

COORG.

PHYSICAL FEATURES.

What Wales is to England, Coorg is to Mysore, in miniature; a picturesque mountain region, situated on its western side. But though governed by the same Chief Commissioner, Coorg is British territory, and forms no part of Mysore. Its name, properly Kodagu, said to mean 'steep mountains', graphically depicts the character of this interesting alpine land.

The country is formed by the summits and eastern declivities of the Western Ghats, which separate it on the south-west from the woody tracts of the Wynad and North Malabar, and on the north-west from South Canara or the Tulu country. On the north it is partially separated from the Mysore Malnad of Manjarabad, of which it is naturally a continuation, by the rivers Kumáradhári and Hemavati. Eastwards it merges into the tableland of Mysore, the boundary for some distance being marked by the river Kávéri. The greater part of the western frontier is from 20 to 30 miles from the sea.

Geographically speaking, it lies between north latitude $11^{\circ} 55'$ and $12^{\circ} 50'$, and between east longitude $75^{\circ} 25'$ and $76^{\circ} 14'$; and embraces an area computed at 1,580 square miles.* Its greatest length, from the Hemavati in the north to Davasi betta in the south, extends over 60 miles; and its greatest breadth, from Sampáji in the west to Fraserpet in the east, about 40 miles. Its shape on the map has been compared to that of an infant's knitted boot, the heel pointing north-west, and the toe south-east. A narrow arm, about 12 miles long by about 6 wide, projects northwards into Mysore on the north east.

Standing on a bright November morning on the summit of the Brahma-giri near Tale Kávéri, the head or source of that river, the observer is filled with delight and admiration of the grand and picturesque

* For this estimate I am indebted to Captain R. M. Clerk, in charge of the Revenue Survey now in progress. In the Census Report and subsequent official documents, the area has been assumed as 2,000 square miles, on what ground is not known. Lieutenant Conner's Survey of 1817 gave an area for Coorg at that time of 2,165 square miles, or 1,585 above the ghats and 580 below; but the latter districts, on the conquest of the country in 1834, were annexed to South Canara.

view that opens out before him. As far as the eye can reach to the north-west and south-east, it beholds ridge after ridge of grassy or forest-clad hills, now gently sloping down in wavy lines, now bold and abrupt, raising their steep summits into the clear blue air. Kudaremkha-betta, the far seen landmark of the mariner, bursts into view from Canara : the Bettadapur and Chamundi hills in Mysore, the Wynád mountains of Malabar, and even the range of the distant Nilagiris are clearly visible ; while in the west, at a distance of about 39 miles below the steep precipices of the Ghats, the coast-line of North Malabar and South Canara, intersected by broad, bright, serpentine rivers, and beyond, the dark-blue Indian Ocean dotted with sailing craft, fascinate the spectator.

Coorg Proper, which occupies the central portion of the country, is covered with forest, save here and there where the clearing of a coffee plantation or ragi patch, or the park-like open glades (*báne*) with their beautiful greensward and varied foliage, afford a charming variety to the landscape. In vain, however, the eye searches for towns and villages, or other indications of civilized life. Only here and there in nooks and corners, ensconced amongst groves or clusters of cultivated trees, and betrayed by a wreath of smoke, can one discover the thatched houses of the Coorgs, who love a secluded abode near their fields.

The want of permanent sheets of water, such as extensive tanks or prominent rivers, may be considered as somewhat detracting from the perfection of the landscape, but during a heavy mist in November, or in the monsoon, fancy may easily transform the whole country into innumerable islands emerging from a vast agitated sea.

The general appearance of the country varies considerably in the different districts. In the vicinity of Somavárpet, in the north of Coorg, the hills are gently rounded, alternating with sloping glades, interspersed with clumps of forest trees, resembling the finest park scenery in Europe. Near Mercara, the hills are closer together and more abrupt, and the ravines deeper and more wild. Towards Fraserpet, the country assumes the champaign character of the Mysore plateau, with scattered solitary hills. South of Mercara, in the direction of Virajpet, especially in Beppu-nád and Kadyet-nád, the country is open, the woods are neither dense nor high, and beautiful grassy downs rise from extensive rice valleys. The eastern frontier, between the Kávéri and Lakshmantirtha rivers, exhibits an almost uninterrupted jungle, inhabited in January, February and March by Kurambar, Lambáni and other wandering tribes.

