Lower Oolites.	Great or Bath Oolite group	Cornbrash. This forms a persistent band at the top of the lower or variable (marine and estuarine) group	25
		Bradford Clay and Forest Marble	160
	Fuller's Earth	Great or Bath Oolite, with Stonesfield Slate	130
		Fuller's Earth	150
	Inferior Oolite	Cheltenham beds (thick estuarine series of Yorkshire, representing the whole succession up to the base of the Cornbrash)	270
		Northampton Sands ("Dogger" of Yorkshire)	160
		Midford Sands (passage beds)	
Lias.	Upper Lias		400
	Marlstone		350
	Lower Lias		900

Although these names appear in tabular order, as expressive of what is the predominant or normal succession of strata, considerable differences occur when the rocks are traced across the country, especially in the Lower Oolites. Thus the Inferior Oolite consists of marine limestones and marls in Gloucestershire, but chiefly of massive estuarine sandstones and shales in Yorkshire. These differences help to bring before us some of the geographical features of the British area during the Jurassic period.

The LIAS[60] consists of three stages or groups, well marked by physical and palæontological characters.[61] In the Lower member, numerous thin blue and brown limestones, with partings of dark shale, are surmounted by similar shales with occasional nodular limestone bands. The Middle Lias consists of argillaceous and ferruginous limestones (Marlstone) with underlying micaceous sands and clays. In some of the midland counties, but more especially in Yorkshire, this subdivision is remarkable for containing a thick series of beds of earthy carbonate of iron (Ironstone series), which has been extensively worked in the Cleveland district. The Upper stage is composed of clays and shales with nodules of limestone, surmounted by sandy deposits, which are perhaps best classed with the Inferior Oolite. In Yorkshire it consists of about 240 feet of gray and black shale, in the upper part of which lies a dark band full of pyritous "doggers" (ironstone concretions) and blocks of jet, which are ex-

[60] This word, now so familiar in geological literature, was adopted by William Smith, who found it given by the Somerset quarrymen to the "layers" of argillaceous limestone forming a part of the series of rocks to which the term is now applied.

[61] The English Lias is fully described by Mr. H. B. Woodward in his monograph in the Memoirs of the Geological Survey above cited.