

PART I.

AN ACCOUNT OF THE INTERIOR OF CEYLON, AND OF ITS INHABITANTS.

CHAPTER I.

NAME. — GEOGRAPHICAL OUTLINE. — ROCKS. — MINERALS. — SOILS. —
SPRINGS.

FEW subjects are more obscure than the names of countries and of people; and, for the obvious reason that they are generally given in remote times and in barbarous ages, before the period of authentic history has commenced or even its dawn appeared. I do not offer this remark prefatory to any disquisition relative to the name of the island of which I am about to write, but rather as a reason for not engaging in it. I may merely mention, that the name ‘Ceylon,’ familiar to us, but unknown in the languages of the East, is derived, probably, from *Sinhala*, the ancient appellation, for which *Lakka* and in Pali *Lanka*, is now substituted by the natives and commonly used.

As this work is expressly on the Interior of Ceylon, the geographical notices of the island in general, may be very concise. It is only necessary to remind the reader, that the island is in the tropic of Cancer, situated nearly between the parallel of 6°

and 10° north latitude, and between 80° and 82° east longitude; that it is at the western entrance of the bay of Bengal, and off the coast of Coromandel, from which its nearest point is separated by the gulf of Manar, only about thirty miles wide; that in figure, it is nearly heart-shaped, with the island of Jaffnapatam, of a very irregular form, appended to its northern and narrowest extremity; that it is almost two-thirds the size of Ireland, containing altogether a surface of about twenty thousand seven hundred and seventy square miles; and lastly, that the coast of the island in general, including the whole of our old possessions, the maritime provinces, are, with the exception chiefly of parts of the broad southern extremity, low and almost flat country.

The Interior of Ceylon, the old kingdom of Kandy, now called the Kandyan provinces, require more minute description. They extend from about latitude $6^{\circ} 20'$ to $8^{\circ} 45'$ north, and lie between about $80^{\circ} 8'$ and $81^{\circ} 45'$ east longitude. As an approximation, their superficial contents may be stated at twelve thousand three hundred and sixty square miles. They occupy the whole middle of the island, and a great portion of its southern extremity; and are bounded by a belt of maritime district, irregularly varying in width, from eight to thirty miles, and at the northern extremity amounting nearly to eighty miles.

The character of the Interior, in relation to surface, greatly varies. Nowhere is the distinction of high land and low land more obvious. With tolerable precision, it may be divided into flat country, hilly, and mountainous. The mountainous division is skirted by the hilly; and, the latter is generally bounded by flat country. Dividing the island into two equal parts, by an imaginary line across, from west to east, the mountainous region

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will occupy the middle of the southern half. The centre of this region is about 7° north and $80^{\circ} 46'$ east. Its greatest length is about sixty-seven miles, and its greatest width, about fifty-three. It is not easy to describe with accuracy the boundaries and extent of the hilly division. Perhaps, on an average, it extends beyond the mountains to the distance of ten or twenty miles. The flat country forms the circumference of the Kandyan provinces, with the exception of a small portion of the western boundary, which is hilly. The greatest extent of this country is to the north and north-east of the mountains; in the former direction, it reaches at least sixty miles.

The features of each of the three divisions of the Interior are necessarily peculiar: grandeur is the characteristic of the mountainous, — beauty of the hilly, and sameness of the lowland country, which, a covering of luxuriant vegetation, with few exceptions spread over the whole, does not tend to diminish.

The mountainous district, in perpendicular elevation above the sea, varies from eight hundred to three thousand and even to four and five thousand feet. In general, it does not exceed one or two thousand feet. The regions of greater elevation are in extent very inconsiderable. The most extensive I am acquainted with reaching four thousand feet, is that portion of country which lies between Maturatta and Fort M'Donald, the very heart and centre of the mountainous division; and it does not exceed twelve miles in length, nor is it more, perhaps, than two or three miles wide. The only region, deserving the name, amounting to five thousand feet, is that tract of wild country called the Neura Ellya, not far distant from the preceding, and the circumference of which can hardly exceed fifteen or twenty miles. It may be right to state distinctly, that the summits of mountains

are not here alluded to, but mountainous regions, or masses of continuous surface, approaching, more or less, to table-land. Many of the mountain-summits are elevated considerably above any of the heights assigned. Adam's Peak, the *Samennella* of the Singalese, the most lofty mountain of Ceylon, is about six thousand one hundred and fifty-two feet perpendicular height; and, Namana Cooli Kandy, which, there is reason to infer, is the next loftiest, is about five thousand five hundred and forty-eight feet high.*

