

stone, known, from a place in Wiltshire, as the Kellaways Rock (Callovian). This rock-division, from 5 to more than 80 feet thick, may be traced from Wiltshire through Bedfordshire to Lincolnshire, and attains a considerable importance in Yorkshire. It contains about 200 species of fossils, of which one-third are found in lower parts of the Jurassic series, and nearly the same proportion passes upward into higher zones. Among its characteristic forms are *Avicula inæquivalvis*, *Gryphæa bilobata*, *Lima notata*, *Ostrea archetypa*, *O. striata*, *Anatina versicostata*, *Cardium subdissimile*, *Corbis lævis*, *Lucina lyrata*, *Trigonia complanata*, *T. paucicostata*, *Alaria arsinœ*, *Cerithium abbreviatum*, *Pleurotomaria arenosa*. The distinctive ammonite of this stage is *A. calloviensis*, which gives its name to a zone. Numerous

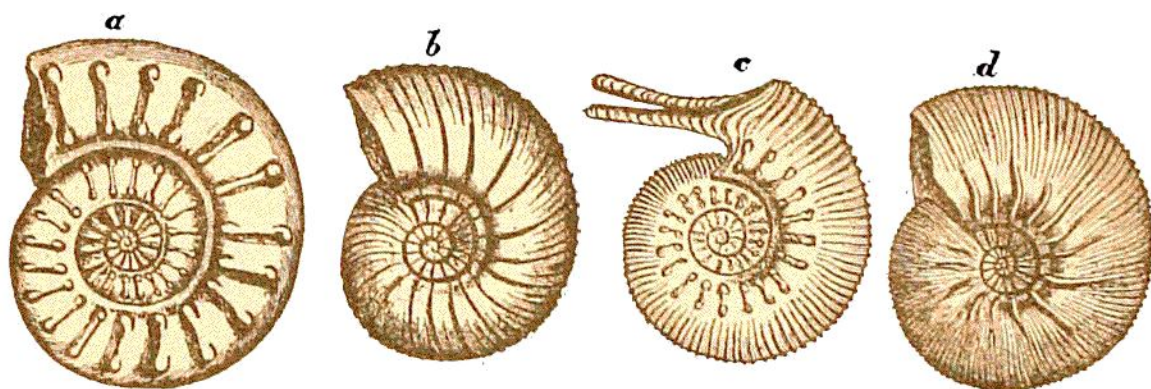


Fig. 409.—Middle Oolite Ammonites.

*a*, Ammonites (*Aspidoceras*) *perarmatus*, Sby. (1-2); *b*, *A. (Amaltheus) Lamberti*, Sby.; *c*, *A. (Cosmoceras) Jason*, Zeit. (1-3); *d*, *A. (Cosmoceras) calloviensis*, Sby. (1-2).

other species of ammonites occur, including *A. modiolaris*, *A. gowerianus*, *A. auritulus*, *A. Bakeriæ*, *A. Baugieri*, *A. Eugeniei*, *A. flexicostatus*, *A. fluctuosus*, *A. goliathus*, *A. lalandianus*, *A. Lonsdalei*, *A. planula*, *A. taticus*, *A. Vernoni*; also *Ancylloceras calloviense*, *Nautilus calloviensis*, and *Belemnites Owenii*.

(*b*) The Oxford Clay—so called from the name of the county through which it passes in its course from the coast of Dorsetshire to that of Yorkshire—consists mainly of layers of stiff blue and brown clay, attaining a thickness of from 300 to 600 feet. From the nature of its material and the conditions of its deposit, this rock is deficient in some forms of life which were no doubt abundant in neighboring areas of clearer water. Thus there are no corals, hardly any species of echinoderms, no polyzoa, and less than a dozen species of brachiopods. Some lamellibranchs are abundant, particularly *Gryphæa dilatata* and *Ostrea* (both forming