Mountains.—The most prominent ridge of mountains in Coorg, as to height and extent, is that which culminates in the summits of the Western Ghats. It stretches in its main outline, from Subrahmanya in the north-west to the furthest point of the Brahmagiris in the south, over upwards of 60 miles. Seen from the Western Coast near Cannanore, the abrupt ascent, with the great height and varied configuration of the Ghats, present a most grand and imposing spectacle.

The most conspicuous subdivisions of the Ghats are,—in the south, the Brahmagiris or Marenád hills, which constitute a formidable natural barrier between Coorg and Wynád. Their height averages some 4,500 feet above the level of the sea. The highest peak of the Brahmagiris is Davasi betta, which towers several hundred feet above a beautiful table-land called Huyále-male, and overlooks the temple of Pémmaiya at Tiranelli in Malabar in the deep valley of the Pápanáshe river, and beyond it the extensive coffee plantations and high mountains of North Wynád. Further on, to the west, rise the Hanumán-betta, the Kadangamale and the Perumále-male. The many spurs that branch off in all directions from the Brahmagiris over the whole of Kiggatnád and on to the eastern elbow of the river Kávéri, produce a ramification of narrow-ridged hills, now ascending to almost solitary grandeur, like the Ambate-betta near Virájpet, the Bittangala, the Hattur hill or Kundada-betta, the Siddesvara hill and Mankal-betta, now subsiding into the undulating slopes of the most eastern elevations, and enclosing innumerable paddy-fields, some of which are the most extensive in Coorg.

From the Perambádipass near Virájpet to the Todikánapass near the source of the Kaveri, the main chain of the Western Ghats extends in a north-westerly direction, in almost a straight line of 30 miles in length. Towards the west it falls with great abruptness, the descent from the summit to the foot being generally from 3 to 5 miles, the first part of which is particularly steep. Behind Nalknád palace, Tadiándamól, the highest mountain of this range, raises its gracefully shaped head over its maritic neighbours. Its height is 5,729 feet above the level of the sea.* The ascent is easy; two-thirds of it may be achieved on horseback, and though the topmost portion is rather difficult, the persevering climber is richly rewarded for his exertion when in the cool bracing air he stands on the narrow ledge of the giddy summit and gazes over the gloriously diversified highlands and lowlands at his feet.

* This and other heights which follow are taken from the charts of the Great Trigonometrical Survey.

About 6 miles to the south-east of Tadiándamól rises the Jóna male, the highest mountain in Kadyetnád. It is sacred to Maletámbiran (Tambiran, a Malayalam god) and overlooks the Kodantora pass. Two miles to the north-east of Tadiándamól there is another mountain giant, the Iggudappa-kundu, near the Páditora pass, and three miles further on, the Pérur point, and four miles still further the Srimangala point. The last notable mountain in the same range is the Brahmagiri in Távunád at the source of the river Kaveri.

At an acute angle upon this line, the main chain of the Ghats is continued in a due easterly direction as the Benga-nád range, till, nearing Mercara, it makes a sudden turn to the north-west, and forms with the latter the Sampáji valley, which leads by a gradual slope into the low country of Canara. At the head of the valley, and supported by a high ridge with steep abutments on its southern front, the Mercara table-land is situated. This ridge branches off in two directions, one towards the south-eastern elbow of the Kaveri, culminating in the pointed peak of Núrokal-betta, and the other, the Horúr branch, due east in a zigzag line towards Fraserpet, with several rugged hills, the most remarkable of which is Kallúr-betta, clothed with teak forest. The Núrokal and Benga-nád range make up with the Western Ghats the watershed of the upper basin of the Kaveri, a valley which between Mercara and Nalknád is 15 English miles broad.

From the main chain of the Ghats and the Benga-nád range, innumerable ridges jut out on either side. These are diminutive when compared with the parent stock; and they decrease in height as they recede, but have almost everywhere narrow summits and steep declivities.

