

THE CAPITAL

OF

INDIA,

With some particulars of the Geography and Climate of
the Country.

BY

GEORGE CAMPBELL, C. S.

CALCUTTA:

PRINTED AT THE "ENGLISHMAN" PRESS, 41, BARRACK STREET.

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I BELIEVE that the determination of the site of the future Capital of India is a matter of very pressing necessity and great practical importance in view to the settled and systematic Administration and rapid development of the country.

As respects Calcutta it is not now so much a question whether the place is good or bad, as an accomplished fact that Calcutta has ceased to be the place from which India is governed, and that the Government is and will remain in a sort of peripatetic, or, to use the more expressive Persian equivalent, "Kanabadosh" state, till some other capital is determined. For very many years past, in fact, for at least a whole generation, no Governor-General has spent more than a mere fraction of his term in Calcutta, except Lord Canning, who was compelled to do so by events, and who died from Indian disease* as certainly as if he had remained a few weeks longer in Calcutta and died there. Very much of the want of uniform system in the administration of India, of the extreme oscillations of policy which have characterised the last thirty years, also very much of the delay in Legislative measures which, naturally following from, and indeed expressly required by the Parliamentary settlement of 1833, are only now in course of fulfilment;—very much of all this, is I take it, due to the want of a settled seat of Government, to the separation of successive Governor Generals, new to the country, from their responsible advisers, and from the administrative and Legislative Offices. Modern facilities have now rendered possible the much improved expedient of moving with the Governor General the Council and the Heads of Offices to a hot weather residence in the Hills. I am far from assuming that it is undesirable that the members of the Government, should, during a great portion of the year, see parts of India other than the Capital, provided a good many months are annually devoted to settled administration and Legislation at the Capital. On the contrary

* That Lord Canning's very sad death was caused by an inevitable liver disease is understood to be a fact ascertained by actual examination.

I believe that of all things it is most necessary, in to bring the different administrations into rapport with the Supreme Government, and to render practicable the modern system, that the Governor General and the members of the Administration should from time to time breathe the official atmosphere of the various parts of India, especially of those which still so persistently maintain the practice (it seems to be some relief to the feelings) of calling the Imperial Government "Bengal." More particularly at a time when the country has the good fortune to be governed by a great Indian Administrator of unrivalled experience and knowledge, a little personal communication and personal inspection would in a very short time render the Supreme Government real and effective for all India to a degree which no former Administration could hope to attain. But the misfortune is, that this is just what the present state of things seems to render nearly impossible. It may be assumed to be now settled that in future no Governor General will spend his hot seasons in Calcutta, and no Legislative Council will sit there at that time. The hot season must and will be spent in a temperate climate. No tour can be made in the hot weather and rains. On the other hand, the nominal Capital and the Offices being still in Calcutta which must be visited in the cold weather, the Governor General is completely tied down at that season, a victim to Mosquitoes and Red boxes, and the tours which always were so beneficial, and now are so necessary are rendered impossible.

To the outsider not acquainted with the mysteries of Government, it is only possible to realise the extreme necessity of a better understanding (of that which for want of a better English word I may call a moral understanding) between the the Supreme and Subordinate Governments by visiting the Minor Presidencies and breathing as it were the moral atmosphere of the European world there. The fact is, however well brought out into relief by recent public history, and if in alluding to that recent history, I must make free with the names of some eminent men, I trust it will not be supposed that I for one moment attribute to them any other feelings than those dictated by that most honorable zeal for the public service by which they are known to be illustrated, that I imagine that they personally participate in the public opinions which surrounds them, or that I allude to anything which is not known to all the world. Their names are public property and as such I deal with them. Well then but a short time ago, it seems but yesterday, Sir Charles Trevelyan was Governor of Madras; Mr Wilson was Financial Member of the Supreme Council; and Sir Bartle Frere was, I believe, a

Member of that Council. At that time it was the firm conscientious, and universal belief of the Madras Public that Madras was oppressed and sat upon; that the Governor Sir Charles Trevelyan was especially thwarted, contradicted, and checked in all his beneficent schemes of public improvement by the Supreme Government, and more particularly by the Financial Member. Now the scenes are shifted; the cards are shuffled. This time the Governor of the last scene has become Financial Member; the Member of the Supreme Council, Sir Bartle Frere, has become Governor of Bombay. This time there exists in the Bombay Presidency a state of things exactly similar to that which before existed in Madras. There is a universal belief that Bombay is especially selected for oppression by a wicked Supreme Government, and that the Governor is checked, brow-beaten, and clipt in all his admirable plans of progress by the Financial Member of the Supreme Government. It is really only necessary to place those two scenes in juxtaposition in order to show the absurdity of both. It is not in human nature, and it most certainly is not in the nature of such men as I have named, so to turn their coats and twist their feelings. No one who reflects will seriously believe that Sir Charles Trevelyan and Sir Bartle Frere can be each in turn the oppressor and the oppressed, that Sir Bartle Frere could have taken part in a policy of repression under which he now suffers, and that Sir Charles Trevelyan, after experiencing the bitterness of such a system, should no sooner occupy the Financial Chair than he turns round and indemnifies himself by exercising it to the uttermost on the unhappy Governor subject to the sway of his shears. No it is clear that all this is due, not to the men but to the system. The fact is, that the functions of the Supreme Government have been difficult and invidious. It has not really in its supreme degree governed the minor Presidencies; it has not had the knowledge and the communication necessary for that. The function of the Supreme Government, and especially of the Financial Member, is rather that of checking than of directing. He is, as it were, the breaksman of the train who applies the breaks whenever he thinks the pace too rapid to be safe, or that we are on Financial declivities, or otherwise exposed to serious dangers. For that purpose he must have both a thorough knowledge of the state of the line, and means of immediate communication with the driver. To drop metaphor, there can, I imagine, be no doubt that there is habitually much jarring and friction in the working together of the Supreme and Subordinate Governments; that there is something which requires a remedy. A good deal might perhaps be done by

carrying out such a system of dividing Imperial from Local Finance, as has been several times suggested but never carried into practice—a system by which real Financial responsibility should be thrown on the local Governments, and they should have an immediate interest in finding the ways and means, in getting as well as in spending. The Supreme Government might then perhaps direct more and check less. Or if the views of those who think that India as a whole should be governed in England were carried out, it might then check less without directing more. But there are some functions of a Central Government which probably must always fall to a Supreme Government and Legislative Council in India. Besides political questions, the necessities of Finance are so shifting and so sudden that a real financial control must always be exercised in India, and in the way of check the control of the purse involves almost everything. In these days there are few good things which do not cost money. It can, too, hardly be doubted that the main feature of the present system of Legislature is the best; that is, that Codes of great Laws put together by skilful legal mechanists in England should be examined, tested, paired off, filled in, and clothed with the little details of practical working by a live Legislature on the spot, working among the men actually engaged in the matters affected by the Legislation, or whose existing everyday interests are touched by it. The local Legislatures of the different local Governments are no doubt an improvement, but they really are so in the sense of giving a local power (subject to the check of the Governor General,) of regulating and experimenting in local affairs, such as was enjoyed in the larger Provinces, efficiently administered under the very much misunderstood Non-Regulation system, rather than because they have a machinery sufficient to make great and permanent laws. Their acts might perhaps more properly be called regulations as distinguished from the Laws or Acts of the Imperial Legislature. The Local Administrations would then be Non-regulation in the sense of having the power of making their own Regulations on matters not touched by general laws. But experience has abundantly shown that the active exercise of the control of the Governor General is necessary, and it is not likely that we can maintain more than one Council in India so presided over, so constituted, and so guided by an eminent Jurist as to be capable of large and sustained Legislation. I say so without disrespect to many able men, for Legislation is the most difficult of human tasks, and able men in India have not often specially turned their attention that way.

The moral, then which I would draw is that there always must be a Central Government, and Legislature of India, in India; that in order to remedy present acknowledged evils the Capital should be so placed that the Governor General and Members of Council charged with Departments should have every facility for frequently visiting the different Administrations, for communicating personally with the official and non-official world in each Province, and for *realising* local facts and feelings; also so placed that the Government in its permanent site among its offices, and the legislature in its sittings should, both in respect of locality and in respect of climate, be easily, freely, and safely accessible from all parts of India, both to Europeans and to Natives. The only mode of effecting this object seems to be to place the Capital in a good situation, in such a climate that the hard normal office work of Government, and the business of legislation may be carried on at the Capital without inconvenience and without interruption during the six or eight months of the hot weather and rains, leaving the cold weather for the tours and communings and local experiences of the Members of the Government. The place should be so situated somewhere on the main Arterial Railways that it should be accessible by rail from all parts of India, at all seasons, without interruption; and it should, if possible, combine a temperateness of climate sufficient to render residence tolerable and safe for European visitors, and to attract summer visitors from many parts of India, with such an absence of extreme cold, rain, and damp as should also make it at the same season safe and tolerable for Native visitors and Members of the Council. Looking not so much to the habits of Englishmen as to the degree of warmth which the human body can bear with advantage, and to the bringing together in a European Capital of a large Christian population capable of service, and even colonisation in various parts of India, it is probable that, even from a European point of view, a climate as warm as the South of Europe might be, in many respects, preferable to one of a more English character. The programme of the Government above set forth would render the excellence of the summer climate more important than that of the winter climate. I may add that while the whole gist of my argument is to avoid distant and prolonged summer absence of the Members of the Government, I think that we may consider as entering into the local climate the existence of cool places within a few miles, or a few hours, so that if we cannot find a place perfect in all respects, (and we probably cannot either in India or in Europe) a place which is quite temperate in the hot weather without being damp or chilly in the rains.

it may be possible for families and exotic statesmen to avoid the heats of a few extreme weeks without disturbing the local current of business or the Meetings of the Council more than when the Governor General is residing at Barrackpore. In short, if we can get such a climate as a South European climate with cool baths 20 miles distant in the overhanging Appenines, Alps, or Pyrenees, we might be content.

Before finally dismissing Calcutta as already abandoned, it may be as well to say a few words regarding the climate of that place. There is probably no place regarding which there are such extreme discrepancies of opinion. All the outside world, all England, all India, and almost every one who visits it as a mere traveller, or for a short time, believe it to be a perfect Golgotha. On the other hand a large proportion of the permanent residents believe it to be by no means so bad, some even think that, as tropical climates go, it is not at all bad. The fact seems to me to be that there are two sides of the shield, and that this difference of view may be explained. Appearances are certainly very much against Calcutta. It may be safely said, that if people do not die there, according to all the Laws of Sanitary science, they certainly ought to die. A more frightful combination of heat, stagnant moisture, and dirt probably does not exist on the face of the earth. Putting aside the native town, into the depths of which no European, except Dr. Tonnerre, has ever penetrated, and taking as now matter of notoriety, the foulness of the drains and ditches of the European portion, it is necessary only take a drive round any of the suburban roads, and to look at the horrible contents of all the Tanks and receptacles of the dreadful water which oozes out of the soil, and combines with filth and slimy vegetation, to wonder how, if there be such a thing as malaria, the human race can exist on such a locality. The evil seems too frightful, and on too great a scale for cure. Then, there can be no doubt of the sad fact that the mortality among the sailors and passing European population is terrible. It is equally certain that there have been many striking instances of distinguished men of mature years new to India, even of Anglo-Indians, new to Calcutta, to whom the climate has very rapidly proved incompatible, and that some fatal results have ensued. It may be added that the nature of the climate, combined with sedentary habits, gives a peculiar paleness and want of robustness in appearance to the European inhabitants of Calcutta, and that if they do not die, they are usually in a low state of life. The paleness of the children as contrasted with up-country children is remarked by every passer by. Still the residents who take a more favorable view are not

without much undoubted fact to support them. They see and know many around them who have really for many years enjoyed very tolerable health in Calcutta. Though statistics are very much wanting, there can be little doubt that the mortality among this class is not very great. All the statistics which can be obtained from Schools, Orphan Asylums, and such Institutions seem to show that among European and East Indian children and young people, if there is not much vital energy, there is notwithstanding singularly little actual mortality. In fact, science is at fault. Among the acclimated population of the better classes, there is little acute disease. The fever and ague of the upper Provinces seems to be comparatively scarce, and the amount of malarious jungle fever not at all great. The Cholera, which every hot season creates such havoc among the shipping and in the Native town, somehow does not seem to affect the European quarter to such a degree as to strike people much. The really fatal disease endemic in Calcutta appears to be dysentery, and that it would seem affects new comers much more than acclimated residents. It is commonly said, that if Calcutta is to disagree with a man, the evil shows itself very fast indeed, he is not long left in doubt. But if he once gets acclimated successfully he may go on for a long time. The truth I take to be, that there is a large percentage of European mankind (especially among men of mature years) who cannot live in Calcutta; the remainder may live with as great safety as in many other places in the tropics. The old residents, the people who have lived there among other people who have also lived there, find it a tolerable place. Those who have not lived there, but have died or fled early in their Indian career, have no voice in this local public opinion. The residents realise the bearing of their fate on the general character of the place less than they would casualties among their own class, and generally speak of them as imprudent individuals with constitutions notoriously unfitted to the country, who came there when they never ought to have come, or fell victims to such unlucky accidents as always will happen. That is one side of the shield. The more distant, but more general public opinion of those who know little of the residents and of the continued immunity of so many among them, is more influenced by the striking deaths of public men and the denunciations of those among themselves who have fled from Calcutta with their lives in their hands, or by the horrible stench and pale faces of the City of Palaces. That is the other side of the shield. The net result, however, is that, though Calcutta is by no means so com-

pletely black as it has been painted, it is not a place where a Council of European statesmen properly can or ever in future will remain throughout the seven or eight hot months of the year. It may be added that the native members of the Council have also repeatedly fled in dismay from the place, and have spread its bad name among the natives far and wide.

In every way, then, it appears that a new Capital must be sought. Sir Charles Wood has been represented as saying that the Capital is not to be moved from Calcutta. I believe that what he really did say is, that the Offices of Government cannot be removed without first settling where they are to go to — That is, without first finding a better place. This is no doubt so. But if the inconveniences of the present unsettled state of things are in truth very great, ought not the question to be settled as soon as possible? Is there any reason for delay? Do we not know enough of the country, of its geography, of its climate, and of the main lines of communications to be hereafter followed, to be able to make a deliberate survey of the Map of India, and exhausting all the parts and places which are not suitable for the Capital, to mark off all the places which are in any way suitable? And then might we not, bringing into a focus all the information available regarding those places, pretty safely come to a conclusion which is the best? It seems to me that the time has come when this may be and should be done. The arterial lines of railway are approaching completion, they will all be open as soon as the movement towards a new Capital could be rendered practicable by the erection of some of the most necessary buildings. We have an enormous mass of information, and an abundance of geographical, topographical, and statistical knowledge regarding almost every part of the country, certainly regarding every part in which it could be proposed to fix the Capital. We need hardly wait till sanitary science advances so far that unhealthy places can be made healthy, and malarious places free from malaria. Of the great mysteries of nature from which these bad influences arise, we do not know so much that we can reasonably hope to solve them in any given number of years or of centuries. We must look to nature for a healthy site and to science only to keep healthy what nature has given healthy. The general recognition of the power of adoption has put a stop to that gradual absorption of the Native states by a mere process of natural extinction which was proceeding surely and not slowly. Excepting as the result of political convulsions (which we trust may be far distant) there is no prospect of great additions of British territory likely very much to affect the question of the Capital. In fact, the British territory in

India now so completely overspreads all India, up to its extreme natural boundaries on all sides, and the Native states are so much mere islands in the Great British Sea, that they could little effect the question in its broadest bearings. Nor is, I believe, any site in Native territory so superior that we should desire to wait for the uncertain chance of its some day falling in.

