

area cannot fail to be struck with the number and irregular outlines of the lakes in the plateau of Archæan gneiss. While mapping that region, it was obvious that the direction of many of the lochs and of their branches had been largely influenced by the trend of lines of shearing and lines of fault, by the trend of groups of intrusive dykes, and by the presence of ultrabasic masses, which weather more readily than the pyroxenic gneiss. In view of these facts, the irregular contour of the lakes on the Archæan plateau, as proved by the soundings, is what might naturally be expected.

Loch Assynt.—This is the largest and by far the most important lake in the Assynt district. Round the upper end and along the north-east shore from Inchnadamph to the southern base of Quinag, it is floored by Cambrian and Torridonian strata, while the remainder rests on the Archæan gneiss plateau. It lies along an old consequent valley, the origin of which dates back to a time when the surface configuration was very different from what it is now. Originally, the lake was of larger dimensions, for at its upper end it has been silted up by the river Loanan; indeed, in that direction it must have extended at one time almost to Stonechrubie. At its lower end it must formerly have continued down to the narrows above Inveruplan—a distance of over two miles from the foot of the loch, where a rocky barrier of gneiss and intrusive dykes crosses the river Inver. From that point upwards to the present lower limit of the lake an alluvial terrace is traceable, through which the river follows a winding course. During its former extension, Loch Assynt must have been continuous with Loch Uidh na Geadaig and Loch Leitir Easaich.

The soundings show that this rock-basin is comparatively uniform. The 50-foot contour-line runs from the present lower limit of the lake to near the mouth of the river Loanan, the 100-foot contour-line, from the bend at Loch Leitir Easaich to near the schoolhouse at Inchnadamph—a distance of 5 miles; the 150-foot contour-line is continuous from a point opposite Tomore to near the schoolhouse at Inchnadamph, thus forming one basin $4\frac{3}{4}$ miles long. Five basins are enclosed by the 200-foot contour-line, and three basins by the 250-foot line. The height of the surface of the lake above sea-level is 215 feet, and the greatest depth is 282 feet, within the Archæan area near Tobeg and Eilean Assynt. At that point the lake is 67 feet below sea-level. A glance at the bathymetrical map will show that the long axes of the deeper basins coincide with the trend of the loch between Loch Leitir Easaich and Inchnadamph, and that they lie nearer the southern shore. This feature is worthy of note, as it is a continuation of an important fault which has been traced for miles along Glen Salach in a north-west direction, in the line of which lie several lakes (see Geological Map). It must be borne in mind, however, that this line of disruption, which has produced brecciation of the Archæan gneiss and dykes along