The table-land of Mercara, which is 3,809 feet above sea level at the Fort, maintains throughout an average altitude of 3,500 feet, and may be said to extend as far as Somawárpét, a distance of 26 miles, but on the east it slopes down towards the Kaveri, which near Fraserpet is still at an elevation of 2,720 feet above the sea. This plateau, crossed in all directions by minor hills and ridges, is bounded on the west by the continuation of the Ghats, which culminate near the Bisilu-pass in the Subrahmanya or Pushpagiri hill, 5,626 feet above the sea level. This is a remarkable two-pointed hill of precipitous height and peculiar shape, and resembles, as seen from Mercara, a gigantic bullock hump. The ascent, which, on account of the precipices of the southern and western

face of the hill, can only be effected by a circuitous route, is more difficult than that of Tadiándamól. Starting from Bhágati, at the base of the Pushpagiri, it is about 6 miles walking, the ascent taking a good walker 3 hours, and the descent to the Hiridi-gadde of the Bidehalli village 2 hours. A dense jungle, dear to wild elephants, has to be penetrated, and the ascent is severe: but the summit commands an extensive prospect over Coorg, Canara and Mysore. There are on this hill numerous Hindu memorials in the shape of stone mounds. Within an enclosure there are two rude stone structures, with the customary imprint of two feet (*páda*) said to be of celestial origin.

Amongst the many ridges that branch off from the Subrahmanya range of the Ghats, the most remarkable is that which attains its greatest height in Kóte-betta, about 9 miles north of Mercara. Its elevation is 5,375 feet, and its base covers a very large extent of country. Its summit, which is divided into two peaks, one rather pointed—the Harargal-betta—and the other broad, forms a comparatively flat table land, while its sides are clothed with forest, and innumerable cultivated valleys occupy the recess. Close to the apex there are two reservoirs of water, one for the use of the Brahmans and one for the Coorgs, which all the year round ret in a constant supply. Close to the summit, on a spacious platform, is a small temple of rough granite slabs dedicated to Siva. This hill, as well as the Núrok-al-betta, offer, on account of their height and central position, the finest general view of Coorg; and even to the lover of nature familiar with mountain glories in Scotland, Switzerland or Italy, no more delightful excursion could be recommended than that to these hills.

From Kóte-betta to the north, there is another ridge running parallel with it, the Sínthalli hills, and beyond them is a bluff hill with almost a precipitous declivity on its western face—the Múkri-betta, with a fine coffee plantation at its base.

The last remarkable range, that which extends from the northern frontier of Coorg down to the Kávéri almost due south, is the Yélnsávira hill, with the Málimbi and Kánangala peak. The former is distinguished by its beautifully conical shape, which strikes the eye in every part of Coorg. Its altitude is 4,486 feet.

The geological formation of the Coorg mountains is indicated by the sharply defined outline of the Western Ghats, a feature characteristic of granitic rocks. The constant action of the stormy monsoon rains, how-

ever, followed by scorching east winds and a burning sun, has greatly affected the surface of the mountains, and a perpetual process of disintegration of the uppermost portions has imparted to them a somewhat rounded appearance, which does not occur where the atmospheric influences are less severe, and the alternation of temperature less sudden.

The several members of the metamorphic class of rocks, of which the Coorg mountains consist, may be found in almost every mountain torrent. They are : granular and foliated or stratified granite (gneiss), which consists of quartz, felspar and mica ; syenite, a rock of the appearance of ordinary granite, in which however hornblende is substituted for mica ; and mica-schist, a slaty rock chiefly composed of mica and quartz, sometimes with imbedded garnets. Near Mercara may be found clay-slate or argillaceous schist of coarse variety. This consists of silica and alumina, combined with a little iron, magnesia, potash and carbon. Amorphous limestone is present in the neighbourhood of Bellur near Fraserpet, and supplies nearly all the requirements for building purposes in Coorg. Among this limestone, which is dug out from the ground in small earthy lumps like the kunkur in the N. W. Provinces, and which is perhaps more properly termed magnesian limestone, nodules of magnesite are occasionally met with.

A ferruginous laterite, composed of silicate of alumina and oxyde of iron, appears sporadically in almost every part of Coorg. Likewise iron ore in the shape of cylindrical, rootlike lumps.

The ingredients of all these rocks, which are subject to an unceasing process of decomposition, constitute the nature of the soil all over the country, and, as a matter of course, on the predominance of the one or other or several of their constituent parts, combined with other conditions, depends as elsewhere the fertility or sterility of the ground.

