

which always constitutes a well marked line of demarcation, preventing the possibility of mistaking or confounding them together; the oolitic rocks of each system generally forming a distinct range of hills, separated from those of the other systems by a broad argillaceous valley. Hence we may give a synoptical view of the whole series, as divided into the upper, middle, and lower oolitic systems. *

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| 1. Upper Oolitic system. | { | <p>Argillo-calcareous Purbeck strata, separating the iron sand and oolitic series.
 <i>Oolitic</i> Strata of Portland, Tisbury, and Aylesbury.
 Calcareous sand and concretions (Shotover hill and Thame.)
 Argillo-calcareous formation of Kimmeridge and the vale of Berks, separating the oolites of this and the next system—Oaktree clay of Smith (generally).</p> |
| 2. Middle Oolitic system. | { | <p><i>Oolitic</i> Strata associated with the Coral rag (Pisolite of Smith).
 Calcareous sand and grit.
 Great Oxford clay (Clunch clay of Smith) separating the oolites of this and the next system.</p> |
| 3. Lower Oolitic system. | { | <p>Numerous <i>Oolitic</i> strata, occasionally subdivided by thin argillaceous beds; including the Cornbrash, Forest marble, Schistose oolite and sand of Stonesfield and Hinton, Great oolite, and Inferior oolite.
 Calcareo-siliceous sand, supporting and passing into the inferior oolite.
 Great argillo-calcareous formation of Lias and Lias marle, constituting the base of the whole series.</p> |

The difficulties more than once already alluded to, as to the precise and proper use of the word *formation* will here present

* In the former editions of Professor Buckland's Synoptical view, the principle of adhering to the great natural division of these systems by the principal argillaceous formations, was sacrificed to the convenience of subdividing the numerous beds of the lower system; so that the two upper systems are here classed together, and the lower divided into two. He is now, however, inclined to admit the propriety of employing the more natural divisions adopted in the text.