

parallel to those in the Moine schists; indeed, in certain localities they pass, irrespective of the boundary-line, from the igneous to the altered sedimentary rocks.

On either side of the Sutors of Cromarty, and stretching southwards along the sea-cliff to Fortrose, there is a narrow belt of crystalline schists rising from underneath the Old Red Sandstone. They belong to the group of quartz biotite granulites, and are associated with bands of amphibolite.

Newer granite masses are also represented in the area, as, for instance, on the hills north of Ardross Castle above Strath Rusdale, and in Glen Orrin west of Fairburn House. They resemble the normal types of the newer granite masses of the Highlands, and were erupted after the Moine schists had assumed their present crystalline character.

The strata of Old Red Sandstone age in the basin of the Cromarty firth are arranged in the form of a great syncline, whose axis runs in a north-north-east and south-south-west direction. The base of the series and the order of succession are admirably displayed on the sea-cliffs at Cromarty, and on the south-east shore of that firth as described long ago by Hugh Miller. The basal conglomerate is there overlain by the well-known fish-band, with calcareous nodules, graduating upwards into the coarse sandstones that form the centre of the basin. On the west side of the firth a similar sequence is observable. The basal conglomerate along the flanks of the hills is usually brought into conjunction with the crystalline schists by a fault, evidently of no great amount, for the unconformity is visible at certain localities. This horizon is surmounted by red sandstones and flagstones, calcareous and bituminous shales, and occasional intercalations of clays with limestone nodules, with fish remains. These are followed by an upper band of conglomerate, which is overlain by the coarse sandstones in the centre of the basin.

Various outliers of Old Red Sandstone, largely composed of conglomerate, and resting unconformably on the highly denuded platform of crystalline schists, occur some miles to the west of the main area of this formation in the Conon basin. Some of these are met with on the plateau between Loch Luchart and Aultguish. By far the largest and most important is that still further north in Strath Vaich, where an extremely coarse conglomerate, composed largely of blocks of the contiguous foliated granite, is found on the crest of Meall a' Ghrianam (2531 feet).

At the base of the sea-cliff formed by the crystalline schists and Old Red Sandstone of the Black Isle and the North Sutor, there are small patches of Oolitic rocks which have only a limited development. They occur on the beach below high-water mark at Eathie and at Port-an-Rìgh and Cadh-an-Rìgh near Sandwick. By means of the great fault that traverses the line of the Caledonian Canal, and is continued north-east along the shore of the Black Isle, these Secondary strata have been let down against the older rocks.