Felspar is very common, and yields a rich soil. Veins of it are laid bare along the banks of the Ghat roads. In many places it is reduced to a white powder, the kaolin or porcelain clay, with which marketable chunam is adulterated. Mica is frequently seen, and here and there the roads glitter with its shining scales. After heavy showers, the water channels along the sides of roads which have been metalled with syenite appear covered with a sparkling blackish sand, the hornblende of the decomposed syenite. Common quartz occurs most frequently in amorphous pieces. The considerable amount of carbonate of lime in the

ashes of the matti (*terminalia coriacea*), a tree largely distributed all over the eastern parts of Coorg, proves the presence of limestone in the soil of that region.

There are no mines in Coorg, and it would appear that, except traces of iron in the shape of oxydes, no metals exist.

Rivers.—From the configuration of the country, it is evident that the main drainage of Coorg is in an easterly direction towards the Bay of Bengal, while the mountain torrents of the western declivities of the Ghats flow into the Indian Ocean.

The Coorg rivers are not remarkable either for width or depth, but their water supply is everywhere abundant throughout the year. As their sources are high up in the mountains, and their courses over steep declivities the streams are impelled with great rapidity over generally very rocky beds, which render them almost wholly useless for navigation of any kind, and owing to the height of their banks and the unevenness of the country, few of them allow of artificial irrigation, but the rivulets are everywhere laid under contribution.

The minor streams vary only in size, which depends upon the length of their course, the general characteristics being the same. They swell with the freshets in the early part of June, and flow with violent and boisterous rapidity till October, when they gradually subside to their normal dimensions.

Of the rivers that flow to the westward, the *Bara-pole* is the most considerable. It rises with the Lakshmantírtha and Pápanáshe on the same plateau of the Brahmárgiri hills in Kiggatnád, and flows for several miles in almost a straight line, through a deep mountain gorge, where it is joined by a tributary that falls over a perpendicular rock of great height, and forms a beautiful cascade near the Kudiál coffee estate. Near the Malryalam frontier, the Bara-pole leaps into a deep chasm, and forms a waterfall that, with the wild gloomy forest scenery around, is remarkably picturesque. Then for two miles this river runs along the Coorg frontier, up to the point where the *Kalla-hok*, descending through the Heggala-p, unite with it, when the combined streams enter Malabar and debouch near Chirakal into the sea. The Bara-pole receives the rainfall of 192 square miles, and is navigable from the sea to within 16 miles off the foot of the Ghats. On the road to Cannanore it is spanned by several bridges.

The next western stream of importance is the *Nujikal*, which drains

the Sampáji valley, and follows the main road as far as Silya, when it turns to the west, receives a tributary that originates on the western slopes of the Todikána pass and Tale Kávéri, and falls, under the name of Basavani river, into the sea near Kasergód.

The *Kumáradhári* rises near the Subrahmánya hill, and carries off but little of the Coorg waters. For some distance it forms the northern boundary along the Bisilu-pass. A number of tributaries from north and south swell its waters, the largest of them being the *Netravati*, which joins it near the village of Uppinángadi and thenceforth gives its own name to the rest of the course of this fine river, which near Mangalore meets the sea. The *Netravati*, though useless for purposes of irrigation, is of considerable commercial value. Boats of large size are safely carried from Mangalore as far as Bantwal or Páni Mangalore, and smaller craft proceed even beyond Uppinángadi.

The chief of the Coorg rivers, both as to size and importance, is the *Kávéri*; considering the volume of water it gathers during a course of nearly 400 miles through Mysore, along Salem and Coimbatore, through Trichinopoly to Tanjore, where it is almost lost in that garden of south India, the *Kávéri* may well be included amongst the principal rivers of the Peninsula. It rises on the Brahmagiri, at a place called Tale Kávéri, on the very verge of the Western Ghats, where they form a sharp angle with the Benga-nád range. Another stream, the *Kánake*, starts close by, and after a short run joins the *Kávéri* at the foot of the hill, near the village of Bhágamandala. At both places, on the top and at the foot of the hill, there are temples of great repute for sanctity among the Hindus, which are yearly resorted to by thousands of pilgrims from the adjoining countries. The *Kávéri* is, according to Brahmanical legend, the holiest river in India. Even the holy goddess Ganga resorts underground to the all-purifying floods of the *Kávéri* once a year in Tulá mása, *i. e.*, October—November, to wash away the pollution contracted from the crowds of sinners who have bathed in her own waters.