On no ground, then, can, I conceive any reason for delay in dealing with this great question. If, as before said, absolute perfection is not to be found in any place in India, no political or natural convulsion will make such a place. The latitude and the altitude, the rays of the sun, and the force of the monsoons cannot be altered. It remains, then, only to see what are the best places available, and whether among them we may not find such advantages as shall satisfy reasonable demands.

I would here remark that it seems to me clear that if we once leave the great centres of European commerce, it can be no object to tie the Capital down to any second-rate city or place. We shall then be free to roam over the face of the country, and to select at will the best spot of ground. That it is in every way most desirable and almost indispensable to place the Capital within the influence of a great European community, of the representatives of the great Industrial interests, and also of all that is intelligent, wealthy, and public-spirited among the educated and civilized natives I most freely admit. It will soon be seen that I put this as one of the most important among the considerations by which the Capital should be determined. But in truth there are but two places which contain these elements, viz., Calcutta and Bombay. Madras is a minor and not a rising place. It is said that as soon as the Railways are opened, a good deal of its trade will go to Bombay, and a great deal more to Negapatam and the extreme south coast. All the large European Stations in the interior are either mere Military Cantonments, seats of Local Government, or watering places in the Hills the resort of a floating population. Not one has any such great local civilisation that it would materially affect the larger community which would necessarily attach itself to the Capital of India. And as regards the only places which really contain influences which cannot be neglected, my view is that if we can place the Governmental Capital within a few hours journey of, and on the line of continual communication with, one of the great Commercial Capitals, and especially if we can place it in such a climate that visitors and temporary residents from the Commercial Capital will be attracted in large numbers at the season when Legislative and other Councils are most

active, the object will be gained as effectually as if the Governor General actually resided in the Commercial City; in some respects, perhaps, better, for in these days it may not be desirable that the servants of Government should be too much tempted to speculation. As respects the political importance of any native city in the interior, the fact is, that in India great cities have been principally composed of the Court followers and Court tradesmen of existing dynasties, the consumers of the surplus produce rather than the producers. Production is chiefly carried on in the country and in villages, where also reside the Chiefs of local power. Hence cities have always in India exercised much less political influence than in Europe. Indeed, in point of mere size and population, with reference to the teeming myriads of the country the Cities are not large. With the single exception of Lucknow, I do not think that there is in the interior of the country, a town which would be deemed a very large city in Europe; there is scarcely one (certainly none which comes within the number of places possible as the Capital) numbering so many as 200,000 souls. It must therefore be, in a political point of view, a matter of comparative indifference whether we settle our Capital near a town of 100,000 inhabitants created by some comparatively modern half-civilised marauder, or near one of 50,000, or in a wide plain with only rural inhabitants enough to show that it is healthy. Even ancient Historical and Religious Associations are confined to places which we are not likely to choose. We are rather in a position to follow the example of the Mahomedans, who generally selected their own capitals. Socially, indeed, there would be many advantages in finding a new site of our own. A well-selected capital in a good climate will (we may reasonably hope) some day become a great European town, and it may be well that all the best ground has not been pre-occupied by native dwellings, that we should be free to lay it out from the first according to our own taste and principles, and that we should surround ourselves, not with the rag, tag of some extinct dynasty, but with followers and fellows of our own, with many of our own race, many of our own religion, many more indoctrinated more or less with our own arts, knowledge, and habits of thought. In fact, it may be hoped and desired that there would be one place of permanent residence in India where we should not feel ourselves aliens as we now are even in Calcutta, but should be in some sense at home as those who lead the fashion and dictate the custom rather than follow it. A sufficient population and sufficient trade would soon follow a capital of the Empire well placed on one of the new arteries by which the whole

circulation of the country will be revolutionised. Already many of our Cantonment Bazaars have risen to be among the most important places in India, *e. g.*, Cawnpore and others easily named; how much more rapidly would rise the Bazaars of a well-placed Capital?

With a view, then, to the social advantages just suggested, I would study not so much to fix on some considerable town as to find a place affording space sufficient for any amenities likely to attract something like a European, Christian, and civilised Native Settlement. I would not place the Capital itself on some isolated and cramped mountain top, but if placed in an open situation and tolerable climate we could have in the neighbourhood a country fitted for European Colonisation, for Plantation purposes, for the education of our youth and the retreat of our age, these would be great additional advantages. In fact, so far as may be possible, we should settle ourselves in a country which we can call more especially our own.

One more very important consideration to be kept in view I must mention, and I may be considered the more sincere in expressing my present belief in its importance, because it is fatal to a scheme which I once before put forth. Recent history, longer consideration, and a more extended survey of the subject, have convinced me that, placed as we are in India, and having, as we almost must have, our base upon the Sea, the Capital ought to be so near the Sea that it should not be liable to cut off from that base in any political crisis. The more our facilities of communication are increased by Railways and Telegraphs the more we depend on means which are peculiarly liable to interruption at the hands of the weakest enemy. I am now, therefore, inclined to believe an easy access to the Sea to be altogether a *sine qua non*. At the same time our Capital must not be so near the Sea that it would be liable in any combination of circumstances to a dangerous attack from the Sea, or that its communications with the interior might be cut off by expeditions arriving by Sea. The Suez Canal may be a fact before a Capital founded in the 19th Century crumbles from age and decay. The Governor General must never be driven from his Capital. He must never be altogether cut off from the Sea, and he must never be altogether cut off from the interior.

These being the principal objects to be kept in view, it remains to notice one matter no doubt of great importance, the Financial view of the question. Wherever the Government may be fixed, offices must be provided. Whether the place to be selected be a large station or a piece of unenclosed country, Government buildings fitted for the purpose will not be found. But it

is well known that in Calcutta Government possesses scarcely any offices; they are almost all hired at an enormous expense. The offices of the Government of India are, after all, not so many, and there can be little doubt that the local offices of Bengal would more than occupy all the Government buildings. The local and Commercial requirements of Calcutta now so rapidly extending and so hard pressed for room, would greedily absorb all the vacant space left in private buildings. The only loss might be on Government House, and even that would be hardly too large for the accommodation of a local Government which would necessarily rise in importance, and of the Governor General when he visits Calcutta. A new Government House at the new Capital would no doubt be required. For the rest the only difference would be that instead of charging an annual rent, it might be necessary for the Government to find the capital money for the erection of offices. The result would probably be a distinct saving in the end. It would not be necessary to find all the money for building in one year or in such a way as to derange the Budget; even if a loan to take the place of the the annual outlay in rent be not thoroughly legitimate. If not financial considerations, certainly a wish to avoid too great a disturbance of the labour and supply market would dictate the policy of spreading a move over several years. If the site be once selected and marked out, the Financial Minister might begin with one wing of the new Government House, and with just so much as would suffice for the hot weather residence of the Viceroy and the most necessary offices, with, in fact just as much as is now taken up on the part of Government at Simla. So much of the offices would then be located in the new site, and besides the compensation from savings in Calcutta, there would be the immediate great saving and clear gain of all the very great expense of travelling and deputation allowances and hiring at extravagant rates at Simla which is now rendered necessary by the annual migrations of the Government. That being the first step, as labor and supplies gradually settle down in a steady current along the new lines of Railway to meet the new demand, and as the officers of Government proceed in housing themselves, so also would the erection of public offices proceed, and gradually one office after another would be transferred to the new Capital without too sudden a revolution either at the old or the new seat of Government. I trust, then, that if a fitting site can be found, there is really no such financial difficulty as should seriously interfere with a remedy for present inconveniences; but that, on the contrary, the measure would ensure very considerable gain as compared to the present state of things.

The sooner a commencement is made the less will be the pressure; if the question is delayed till it becomes (as it probably soon will become) inevitable, the pressure, financial and social, will be much greater.

If then it be conceded that a new Capital is wanted, that there are no insuperable obstacles to moving to a new place when a place in every way suitable can be found, and that there is no reason for delay; if, moreover, there be a pretty general agreement on the most essential requisites for a European Capital in India, it only remains to go forth map in hand and to try to find a suitable place. I am sorry that this has not already been done by persons fully qualified and authorised by Government, but as it has not been so, I propose to give for anything that it may be worth (if it be worth anything) the result of a good deal of private inquiry and thought. I have, at any rate, had considerable opportunities of observation. I have for many years had occasion to turn my attention to the collection of facts regarding the present condition of India, and have continued that practice till it has become a habit of my life. I have once before hazarded a proposition on this particular subject of the Capital, which has attracted some notice (though as I have already said, I have now seen reason to abandon it); and in the course of several recent tours I have kept the same subject more especially in view. In fact, being one of those people who cannot get on without an object, I have constituted myself a sort of amateur Commissioner on the subject. I have made the round of all the British Provinces in India. It has been my fortune to be employed in widely different parts of India, and thus to have acquired a personal familiarity with at least four of the great Administrative Divisions. During recent years I have devoted one long holiday to Madras and Mysore, and another to Bombay and the Central Provinces, and have been unceasing in inquiries from persons better acquainted with those Provinces. I have to acknowledge much kind hospitality and kind tolerance from many residents in those (to a Bengallee) foreign parts, who, if they partake of that political Bengal phobia which is characteristic of their country and race, are yet to individual Bengallees most considerate, most tolerant, and most ready to afford the most unwearying assistance, and the most ample information. I fear that I have ill repaid their good offices by relentless cross-questioning and most inquisitorial examination, but while I very much apologise for thus having been so hard on them, I trust that they will believe that I was a man with an object, and that if such a man is a bore, he at least fancies that he has the public good at heart. I have, at any rate, thoroughly

appreciated the admirable examples of successful zeal in the public service which abound in the Southern and Western Presidencies. I have, I confess, returned half a convert to some of their systems, especially to one by which a series of great and good men have succeeded in conferring on the populations of Western India a happiness and well-being probable unexampled in the country, at the same time that they have given to the land a simplicity of tenure and a marketable facility which is the first and greatest step towards permanent material improvement. In fine, thinking that an official man may in his leisure dabble in matters beyond his official Province, and that in such matters a man rightly or wrongly believing that he is doing what he can to contribute his mite to the public weal, may offer his small measure of assistance and aid even though he is not paid for the business, I venture very humbly and respectfully to submit the result of my inquiries to His Excellency the Viceroy, to the Members of the Government, to my friends, and to the public.

The following are the points to which I have alluded in my prefatory remarks, as those especially to be kept in view in selecting the site for the Capital :

1.—It should be as far as possible central, geographically and politically, and easily accessible from the different parts of India.

2.—It should be within easy reach of the sea, but not so near as to be exposed to danger of attack from the sea; *cæteris paribus* that Coast would be preferable, from which there is the most direct and rapid communication with Europe.

3.—The climate should be temperate, and, with such aid as local surroundings may afford, tolerable throughout the seven or eight warm months of the year. At the same time it should not be too cold, damp, or rainy, nor unfitted for native constitutions at that season.

4.—The site should be sufficiently roomy, should afford space for some European settlement, and should possess such amenities in itself, and in the neighbourhood, as might be expected to attract settlers, schools, &c.

5.—It should be within reach of the influences of the public opinion, of a great European and civilised-native community engaged in practical business.

If we cannot find all these advantages combined in the highest degree, we must compare different places assigning to each the relative degree of advantage under each head, and thus ascertain which, upon the whole, has the greatest combination of advantages. But among the requisites which I have named are some, which must be considered, to a great

degree, obligatory, and without a tolerable mark in which no candidate can be passed. These are, I think, climate and nearness to the sea, and perhaps also the immediate proximity of a great public opinion. If I am right as regards these obligatory conditions, our inquiry might be narrowed much. It might probably be assumed that no place within fifty miles of the sea will answer the purpose. We should, then, but have to take a strip round the Peninsula, ranging from 50 to 150 or 200 miles from the sea, and to see if we can find a good climate in that space. If, again, it be admitted that (as I am myself inclined to think) it is necessary to be in easy communication with and within the immediate influence of one of the present great centres of Indian business and civilisation, the question is much farther narrowed and becomes simply this—is there within a few hours journey of Calcutta or of Bombay a place suited by climate and position for the new Capital? We know that there is no such place near Calcutta. Therefore, we come to the still more narrow question—is there such a place within reach of Bombay, within a couple of hundred miles of Bombay on one of the main lines of Railway diverging from that place? In short, is there any suitable site in the high country which exists immediately above Bombay?

But lest there should be doubts as to the conditions which I have laid down, I propose to take a wider survey of the whole country, and fairly to compare the advantages and disadvantages of different places in their various aspects.

I shall assume that those who may do me the honor of reading these pages are possessed of a Map of India, and that they are aware of the ordinary facts of latitude and geography there depicted, and of the course of the Railways now under construction. From the Map will be apparent the position of different places in regard to centralness (if I may coin such a word) nearness to the sea, and nearness to the commercial centres. But with respect to altitude, climate and the amenities of soil and surroundings, it will be necessary that I should go into some details of the Physical and descriptive Geography of the country. In doing so, I must apologise for this, that I shall tell little which is not familiarly known to many hundreds. But I think I am to a certain extent justified by the circumstance that there are singularly few who know India as a whole. There is a remarkable want of intercommunication between the different Presidencies and Governorships—and no Map of India that I know conveys a good idea of the altitudes and physical character of the interior. I can answer for myself that, though I have taken a good deal of trouble in the way of inquiry, I never

fully realised the character of the countries which I had not seen till I did see them. Even as regards ordinary Geography, I once imagined that a low plain extended to the south of the Neigherries through which the Madras Railway ran to the opposite coast, and was astonished to find myself running through a picturesque hilly country 1,500 feet above the sea on a line abounding in steeps, gradients, and sharp curves. I believed, too, I confess, that the Concan was a flat country between the ghats and the sea, a sort of Indian pontine marshes, and that the Nagpore territory was "otherwise called the valley of Berar." On the other hand, I never knew an intelligent Madras or Bombay man who did not imagine Rohilkund to be a delightfully hilly country, and I believe there may be some who would fail to detect the absurdity of the popular London Panoramic representation of Cawnpore as a pleasant tropical-looking place surrounded by luxuriant green hills waving cocoanut palms and lovely flowers; possibly even there may be those who could calmly witness the terrific defence by the Nara of the mountain pass between Cawnpore and Lucknow. My impression, then, on the whole subject is, that though the amount of knowledge regarding every part of India is vast, it wants putting together; and my attempt is merely in a rough way to put together the most salient points of our knowledge, so far as regards my present subject. For the purpose of rapidly running over with me the physical geography, I would recommend, to those who have not at hand a good and compact map, a small Map compiled by the Surveyor General, and known as Lady Canning's Map. It has been published recently under the modest title of "Map of India showing Railway Lines and Telegraph Stations," and for the modest price of two rupees. It is the only Map of India which gives the present boundaries of the British dominions with any approach to correctness, and also the only Map which gives that most important information, the altitude of the chief places expressed in feet under the name. The new lines of communication are prominently marked, and most of the hill ranges are given. I must only ask those who use the Map with reference to my pages to fill in one line of ghats which has been omitted, but which forms an important geographical boundary. It will be found in other Maps and may be filled in with a pencil. I mean the marked Ghat range which bounds the Deccan, on the north and divides it from Kandeish, Berar, and the Nagpore country. Leaving the western ghats north of Nassick and south of the lower Taptee it passes south of Mulligaom by Ajunta (the Ajanta Temples are in the range) in a direction

nearly due east till it approaches the Wardah near Hengan Ghat and Chanda, and thence tails off down the course of the Godavery. It divides the high land to the south from the comparatively low land to the north, and contains some places possessed of a very good climate. That range being then, as I have said, run in with a pencil, we may go on to the business of Geography.