In few countries do mountains exhibit greater variety of forms and directions. They most frequently occur connected in chains and terminating in rounded or peaked summits. I do not recollect a single instance of a solitary, insulated mountain. Their sides are always steep, and occasionally precipitous and rocky. In some parts, the chains of mountains observe a parallelism in their course; in other parts, even neighbouring mountains do not correspond with any regularity in their direction. An instance of the former, occurs in the province of Doombera, where the mountain-ridges generally run N. N. E. and S. S. W. The provinces of Ouva affords an example of the latter, of the very various directions of the mountain-chains. By some inquirers it is supposed, that a correspondence may be traced between the proportional heights of the mountains and the depths of the adjoining valleys. As a general rule, such a supposition is not applicable to Ceylon. The curious circumstance of there being no lakes, not even a single stagnant pool among the mountains, is alone almost sufficient to show the fallacy of the preceding conclu-

* The data, from which these heights are assigned, will be given in an after-part of the work.

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sion. In the Highlands of Scotland, where the loftiest mountain is two thousand feet lower than Adam's Peak, there are many lakes exceeding in depth six hundred feet ; and, it is hardly credible to suppose, that lakes of proportional depth ever existed in Ceylon, that have since been filled up by the detritus of rocks, little, if at all, more liable to decay and be disintegrated than the rocks of the mountains of Scotland.

Since there are no lakes in the interior, it is unnecessary to add, that every valley has an outlet ; and, that the descent of every valley is gradual, though irregular, from the mountain to the plain. The forms and directions of the valleys are not less various than those of the mountains by which they are constituted. In general, their width is a very small proportion of their length ; often, they are extremely narrow. The deepest valleys are in the heart of the mountains. In relation to depth, I am not acquainted with any valley that exceeds that of Maturratta. This valley, in many parts, is between three and four thousand feet deep, and from one boundary-mountain to the other, not, perhaps, half a mile wide.

The hilly division of the interior, in elevation above the sea, may vary from one to five hundred feet ; and the hills themselves may vary in perpendicular height from two hundred to one thousand feet. The hills, like the mountains, are, more or less, connected in chains, generally of little length. Their outlines are rounded and gentle ; their sides seldom steep, and their appearance comparatively tame. In the valleys formed by the hills, there is nothing peculiar that requires notice.

The level division of the Interior may vary in elevation, from fifty to two hundred feet. It exhibits extensive plains, either quite level to the eye, or very gently undulating ; in some dis-

tracts, entirely without hill ; in others, interrupted by chains of low hills ; and in some places dotted, as it were, with solitary hills from one hundred to five hundred feet high above the plain, and these in general are immense masses of rock.

These geographical notices of the Interior have not that precision which the subject requires, but of which, at present, it does not admit. Till very lately, the Kandyan provinces have been almost a *terra incognita*. It is only since we have had possession of the country that it has been in our power to investigate its geography. And though much has been done in this important enquiry during the last three years, still much remains to be done, to afford materials either for minute description, or for the formation of a perfectly accurate map. In a cursory manner the subject will be resumed in the progress of this work, and particularly in the narrative of travels, one of the principal objects of which will be the description of country, and the illustration of scenery.

The geology and mineralogy of Ceylon have not yet received that degree of attention which their importance deserves. The statements that have been made on these subjects by former authors, have been far from correct, and often very delusive, — tending to inspire hopes of subterranean riches never to be realised, and to encourage enterprises in which it would be madness to engage. As these remarks relate to the maritime as well as the Kandyan provinces, no apology is required for giving a sketch of the geology and mineralogy of the island in general. It may be premised, that a summary of part of the information I have to offer has been already presented to the Geological Society of London, and has been honoured with a place in their Transactions. Since that brief account was written, I have en-

joyed opportunities for more extended observation, in consequence of which, much will appear in the following sketch, of which no notice is to be found in that paper.

In Ceylon, nothing is to be observed of that order and succession of rocks that occurs in Saxony and in England and in many other parts of Europe. Uniformity of formation is the most remarkable feature in the geological character of the island. As far as my information extends, the whole of Ceylon, with very few exceptions, consists of primitive rock. And the exceptions exist so very partially, presenting themselves only at Jaffnapatam and the contiguous islets, and here and there along the shores about high-water mark, that they need not interfere with the comprehensive idea, that the mass of the island is primitive, and unconnected with any other class of rocks, exclusive of those of very recent formation, to which the exceptions alluded to belong.

Another remarkable geological circumstance is, that though the varieties of primitive rock are extremely numerous and indeed almost infinite, the species are very few, and seldom well defined. The most prevailing species is granite, or gneiss; the more limited are quartz-rock, hornblende-rock and dolomite-rock, and a few others, which may be considered, perhaps, with advantage under the head of imbedded minerals.

