

Red Sandstone frame there occurs to the south, in the line of the great flat valley which runs across the country from the Firth of Forth to that of the Clyde, a broad belt of the Coal Measures,—the system which succeeds to it in natural sequence; but on the east, west, and north, the Coal Measures and New Red Sandstone are wanting, and we find fragments of a ring of Lias, as at Applecross on the one coast, and at Cromarty and Shandwick on the other; and outside the Lias, considerable fragments of yet another and wider ring of the Oolite. The sea on the east coast, and both that and numerous outbursts of overlying trap on the west, covers up the ring which lies beyond; but the Chalk flints and Greensand fossils of Aberdeen and Banff shires on the one hand, and the Chalk flints of Mull and Caithness on the other, indicate its existence and its components. An outer ring or frame of Chalk and Greensand, more or less broken, surrounds on two, mayhap on three, sides, the central nucleus of the kingdom; and were the beds of the German and Atlantic Oceans to be laid dry to the depth of about fifty fathoms, and the area of Scotland to be proportionally extended, you would find formation succeeding formation, in crossing the ring from the nucleus outwards, as we find them succeeding each other in the south of England, when crossing the country from South Wales in the direction of London. Beyond this outer ring of Chalk there lie, it is more than probable, deposits of the Tertiary system. Of the Mull deposits on the west coast we at least know, though they occur in so disturbed and overflowed a district, that they lie outside the Secondary deposits of the island; and again on the east coast, where the Tertiary deposits, which occupy so large a portion of

Cambrian and Lower Silurian rocks of Wales, and superposed upon these older formations in the great Old Red Sandstone of Caithness. See the abstract of Sir Roderick Murchison's paper in the Reports of the Leeds Meeting of the British Association.—G.