The course of this fine river through Coorg is very tortuous, but below Bhágamandala its current, with the exception of a few localities where it traverses beds of granite rock, is generally tranquil. Its banks, which are high and steep, are usually formed of rich clay or mould, and covered with luxuriant tropical vegetation. The bed over which it flows differs in various places, being alternately sandy, pebbly or rocky,

but the latter feature is predominant. In the dry season it is fordable at almost all points, but there is always a good body of water, considering the vicinity of its source.

During the monsoon it rises to an impetuous torrent, whose mud-stained waters roll with thundering velocity through its wide channel, floating down shrubs and trees from its crumbling banks, and overflowing for a few days the adjoining country. During these freshes the river rises to a height of 20 to 30 feet near Fraserpet, where it is spanned by a magnificent stone bridge 516 feet in length.

Descending through the great valley between Mercara and Nálknád, the Kávéri makes a sudden turn near Siddhapur to the north, and flows for 25 miles along the eastern frontier, being swollen in its course by several large tributaries. From the Tadianda-mol it receives the Kakabé river, which separates for some distance Padináknád from Kádyetnád. In Beppunád it is joined by the Kadanur river; and in Yedenalknád, by the Kumma-hole.

The Muttáremutta collects the waters of the southern slope of the Mercara ridge, and the Chikka-hole those of the valley of Horúr-núrokkal-nád. The *Hiringi* or Suvarnavati, with the Kakke-hole from Sónawarpet, the Chóran-hole from Sánthalli, the Mattapur and Hatte-hole from Kóte-betta, drain the whole northern plateau of Coorg, and add an immense bulk of water to the Kávéri. Almost every one of these mountain streams forms, in its descent over rocky beds, cascades of great beauty. One near Mercara, the Jessy fall (so called in honour of a daughter of the first chaplain of Mercara), is much admired, and frequently visited by picnic parties. Some of the coffee estates along the Sampáji valley are notable for pleasing cataracts.

The rivers of Coorg which fall into the Kávéri beyond the Province are the Hemavati and the Lakshmantirtha. The former rises near the Bhadra river, south of Wastára in the Kadur District of Mysore, and after passing Manjarabad, it forms for a few miles the northern boundary of Coorg, and joins the Kávéri in the Yedatore taluk of Mysore near the village of Tippur. The Lakshmantirtha, with its tributaries the Kakotta and Kere-hole, drains nearly the whole of Kiggatnád. It rises in the Muni-kádu forest, on the plateau of Davasí betta in the Brahmagiris, and in its descent over an almost perpendicular mountain wall forms a celebrated cataract, which by Brahmanical priest-craft has been invested with sin-cleansing virtue, and is consequently

visited at the Irpu játre by thousands of superstitious devotees. The banks of this river, like those of the Kávéri, are of clay or mould, steep, with sandy bottom, and shaded by dense forest or bamboo clumps.

Lakes, Tanks, Wells.—Throughout Coorg there is not a lake or tank of any size worth mentioning. In Kiggatnád only there are a few natural reservoirs, called *kolli*, enclosed by a belt of small trees, and containing water all the year round. A tank 3 miles north of Somwarpet is notable for its picturesque rock scenery and the legend connected with it, which does not however accord with the inscription written upon a stone on the western outlet of the tank. The latter runs thus: "The king Andani ordered this tank to be built on Tuesday, the tenth day of the month Phálguna, in the year Párthiva. This was written by Venkadasya Mallia Bomarsia, in the time of Basawalinga Déva Rája Vodeyar." The legend is shortly this: "A merchant named Malla Shetti of Yelusávirashime, vowed to build this tank. But when it was finished there was no water forthcoming. Animal sacrifices were suggested by the tank diggers, and offered, but in vain. In this distress the goddess Ganga appeared and demanded the little finger of the Shetti. Unwilling to make this sacrifice, he offered instead the life of Akkoni, his daughter-in-law, whose husband was away on a journey. Akkoni agreed, took an affectionate leave of her child and parents, who were ignorant of her intentions, and amidst great solemnities she stepped into the tank, when Ganga made her appearance in rushing water. Akkoni's parents, now hearing of the impending sacrifice, hastened to rescue their daughter, but she refused to leave the tank, uttered a curse upon her father and mother-in-law, and sank in the rising water. She then appeared in a dream to her husband, who speedily returned home, and, on hearing what had happened, killed his parents, and with his child in his arms rushed to the tank, and in despair threw himself into it, when both were graciously received by Ganga."