It is probably unnecessary to repeat that India on those natural limits which were attained and established by that great Governor General whom it has been for a brief time the fashion so ignorantly and so ungenerously to decry, is on the land side shut out and walled off from the rest of the world by the great system of great mountains which extend in a curve approaching to a semi-circle from Kurrachee to Chittagong; in which any altitude may be attained from the side of India, and which are for the most part inaccessible from the other side. Of the highest and most secure portion of this mountain system, the great Himalayan range, a considerable extent is British territory, stretching in several places right up to the eternal snows and to the borders of the Thibetan plateau of high Asia. From the Indus to the Sardah, bordering on Nepal, it may be said that, with the exception of Cashmere, we have possession of the hills or control over them sufficient to enable us to establish Sanitaria and European stations at our pleasure. From the Sardah eastward Nepal occupies a large portion of the range, but east of that again we have Darjeeling, and we may soon have something of Bhootan. Cachar and the adjacent hills are rich in products but not convenient or healthy, and for the present purpose our observations may be confined to the proper Himmalayas. Those mountains may be said to rise right up out of the plain in one great unbroken line with little of gradual transition in the way of undulating country or low hills of any kind. The presence here and there of the low outlying range of what is called the Sewalic formation, comprised of mere recent debris (geologically speaking), forms but a slight and partial exception to this general rule. The outer range of the outer Himalaya very commonly attains a height of 7 or 8,000 feet, and a sea of mountains extends back for 100 or 150 miles to the inaccessible snows. The general characteristic of the range may be said to be that as a rule it contains no valleys, no lakes, and no table lands. There is but, as it were, a gigantic system of ravines; the valleys are ravines and the mountains are very steeply inclined sharp-backed ridges. Certainly from the Sutlej eastward there is not in the British Himmalayas a single valley of even the smallest dimensions, except the

Deyrah Dhoon, which is not in the main range, but happens to be enclosed between that range and an unusual local development of the Sewalic range. That is a fine valley, ranging say about 50 miles by ten to fifteen, and Deyrah in the centre is 2,344 feet above the sea. Further west the range opens out a little, we have Cashmere in the interior, and the fine British valley of Kangra nearer the plains, but still these are but exceptions and the general character of the range is the same. On the hills throughout the entire range it may be said that there is not one acre of level ground. The sparse dwellings and fields of the hillmen are terraced on the mountain sides or obtained by taking advantage of petty nooks and shoulders of hills, indistinct alluvial steps on the sides of ravines, and small strips of rice land at the bottom. Except on the rare roads curiously constructed with great engineering skill wheel and even most animal carriage is out of the question, and even on foot none but a hill coolie, an inveterate sportsman, or a mountain sheep, can attempt to leave the roads.

Within the great system of mountains lies the great alluvial, or diluvial, plain which also extends in one continuous curve from the mouths of the Ganges to the mouths of the Indus with a breadth of about 150 to 200 miles, forming in the different portions of its length Bengal proper, the N. W. Provinces, and Oude, the Punjab territories, Scinde, with the adjacent desert, and, perhaps, we may add Guzerat. Here the contrast to the hills is carried to the utmost; for as in the hills there is not a piece of flat ground sufficient to plant the sole of one's foot so in the plain there is nowhere, it may be said, an undulation of twenty feet, and no such thing as a stone of the smallest dimensions throughout its whole extent. For our purpose the plain may be considered as nowhere rising perceptibly or materially above the level of the sea.

The whole of the rest of India may be said to be composed of one solid formation of a pretty uniform character to which the deltas of the rivers and low diluvial lands of limited extent are mere exceptions. By far the greater portion of all this great tract is a rocky and more or less hilly formation considerably elevated above the level of the sea, and it is contrasted equally with the Himalayas and the plains; for as the one is all sharp-peaked ridges without valleys and the other all dead level plain, here it may be said that there is nowhere either one or the other; all the hills seem to have flat tops and all the rest is undulating high land and valley. Hills are nowhere altogether absent and the country is seldom purely mountainous. This formation ends to the

north and south in two apexes conspicuous on the Map, the city of Delhi and Cape Comorin, which, singularly enough, are as exactly in the same longitude as if they had been laid out with a Plumber's line. If we include Cutch and Kuttywar we may describe the whole as a diamond-shaped country, the points of which are Delhi, Cape Comorin, Cutch, and Rajmehal; excluding Cutch and Kuttywar as isolated and separated by Guzerat (which in all its characteristics belongs to the Great Plain) we might describe the solid country as a triangle, of which the base, considerably bulged out, runs from Delhi along the Aravallee range and the hills east of Baroda to the Western Ghats and so to Cape Comorin. Thus placed, the triangle would have its apex at Rajmehal, and the apex would be connected with the base by the hills running along the right bank of the Ganges and Jumna on one side, and by the line of the Eastern Ghats on the other side. The geological character of the whole of this region is, I believe, in its principal features much the same throughout and very peculiar, large masses of trap being constantly thrown up over the sandstone and other formations into hills and eminences, which again are usually capped by the singular flat tops composed of red Laterite. The soils (with the exception, of course, of the alluvial and diluvial deposits interspersed) seem to be pretty universally composed of two sorts; the peculiar black soil said to be the debris of the trap often of considerable depth and lying upon a retentive kind of rubble, and the red soil the debris of the Laterite. Both are fertile though as different in their characters as heavy and light soils can be.

Delhi as is well known is situated within a few feet of the level of the plain on the last low spur of the red sandstone projecting towards the north, so that not only historically but geographically it is a permanent point. It is as it were the last point where a city is not liable to be washed off the alluvial soil by a change in the course of the great rivers. Agra is also on the edge of the solid formation. For a considerable distance south of Delhi the country does not seem to rise to any considerable height, and when it does rise it rises very gradually to the south and west. Farther east opposite Allahabad and Mirzapore there is a more marked and sudden rise by a steep ghat line, and as we go south and west we come to a considerable elevation and a pleasant climate. Neemuch is about 1,400 feet high and farther on many stations situated widely apart are all placed at a pretty uniform height of about 2,000 feet above the sea, viz., Saugor, Indore and Mhow, Oodeypore, Baitool, Chandwara, Seonee, Hazareebagh and others. In the extreme west the Aravallee

range culminates in Mount Aboo upwards of 5,000 feet above the sea. Along the southern face of this high land a considerable height is also attained in several places.

It appears to me that the common assumption that the Nerbudda is the boundary between North and South India is a mistake. Rivers never are ethnological and seldom geographical boundaries. The Vyndya range north of the Nerbudda in the sense of a marked dividing line (a sort of backbone of India as it is sometimes supposed to be) seems to be quite a myth. I mean, that it is not an elevated range of hills forming a real and substantial boundary. The country to the north having already attained a general height of about 2,000 feet, I believe that scarcely a peak of this range rises 500 feet above the general level; at any rate, it is certain that throughout the whole range there is not a spot which has ever been used or suggested as a Sanatarium on the smallest scale. On the upper valley of the Nerbudda there is not even a heavy descent; the roads seem to find their way into the valley without any very steep or marked ghats. The range seems in this part of its course to be merely a sort of old shore marking a very moderate descent into the valley. Nor is the valley itself in this open and fertile part of its course very greatly depressed. Jubbulpore on the Nerbudda is between 1,300 and 1,400 feet above the sea. It is only lower down when the Nerbudda has cut a deeper and narrower gorge into which it rushes down over rocks and falls that its level is low, jungly and unhealthy. There the north face of the Vyndyas presents a deeper and steeper face, but still without rising to any considerable height above the general level of the country on the other side. I believe that it is much the same to the east as regards the Kymore range north of the Soane. It may be said that south of the Himalayas and north of the Nerbudda there is no available ground whatever above the general level of 2,000 feet, excepting Mount Aboo which is too far out of the way to require farther notice as connected with our present purpose.

What is called the valley of the Nerbudda seems to be in fact but a narrow and partial depression in the general level of the high land, into which the Nerbudda runs at Jubbulpore, and out of which a branch of the Soane runs the other way, a little to the east of Jubbulpore. Easily the roads from north to south makes a slight descent to Jubbulpore and Nursingpore, and easily they rise again to their former level in the country south of those places. That country as a plateau reaches its greatest height of 2,200 or 2,300 feet quite on its southern edge, immediately before we come to

the steep ghats on its southern face which lead down to Nagpore and Berar; and on this southern face of the plateau the hills do rise considerably above the general level which I have just stated—in several places very much above that level, constituting what I shall in general terms call the Sautpoora range. That range seems to me to be the only real backbone running east and west.* It very well marked in the small Map which I have taken for reference, though the name of Sautpoora is there confined to its western portion. In the sense in which I use the term, it extends from near Broach by Asseergurh, Baitool, Pachmarree, Seonee, Ummerkantak, Sohagpore, Hazareebaugh and Parisnath to Rajmehal, and divides the watersheds of the Nerbudda and Ganges from those of the Taptee, Godavery, Mahanuddee and Damooda. To the north of Kandeish at a place in British territory called Tooran Mull, this range is said to attain a height of upwards of 5000 feet. The Pachmarree hills in the Central Provinces are about 4,500 feet. Near Ummerkuntak there is similarly high land, and Parisnath is 4,478 feet high. The southern face of this range seems to be in every way the true natural and ethnological boundary of North India. Till we come to these ghats the population (with the exception of the scattered Gonds and Khonds of the hills) are Hindee speaking, and in all their characteristics Hindoostanees. Even the widely scattered Coles or coolies seem to be aboriginal Hindee speakers, and to have, if I am rightly informed, no radically different language. At any rate at Jubbulpore or at Seonee the Mass of the population (the Gonds excepted) are just as much Hindoostanees as at Lucknow, and I believe that it is the same throughout Malwa. Immediately under the southern face of the Sautpoora there is generally a strip of jungly, unhealthy, and almost uninhabited country which still more tends to make the natural boundary distinct. As soon as we get south of this line, we are among the Maratta-speaking population of Kandeish, Berar, and Nagpore, the Ooryahs of the Mahanuddee, and the Telingas of the lower Godavery, in short in Southern India. I shall then designate as the northern plateau, the country rising to the south and west from Delhi, Agra, Allahabad and Sasaram into Central India, and bounded on the west by Aboo and the Aravallees, on the south by the great length of the Sautpoora range from Tooran Mull to Parisnath.

* I am inclined to suspect that in ancient use the term Vyndyas included the Sautpooras.

This northern plateau is separated from what I shall call the southern plateau by a depression much deeper and more considerable than that of the Nerbudda and forming a much more distinct geographical division. It may be said to extend right across India from the gorge of the lower Taptee, by Kandeish, Berar, the valleys of the Nagpore Province, and the course of the Wardah and Godavery to the Bay of Bengal; perhaps it may also be said that the valley of the Mahanuddee is in some sense another branch of the same depression. Both at the western and eastern extremities where the Taptee, the Godavery, and the Mahanuddee break through the western and eastern ghats the depression is deep and narrow. But throughout a great extent of Central India the depression comprises some of the most fertile countries in India viz. Eastern Kandeish, the whole of the broad and rich valley of Berar, the valleys of the Wardah and Wyngunge and the plains about Nagpore. This country does not descend quite to the level of the sea, nor is it so flat an alluvial plain as the great plains of the Ganges. Low hills and stones are seldom altogether out of sight, they crop out here and there, or the soil lies on a stony bottom. But it is all situated at a level so low as to make its character entirely tropical. It is every where, say under 1,600 feet above the sea. We pass from the watershed of the Taptee to that of the Wardah and Godavery without crossing over any considerable ridge or dividing line, and by this route the railway runs to Nagpore. Soon after passing the longitude of Nagpore the valley of the Wardah becomes narrow, and thence the whole course of the Godavery (running in a south-easterly directions till it spreads out in the Delta beyond the eastern ghats) runs through a low unhealthy and very sparsely inhabited country, confined by hills and jungles. On the other hand proceeding due east from Nagpore after passing the Wyngunga and crossing (at it appears no great elevation) a tract of unsurveyed hilly country and the plateau of Chateesghur, the valley of the Mahanuddee is reached, proceeding down which to Cuttack, the communication with Calcutta may perhaps some day be opened that way. The whole of the country, however, between the Godavery and the Mahanuddee, and again from the Mahanuddee to the borders of Bengal is (with the exception of the strip along the coast) unhealthy, jungly and sparsely inhabited in the extreme. This is, in fact, the great tract so long marked as "unexplored," and to the present day almost a blank in our Maps. It may be defined as extending from the Godavery to the Midnapore District, and from the eastern portion of the range which I have called the Satpeoras to the eastern ghats, excepting only the

Chateesghur country (discovered by Mr. Temple and marked in the Map by Reypore) and the Sumbulpore valley. It is on account of the difficult inhospitable and savage character of this country that the railway communication between Bombay and Calcutta has taken the more circuitous route of the Upper Nerbudda valley and Allahabad instead of proceeding more directly by a continuation of the Nagpore line. This unexplored country (for such it still almost is) seems to be very hilly and broken, and at the same time for the most part lies comparatively low and within the worst fever level. But on the south-eastern border approaching the sea, as if to make up for previous deficiencies in elevation, the Eastern ghats rise far beyond their height in any other portion of their course. Between the Godavery and the Mahanuddee it would seem that at several points they reach a height of about 5,000 feet *e. g.* at Goleykonda near Vizagapatam, and at another place near Ganjam. As, however, the healthiness and practicability of these places has not been ascertained, and I do not think it probable that under any circumstances any one will propose to place the Capital of India, there it will probably not be necessary that I should recur to them.

To return then to Central India, we may say that the depression dividing the northern plateau from the high country to the south attains its greatest breadth of about sixty miles in Berar, and is there a very well defined valley distinctly bounded by the Sautpooras on one side and by the southern ghat range (which I requested my readers to run into the Map in pencil) on the other side. The proper western ghats (as the name is usually applied) seem to end at the Taptee, for beyond that river though a broken hilly country is continued to Aboo and the Arravallees it is not so clearly marked as a defined range running north and south. From thence the north extremity of the proper western ghats just south of the Taptee as if the ghat had taken a turn at right angles, the range which I have already in general terms described runs east and west. It is comparatively low and at first not very prominently marked, sloping gradually into Kandeish, but further east it is very well marked and contains, as I have said some pleasant climates about Ajunta, Booldana, &c. It is, however, more important for my purpose as marking the northern limit of the southern high land. The line of this range and its continuation of hilly country along the right bank of the Godavery to the eastern ghats may be said, to mark off from the rest of India, the Deccan or south country. This south country again is principally occupied by the high land to which the term Deccan is in

its more general sense is applied. In a more limited sense on the Bombay side the Mahratta country above the ghats is called the Deccan. But the Mogul Subadar of the Deccan, now called the Nizam, was Governor of all southern India; and I do not know why we should not include in the term all his present territory, and even Mysore. However, let us dismiss the ambiguous term and speak of the southern plateau. That might be described as a triangle bounded by the northern line already mentioned, the western, and the eastern ghats. But the country about the lower Kistna and Godavery seems hardly to partake of this character, and there does not appear to be any high ground which requires mention in that portion of the eastern ghats; therefore we may limit the eastern boundary of the southern plateau to about the longitude of Hyderabad. It extends then for our purpose from Berar to the Neilgherries, and from the parallel of Hyderabad to the western ghats. It may be said to have a general level of about 2,000 feet; the plateau generally ranging from 1,500 to about 2,500 feet, and most of the stations in the Deccan being either a little above or a little under 2,000. Belgaum, Dharwar and Mysore are about 2,500, while Bangalore alone attains 3,000. The plateau generally slopes gradually from west to east. All the rivers rise in the western ghats and find their way through the eastern Ghats to the Bay of Bengal.

