

Beag and of the Coigach mountains beyond. Though at the base there is sometimes a local breccia that varies in character in accordance with the underlying rocks, this pile of sediment mainly consists of a succession of false-bedded grits and sandstones, with scattered pebbles derived from formations which do not now occur in the west of Sutherland and Ross. On Quinag and Beinn Gharbh the sandstones have a gentle dip to the south of east, but on Suilven the strata are horizontal, or nearly so. They attain a thickness of several thousand feet, for in the Coigach mountains they rise from the shores of Loch Broom to a height of about 2400 feet.

Overlying the Torridon Sandstone come the various subdivisions of the Cambrian formation, comprising the basal quartzite (a^1 on map), pipe-rock (a^2), fucoid beds (a^3), serpulite grit and limestone (a^4). The detailed mapping of that region has proved that the Cambrian strata are separated from the Torridon Sandstone by a marked unconformability. It represents an interval of time during which the Archæan floor and overlying Torridonian sediments were exposed to denudation, a vast thickness of strata was removed, and in places the Archæan gneisses were laid bare. Hence we find in the undisturbed area clear evidence of the double unconformability of the Cambrian quartzites on the Torridon Sandstone and Archæan gneiss. This important geological feature is well displayed on the north slope of Beinn Gharbh, south of Loch Assynt. The age of these sediments has been proved by the discovery of trilobites and other organisms, characteristic of the lower division of the Cambrian system, in the fucoid beds of Sutherland and Ross. Fragments of these trilobites have been found in this member of the series at Knockan and on the north shore of Loch Assynt.

On referring to the map, it will be seen that to the west of the band of limestone (a^4) extending from Inchnadamph to Knockan, the Cambrian quartzites and fucoid beds have been traced across the sheet from Loch Gainmheich to Strath Kanaird. On the eastern slopes of Quinag, Canisp, and Cul Mor, the white quartzites form a thin cake on the underlying Torridon Sandstone, which on some of the lofty peaks is isolated by denudation. The quartzites dip at a higher angle than the sandstone, and on descending the hill slopes the former pass transgressively across bed after bed of the sandstone, and rest successively on lower members of the Torridon Sandstone.

One of the remarkable features of the Assynt district is the series of intrusive igneous rocks of later date than the Cambrian limestone and older than the post-Cambrian movements. In the undisturbed area west of the great post-Cambrian displacements, they cover considerable areas on Beinn Gharbh, south of Loch Assynt, where they appear as sills in the Torridon Sandstone or Cambrian quartzite. These sills can be traced round the western slopes of that hill, as well