Besides the small public tanks, there are only private wells, that everywhere yield, if dug deep enough, sweet and clear water; but it appears that the natives of Coorg do not bestow enough attention on the great blessing of wholesome water, and are often satisfied with the muddy contents of a hole carelessly dug by the side of their paddy-fields, though from their own experience they assert that most of their diseases are owing to the bad quality of their drinking water.

Meteorology.

Though Coorg is but a small country, yet its high mountain ridges and narrow valleys, its wood-clad hill slopes and open champaign tracts, greatly influence the atmospheric conditions of the locality. Still the dry eastern or Kanavé district may in the mean present as constant a climate as the moist hilly tract along the Ghats or the Mercara plateau. We have to distinguish the hot, the rainy and the cold season, though throughout the year the atmosphere is not without humidity, which is precipitated either in dense mist or in showers of rain. From the end of December to the end of March, rain indeed is scarce, but in the mornings and evenings the valleys are seldom free from fogs or dews. During these months the dry east wind prevails, which has long ceased to carry remains of north-east monsoon clouds to the Western Ghats.

Towards the end of March the clouds begin to collect towards the south-west, and the cooling sea breeze blows with more regularity over the Ghats. In April and May the sun increases in power, banks of massive clouds extend along the western horizon, and occasional thunderstorms and showers, indicating the approach of the monsoon, cool the atmosphere, which is warm and moist. The thunderstorms during this season are even more impressive than in the low country. Mountains of clouds, in double and treble ranges, float against each other with the order of armies. The sound as of heavy cannon is heard from a distance: solitary discharges of the electric fluid shoot through the gloom. Now whole battalions seem to be in action; peals of thunder are heard at brief intervals, and the eye shuts involuntarily against the dazzling brilliancy of the lightning. Then the conflict seems to subside, the roar of thunder is heard at greater intervals, the flashes of lightning lose their intense and fearful glare, and the rain pours down in torrents.

Towards the end of May the clouds take up a firm position in the western sky and grow in massiveness. In June, the *rapport* between the western sea and the atmosphere of Coorg is fully established. Rain prevails, descending at times softly, but more frequently with great violence and heavy gusts of wind. In July the monsoon reaches its greatest vehemence. The clouds seem to be inexhaustible, the blasts of the wind irresistible. As much as 74 inches of rain have been registered within this month, and for several days in succession 5, 6 and 7 inches within 24 hours! The sun is often not seen for weeks, and life

in the Province would be as dull and gloomy as the clouds overhead, did not the inhabitants adapt themselves to circumstances and learn to make light of the incessant downpour. But it is pardonable if one is sometimes tempted to envy those favoured few who bask all the while in the mild sunshine of pleasant Fraserpet, the monsoon-head quarters of the Superintendent, 20 miles to the east of Mercara, where the roaring Kávéri river, and an occasional shower from the fringe of the monsoon clouds, are the only signs of the rainy season in the highlands.

In August the rain is considerably less, and a few days' break, with an open sunny sky, atone for all the past discomforts. The ancient Coorg hills send the floods, controlled by steep river banks, to the east and west, and stand forth in renewed beauty. In September the sun breaks through the dense atmosphere. In October the north-east wind, strong and cold, gains the ascendancy and clears the sky; in November, however, it often carries heavy clouds from the eastern coast, which discharge themselves chiefly upon the east and south-east of Coorg. The greater part of December is foggy, but towards the end of the month the weather becomes delightfully clear and fresh, the thermometer falling to a minimum of 50° .

The meteorological observations in Coorg are almost confined to Mercara, the principal station. From Mr. Richter's observations for 13 years, the following facts may be deduced for the meteorological condition of Mercara, near the Central School. The mercurial barometer shews its maximum height during the hot weather months, when it reaches $26^{\circ} 60'$, and its minimum during the monsoon, when it has fallen to $26^{\circ} 15'$. The thermometer indicates a moderate temperature, owing not to the latitude, but only to the elevation of the country. During the cold months, from October to January inclusive, the daily average variation ranges over 24° Fahrenheit between the extremes, giving a daily mean of 65° ; during the hot weather months, February to May inclusive, the daily mean temperature is 70° , deduced from the average extremes of 57° and 82° which shew a daily variation of 25° ; during the monsoon, from June to September, the temperature is most equable, moving between the extremes of 60° and 75° which leave only a daily variation of 15° and a daily mean temperature of 65° for these months.

