of 3000 to 4000 feet above the sea. Their most familiar example perhaps is the top of Lochnagar, where when the level of 3500 feet has been gained the traveller finds himself on a broad undulating moor, more than a mile and a half long, sloping gently southwards towards Glen Muick and terminating on the north at the edge of a range of granite precipices. The top of Ben Macdui stands upon nearly a square mile of moor exceeding 4000 feet in elevation. These mountains lie within granite areas ; but not less striking examples may be found among the schists. The mountains at the head of Glen Esk and Glen Isla, for instance, sweep upward into a broad moor some 3000 feet above the sea, the more prominent parts of which have received special names,—Driesh, Mayar, Tom Buidhe, Tolmount, Cairn na Glasha. It would hardly be an exaggeration to say that there is more level ground on the tops of these moun­tains than in areas of corresponding size in the valleys below. That these high plateaus are planes of erosion is shown by their independence of geological structure, the upturned edges of the vertical and contorted schists having been abruptly shorn off and the granite having been wasted and levelled along its exposed sur­face. They look like fragments of the original tableland of erosion out of which the present valley-systems of the Highlands have been carved. Among the southern uplands traces of a similar tableland of erosion are in many places to be detected. The top of Broad Law in Peeblesshire, for example, is a level moor com­prising between 300 and 400 acres above the contour line of 2500 feet and lying upon the upturned edges of the greatly denuded Silurian grits and shales. An instructive example of the similar destruction of a much younger platform is to be found in the ter­raced plateaus of Skye, Eigg, Canna, Muck, Mull, and Morven, which are portions of what was probably originally a continuous plain of basalt. Though dating back only to older Tertiary time, this plain has been so deeply trenched by the forces of denudation that it has been reduced to mere scattered fragments. Thousands of feet of basalt have been worn away from many parts of its sur­face ; deep and wide valleys have been carved out of it ; and so enormously has it been wasted that it has been almost entirely stripped from wide tracts which it formerly covered and where only scattered outliers remain to prove that it once existed.

It is a curious fact, to which allusion has already been made, that broad flat-topped mountains are chiefly to be found in the eastern parts of the country. Traced westwards these forms gradu­ally give place to narrow ridges and crests. No contrast, for in­stance, can be greater than that between the wide elevated moors of the eastern Grampians, and the crested ridges of western Inver­ness-shire and Argyllshire—Loch Hourn, Glen Nevis, Glencoe— or that between the broad uplands of Peeblesshire and the preci­pitous heights of Galloway. No satisfactory reason for these con­trasts can be found in geological structure alone. Perhaps the key to them is to be sought mainly in differences of rainfall. The western mountains, exposed to the fierce dash of the Atlantic rains, sustain the heaviest and most constant precipitation. Their sides are seamed with torrents which tear down the solid rock and sweep its detritus into the glens and sea lochs. The eastern heights, on the other hand, experience a less rainfall and consequently a dimi­nished rate of erosion. There is no reason to doubt that the present preponderance of rainfall in the west has persisted for an enormous duration of time.

Regarding the existing flat-topped heights among the eastern Grampians as representing what may have been the general char­acter of the surface out of which the present Highlands have been carved, we can trace every step in the gradual obliteration of the tableland and in the formation of the most rugged and individual­ized forms of isolated mountain. In fact, in journeying westwards across the tops of the Highland mountains we pass, as it were, over successive stages in the history of the origin of Highland scenery. The oldest types of form lie on the east side and the newest on the west. From the larger fragments of the denuded tableland we advance to ridges with narrow tops, which pass by degrees into sharp rugged crests. The ridges, too, are more and more trenched until they become groups of detached hills or mountains. In the progress of this erosion full scope has been afforded for the modifica­tion of form produced by variations in geological structure. Each ridge and mountain has been cut into its shape by denudation, but its actual outlines have been determined by the nature of the rocks and the manner in which they have yielded to decay. Every distinct variety of rock has impressed its own characters upon the landscapes in which it plays a part. Hence, amid the monotonous succession of ridge beyond ridge and valley after valley, consider­able diversity of detail has resulted from the varying composition and grouping of the rocks.

