NO. XXV.—THE CAMBRIAN FAUNA OF THE NORTH-WEST HIGHLANDS.

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(SUMMARY.)

THE Cambrian strata of the North-west Highlands extend as a narrow belt from Durness and Eriboll in Sutherlandshire to the district of Sleat in Skye. They consist of a basement quartzite, a middle group of shale, dolomites and grits; the Fucoid beds and Serpulite Grit, and upper group of dolomites, limestones and cherts—the “Durness Limestone.” These were evidently deposited along the shore of the gently-sloping land-area which lay towards the north, and which gradually subsided, the “Durness limestone” bearing evidence of having been deposited in clear water free from land-borne sediment. Their contained fossils are markedly American in facies, unlike those in rocks of corresponding age in England and Wales, Scandinavia, Russia, Bohemia, France, Spain and Sardinia. From these facts it was inferred that in Cambrian times there had been free migration of species along the shore-line of a continent lying across what is now the North Atlantic Ocean to Arctic Europe; and that clear deep sea, and not a land barrier, prevented their migration into the other European areas. The position of this sea is indicated by the radiolarian cherts which occur in the Arenig rocks of the southern uplands and the Highland border.

If these inferences are correct, then the plication and metamorphism of the Central Highland rocks is post-Cambrian in date. This supposition is strengthened by the fact that the “Durness Limestone,” the upper members of which contained an Upper Cambrian or Ordovician fauna, and the radiolarian cherts, presumably of Arenig age, are respectively involved in the northern and southern edges of the great “fan” into which the rocks of the Central Highlands have been thrown.