The western ghats all along the line rise in ridges to a considerable height above the level of the plateau; but there are everywhere passes through them little, if at all, above the ordinary plateau levels. In fact, the ghats are not as generally depicted, a ridge running north and south. The rise of level, the break as it were, and upheaval in the crust of the earth, runs north and south, but the hills are rather a succession of transverse ridges placed as it were edgeways to this line of general elevation. The sudden break in these ridges and subsequent denudation by water courses and landslips gives to the broken ends a peaked and jagged appearance when we look from below. But on the other side, where the ridges run back into the Deccan, the usual flat-topped character of the hills is observed, and along, as it were, the flat backs of the ridges, ground is found fitted both for cultivation and for sanatoria, not broad but running back in narrow irregular slips and promontories. On such places at elevations of from 3,500 to 4,500 feet, say generally about 4,000 feet, are and may be placed Sanitaria in a cool climate at many points, all along the ghats. The transverse ridges themselves gradually tail off into the Deccan; but some of the most prominent may be traced for almost hundreds of

miles, *e. g.* one runs from immediately over Bombay (from about Jooneir) to Beder not far from Hyderabad. On one of the flattest tops of one of these transverse ridges, immediately over-looking the drop into the lower and, therefore, at one of the highest and coolest points, is Mahableshwar. All over the Deccan, occasional flat-topped hills stand up here and there, and are sometimes so large and so high as to afford room for Sanitaria. There is a good one near Bellary 3,500 feet high, two near Bangalore marked 4,600 feet, one in the North of the Mysore country marked as upwards of 6,000 high.

Between the ghat ridges, the narrow passes through which the roads are carried soon expand into the large valleys and broad irregular high-level plains of which the Deccan is mainly composed. Thus one of the railways from Bombay ascending the ghat enters on a fine open country through which run the streams of the Upper Godavery; another similarly enters the country which supplies the feeders of the Kistna, and, in fact, follows, throughout most of its course, the comparatively level lands marked by that water system, till, in the Madras Presidency, it crosses over by Cuddapah and finds its way through the Eastern ghats to Madras.

At the Southern extremity of the Southern Plateau, the Western and Eastern Ghats seem to run together and to be heaved up into the great block called the Neilgherries, which, again, has a flattish top about 7,000 feet high. South of the Neilgherries there is a great depression which does not altogether sink to the level or character of a Plain, the railway through this depression running, as I have before said, through a country for the most part hilly and in places as high as nearly 1,500 feet. Beyond this depression, again, rises another block or range almost as high as the Neilgherries and similar in character, which, at a greater or less elevation, extends to Cape Comorin, and the different parts and branches of which are known as the Pulneys and Anamullees, Travancore and Tinevelly hills; they are all parts of one connected range. There is, it is understood, much fine ground on the Pulneys and Anamullees, but they are hardly fully explored, and being in character quite similar to the Neilgherries and more distant, I may for my purpose dismiss them and take the Neilgherries alone as the type of the highest land in this part of India. Near Salem there is an outlying block called the Shevaroy's which attain a height of 5,000 feet and are good for Coffee planting, but these also I may dismiss as represented by the higher Neilgherries. The lower hilly country in the Salem and surrounding Districts I need not here further notice.

Between the high country and the sea, on the west coast, the narrow strip of lower country is generally broken by hills. The Southern Concan, and the whole of the low country near and for several hundred miles south of Bombay, is extremely hilly and impracticable right down to the sea, being composed, it may be said, of an endless succession of small deep valleys and hills running up to, say, sometimes, as high as 2,000 feet, *e. g.* the Materan hill, with a flat top about that height near Bombay. In fact, we have the Ghat country over again at a lower level. Further south in Malabar and Canara there is more flat diluvial land near the sea, but even here it is constantly broken by low hills which, at various points, reach down to the sea shore. On the East Coast we have a less intense variety of the same thing, the less marked Ghats of the Eastern side of India being succeeded by a somewhat broader, low country, more sandy and less moist and rich but still broken by occasional hills even down to the Sea *e. g.* St. Thomas' Mount, Pulicat, and other hills near Madras, and Waltair near Vizagapatam. On this coast we have also the rich Deltas of the great rivers running down from the Western Ghats across India, those of the Cauvery (Tanjore District) Kistna, and Godavery.

Thus, then, I have, I think, exhausted in general terms the Map of India, with especial reference to the altitudes by which the climate is so much determined. Setting aside those parts which I have dismissed as immaterial to our present purpose I may say, then, that we have the following regions:—

1. The Himmalayas.
2. The Great Plain.
3. The Sea Coast.
4. The Northern Plateau.
5. The Southern Plateau.

To recapitulate the position of the two irregular but more or less triangular Plateaus; the Northern with its apex at Delhi has its very elongated base and highest part in the long range of high land stretching nearly across India East and West from the lower Taptee and the borders of Guzerat to the borders of Lower Bengal. The Southern, with its apex in the Eastern part of the Nizam's territory, has its base and highest part along the line of the Western Ghats running North and South. The two Plateaus lie, as it were, cornerwise to one another, and the South Western corner of one is only separated from the Northern corner of the other by the valleys of Kandeish and Berar, where the Ghats or walls which support each may frequently be seen at the same time from some spot in the intervening valley. The Southern Plateau in its highest parts attains a height somewhat

greater than the other, but very large portions of both lie pretty uniformly about 2000 feet above the Sea.

Next we must look to the Monsoons and rainy seasons which so materially affect the climate. The South-West Monsoon may be said to blow partially from that quarter at an earlier date (especially in the South) but it only acquires strength and begins to bring in the regular rains about the beginning of June. It is chiefly felt as a regular Monsoon (that is a strong and constant wind from one direction) on the West Coast, and in the countries which derive their supply from that quarter. There it comes in from the West with great violence in June and July, and, though the wind becomes lighter in August, the rains may be said to last to the beginning of October. It appears, so far as I can gather, that they are not quite so heavy in the extreme South, but going Northward along the Malabar and Canarese Coasts; they are excessively heavy, and so continue till towards Bombay they begin to lessen in intensity. At Bombay they seem to be still very constant, vapoury; and disagreeable, but the annual rainfall is not very enormous, say about 80 inches, falling almost entirely in the Monsoon. North of Bombay the quantity of rain lessens, in Guzerat it is much less, and further North it disappears altogether, so that in Sindh and the desert, there is no regular rainy season, and scarcely any rain. The great plain, therefore, gets no rain supply from the West, unless indeed any of the Western clouds find their way to Agra or other places on the banks of the Jumna, of which we have no information. The mass of the clouds brought up by this West Monsoon are poured out on the Western Ghats, the rainfall there rising as high as three hundred inches or more and rendering all the exposed places on the Ghats and neighbouring hills (*e. g.* Mahableshwar and Materan) almost uninhabitable in the rainy season. But though these very watery clouds reach to the top of and over the crest of the highest of the Ghats, it is singular that that they go little beyond the outer line. It appears one of the most extraordinary phenomena to be seen that on these ridges you may stand at an elevated site and see one point (near the edge) where there is a fall of three hundred inches, another, eight or ten miles further back where the fall is not above a fourth or fifth of that quantity, and another half or dozen miles further still where it is almost reduced to a minimum, perhaps is not more than eighteen or twenty inches in the year; and all the while there is no visible obstacle to arrest the progress of the rain between these places; in fact, the Monsoon, so far as the current of air is concerned, continues its course uninterrupted. It seems

that the rain-clouds just curl over the top of the Western Ghats, and in the course of about fifteen miles lose the whole of their excessive moisture. The country beyond gets all the benefit of the coolness and airiness caused by the rain and wind, without the heavy rain itself, and, consequently, the climate of this country beyond the ghats appears to be, during this rainy season, one of the most delightful in the world. There is just enough rain to water the ground, (considerably elevated as it is,) throughout the monsoon season; it is never too hot and never too cold, and there is always a pleasant breeze. In parts of the Bombay Deccan the rain-fall is so small as to suffice (in that undulating country) for little more than the rainy season—during the rest of the year there is a want of moisture, and the climate is therefore, taking the whole year round, more dry than is desirable. This gives the country about Poonah and along the line of the rail towards Sholapore an arid and treeless appearance. Bellary and other places in the same direction are also very dry.

In the South, towards Dharwar and the Mysore country, the supply rain is better, and there is not the same aridity. The Southern countries seem also to have showers which mitigate the hot weather somewhat earlier in the season. The Monsoon rains from the West extend as far as the Eastern ghats on the Eastern edge of the plateau. On the Neilgherries, the fall of rain is not so excessive as to drive away the European residents, but throughout the rainy season, there is much driving heavy rain, and in this respect Ootacamund seems to have no advantage over Simla and the Himmalayan stations. The South-West Monsoon does not pass beyond the Mysore country, and the Neilgherry and Pulney ranges to the country below the Eastern ghats—that is the low country comprising Madras and the districts on the East coast—South of and for some distance North of Madras. That tract alone is excluded from the benefit of those regular summer rains, and has, at that season, but partial and irregular showers. In all India there are but two tracts thus deprived of the rains brought up by the South-west monsoon, Scinde and the desert in one quarter, and the Madras coast in another. It is this want of summer rain which gives their great importance to the irrigation works of the Madras deltas, since the rivers filled by the immense rain-falls of the western ghats and the moderate periodical rains of the intervening country are just at their highest when water is most wanted in the Deltas, and it is then most easily distributed from the over-filled and over-flowing channels. The situation is exactly that of the Egyptian Delta in reference

to the Nile. Irrigation works of this character must not be confounded with those undertaken in countries exposed to the periodical rains. These latter are of a totally different character, the water being only in demand when the rivers are at their lowest, and they require much greater works to bring the water from a much greater distance.

In the Northern portions of the country watered by the Western monsoon, it appears that, although the Coast supply of rain is much smaller than farther South (decreasing from about 180 inches at Mangalore and 120 in the further Concan to about 35 in Guzerat), whether it be that the clouds find their way up the Gorges of the Taptee and Nerbudda, that the hills north of the Taptee are less high and check them less, that they are lighter and fly higher—that they are attracted by the Sautpoora range, or that their course is checked by the counter current of the Gangetic valley, whatever the cause it would appear that in the interior the country is better watered by the monsoon than farther south in the Deccan. All Central India seems to receive its rain supply from the west. Berar and Nagpore are well watered and the neighbouring stations on the northern Plateau are moist, Baitool and Seonee are so, and Jubbulpore is in the rains decidedly moist and tropical. Mhow is dry, but there is more rain at Neemuch, and Saugor is cloudy and well watered in the rains. It appears that throughout Central India there is a peculiar cloudiness in the rains, so that at Saugor and Jubbulpore the sun is sometimes seldom seen for a month together. This is probably due to the collection of the clouds between the two currents, the westerly current and that of the Gangetic valley to which I shall soon allude.

It may be generally remarked of all the countries affected by the direct westerly monsoon that the rain comes with a much more steady and regular wind than in the plain of the Ganges. It may be expressed that the one is a proper monsoon, and the other only a rainy season. This steady wind makes the rainy season cooler and less muggy. The remark of course applies in a greater degree to stations more nearly and directly exposed to the westerly monsoon than to those at a distance, but even at Nagpore, at a scarcely greater elevation than Meerut or Delhi, and nearly 500 miles from the Sea, the rainy season is very much cooler and more pleasant than at those places. It may, then, generally be said that all the places partaking in the monsoon of the west coast (except those where the rain is unendurably heavy; or where the elevation is too great to make the wind a desideratum) have, altitude apart, a pleasanter climate in the rains than those of the Bengal Presidency, and that as almost all the stations in the

interior are placed higher than those of the great plain without being too high, they are as a rule *very much* pleasanter at that season.

In addition to what I have said of the moistness of most of the stations on the southern base of the northern Plateau, I may here add that the eastern projection of that Plateau, the Chota Nagpore country about Hazareebagh, receives an abundant supply of rain from the Bay of Bengal, (the rainfall at Hazareebagh seems to be about 70 or 72 inches,) so that the greater part of the higher portions of this Plateau may be generally stated to be moist.

Another branch of the south western monsoon at the same season affects the greater part of the Bay of Bengal and the eastern side of India. In the southern part of its course, this branch is separated from the western branch by the Madras country, and part of the adjacent sea. Rounding the southern extremity of Ceylon, the monsoon takes a south-westerly direction, and thus keeps clear of that part of the eastern coast which runs nearly due north and south. But as it gets farther up the Bay of Bengal it blows more directly from the south, and the coast also from about the mouth of the Kistna, trending more to the east, the monsoon strikes this coast and brings up heavy rain on all the country on the upper part of the Bay. At Vizagapatam the fall seems to be light, it increases in Cuttack, and is pretty heavy in Calcutta. The total annual rain-fall there is about sixty-five inches per annum. In Eastern Bengal it is much heavier, and on the hills of the extreme east it is enormous, sometimes it is said as high as 600 inches in a year.

At Calcutta and in Lower Bengal at this season (and for some time before in the hot weather) the breeze is hardly strong and regular enough to fulfil the idea of a monsoon, but still there is a pretty constant southerly current to which that name may perhaps be given. Proceeding north this current is again deflected to the west, and so in a weakened and less constant form it proceeds up the plain of the Ganges. It can no longer be called a monsoon, and is very varying and inconstant, but still there is, during part of June and the following months, a general tendency to south-easterly and easterly winds or currents which bring up the monsoon rains, and to which the country is indebted for fertilising moisture. As a general rule, then, the whole upper plain of the Ganges receives its rain supply from the east, and this supply, though from a contrary direction, is moved by the same impulse and is, as it were, part of the south-west monsoon. Proceeding farther up the country, the supply becomes less and less, but seldom fails altogether till we pass

into the watershed of the Indus system of rivers. It is always heavier near the Himalayas than farther from them. Passing Delhi, the flat country to the left is very scantily watered, but nearer the hills the supply continues. Crossing the Sutlej, the Jullunder Doab is well watered, but at Lahore the supply is scanty and precarious, and farther on the watered country becomes narrower till beyond the Jhelum, these periodical rains seem to be confined to the hills. Everywhere in the plains the breeze being so light and uncertain and the rain supply broken and interrupted, it is frequently or generally muggy and hot throughout the rainy season. In the lower parts of the Upper Provinces and near the hills the annual rainfall may be taken to be forty to forty-five inches; further up and further from the hills it diminishes to about twenty-five inches. In the greater part of the lower Punjab there is no regular rainy season that can be depended on, and the absence of rain in the tract between the Punjab the Ocean and the Aravallee range causes the great Indian Desert.

The rain falls heavier and more continually than in the plains along the whole course of the outer Himalayas, but at considerable elevations it is not so very heavy as in the lower hills to the east. The annual fall of rain at Darjeeling is, I believe, about a hundred and twenty or a hundred and thirty inches, at Nynnee Tal about eighty-five, at Mussooree about seventy-five, at Simla about sixty-five inches, and at Murree considerably less.

It is not till very high ranges of thirteen or fourteen thousand feet intervene that the periodical rains cease in the hills; but far in the interior beyond those high ranges they are little felt. In the remote Hill regions twelve or fourteen marches beyond Simla we are nearly beyond their influence; it is the same in Cashmeer, and the rains do not reach into Thibet.

