maximum extension may thus be briefly summarised:—(1) The grinding up of the cover of rotted rock and loose debris due to subaerial waste in the later divisions of Tertiary time; (2) the scooping out of loosened material along shatter belts or great lines of fracture; (3) the differential erosion of the rocks entering into the geological structure of the country, dependent upon the variation in the powers of resistance of the strata, on the thickness and slope of the ice, and on the grinding power of its basal layers charged with sand, clay, and stones; (4) the consequent steepening of opposing rock-faces, of escarpments, of mountain sides, the deepening of valley floors, the planing of cols, and the general lowering of the rocky plateaux.

Thus we find in those cases where the trend of the valley coincided with the direction of ice-flow during the maximum extension, that V-shaped valleys became U-shaped—a form characteristic of glaciated mountain regions. The projecting spurs were removed, and a lack of adjustment was produced between the over-deepened trunk valleys and their tributaries. The latter are termed hanging valleys, owing to the steep gradient at which they enter the trunk valleys. Another result of the abrasion by the ice, which will be more fully dealt with in the sequel, was the production of one or more rock-basins along the course of the valley, dependent upon the topographical features, the geological structure, and the erosive power of the ice in each case.

The distribution of the ice in the region situated to the north-west of the Great Glen, where the ice-shed lay to the east of the watershed over part of the area, caused a drainage of ice across the low cols in the old transverse valleys. Hence, owing to the excessive erosion which they experienced, these low cols form flats often studded with lochans, many of which are true rock-basins. Where the side streams debouch on the cols they form deltas, which deflect the drainage to the east or west, or impound the waters and thereby give rise to lakelets.

The glacial accumulation characteristic of this period is the boulder clay, with lenticular sheets of sand and gravel, which forms an extensive covering in the Lowlands, and stretches up the valleys of the Southern Uplands, and to a limited extent in the Highlands. Its remarkable thickness in certain localities, and its continuity in the Lowlands, furnishes impressive testimony of the modification of the country during the period of maximum extension of the ice; but though the area which it covers on the mainland seems large, it is in reality small compared with the covering which must have been spread over the Continental Shelf.

During the retreat of the great *mer de glace*, marginal lakes were formed between the ice-front and the slopes of the hills from which the ice had melted away, thus giving rise to terraces of sand and