

base, of the Cambrian system, it becomes manifest that the schists must be of pre-Cambrian age.³⁸

Two groups of schistose rocks, which differ considerably in petrographical characters, have been detected in Anglesey. One of these, consisting mainly of coarse gneisses, abounding in hornblende, garnets, and brown mica, and with coarse pegmatite veins, presents a close resemblance to portions of the Lewisian series of N.W. Scotland. The other group occupies a much larger area, and is composed of flaggy chloritic schists, green and purple phyllites or slates, quartzite, grit, and other more or less recognizably clastic rocks. The resemblance of these masses to the Dalradian series of Scotland and Ireland is striking. The quartzites of Holyhead contain annelid burrows. The exact stratigraphical relations of the two crystalline groups to each other have not yet been satisfactorily determined. There was probably an original unconformability between them, like that referred to as occurring in the west of Mayo.³⁹ It may be regarded as a well-established fact in British Geology that early in the Cambrian period there existed at least one tract of old crystalline rocks above water in the north-west of Wales.

On the borders of Shropshire and Wales a ridge of ancient rocks rises up from under Silurian strata which lie upon it unconformably. Part of this ridge consists of eruptive material which was formerly believed to be of later date than the sedimentary rocks immediately around. But the main portion of the high ground is formed of a thick series of evidently very old grits, slates, and other clastic deposits, which, though hardly any trace of organic remains had been found in them, were assigned to the Cambrian system. More recent researches, however, have shown the presence of the *Olenellus*-zone in this district at the base of a group of strata which are thus definitely proved to be lower Cambrian.⁴⁰

³⁸ Prof. Hughes, op. cit. xxxiv. 1878, p. 137, xxxv. 1879, p. 682; Brit. Assoc. 1881, Sects. p. 643; Proc. Camb. Phil. Soc. iii. pp. 67, 69, 341. Prof. Bonney, Quart. Journ. Geol. Soc. xxxv. 1879, pp. 300, 321; Geol. Mag. 1880, p. 125. Dr. Hicks, Quart. Journ. Geol. Soc. xxxiv. 1878, p. 147; xxxv. 1879, p. 295; Geol. Mag. 1879, pp. 433, 528. Dr. Callaway, Quart. Journ. Geol. Soc. xxxvii. 1881, p. 210, xl. 1884, p. 567. Prof. J. F. Blake, op. cit. xliv. 1888, p. 463; Brit. Assoc. 1888 (Report on Microscopic Structure of Anglesey Rocks).

³⁹ Quart. Journ. Geol. Soc. xlvi. 1891, Address, p. 82. Mr. Blake has proposed the name of "Monian System" for the pre-Cambrian rocks of Anglesey. In the Address just quoted I have given reasons for my inability to adopt this term.

⁴⁰ Lapworth, Geol. Mag. 1888, p. 484.