The prevailing winds are : west wind just before and during the monsoon ; north-east wind directly after the monsoon : and east to south-east wind during the remaining season.

The percentage of humidity, as exhibited by Dr. Bidie in his

"Report on the ravages of the Borer", varies between 48 and 87, the minimum occurring in December and the maximum at the end of September; very gradually and steadily rising 10 cents from January until May, when with a bound it increases 10 cents in May, 5 cents in June, 5 cents in July, and after a decrease of 5 cents in August, it reaches the maximum of 87 cents in September, falls 10 cents in October, 10 in November and 22 in December, when it attains its minimum.

The mean annual rainfall for the 13 years from 1863 to 1875 amounts to 123.21 inches, of which at an average 8.97 inches fell during the hot season, 103.75 inches during the monsoon, and 10.49 inches during the cold season. According to the scientific theory of the south-west monsoon, the rainfall in Coorg would seem to be entirely dependent on the geographical position and geological configuration of the country, but practical experience attests the fact, which is also corroborated by the pluviometrical table, that the rainfall was for some years, from 1866 to 1871, steadily decreasing, and the cause is attributed to the extensive denudation of forest-clad hills for coffee cultivation, contemporaneously with the natural decay of all the bamboos in Coorg. The same amount of vapours as in former years may have been carried from the sea over the Ghats, but the local power of attracting the rain clouds diminished with the disappearance of the forests. No one who has attentively watched the sailing of clouds over partially wooded hill-tops can have failed to observe their lingering, hovering over, and descent upon the forests, whereas over the bare hills the clouds sweep past with unimpeded velocity. The rains were neither as heavy, regular, or continuous as they used to be, and since there was less rain sinking into the ground and the retaining qualities of the soil had been reduced by the extensive clearing of forests and jungles, there were fewer springs and shallower streams and the country in general became drier. Were it not for the incidental droughts, injurious to coffee planting, and the increasing difficulty of rice cultivation in some parts of the country, the change might have been hailed as a most welcome improvement in the Coorg climate, which for the sake of human health might be still less loaded with moisture. Since 1871, however, the rainfall has reached the former high amount, which may perhaps be attributed to the recovering of the formerly denuded hill sides by the growing up of the coffee trees; but on the other hand the year 1875 was the driest on record for the past 13 years.

On the whole the influence of the Coorg climate, with its average temperature of $66^{\circ} 6'$, is salubrious. The nights are cool throughout the year, and Europeans are able to take exercise in the open air at all hours. European children in particular enjoy excellent health, and their fat rosy cheeks form a striking contrast to the thin pale faces of those in the low country.

The rarified, often cold and damp, air of Mercara, with the usually prevailing high winds, necessarily does not agree with asthmatic and bronchial affections, chronic disorders of the liver and dysenteric complaints; but Fraserpet, which is 1,000 feet lower than Mercara, affords a salutary change during the rainy season.

The native troops, especially new arrivals from the low country, suffer much from the cold and damp, and are, during their first year of acclimatization, subject to fever and bowel complaints, but in time even they enjoy the bracing climate of Mercara.

The climate of the valleys, particularly during the hot months preceding the monsoon, when, as the natives say, the old and new waters are mixed, is far from being healthy. Fevers, agues and bowel complaints are then very frequent and protracted. For the rest of the year, the natives of the country pronounce the climate to be excellent, especially after the monsoon. Besides the dreaded Coorg fever, which appears in its worst form, especially to Europeans, in the vicinity of Hattur in south-east Coorg, and about Sampāji on the western boundary, small-pox has laid a fearful hold upon the natives, though vaccination is much in vogue. Cholera is almost unknown in Coorg. A peculiar ulcer-disease on the limbs has latterly been rather prevalent about Virajpet, which is ascribed to impoverished blood for want of nourishing animal diet.

The account which natives of Mysore or from the Western Coast give of the climate of Coorg is not favourable. They have experience on their side. Of the large number of people whom Tippu sent from Mysore to replace the ancient inhabitants, or who during the various wars were carried off by the Coorg Rajas from the neighbouring countries to cultivate their lands, but few survived the change. In our days the thousands of Mysore coolies who annually emigrate to work on the Government roads or on coffee estates stand the climate much better, care being bestowed upon them, and a periodical return to their homes being rendered practicable.