The varieties of granite and gneiss are innumerable, passing often from one into another, and occasionally changing their character altogether, and assuming appearances, for which, in small masses, it would be extremely difficult to find appropriate names. These changes and endless varieties depend chiefly on composition,—on the proportions of the elements,—on the excess or deficiency of one or more,—or on the addition of new

ingredients,—not to mention mechanical structure, variation of which, though obscure in relation to causes, has a manifest effect in modifying appearances. Regular granite is not of very common occurrence. One of the best instances I know of it, is in the neighbourhood of Point de Galle, where it is of a grey colour and fine-grained. Graphic granite is still rarer. The only good example of it, with which I am acquainted, is at Trincomalee, where it occurs of a beautiful quality, on the sea-shore about half a mile beyond Chapel Point, imbedded in a granitic rock. The quartz, in this instance, is black or grey rock crystal, and the felspar highly crystalline and of a bright flesh colour. The quartz envelopes the felspar in very thin hexagonal or triangular cases, so that nothing can be more different in appearance than the longitudinal and transverse fracture of the rock. Neither is sienite common. I have found it in several places in the neighbourhood of Atgalle and Meddamahaneura and in some other parts of the Kandyan provinces. It occurs, rather forming a part of rocks of a different kind, than in great mountain masses. Well formed gneiss is more abundant than granite. Its peculiar structure may be seen in many places, but no where more beautiful than at Amanapoora in the Kandyan provinces, where it consists of white felspar and quartz in a finely crystalline state, with layers of black mica, containing disseminated through it, numerous crystals of a light coloured garnet.

Both the granite and gneiss are very much modified, it has been remarked, by an excess or deficiency of one or other of the ingredients. When quartz abounds in a fine-granular state, the rock often looks very like sandstone: of this there is an instance in the neighbourhood of Kandy. When felspar, or adularia

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abound, the rock acquires a new external character. This variety is common. In a few places the rock contains so much of these minerals, that it may with propriety be called adularia or felspar-rock. When mica prevails in gneiss, which in Ceylon is very rare, it acquires not only the appearance but very much the structure of mica-slate: I had an instance of this in a very wild and unfrequented part of the interior, amongst the mountains of Kotmale at the ford of the Poondool oya. The instances of change of appearance of the granitic varieties from the presence of unusual ingredients, are neither few in number, or of unusual occurrence. The discussion of them may be engaged in, in the mineralogical part of the work.

The more limited varieties of primitive rock, as quartz, hornblende, and dolomite rock, seldom occur in the form of mountain masses.

Quartz in large veins and imbedded masses is abundant in the granitic rocks; and in some places to such an extent as even to rival mountain masses: Of this description is the quartz-rock at Trincomalie, where a low hill is entirely composed of it, extending from Chapel Point to the opposite point on which Fort Osthburgh is built; a distance, perhaps, of two miles. This quartz-rock near the sea has a very singular and picturesque aspect. Quite bare, it stands erect like denuded veins. It is very precipitous, and exhibits the appearance of buildings in ruins; a circumstance from whence the name of Chapel Point is derived, which is applied to the termination of the ridge in question. The quartz is in general milk white, translucent, full of rents, and so very friable as to remind one of unannealed glass. Besides Trincomalee, other places might be mentioned,

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especially in the interior, in which this rock occurs in considerable quantities.

Pure hornblende-rock and primitive greenstone are far from uncommon. They constitute no entire mountain, or hill, that I am aware of; but they form a part of many, particularly of Adam's Peak and of the hills and mountains adjoining Kandy.

Dolomite-rock, I believe, is entirely confined to the interior, where it exists in very many places in veins and imbedded; and where it occasionally appears constituting low hills. In the first form, its localities are so numerous that it would be tedious to enumerate them: I may merely mention, that it is very abundant in the neighbourhood of Kandy and Badulla, and that it occurs in many parts of the districts of Doombera, Matele, Saffragam, and Ouva. Constituting hills, it is of rare occurrence; indeed, I am not aware that any hills of this rock exist, excepting in the lower parts of Matele, and near Hangranketty. The old military post of Nalandi in Matele was situated on a hill of this kind; and judging from the forms of many of the hills of this district, I suspect they are of the same nature; but I could not, when travelling, ascertain the fact, — that part of the country being uninhabited, — very generally covered with thick wood, — the hills not very near the road and of very difficult access, (if accessible,) and my time limited. The varieties of dolomite-rock are almost as numerous as those of granite. When purest, it is snow-white; generally crystalline; often highly crystalline, composed of rhombs that are easily separated by a smart blow, but rarely finely granular. I found a specimen of the highly crystalline kind, of sp. grav. 1.93, composed of