While no *islands* except mere solitary rocks like May island, the Bass Rock and Inchkeith diversify the eastern seaboard, the western presents a vast number, varying from such extensive tracts as Skye to the smallest stack or skerry. Looked at in the broadest way, these numerous islands may be regarded as belonging to two groups or series, the Outer and the Inner Hebrides. In the Outer Hebrides most of the ground is low, rocky and plentifully dotted over with lakes; but it rises into mountainous heights in Harris, some of the summits attaining elevations of 2600 ft. The general trend of this long belt of islands is north-north-east. The Inner Hebrides form a much less definite group. They may be regarded as beginning with the Shiant Isles in the Minch and stretching to the southern head­lands of lslay, and their irregularity has no doubt been chiefly brought about by the remarkable diversity of geological structure. Archean gneiss, Cambrian sandstone, Silurian quartzite, limestone and schist, Jurassic sandstone and limestone. Cretaceous sandstone, and Tertiary basalts, gabbros, and granitic rocks all enter into the composition of the islands.

*Influence of Topography.*—The influence of the topography of the country on the history of its inhabitants has been all-important. How powerfully the configuration affects the climate is shown in the remarkable difference between the rainfall of the mountainous west and of the lowland east. This difference has necessarily modified the character and employment of the people, leading to the culti- vation of the soil on the one side and the raising of sheep and cattle ■on the other. The fertile low grounds on the east have offered facilities for the invasions of Romans, Norsemen and English, while the mountain fastnesses of the interior and the west have served as secure retreats for the older Celtic population. While, therefore, Teutonic people have spread over the one area, the earlier race has to this day maintained its ground in the other. Not only external con­figuration but geological structure also has profoundly influenced the progress of the inhabitants. In the Highlands no mineral wealth has been discovered to stimulate the industry of the natives or to attract labour and capital. These tracts remain still, as of old, sparsely inhabited and given over to the breeding of stock and the pursuit of game. In the Lowlands, on the other hand, rich stores of coal, iron, lime and other minerals have been found. The coal-fields have gradually drawn to them an ever-increasing share of the population. Villages and towns have suddenly developed and rapidly increased in size. Manufactures and shipbuilding have grown and commerce has advanced with accelerated pace. Other influences have of course contributed largely to the development of the country, but among them all the chief place must be assigned to that fortunate geological structure which, amid the revolutions of the past, has preserved in the centre of Scotland those fields of coal and ironstone which are the foundations of the national industry.

*Geology.*

*Archean Rocks.—*The oldest rocks of Scotland and of the British Isles are known, from their antiquity, as Archean, and consist chiefly ■of gneiss (called Fundamental, as lying at the foundation of the geological structure of the country, and Lewisian and Hebridean, because it is well developed in the island of Harris and the Outer Hebrides), which varies from a coarsely crystalline granitoid mass to fine schist. The coarse varieties are most abundant, intermingled with bands of hornblende-rock, hornblende-schist, pegmatite, eucrite, mica-schist, sericite-schist and other schistose accompaniments. In a few places limestone has been observed. No trace of any organism has ever been detected in any of these rocks. Over wide areas, particularly on the mainland, the bands of gneiss have a general north-west trend and undulate in frequent plications with variable inclination to north-east and south-west. The largest tract of Archean rock is that which forms almost the whole of the Outer Hebrides, from Barra Head to the Butt of Lewis. Other areas more or less widely separated from each other run down the western parts of the shires of Sutherland and Ross and Cromarty, and are probably continued at least as far as the island of Rum.

*Eastern or Younger Schists.—*The central, southern and eastern Highlands are occupied by metamorphosed sedimentary and igneous rocks, to which has been provisionally assigned the name of Dalradian, from the old Celtic kingdom of Dalriada. Their true stratigraphical position has not yet been ascertained, and it may appear that more than one group of rocks is included in the series. Eastward of the Archean gneiss in the west of Sutherland the effect of enormous underground pressure has been to upraise masses of the ancient gneiss and Torridonian sandstone and thrust them westward over the younger rocks. It is not possible to say what was the original character of many of the disrupted materials, for they have been rearranged and re-crystallized into granulitic, flaggy gneisses and schists (Moine schists). They extend from the north-east of Suther­land as far south as the Sound of Mull. To the east of the dislocation of the Great Glen these puzzling rocks may also be met with, though in that tract most of the surface comprises sedimentary and igneous rocks, the metamorphism of which has varied much. Immense sheets of dolerite, gabbro, or allied basic rocks indicate eruptive materials intruded as sills or poured out as lavas contemporaneously with the sedimentary formations among which they he. On the other hand, there occur bands of conglomerate, pebbly grit, quartzite,

graphitic shale and limestone in a certain ordered sequence and over a wide area. Traces of annelids have been detected in some of the quartzites, and some of the less changed parts of the limestones may be searched for fossils. This great series of metamorphic rocks, the geological age of which is still unsettled, has had a powerful effect on the scenery, especially along the Highland line. Where a thick group of coarse hard grits intercalated in the sedimentary rocks crops out it rises into a chain of lofty rugged hills, of which Ben Ledi and Ben Vorlich are examples. The slate hills, weathering more readily,

assume gentle slopes and rounded ridges, as in the high land from Holy Loch to the Kyles of Bute. The quartzites rise in conical hills, such as those of Jura and Islay. And to the soil created by the decay of the limestones is due a greener verdure than that of the surrounding moors.

*Torridonian Sandstone.—*Above the Archean gneiss lies a series of red and chocolate-coloured sandstone (Torridon sandstone), which form a number of detached areas from Cape Wrath down the sea­board of the shires of Sutherland and Ross and Cromarty, across Skye, and as far as the island of Rum. They rise into prominent pyramidal mountains, which, as the stratification is usually almost horizontal present in their terraced sides a singular contrast to the neighbouring heights, composed of highly plicated crystalline schists. In the Torridon district they can be seen towering bed above bed to a height of about 4000 ft., but they must be at least 10,000 ft. thick. They are not met with anywhere else in Scotland. Traces of annelids and probably other organisms have been found in the bands of shale occurring in the south-west of the shire of Ross and Cromarty, in the isle of Raasay, and at Cailleach Head, and are the oldest relics of animal life yet found in Great Britain.

*Cambrian.—*In the north-western Highlands masses of white quartzite, resting unconformably in Torridonian sandstone, run from Loch Eriboll to Skye, forming in places great conical hills and some-