b) Oxfordian, with zones *A. Lamberti*, *A. Mariæ*, *A. cordatus*. This stage is well exposed on the coast of Calvados, between Trouville and Dives, where it attains a thickness of 330 feet, and is divisible into a lower sub-group of marls (Dives) with *Amm. Lamberti*, a middle sub-group of clays (Villiers) with *A. Mariæ*, and an upper sub-group of clays with *A. cordatus*. It is likewise displayed in the Boulonnais. Northeastward, in the Ardennes, the Callovian sub-stage appears as a pyritous clay (25–30 feet) with oolitic limonite, the Oxfordian as a series of clays, marls, argillaceous sandstone (full of gelatinous silica and locally known as gaize) and oolitic ironstone. In the Côte-d'Or, the fossils of the Callovian and Oxfordian beds are mingled in the same strata. Round Poitiers, the Callovian division is upward of 100 feet thick. Eastward it dwindles down toward the Jura, but is recognizable there under the Oxfordian pyritous marls (330 feet).
 6. **Bathonian** (Grande Oolithe) may be divided into a lower sub-stage (Vesulian) with the zone of *Ostrea acuminata* and *Amm. ferrugineus*, and an upper (Bradfordien) with the zones of *Rhynchonella decorata* and *Waldheimia digona* (*Amm. aspidoides*). In Normandy, it consists of (a) a lower group of strata which at one part are the Port-en-Bessin marls (100 feet or more) and at another the famous Caen stone, so long used as a building material, and which from its saurian and other remains may be paralleled with the Stonesfield Slate; (b) granular limestone (Ranville), bryozoan limestone, with some of the fossils of the Bradford Clay. In the Ardennes, the Fuller's Earth is represented by some sandy limestones, lumachelles, and granular limestone, with *Ostrea acuminata*, *Amm. Parkinsoni*, *Belemnites giganteus*, etc.; the Great Oolite by a massive limestone (160–200 feet) with *Cardium pes-bovis*, *Purpura minax*, followed by