The process by which the ancient tablelands of the country have been trenched into the present system of valleys and confluent ridges is most instructively displayed among the higher mountains, where erosion proceeds at an accelerated pace. The long “screes” or talus-slopes at the foot of every crag and cliff bear witness to the continual waste of the mountain sides. The headwaters of a river cut into the slopes of the parent hill. Each valley is consequently

lengthened at the expense of the mountain from which it descends. Where a number of small torrents converge in a steep mountain recess, they cut out a crescent-shaped hollow or half-cauldron, which in the Scottish Highlands is known as a “ corry. ” Whether the convergent action of the streams has been the sole agency con­cerned in the erosion of these striking concavities, or whether snow and glacier-ice may have had a share in the task, is a question that cannot at present be satisfactorily solved. No feature in Highland scenery is more characteristic than the corries, and in none can the influence of geological structure be more instructively seen. Usu­ally the upper part of a corry is formed by a crescent of naked rock, from which long trails of débris descend to the bottom of the hollow. Every distinct variety of rock has its own type of corry, the pecu­liarities being marked both in the details of the upper cliffs and crags and in the amount, form, and colour of the screes. The Scottish corries have been occupied by glaciers. Hence their bottoms are generally well ice-worn or strewn over with moraine stuff. Not infrequently also a small tarn fills up the bottom, ponded back by a moraine. It is in these localities that we can best observe the last relics left by the retreat of the glaciers that once overspread the country. Among these high grounds also the gradual narrowing of ridges into sharp, narrow, knife-edged crests and the lowering of these into cols or passes can be admirably studied. Where two glens begin opposite to each other on the same ridge, their corries are gradually cut back until only a sharp crest separates them. This crest, attacked on each front and along the summit, is lowered with comparative rapidity, until in the end merely a low col or pass may separate the heads of the two glens. The various stages in this kind of demolition are best seen where the underlying rock is of granite or some similar material which possesses considerable toughness, while at the same time it is apt to be split and splintered by means of its numerous trans­verse joints. The granite mountains of Arran furnish excellent illustrations.

Where a rock yields with considerable uniformity in all directions to the attacks of the weather it is apt to assume conical forms in the progress of denudation. Sometimes this uniformity is attained by a general disintegration of the rock into fine débris, which rolls down the slopes in long screes. In other cases it is secured by the intersection of joints, whereby a rock, in itself hard and durable, is divided into small angular blocks, which are separated by the action of the elements and slide down the declivities. In many instances the beginning of the formation of a cone may be detected on ridges which have been deeply trenched by valleys. The smaller isolated portions, attacked on all sides, have broken up under the influence of the weather. Layer after layer has been stripped from their sides, and the flat or rounded top has been narrowed until it has now become the apex of a cone. The mountain Schiehallien (3547 feet) is a noble instance of a cone not yet freed from its parent ridge. Occasionally a ridge has been carved into a series of cones united at their bases, as in the chain of the Pentland Hills. A further stage in denudation brings us to isolated groups of cones completely separated from the rest of the rocks among which they once lay buried. Such groups may be carved out of a continuous band of rock which extends into the regions beyond. The Paps of Jura, for instance, rise out of a long belt of quartzite which stretches through the islands of Isla, Jura, and Scarba. In many cases, however, the groups point to the existence of some boss of rock of greater durability than those in the immediate neighbourhood, as in the Cuchullins and Red Hills of Skye and the group of granite cones of Ben Loyal, Sutherland. The most impressive form of soli­tary cone is that wherein after vast denudation a thick overlying formation has been reduced to a single outlier, such as Morven in Caithness and the two Ben Griams in Sutherland, and still more strikingly the pyramids of red sandstone on the western margin of Sutherland and Ross-shire. The horizontal stratification of some of these masses gives them a curiously architectural aspect, which is further increased by the effect of the numerous vertical joints by which the rock is cleft into buttresses and recesses along the fronts of the precipices and into pinnacles and finials along the summits. Solitary or grouped pyramids of red sandstone, rising to heights of between 3000 and 4000 feet above the sea, are mere remnants of a once continuous sheet of red sandstone that spread far and wide over the western Highlands.

Stratified rocks when they have not been much disturbed from their original approximate horizontality weather into what are called “escarpments,”—lines of cliff or steep bank marking the edge or outcrop of harder bands which lie upon softer or more easily eroded layers. Such cliffs may run for many miles across a country, rising one above another into lofty terraced hills. In Scotland the rocks have for the most part been so dislocated and disturbed as to prevent the formation of continuous escarpments, and this interesting form of rock-scenery is consequently almost entirely absent, except locally and for the most part on a compara­tively small scale. The most extensive Scottish escarpments are found among the igneous rocks. Where lava has been piled up in successive nearly horizontal sheets, with occasional layers of tuff