The Bengal branch of the south-west monsoon seems to be as it were slewed round to make the north-East monsoon. Towards the end of the rains the wind in Calcutta often trends a little to the east—that is, it is more or less south-easterly or south-south-easterly; but still the brief wind up of the rains, which often comes down pretty heavy in October, plainly comes up from the southern sea, and it never occurs to any one in the Bengal Presidency to take it for anything else than the tail of the regular rains of the southern monsoon. At the same time, however, in the end of September and throughout October, and apparently by the same impulse, a good deal of more continued rain seems to be thrown by an easterly wind across the Bay of

Bengal on the country to the west of the upper portion of the Bay, and there passes for the north-east monsoon. The Cyclones which occasionally occur at this season seem to come up from the Bay driving the water before them; in Lower Bengal they come up from the south, in the northern districts of the Madras Presidency they come from the east. The country in the east of the Peninsula which receives a share of both monsoons is thus rendered moister than those which receive but a scanty share of one. These easterly October rains, though heavy only to the east, seem to extend in a slight shape almost throughout the breadth of the Peninsula, being more distinctly perceptible in the centre, and less so in the west. Even in Bombay, the stormy showers usually expected some time in October, coming from the east over Elephanta are called Elephantas*. And in the Deccan a small fall from the east is commonly expected at that season, and is there known as the Madras monsoon. At Madras itself, however, the monsoon rain usually does not fall till somewhat later, when the current having been more decidedly slewed round comes from the north-east, and throws the rain and sea on the southern part of the coast. There though the official monsoon or dangerous season, is supposed to commence on 15th October, it is generally a short affair of three weeks heavy rain in November. Inland the fall is less heavy, but it reaches Mysore, the Neilgherries, and other inland parts.

As respects the rest of the year, northerly currents of air prevail, I believe, for some months on the Indian ocean. In Calcutta the cold weather air generally comes from the north. In the Upper Provinces there is no very prevailing wind in the cold season, and the nights are usually quite still. This absence of cold winds with very cool air and a bright sky makes the up-country cold weather particularly pleasant and invigorating. In March, April, and May again westerly wind prevails in the Upper Provinces, and as the desert and dry country over which it blows becomes heated, these winds become the hot winds of May and June.

In the Deccan after the west winds of the monsoon, there seems to be a re-action in a general tendency to easterly winds, and these easterly winds, cold in the cold season and hot in the hot season, are not popular there.

All round the coast during the whole of the season in

* NOTE.—That is the popular derivation of the word, and I never doubted its authenticity; but since writing this passage, I have been struck by a passage in Sir Thomas Roe's travels, in which, while he is at the Court of the Emperor at Ajmere, he says that the October rains are there called "Oliphants."

which the strong monsoon is not blowing, the diurnal sea and land breezes are constant. The sea breeze in particular always blows fresh and pleasant and much mitigates the climate. In the cold weather it has a narrow range, but in the hot weather, when the land is heated and the contrast is greater, it extends a long way inland, and is more or less felt at places 100 or 150 miles distant from the sea. On the west coast at this season it passes the ghats, and late in the afternoon arrives at stations some way beyond them.

I think that I have now mentioned all the main elements affecting the climate generally. For latitude and proximity to the sea I have referred to the Map, the altitude and general conformation, and the winds, monsoons and rains, I have attempted to describe. Now as to the result on the climate of particular places.

Putting altitude apart, it is singular how much the great differences of latitude in India are compensated by nearness to the sea and other circumstances, and, as respects all the chief places not materially raised above the sea level, how evenly balanced are their relative superiorities and inferiorities in the matter of climate. Taking Calcutta, Madras, Bombay, and any good station in the plains of the Upper Provinces, it is impossible decidedly to say which is best, all are so balanced that those who prefer one or the other may, with some reason, maintain its superiority. I have already discussed the climate of Calcutta. Comparing it to the Upper Provinces, it may be observed that, for three or four months, Calcutta is quite cool enough for ordinary sedentary residents, so cool that the feeling of disagreeable heat is altogether absent. At the same time the air is not very bracing, there is always a good deal of damp, and the mosquitoes are at that season terrible. Up the country the cold weather is decidedly superior, it lasts longer, is colder and more dry and bracing without being (till, perhaps, we get up as far as Lahore) at all raw or disagreeable. On the other hand, the hot weather in Calcutta, though, no doubt, very hot, is tempered by the southerly breeze which often makes the evenings almost cool while we are directly within its influence; whereas the heat up-country of the two months from the latter part of April to the setting in of the rains is tremendous. This heat is, no doubt, quite mitigated during the day by tatties when the wind does not fail, but the wind very often does fail in the day. At night it always fails, and the hottest nights of the Upper Provinces are certainly very distressing. Outside, the country there then looks like a howling, dusty wilderness. Yet the hot winds are thought not to be at the time unhealthy, though they must try the European constitution.

In the rains, again, the southerly breeze and abundance of rain makes the first part of that season in Calcutta preferable, I think, to the Upper Provinces, where there are often very hot breaks in the weather, and a tendency to mugginess. Later in the season, when the wind fails, Calcutta is much more moist and muggy than the drier country; but then again the rains last longer, and there is not so much of the fever and ague which often attend the hot drying up of the rains in many of the less moist stations of the Upper Provinces.

Altogether, while the climate of the Upper Provinces is decidedly preferable in the cold weather, that of Calcutta is probably on the whole not more, perhaps it is less-disagreeable in the hot weather. Again up-the-country, there are great facilities for getting to the hills which are wanting in Calcutta where the absence of any means of change is a great disadvantage. Darjeeling is yet far distant, besides being so rainy for so great a part of the season. Parasnath has never been utilised as it might be. It is something to get to sea in cases of serious illness, but till it comes to that, people do not much appreciate such a change. There is no means of spending the Saturday and Sunday in a better climate.

On the whole, I think (reference being had to what I have before said regarding the sanitary condition of Calcutta), that Calcutta is a more dangerous place for new arrivals, but perhaps, on the whole, not more trying to acclimated sedentary residents, living there all the year round for a series of years, than would be a similar life at an up-country station. The up-country residents look more robust, but if they never take a change they are much tried. As a matter of fact, however, with so many hill stations at hand, they do get change and their families do still more. Take it, then, all in all, I think that, as a body, the Europeans in the Upper Provinces are more robust and more healthy than those in Calcutta; but that the difference in the value of European life is not so great as has been sometimes supposed. Although healthy people leading an active life up-country may look much better than those who sit in offices in Calcutta, still for Sedentary Legislators and Administrators fixed for business in the hot and rainy months, there would be no very great advantage of climate at any station in the plains of the Upper Provinces.

Madras, being only less warm than at other seasons for a short time in the cold season, and little cooled by the south west monsoon, has an average temperature higher than any of the places with which I am comparing it. Still there

are a good many showers at different times in the year, (the average rainfall is forty-seven inches), and a fine sea breeze which seldom fails. The place seems to be free from malarious influences. Some people seem to live robustly there to a good age; and altogether Madras may be deemed tolerably healthy, decidedly more healthy I think than Calcutta. There are also now excellent facilities for getting away, for a change, to Bangalore, the Shevaroy, and the Neilgherries.

The country under the western ghats is not so unhealthy as such sub-montane tracts in tropical climates sometimes are. The hills of the Concan and the whole of the sea coast seem to be healthy enough. But the low confined valleys, which the sea breeze does not well reach, are decidedly unhealthy. The sea breeze is everything in those parts, and at all the places on the coast to be either cool healthy or you must be actually on the sea and exposed to the direct action of the breeze. This, then, is the case with Bombay. Bombay itself is by no means an unhealthy climate; but parts of the adjoining Concan are not healthy and are very sparsely inhabited. It is therefore difficult to extend elsewhere than immediately on the sea shore. The situation of the town and island of Bombay renders it in this respect, excessively cramped and inexpansive. As it stands, however, I repeat that Bombay is by no means unhealthy for a place in the Tropics. It seems to be pretty free from malarious influences. The cold weather is not nearly so cool, or so long protracted, as that of Calcutta; but from the end of November to the end of March the climate upon the sea shore seems to be pleasant and healthy. April and May are hot, but still are tempered by the Sea breeze. The rains are heavy, boisterous, constant, and unpleasant, but not unhealthy. After the rains, again, October and part of November are warm. On the whole, Bombay, taken by itself, seems to be a healthier place than Calcutta, and, taking into consideration the facilities for change, it is much healthier. The hill of Matheran, within four or five hours' journey by a very easy route, though not much more than two thousand feet high, is, owing to the influence of the sea breeze, sufficiently cool in the hottest weather and a delightful Saturday change. And in the rains, within one hundred and twenty miles by Rail, that is seven or eight hours' journey, is the delightful climate of the Deccan.

Thus, then, it will be seen that, whilst as I have said the *pros* and *cons* of many far distant places are pretty well balanced, still as a place of residence for persons arriving from Europe at a mature age, Calcutta is decidedly less healthy and safe than the other places mentioned, both in itself and in the want of facility for easily obtaining change of air.

It would be useless to carry this comparison farther; the present Capitals of the different provinces are sufficiently good instances of the climate of the plains and of the coast, and no other places, similarly situated, are likely to be chosen to supersede them. The other places on the coast are, in climate, very like Madras and Bombay. Guzerat more partakes of the climate of the Upper Provinces, but is, unfortunately, by no means healthy.

To find, then, a better climate, we must look to a greater elevation. First I shall deal with the higher elevations.

At an altitude of 7,000 feet, which is about that of our hill Sanatoria, we secure a cool European temperature throughout the warm months of the year, and in the northern hills, where there is also a cold winter, the climate might be described as European throughout the year, were it not for the marked periodical rains. At Simla and Mussooree the hot weather is in the day like the warmest and most sunshiny English summer weather; the direct rays of the sun are more powerful. The thermometer in the shade in the hottest times of the hottest days may approach, or occasionally even reach, 80° ; usually it keeps some degrees below that point. The nights are cool, and there is never the still sultriness of European dog days. The rains of the rainy season are very constant and disagreeable; clouds and mists hang a great deal about the hills, and though exercise may generally be taken sometime in the day, anything like distant excursions, or variety is out of the question. After the middle of September there is little rain; the weather becomes splendid, and in October, November, and December the climate is unsurpassed in the world, even the latter month, though cold, being usually bright, clear and bracing. In January and February, there is a liability to snow, and broken weather. March, too, is not unfrequently stormy. In April the hill season commences; the weather then is generally delightful. At Darjeeling, the rains, and more especially the mists, commence earlier and leave off later, and the fall is heavier; there is, therefore, a much smaller proportion of agreeable weather. The rains in the hills, though disagreeable, are not generally unhealthy. The hill stations are usually free from fever and cholera, but at those above 5,000 feet, the water or air, or some other cause, gives a tendency to bowel disease, which seriously affects some people, and has sometimes caused a good deal of mortality in sickly regiments. On the whole, the hill climate is probably, in itself, not much less healthy than England, but the confined character of the ground, and the want of room to move about,

certainly make the hill stations much inferior to England for the development of a growing human frame.

The summer climate of the Neilgherries is about equal to that of the Himmalayan stations, it seems to be mere matter of varying opinion which is preferred. In the Neilgherries the warm weather sets in earlier, but is sooner broken by showers. In the warmest months it is, perhaps, rather preferable. In the rains there is not much to choose. After the rains the latitude and the interruption caused by the north-east monsoon render the Neilgherry autumn by no means so splendidly fine as the Himmalayan October and November. The Neilgherries are free from winter snow and storm, but I understand that some of the earlier months of the year are dry, dusty, and subject to an unpleasant cold wind.

Probably, the greater flatness and roominess of the ground about the Neilgherry stations, and the absence of extremes of climate, render them a better residence for permanent inhabitants of stationary habits. On the other hand, they have not the fine scenery and vegetation and the interesting routes into the interior (of the Alpine countries, or even into High Asia) which render the Himmalayan stations more interesting to a visitor. The advantages are pretty equally balanced; but, as I have said, for a place of quiet residence, the Neilgherries are probably preferable.

Ootacamund seems to be not altogether free from a little fever, and at somewhat lower elevations in those southern hills fever is unluckily very prevalent. It appears that the fever range runs very high in those parts. The Wynaad and other places 4,000 or 5,000 feet high suffer much from this scourge. It is, therefore, not necessary to consider as fitted by climate for our purposes any places at an elevation between the high level of the Neilgherries and the ordinary height of the southern plateau.

The Sanatoria on the edge of the western ghats in the Bombay Presidency are not, at the highest point above, 4,500 feet; but then they are within the influence of the sea breeze, which, in the hot weather, is so constant, that the heat is never oppressive even at a less elevation than that which I have mentioned. At this season these places are, probably, at least as healthy as any of the higher hill stations—perhaps more so. Indeed, they seem to be, throughout the year, free from any marked unhealthiness. But during the rainy season, the mere force and amount of rain causes them to be deserted; the more so as the much better climate of the Deccan at that time remains on the ghats. ●

A few miles back, however, on the backs of some of the higher ridges, places may be found where the climate is good all the year round, the rains not being heavier than at Simla or Ootacamund. There is such a settlement for pensioners a few miles in the rear of Mahableshtar, and another is projected on the opposite side of the valley. Of course, as we remove from the direct effect of the monsoon, we also somewhat lose the force of the hot weather sea breeze; but say at 4,000 feet high, within 15 or 20 miles of the edge of the ghats, the breeze is not wanting in the hottest weather, the climate is never disagreeably warm, and, for a permanent residence in an open healthy situation, and among cultivated fields, there are probably no better sites in India than these; the Neilgherries, perhaps, excepted. Still the rain climate of the ordinary plateau of the Deccan behind the ghats is so good, that no one wants a sanatorium in the rains and (colonisation being yet in its infancy), the only people who want a hot weather resort have been content to go in the hot weather to the stations looking down upon the ghat scenery and the sea from the edge of the high land, and to come down in the rains to the Deccan stations.

The detached hills, of considerable height in the interior of the Deccan, are too inconsiderable to be of importance for our present purpose, and Aboo, as I have said, is too far out of the way.

There remain, then, among high elevations only those of the Sautpoora range.

It has been often remarked that, if a new capital were to be chosen, the natural and most desirable arrangement would be to find a good climate in an elevated situation somewhere on the line of railway which, running from Bombay to Allahabad, bisects India into two as nearly as possible equal portions, and so will form a great central line of communication. Now, this railway, after leaving the western ghats and the Deccan, runs through and along the Sautpooras, and, if on them, near the line, a site could be found in other respects eligible, it would have many advantages. Unfortunately it happens that no situation combining considerable height, (I mean something above, say 3,000 feet), space and healthiness is to be found. A good deal of unhealthiness hangs about the whole line of this range. Commencing from the west, the jungly gorges through which the Nerbudda and Taptee flow to Guzerat and the sea, and the hilly country to the north (Rajpootana and other tracts) are at present notoriously unhealthy, and inhabited only by wild Bheels. As we go east, the jungles are still unhealthy. In the north of Kandish, about the Nerbudda under Mhow, and in the jungles

near Asseerghur there is very bad malaria. So it is in many of the wooded valleys in those parts of the range which run through the Central Provinces. In Mandlah and other districts, and thence south-east, the valleys are unhealthy till they merge in the great unhealthy tract which I have described as the unexplored country reaching to the eastern ghats.

This unhealthiness of the valleys also, in some degree, extends to many of the wooded hills of the range; the fever range sometimes goes up to a considerable height. It may be that much of the unhealthiness of parts of Kandeish and other places on this line of country, is in great part caused by the ruin of the country, and consequent growth of jungle, the result of years of frightful devastation by the harrying raids of the Pindarees and other plunderers. No doubt much of the country so reduced to desolation from a previously flourishing condition will yet much recover. But still some part of the malaria may probably be due to the moistness of climate, or to other causes which we cannot, in our present state of knowledge, eradicate.

And, in truth, the portions of the range which ascend to a high level are very rare and limited, and in point of mere space insufficient. Nearest to the sea, and so far very favorably situated, is the newly discovered Tooran Mull in the north of Kandeish, said by its discoverers to be delightful; but, if so good, it seems strange that it should yet be but imperfectly discovered; it is far from the Railway, surrounded by jungle tribes and Native States, moist and probably not very healthy in the rains, and hardly likely to be a fit site for the Capital. Nevertheless it may be included in an examination which I shall presently suggest.

A good way farther east we come to the Chikuldah hills, which form a pleasant local Sanatarium for Berar, but they are only about 3,000 feet high, are not very healthy in the rains, and are very limited in extent. Pachmarree and Mohtoor are a little higher, but the same remarks apply to them. I am sure that if it were possible for any man combining the utmost energy of body and mind, and taking the greatest interest in the subject, to find a good Sanatarium for the Central Provinces in these hills, such a place would, ere this, have been found by that most distinguished and most ubiquitous man, my friend Mr. R. Temple, Chief Commissioner of the Central Provinces, to whom I am especially indebted, both for much of the assistance which enabled me to see Central India, and for much of the information which I now retail. Mr. Temple has not found any thoroughly satisfactory and sufficient Sanatarium for his own Provinces;

and, therefore, it may safely be assumed that no very elevated spot, fitted by climate and space for the Capital of India, exists in those hills. Chikaldah on one side and Pachmarree on the other, will probably always be useful as local hot weather resorts for this part of India, but they will hardly be anything more.

The open parts of the adjoining plateau are pretty healthy and will be presently noticed; at present I am dealing only with the highest elevations. Ummerkantak had once a great, though somewhat mythical, name—but it has now somewhat lost reputation, and has been given to the Rajah of Rewah. Parisnath, though it may be, as I have already suggested, a good place of local and temporary resort from Calcutta, is not fitted for anything larger than that.

I repeat, then, that in the Sautpoora range, there is no extensive site with a high elevation and a climate always cool and healthy, so that resource must be abandoned.

Having exhausted the high level climates of from three thousand to eight thousand feet, I come to the middle placed plateau climates at elevations of from about one thousand five hundred to three thousand feet.

The southern plateau may be generally described as remarkably healthy. In the south the places near the ghats partake of the unhealthiness which I have ascribed to low hills in this part of the country. But the greater part of the Mysore country and the elevated parts of that of the Nizam are generally healthy. Bangalore is one of the best stations in India. In the north of this plateau in the Bombay Presidency, the districts near the ghats are the healthiest of all, being free from jungle and from excessive rain and moisture, and, in addition to a considerable elevation of about two thousand feet, having the advantage of a sea breeze in the hot weather and of the cool monsoon breeze already described in the rains. In the hot weather, no doubt, the country becomes somewhat heated, and there is something in the same style as the hot winds of the Upper Provinces, but in an infinitely less degree. I may best convey to Bengalees an idea of the difference of climate when I say that punkahs are almost unknown in the Bombay Deccan—they do not exist. No doubt they would sometimes be useful, but the want is not felt to such an extent as to have lead to their introduction. In the heat of the day the houses are cooled with tatties; and late in the afternoon the sea breeze arriving makes the evenings quite pleasant and the nights cool; a night punkah would never be wanted. At this season, too, at many points in the neighbouring ghats and the ridges running out from them, a relief from the warm wea-

ther may be had close at hand. The rain climate of the Deccan I have described, and it is healthy as well as pleasant. After the rains the weather may again be a little warm for about a month, but not excessively so, nor is there then any material sickness. It is only said that the cold dry winds of the following season are bad for liverish subjects.

With the exception, then, that the cold weather is inferior to that of northern India, the Deccan climate is clearly vastly superior to anything known in the plains; the hot weather is much less hot and more easily avoided, and the rains are as superior as the best climate can be to the worst. That the climate is, in truth, very healthy to the European constitution is clearly shown by Military Statistics. The Deccan stations of the Bombay Presidency are, it would appear, among the healthiest quarters of the British Army. An average of ten years' return in the Appendix to the Report of the Royal Sanitary Commission shows the annual mortality of the European troops at these Deccan stations to be only $1\frac{1}{2}$ per cent. or between 17 and 18 per thousand.

The northern plateau, with the exception of the jungly parts on the southern edge to which I have already alluded, is generally healthy. Yet here and there the taint of fever slightly extends into the open country.

Mhow has a very pleasant and healthy climate; and Malwa is a very fine and very central country. Mandoo, the old Mahomedan Capital of that part of the country on the ghats overlooking the Nerbudda, is said to be a beautiful site. If Malwa had been British territory, it might have been very well worthy of consideration for our present purpose, but as it is not, and there is no prospect of its becoming so, we must put it out of the question. It may, however, be mentioned that Mhow does not seem to have the advantage of climate over the Deccan stations although the latter are a degree or two south at the same elevation of about 2,000 feet. If its more northerly position gives it a better cold weather, it has not the same advantage of the sea breeze in the warm weather, and it has no higher Sanatoria near it as have all the Deccan stations. The death rate among the European troops is larger being twenty-eight per thousand. And if, as being farther in the interior, it is more central, it is also farther from the sea and separated from the nearest point on the sea shore by an unhealthy jungly country.

Saugor, in British territory and about the same height, had also a mild and good climate, but besides being very far from the sea it is off the line of the Rail—has no hill Sanatoria near it, and has always labored under a certain suspicion of feverishness, although at present on the whole the

European troops seem to do well there. Jubbulpore again, though one of the pleasantest-looking, and to those with whom it agrees most pleasant stations in India, is unfortunately decidedly feverish. It is perhaps, with reference both to geographical position and to the great lines of communication, the most central spot in all India; and in point of situation, fertility and beauty of vegetation and surroundings, it cannot be surpassed. But it is only from 1,300 to 1,400 feet high and too moist for health. To my view it is too far from the sea, and, if it were not, the climate is not so good that it could be recommended.

Seonee between Jubbulpore and Nagpore, is a small station on an open plateau over 2,000 feet high. The remarks made regarding Saugor apply for the most part to it also. It is more moist and, probably, less healthy than the stations farther west.

Hazareebagh and one or two of the neighbouring civil stations are nearly, or quite, 2000 feet high and have a fine climate. In the cold weather the climate of that country is delightful and the hot weather is mild compared to the Plains. But it is beyond the action of the sea breeze, and the rains are unpleasantly heavy. The Military Returns are for a limited period, but do not show Hazareebagh to be so healthy as the Deccan.

On the whole, then, I think it must be considered that the climate of the higher parts of the northern plateau are not so good as those of the southern plateau.

Enough has now been said on the all important subject of climate and other matters to enable us to apply the whole to the question of the best site for the Capital, all things considered; to narrow, by the exhaustive process, the field to the limits of the possible; and among possible places by comparing the advantages and disadvantages to classify them relatively with reference to the different main elements of choice which we have already laid down.

The five zones of climate which I formerly stated, may now be reduced to three, by classing together the plains and the sea coast as ... 1. Tropical climates.

Taking the high hills as ... 2. Cool climates.

And placing all the elevated plateaus at inferior heights together as } 3. Intermediate climates.

I have expressed the opinion that there is not sufficient reason for changing the Capital from Calcutta to any place in the plains of Hindostan. Madras is not central and not likely to be preferred. The question of tropical climates

seems therefore to be reduced to a comparison of Calcutta and Bombay. Those are, as it were, the only tropical candidates. And if each has disabilities which render it necessary to seek the real Capital in another zone of climate, still the influences and attractions of those great cities must be so considerable in determining which quarter of India is to be preferred, that I think it necessary to institute a comparison between them not only as respects climate and locale, but also as regards political, social, and material character, position and prospects.

In point of population and trade, Bombay is now little, if at all, inferior to Calcutta, and in point of available wealth (that is ready money) it is probably superior. In some respects it is, however, inferior. The European community is certainly neither so large, nor so varied, nor so advanced in the arts of material comfort. Bombay is more purely a Commercial place, and a stranger is much struck by its comparative deficiency in the other arts and appliances of civilisation and luxury. In respect of European shops, hotels, manufactories of carriages, furniture, and many other things, it is very far behind Calcutta. One finds that all the European articles which are so well made in the great establishments of Calcutta are in Bombay imported from England. Such a thing as a carriage or a billiard table made in Bombay is unknown. The European community is, no doubt, in a less advanced stage. The relative merits of the two places were well put by a gentleman who had resided in both, to whom I put the question, which he thought best? 'Well' he said, 'I think Bombay is the better climate, but Calcutta is the best place to live in.' No doubt a good deal of the present superiority of Calcutta is due to the very presence of the offices of Government, the location of which is now in question, and that element with its following of tradesmen &c. would be transferred to Bombay or any other place to which the Capital might be transferred. But even putting apart this element, I think that on the whole the independent European community of Calcutta is stronger and includes larger and broader elements of business and opinion. From a European point of view Calcutta must, in my judgment, at present, have the preference.

On the other hand the native element, and especially that very important native element which forms a connecting link between the European and the native, is in, my opinion, decidedly superior in Bombay. It cannot be considered that in Calcutta the two races socially draw much together. I believe that no Indian race is intellectually more acute, and certainly none is more highly educated than the Bengallees.

But there seems to be a want of practical aptitude about the Bengallee intellect and character. It is singular how little of the larger commerce, business, and enterprise of Calcutta is in the hands of Bengallees. It is usually not they who push great Commercial schemes and great enterprises for the development of the interior. That is principally done by Europeans. On the other hand, almost all the Native Banking business is done by up-country firms, and most of the Native trade in opium and other great staples, in everything that requires much speculative enterprise, seems to be done by red-turbaned Marwarees, and Moguls, and Arabs, by any one but Bengallees. Their want of that public spirit which is shown by the natives of Bombay in their liberal and spirited promotion of public institutions, has been the subject of much remark. It happens, then, that there is not between Europeans and Bengallees the community of practical interest and enterprise which best promotes social union. The development of the Bengallee mind taking for the most part a purely intellectual direction, the race is not of the same political importance as some other Indian races intellectually inferior, and is in no way a normal specimen of the natives of India from which the Government can safely judge the tone of the remainder. In truth it seems that the literary development of the Bengallees gives them too much self-respect to consent to associate with Europeans on the inferior terms which a conquered Asiatic race usually accepts, without bringing them into terms of real intimacy on an equal footing. And it appears to me to be a fact, much to be lamented, that there is now in Calcutta less friendly and familiar intercourse between the upper European community and the upper classes of Natives than in the least advanced up-country stations. The Marwarees and others in whose hands is much of the trade of Calcutta, are as rude and uncultivated as in their remote native Towns and with them also there is not much social intercourse. In Bombay all this is far otherwise. There the native community has taken not only an educated and civilised, but also a highly practical turn. There is no work of great private enterprise or great public benefit in which Europeans and Native leaders do not go hand to hand. And thus associated as the two races are in the active business of life, they also become socially intimate to a degree which is elsewhere unknown. We have in Bombay a really close connection with and knowledge of several of the best and most important Native races; races which are important alike in a material, a social, and a political point of view, and through whom the pulse of Native India may be felt by a

skilful manipulator. The Hindoos of Bombay (both men of trade and men of the pen, with the Bramins of the Deccan, and the many Maratta and other Chiefs of the neighbourhood who resort to the seat of Government) are excellent specimens of their class, and many of them have been very honorably distinguished. The Borahs and other Mahomedans are among the best of that class, pushing, active, prosperous men, very different from those who dose over the decline of former prosperity in some parts of India. The Parsees, though in schools and intellectual pursuits inferior to the Hindoos, have a singular commercial aptitude for the acquisition of wealth, and a most benevolent and large hearted liberality in its distribution. Not less important is their function as a connecting link between European and Native. Another such link we have in the Jews of Bombay, one of the most enterprising wealthy and liberal sections of a wealthy community. It seems as if these two races, the Parsees and the Jews, had been placed by Providence in Bombay and its neighbourhood to bridge over there the chasm between Europe and Asia.

In every point of view, then, the Native community of Bombay seems to me to be a population among or near whom the seat of Government would be placed most advantageously, and in this respect Bombay has a very great advantage over Calcutta.

To return again to the European community; although I have said that in this point of view Bombay is inferior, I have confined that statement to this very present time. When we look but a very little way into the future, it is clear that the positive and comparative importance of Bombay must rise daily. Hitherto, Calcutta has been the sole outlet for the whole of the great plain even up to Lahore and Peshawar, and for the countries on either side for a distance of several hundred miles. The opening of railways and extension of commerce will, no doubt, maintain and extend the local trade and the prosperity of Calcutta, but there is no denying that, as respects a great part of India, the channels of trade and communication must soon be diverted to another route. Already instead of coming down by Mirzapore to Calcutta, the trade of the Nerbudda valley, Nagpore, and other parts of Central India goes wholly to Bombay, and even from the N. W. Provinces and from Mirzapore itself, cotton is carted across to the Bombay Railways. As soon as (two or three years hence), by the completion of the Trunk lines of Railway, those parts of the country are placed in direct communication with Bombay, most of the goods and all the passenger traffic will go to that port. It will be the same as regards

the traffic of the south when the through line to Madras is opened. Bombay is, beyond, I think, all doubt or question, destined to be in every way the port of India. Instead of the present great route from Calcutta to the Upper Provinces, the grand route will be from Bombay, through Central India, to the Upper and Northern and even Eastern Provinces, and the second important route will be from Bombay to the South. Bombay, and not Calcutta, must then be the main starting point and basis of Military, Commercial, Industrial, and Social enterprise in the interior of India. The European community must be greatly extended and amplified, new demands will create new supplies; if the present town will not suffice; new towns must rise around the only good harbor on the west coast of India; and altogether Bombay must rise enormously, and must, it seems to me, in a short period greatly surpass Calcutta, which will be in future only the prosperous Capital of rich Bengal.

I conclude, then, that looking to the different elements, European and Native, and to the early future as well as to the present, Bombay is a place of greater importance and a more powerful attraction in fixing the seat of Government than Calcutta.

Calcutta has that security on the side of the sea which Bombay has not; and if we must choose one or the other, that consideration would probably outweigh all others; but if we move into the interior, the relative attractions are, I think, those which I have stated. Calcutta being unhealthy and Bombay insecure, I believe that we *must* move into the interior. Besides being insecure, the pressure for space, for labor, and for supplies in the Island of Bombay is already so great that to locate the Supreme Government there would be simply impossible.

From tropical climates I now then go on to the cool climates of the interior.

As I have reduced the former to a comparison of two places, so also the cool climates of high elevation may be reduced to two, as respects the practical question of selection. For since the western ghats are all but uninhabitable in the rains, they cannot be classed as possible for a permanent site. And putting aside the remote sites in Mount Aboo, the Pulney hills, and the eastern ghats of Vizagapatam, it must, I consider, be farther accepted as an established fact that, throughout central India, there is no good and sufficient site at a high elevation. Hence by this process of exhaustion we come to the only possible high climates; viz.

The Himalayan Stations and
The Neilgherries.

I have more than once expressed the opinion that the permanent Capital should be within reach of the sea, and that the Himmalayas are thus rendered unfit for our purpose. I also think that, if that objection were over-ruled, still the offices and permanent Capital should not be placed out of reach of the ordinary population and traffic out of the course of affairs and removed from the practical stir of life on a remote ridge in the interior of the Himmalaya. I adhere to the opinion that it would be better to build our city in some pleasant site in full communication with the plains on one side and with the hills on the other. Kangra is out of the way, and the only place in the Himmalaya practically feasible for such a site still seems to me to be the Deyrah Dhoon with Mussooree immediately overlooking it. I have stated the height of Deyrah to be 2,344 feet. It, therefore, ranks among the intermediate climates, but having disposed of it as too far from the sea, I need not again recur to it.

The Neilgherries are within a moderate distance from the sea, and have very many advantages. But, in my opinion, they are too far removed in a remote corner of India, and too distant from the most important populations and the greatest Political, Military and Commercial centres. They are also subject to the exception which I have taken against places too much isolated by height and climate from the ordinary business and people of the country.

If, then, the cool climates are subject to certain grave disadvantages, we next come to the intermediate climates, and especially to those which favoring circumstances render more agreeable than their moderate altitude would imply; which, therefore, are rather cool or temperate than warm; and which are within reach of cool places for change and relaxation during the short warm season.

Let us begin from the south. Bangalore is by far the best site on the plateau in this quarter, and is, as I have said, in every way one of the best stations in India. It is 1,000 feet higher than the plateau stations farther north, (being 3,000 feet), and, consequently, is not quite so hot in the two or three hottest months, though it is for a time warm and dusty. On the other hand, it is farther removed from the sea breeze and has no good Sanataria quite close. The hill Droogs occasionally used are thirty or forty miles distant and not very good. The Neilgherries may be reached in about thirty hours. Situated so far south the variations are not great, and the mean temperature is as high as seventy-six; the thermometer rising half a dozen degrees above that point in the warmest months and falling at most half a dozen degrees below it in the coolest. The place seems to have been not quite so

healthy as it should be; for native soldiers it is stated not to be very healthy, and though the returns of mortality of European soldiers are somewhat scanty, I understand that they are on an average in excess of those of the Deccan stations. Still the place is, generally, no doubt healthy for Europeans, and it possesses what I have called the *amenities* in a much greater degree than the best known Deccan station viz Poonah, being a green and pleasant place with good gardens and flourishing cultivation. A good many European Pensioners, &c. are settled there. Altogether the station is nowhere in India surpassed. But it is open to the same objection as the Neilgherries, that it is too much out of the way of the most important portions of India. Therefore a more central position, in any degree approaching to it in other respects, is to be preferred. I do not think that Bangalore can be considered possible.

Bangalore then representing in its most favorable light the south, we next come to the Deccan high land of the Bombay Presidency. And here I must premise that the most well known station in the Deccan, viz. Poonah, is by no means the most favorable specimen of that country. Poonah is neither an ancient historical site nor a selection of the British Government. It merely happened to be the Capital of a modern Mahratta Chief, who eventually rose to be the head of the confederacy, and thus for a certain period it acquired importance as the Mahratta Capital. When we conquered the Peshwah, we as a matter of course made Poonah the Head-quarters of the Civil Administration of the district, and a strong Military Cantonment. Then, being a large British station very conveniently situated for access from Bombay, it also became a common resort of those of the European community of Bombay who could escape during the rains to the delightful Deccan climate of that season. More especially it has become so since it has been in direct railway communication with Bombay, from which it is distant by rail 119 miles. As a place of temporary resort during the rains, probably, convenience of situation and all things considered, no place could be much better. The excessive dryness, barrenness, and aridity of the soil and climate which detract from the place at other times, are rather an advantage during the rains. Certainly among the temporary visitors the place is highly popular. But permanent residents do not view it in altogether so favorable a light. There is a great discrepancy in the statements regarding the average fall of rain, which is variously put down at 18, 22 and 35 inches; but we may take it at about 25 inches. This rain almost entirely falls in the

monsoon months, and owing to the dry undulating unfertile character of the soil and country, it runs off very quickly. Hence it happens that vegetation is almost entirely confined to the monsoon. The only crop is the sparse and scattered rain crop. The cold weather crops of wheat, barley, &c. &c., which give a second green season to the driest parts of the North-Western Provinces, are here altogether wanting. Trees thrive very badly; the hills are very bare and hot looking, and in fact during eight months of the year the country looks very desert. The same style of country is continued for a long way to the east and south-east and renders the east wind, somewhat bitter in the cold weather, and hot and dusty in the hot weather. The place has not in the Deccan the reputation of being particularly healthy, but it cannot be much otherwise as the average European mortality among the troops is only 17 per thousand, and at Kirkee a couple of miles farther from the town the mortality is still less. There is not only a want of general greenness and cultivation in the country, but even small gardens cannot be kept up successfully in the European station and cantonments during the greater part of the year. Vegetables are grown in the rains, but water is not obtainable the rest of the year, nothing will then grow, and in fruit trees and all other green things the place is singularly deficient. On the whole then it appears that Poonah is a decidedly healthy place, probably more healthy than Bangalore, or any other great station in distant parts of the country with which it can be compared, that it is at one season a particularly pleasant place, but at other seasons it is not so. In short it is very much wanting in the amenities of Bangalore and such like stations. It is not very well situated for quick access to good Sanataria, Mahableshwar being two nights journey. There are some small hill Forts used as local Sanataria within a shorter distance, but they are very confined places.

The Native town is now a good second rate town of, say 80,000 or 100,000 inhabitants, (I cannot give a very recent statistic) a great place for Maratta Bramins and the resort of Parsees and others who follow the European community from Bombay; but otherwise it has no considerable political importance. The district of Poonah like the station is one of the driest and least productive in the country.

But both north and south of Poonah the Deccan presents a much more favorable aspect—is more fertile, greener, and cooler. All the stations to the south, Belgaum, Dharwar, Sattara, &c. are in these respects superior and have altogether (taking the whole year round) a pleasanter climate. They are also quite as

healthy, the average mortality of the European troops nowhere exceeding eighteen per thousand, and they are generally preferred as in every way better stations. Their position, however, to the south and out of the way of the main lines of communication, puts them at a great disadvantage for our present purpose. We must then look to the north of Poona—and getting to the northern extremity of the Deccan, we come again to the other line of Railway, the great line to which I have already referred as bisecting the country and connecting the great centres of British power and population in India.

Let us follow then the course of this Railway. Starting from Bombay it runs through the hilly and rocky country of the northern Concan, till about the 75th mile, it reaches the Thull ghat where an ascent of about ten miles brings it to the high land of the Deccan at the very pretty and pleasant looking place called "Egatpoorah," abounding in fine trees and picturesque sites, and where the Railway officials and others have created quite a little European community. This place in the gorge of the Ghats, though scarcely 2,000 feet high, is never hot in the hottest weather. The rains are excessively heavy, but do not extend many miles. Thence, running past the Ghat hills (rising to a considerable elevation on either side), the rail passes through a country at first undulating and afterwards becoming broad and open enough to be called a plain, which it crosses at a pretty uniform elevation of about 2,000 feet, till about the 150th mile from Bombay it passes the ridge which I have asked my readers to fill in pencil,* at a point where the ridge is only marked by a line of small peaks, and there is a very gradual slope on the other side down into the lower country of Kandeish.

Thence the Rail passes through the south-eastern portion of fertile Kandeish to Bosawal (about the 270th mile) the point where the Nagpore and Jubbulpore lines bifurcate. The former line runs through the length of the rich valley or plain of Berar into the Wardah valley and thence to Nagpore. The other, which is the main line, running up by Asseerghur crosses over by a fortunate gap in the Satpoora range into the valley of the Nerbudda, runs up the valley to Jubbulpore and thence to Allahabad. Now as Kandeish, Berar, Nagpore, and the lower parts of the Nerbudda valley lie comparatively low, after leaving the Deccan we have for our choice only the places which I have already noticed in surveying the climate. In the ascertained absence

* NOTE.—I should, it seems, have called this range the Chandore range.

of any sufficient site at a high elevation in Central India, we have, in fact, on this part of the line only two alternatives; one to rest at the highest point of the line of Rail in the Nerbudda valley about Jubbulpore; another, to carry a branch to Saugor, or to the neighbourhood of Seonee, and there to establish ourselves on the plateau a few hundred feet higher. Now, with reference to climate I have already said, that Jubbulpore is certainly not very healthy, and that the other places mentioned, though the climate is moderate, and they may well be called healthy, are not free from so much suspicion of fever as to render it improper to place them in the very first class of climates in point of health. They are no doubt less healthy than the Deccan stations. I have also already suggested that in my opinion all these places are too far from the sea. They are, as it were, too central, too much surrounded by a great breadth of India on all sides. At Simla or Mussoorie, if remote from the sea, we should at least have an inaccessible rear and impregnable surroundings. At Jubbulpore or Saugor we might have trouble in every quarter of the compass. There appear then to me to be objections to these sites.

One more site in this direction, though not on the Rail or present lines of communication, I must again mention, the eastern extremity of the northern plateau, say Hazareebagh. The climate there is undoubtedly good; on the whole we may say that taking the year round it is perhaps nearly as agreeable a climate as that of places of similar elevation on the southern plateau. The cold weather is certainly finer and more bracing. On the other hand there is not only a want of the sea breeze in the hot weather, but also the heavy fall of rain renders the rainy season less pleasant, and the climate on the whole less healthy. The question which had occurred to me is, whether the Hazareebagh country might not fill the same place as regards Calcutta, which the Deccan does with respect to Bombay, and whether, if abandoning those cities we are to seek new sites in easy communication with them, we might not as well go to Hazareebagh near Calcutta, as to any place near Bombay. Here we are at once met by the practical fact that whereas the Bombay community have always resorted much to the Deccan, the Calcutta community have never resorted to the Hazareebagh or Chota Nagpore plateau, although that country is a very old British possession, and although in fact during very many years, by the line of the Grand Trunk Road with its ample travelling resources, Hazareebagh was more accessible from Calcutta than Poonah from Bombay. In truth the summer advantages of Hazareebagh have not been so great as hitherto to attract temporary

visitors, and as the Railway has taken another direction, the plateau is now in practice much more distant from Calcutta than is the Deccan from Bombay. Hazareebagh is 240 miles from Calcutta, of which about 130 is by rail, the rest by road. I have already expressed my conclusion that looking to the future Bombay must be considered a more powerful point of attraction than Calcutta. And as regards a moderate climate within reach of one or the other, the high land near Bombay is—

1. Much nearer than the high land available from Calcutta.

2. It is on the main lines of communication while the other high land is off the line.

3. It has a decidedly better summer climate, and one to which people resort for change while they do not do so to the other. Therefore, I do not think that we can accept Hazareebagh.

It may now appear that I am carrying my exhaustive process too far; and that having shown every possible place to be impossible, I am in danger of landing my readers just where they were. At an early point of my argument I suggested that if the necessary conditions of the Capital then stated were granted as correct, we might, by a short cut, arrive at the conclusion that the only possible part of the country is the high land above Bombay, that is the Deccan, and I have frequently used this Deccan country and climate as a standard of comparison in discussing the merits and demerits of other places similarly elevated. But I have also shown the southern Mahratta country (Belgaum, Dharwar, &c.) to be too far south and out of the way, and the Poonah country to be too dry, dusty, hot and barren during the greater part of the year. There remains only the North-Western extremity of the Deccan. That region I have just touched without discussing in tracing the course of the great line of Railway running North-east from Bombay. I have stated it to be considerably elevated. There is then one more chance left for us yet. In that last site I hope to show that we may rest at last. If there is anything in the views which I have put forth, the best spot, geographically speaking, is about this point, and if it so happens that the spot thus geographically the best is also a healthy pleasant place with a temperate climate and a good political situation, the necessary conditions will be fulfilled. I think that they are fulfilled and proceed to give particulars.

The tract to which I allude is comparatively unknown, having been hitherto cut off from the route of passengers by want of roads. It has now been penetrated by the Rail. In the present

month I believe that the Thull ghat will be opened to the public putting it in direct railway communication with Bombay distant about 100 miles. No doubt then it will soon be better known and more resorted to; meantime I give the result of my own observations and inquiries. First as to the geographical and political position. The tract in question is the high land over which the Great Indian Peninsular Railway Company's North East line runs from about the 85th to about the 150th mile.

In describing the hilly region of central and southern India as a triangle, I somewhat distorted my base. But if we take all India together, hill and plain, and leave out of account part of the desert, I shall not be far wrong in saying that we may consider India to be a triangle formed towards the east (with an obtuse Apex) on a long base line drawn from Peshawar in latitude 34° to Cape Comerin in latitude 8° . Scinde and Kattywar are thrown out of the triangle by the desert, but they are the more convenient to my site, so they will not disturb my argument. Well then the base of the triangle runs down the Indus to its junction with the Punjab rivers, and thence across the desert to, and along the western coast. The Apex is formed by lower Bengal. If then it be granted that proximity to the sea is a *sine qua non* it follows that the most central point possible is near the middle of the base line. Now measure my base line, and it will be found that the exact centre falls on the western coast about 80 miles north of Bombay. Farther to fulfil the conditions of the Programme and to avoid maritime attacks, we proceed sixty or seventy miles inland, that is, not quite so far from the sea as Calcutta. In doing so we ascend and cross the ghats to the high land beyond, and there, at the distance from the sea which I have stated, we are in the Deccan and on the North-east Railway about the point where I am making my stand. By line and compass then that is the true central point. We are about equi-distant from Calcutta, Lahore and the southern part of the Madras country; and nearer to Bombay, Allahabad, Agra, Nagpore, Indore, Hyderabad and other places.

As regards means of communication hardly any place can be so central. That is apparent from any modern Map showing the Railway lines. The north-east line as it proceeds onwards bigurcates and will soon trifurcate. The main line at Allahabad reaches a great centre of communication. The right or easterly line to Nagpore may eventually by that more direct route reach lower Bengal. A left or north line has been already surveyed to Indore, and will, without doubt, eventually reach Agra or Delhi by that route.

In the other direction also the rail may be said to trifurcate. Passing down the Thull ghat we are within thirty or forty miles of the Bombay and Baroda coast line, and should probably by a cross-communication be saved the acute angle now required to get on that line, which takes us through Guzerat to Ahmedabad, and by which we may some day reach Scinde and the lower Punjab. Again from Callian the Madras line branches off—while the main line goes to Bombay. Thus it may be said that we stand on the neck, from which radiate six great lines of communication to the east, north-east, west north-west, north and south, and so to the farthest parts of India. In this respect we have a very great advantage over Poonah, which standing on the isolated southern line is only more distantly connected with the more important system, and with the great political centres by the round-about line proceeding down the ghats and up again in dangerous proximity to the sea.

When I have shown my plateau to be geographically central and unrivalled in means of communication, the elements of a political centre are almost given. But I may also say that taken from a political and ethnological point of view, the result is the same. We are at the extreme north-western point of the territory of the great Maratta-speaking race, the greater part of which (in the Bombay Presidency, Berar and Nagpore) is subject to British rule. Closely adjoining is the great Hindostanee race which occupies the north country up to the Sautpooras, and in fact so much overflows to the south that at the point, where we now are, the greater part of the labourers, carters, &c. are Hindostanees, and the Hindostanee language is as current as the Maratta. A little to the north-west is Guzerat. Within twenty or twenty-four hours journey by rail are all the great seats of Hindostanee population and political action on the Jumna and Ganges. Another day will bring the Governor General to the Punjab, to Lower Bengal, or to the farthest parts of Madras. This also I think very important that the situation thoroughly commands the two great masses of Native territory. Within eight or ten hours by rail are Mhow and Indore, which must always be the main points from which to command Rajpootana and the Native States of Central India. On the other side about the same distance are the British Cantonnments of Jaulnah and Hingolee, from which the Nizam's territory is commanded; and there will probably sooner or later be some tolerably direct communication with Hyderabad. From no point could the political functions of the Governor General be better exercised.

The position then relatively to the rest of India being so

good, let us examine more minutely the locality itself. I have said that the high land over which the north-eastern line of the Grand Indian Peninsular Railway runs at an elevation of about 2,000 feet extends from the 85th to about the 150th mile, say for sixty miles; the greatest part of this tract being nearly a plain varied by a surrounding of hills. This tract is highly cultivated and watered by several streams, one of which is the infant Godavery, and the others its tributaries. The soil is for the most part a fertile blackish diluvial loam but not the ordinary black cotton soil—no cotton grows there. In entire contrast, however, to the Deccan country about Poonah there is (in addition to the ordinary rain crops) a great abundance of the best cold weather crops, such as we see in the North-Western Provinces; a very large breadth of wheat, and also sugarcane, tobacco, oilseeds, gram, &c. &c. Trees thrive extremely well and look well-grown, green and healthy. The breadth of the open tract being so considerable, it is in no degree rendered hot or close by the hills, which on its outer circle nearly surround it, and which, looking from so considerable an elevation, do not seem very high. But these hills supply on all sides a great abundance of small perennial-running streams easily used for purposes of irrigation, and which give this country a cheery well watered look. At the same time it is entirely free from anything like stagnation, jungle or miasma; the culturable part is exclusively occupied by cultivation and the rainfall being small (as I have explained it to be in all the Deccan country behind the ghats) the hills are free from jungle, except on the western face of the ghats looking the other way.

The hills surrounding this plain of the Upper Godavery (for so I may best describe it) are, on the west the western ghats; on the north the north wall* of the Deccan (on several high points of which are small Sanataria used by the Europeans of Kandeish); on the south the range which I have described as running from immediately over Bombay far east into the Deccan to Beder and the neighbourhood of Hyderabad, and which here in its upper portion contains many elevated sites. Between these two last ranges the Godavery swelled by its many small tributaries finds its way through a fertile valley towards the Nizam's country passing a little to the south of Dowlatabad and Aurungabad, the Capitals selected by the Emperors Mahomed Toglak and Aurunzebe respectively, when they severally determined to find Capitals more Central than Delhi. From their

* The Chandore range.

point of view the selection was no doubt admirable, and these are still pleasant places famous for fruits and such like produce. But from our point of view they are farther from the sea, less cooled by the sea breeze, and less accessible than the site which I am discussing, and as they belong to the Nizam, nothing more need be said regarding them.

The western ghats in which the Godavery takes its rise are full of cool and pleasant places well exposed to the influence of the sea breeze, and I am told by all the Civil Officers of those parts that in the hottest weather they can always pitch their camps at many different points in places so cool as never to be disagreeably warm even under canvass.

Of course, after what I have before said, I do not think the presence of a third rate town to be any recommendation towards fixing an exact point, but as a fair specimen of this plain of the Upper Godavery, let us take Nassick the Headquarters of the Civil Establishments and within five miles of the Railway. This place is by rail if anything nearer to Bombay than Poonah being 116 miles to 119 the distance of Poonah. The ghat ascent is also somewhat easier. Nassick is about the same height as Poonah—rather higher than lower. The town is a compact, high built, tile-roofed place on the bank of the Godavery, of twenty or thirty thousand inhabitants. The surrounding country is very fertile and well watered, abounding in groves, gardens, wells, and small canals. The mangoe-trees (their appearance is a great test in India) are as well grown and thriving as in any place which I know, and there is a feature which I had never seen elsewhere in India, viz. many great native vineyards. Several single vineyards cover many acres each, the vines being trained high, over trees planted and pollarded for the purpose, after the Italian fashion. The vine is a great test of climate, and I fancy of healthiness. Where it thrives on an extensive scale, both the climate and the rains must be moderate. In most parts of India if grapes will grow at all, they are very indifferent things, scantily grown in European gardens, pushed to premature maturity in the hot winds, and rotted the moment the rains fall. At Nassick they are certainly abundant, and they are said to be excellent. Most European fruits and vegetables thrive so far as they have been tried, but in truth the place has been but a small, and hitherto out of the way station and there has been little European cultivation. The Godavery is here but a petty stream. On one side of the river is the rich dark soil, on the other the dry red soil, so that the latter is available for troops, &c. if it is preferred. The fall of rain is little, if at all greater than at Poonah. I have

found only one statement of the annual average, which makes it 28 inches, and that is, I think, about correct.

The climate is what I have before in general terms described the Deccan climate to be, with the reservation that we have here the Deccan in its most favorable aspect. Being the most northerly point of the Deccan, there is the best cold weather without so much of a bitter, dusty wind as farther south. The irrigation, cultivation, and character of the soil and of the country to the east render the heat and dust of the hot weather also less remarkable than in the more arid country. Still at Nassick and everywhere east of the ghats the hot weather is undoubtedly warm during the day, and without punkahs or appliances it may sometimes be called hot, disagreeably hot. I believe, however, that the heat never passes the point of healthiness (a certain degree of heat without miasma at one season of the year is probably healthy,) and the evenings and nights are at this season unvariably rendered perfectly cool and agreeable by the sea breeze. The rainy season is somewhat cooler than at Poonah, and in every other respect quite as pleasant.

For those who can leave and wish to leave the station in the warmest weather there is an admirable Sanatorium (or a Sanatorium which would be admirable if roads, &c., were made) on the hill of Angeneer, at a distance of only fifteen miles. This hill is about the same height, and has almost the same climate, as Mahableshwar. It is very extensive, and affords room for any number of houses. It is somewhat nearer to the Railway at a point somewhat nearer to Bombay; and being thus, now that the Railway is opened through, so much more accessible from Bombay than is Mahableshwar, I think it probable that if nothing better is discovered in the same quarter, it will eventually become the resort of those of the European community of Bombay who seek a high elevation. The fact, however, is that there are endless high sites to be explored in these ranges. One more advantage of this same part of the country I must add, *viz.*, the facility for getting down in a few hours to the sea air and sea bathing of the cool season on the coast, on the line of the Bombay and Baroda Railway. To those who wish to avoid the dry cold of the cold weather, this would be a very pleasant change, and even in March, when the upper plateau is becoming warm, the sea shore is still temperate and pleasant. No part of the country is more healthy than Nassick and the surrounding district. In fact, although, it may be at times warmer than Englishmen like, I doubt whether, on the whole, we could have a climate more favorable to life, and especially to European life. The only illness to

which the natives seem to be at all subject arises from exposure to cold and variations of temperature in the cold weather, and this less affects Europeans. No place in India under a certain high elevation escapes periodical visitations of cholera, but that disease is in no degree endemic as in Calcutta and other tropical places, and if at intervals it may appear on the Nassick plain the facilities of escape to the hills and other places are great. Accurate statistics are so rare that almost all my statements regarding climate, healthiness, &c. must be comparative, and Poonah is so well known that I shall best establish the status of Nassick in this respect by saying that I have very carefully enquired of a number of different officers, both European and Native, who have long served in and are thoroughly acquainted with both districts. They are all quite unanimous in saying that the climate of Nassick is decidedly better and more pleasant than that of Poonah, and that it is preferable in every way. That, then, is a pretty safe standard.

To readers on this side of India I may perhaps best convey some idea of Nassick thus:—Take a good station in one of the least arid parts of the North-Western Provinces; decrease the open air temperature some ten or fifteen degrees throughout the hot weather and rains. Suppose the sea within seventy or eighty miles and a sea breeze regularly to arrive every evening and to afford a cool drive and night's rest; let the rains be less muggy, less heavy at one time, and less broken at another, and at all times more breezy and showery; throw in some undulations and running streams and vineyards; suppose a good hill climate available within fifteen miles—you have then the sort of place which I am describing.

I would propose then to select for the Capital some suitable spot of this kind in the plain of the Upper Godavery, coupled with a roomy Sanatorium available within a couple of hours. Between the Railway Station and Nassick there is a high dry and very open site at present somewhat bare for want of water. If water were brought upon this spot from a few miles up the streams on either side, it might be a very admirable location, or many others might be selected and compared. The facilities for storing and bringing water afforded by the undulating ghat country in the rear are inexhaustible. The fertile and populous countries into which the rail to the north-east has penetrated and is penetrating will afford the most abundant supplies of food and labor. When the different branches of the rail have tapped not only Kandeish, Berar, Nagpore, the Nerbudda and Malwa, but also the great and over-populated Gangetic valley at several points, all the labor and food of India will flow to this

point so far as there is a demand for it; the supply will be practically unlimited. The supply of animals will also be great. Kandeish and Central India afford great grazing grounds, and the cattle are of an excellent breed. The excellence of the Deccan climate shows itself in the ponies, the true blood of India. The Deccan ponies, which run in the sort of poney Curricie called a 'Mofussi,' made in the Native Christian establishment at Nassick, are unrivalled in their way. Kandeish Farming Companies have already been attempted, and it would be, I consider, a great prospective advantage that the present backward state of parts of Kandeish and the greater portion of the Sautpoora range gives great opportunity for European enterprise in the way of taking up waste lands and cultivating those many valuable products of a semi-temperate climate in a tropical latitude, which now give such promise of wealth and development. I hope that as these jungles become cleared and cultivated, their present somewhat feverish character may not improbably disappear; at any rate, we may, from our experience of the more open spots, be confident that it would be reduced to a minimum.

The same sort of cultivation may probably be carried on at many healthy spots on the eastern shoulders of the western ghats, or even on parts of the more moist and jungly slopes overhanging the precipices to the west.

I have yet to notice the hills to the south of the Nassick district. I before alluded to the existence of high spots on the ridges behind the ghats, high enough to be always cool, and yet not so rainy as to be uninhabitable in the rains. But the accessible spots of this character in the rear of Mahableshwar are not extensive enough for our present purpose, and the existence of sufficient sites of the kind being doubtful, and the elevation not very great, I have not classed these places among the cool climates of the highest level. In point of climate, however, by the aid of the sea breeze, they are probably worthy of that class, and I am informed that the most extensive high lands of the kind are on this range south of the Nassick district—that is, in the hilly country which intervenes between the north-east and south-east lines of the great Indian Peninsular Railway, and between the Nassick and Poonah districts. Here there is much more than a single range; in fact, there is a very considerable and hitherto somewhat inaccessible hilly district, which tails off eastward into the range running to Beder. Just across the ghats due east of Bombay, and in this hilly country, is Joonier, once a Mahomedan Capital of the Deccan, and by all accounts a remarkably pretty, pleasant place. A Government Botani-

cal Garden has been established here. And not far distant there is, I am told, much flattish land on the back of the ridges affording sites a good deal more extensive than Mahableshwar, and yet removed from the excessive rain. A good site of this kind in this part of the country, say 3,500 or 4,000 feet high and sufficiently supplied with water, would have many advantages. If, as at one time intended, the Railway from Bombay had crossed the ghats in a single line about Joonier and then bifurcated, I have little doubt that somewhere in this locality would have been the true site for the Capital. But the route proved difficult and was abandoned. It is still difficult of approach. Possibly, however, a good site may be found not far removed from the rail, and possibly an eventual junction line above the ghats (between the north and south lines) might be made to penetrate this country. In any examination of the localities about my proposed site, I would by no means omit these hills. Still, my own impression is that a site in a temperate climate, with facilities for getting away at pleasure, placed on the main routes of population and traffic, and with plenty of room, plenty of water supply at all seasons, and no over supply of rain at one season, would probably be preferable to a place in a somewhat cooler climate, less accessible, more cramped, with little permanent water supply, and too rainy and cloudy in the rainy season. I am inclined to think that this hilly country may be found rather a most useful adjunct to the Capital than a good position for the Capital itself; that opening it out by roads its scanty cultivation and scanty aboriginal population might be supplemented by European Colonists and European Farms and Plantations; that we might here have our quiet retired country houses, our schools, and our pension establishments.

The ghats, backed by the sea on one side, and these hills on another, would go far to make the Capital impregnable on those sides. On the north the deep jungly valleys of the Taptee and Nerbudda, and the intervening hills would be a sufficient defence. On the north-east it would only remain to take advantage of the north wall of the Deccan—the Chandore range through which the Railway passes to Kandeish. If it should be necessary, the few passes might no doubt easily be rendered defensible. On the east the valley of the Nerbudda would be easily held. In this elevated plain we should have, as it were, the Capital in a great park of fifty or sixty miles in diameter enclosed in a complete ring fence. 6

That Capital would be a pleasant, healthy place in a good climate, and the European houses would be surrounded by gardens and vineries, and all things pleasant to the eye, which are so essential to a permanent abode. There would be an

abundance of pleasant country abounding in European residents and residences in the neighbourhood, and the most abundant opportunities for change of air, to cool hill climates for those who wish to avoid the heats of the hot weather, and to sea shore and sea bathings for those who wish to avoid the chills of the cold weather or the early heats of March. The rich and the delicate would have their country cottages on breezy heights a few miles distant. For seven, eight, or nine months the work of Government would go on uninterruptedly; for four months of this time (the rainy season of India generally) there would be a *season* when all the world would flock to the Capital itself. For two or three or four or five months in the cold season, as the case might be, the Governor General and the Members of the Government would be free to visit all India, not in the heavy, encumbered way in which they move for six months' residence at a distant point, but light and unencumbered as official travellers and tourists.

I have thus, then, by an exhaustive process, after going over the map, tried to show that no other place than the high land north-east of Bombay fulfils the conditions necessary for the Capital; that the high land, in the position which I have indicated, does fulfil these conditions; and that we may there find a good site in a healthy, temperate climate, in a pleasant locality, and within easy reach of cool hills on all sides, and of the sea on one side.

To those who have not cared to follow me through the long process of exhausting all India, and who will either take my word for it that there is no suitable place in Central India, or will accept the conditions with which I prefaced the search for a Capital, I have more than once hinted that the result may be reached by a short cut. If the new site must be in a good climate near the sea, and within a few hours journey of one of the great centres of enterprise and commerce, we must find a good climate near either to Calcutta or to Bombay. There is no sufficiently good climate sufficiently near Calcutta; there is a good climate in the elevated country near Bombay; therefore the new site must be in the elevated country near Bombay, and on one of the two lines of Railway leading from Bombay into that elevated country. Thus put, the question rapidly resolves itself into one between the high country near Bombay on the south-east line of Railway—that is, about Poonah—and the country on the north-east line of Railway—that is the plain of the Upper Godavery. Both are equally near Bombay—within 120 miles, or say five or six hours' journey for a tolerably fast train. But the one (viz., the site on the north-east line) is much better situated on the main lines of communi-

cation, and is in that respect much preferable to Poonah. It is also in a greener, pleasanter, and cooler country and climate, with infinitely greater amenities for residence and greater facilities for agreeable change, and thus in its local qualities also is much preferable. Therefore, the plain of the Godavery should be preferred to Poonah. In fact, in thus shaking off Poonah and making a free choice much of the question lies. Most of those who have thought on the subject have inclined to the belief that in the Deccan above Bombay is the only practicable locality. They have taken Poonah as the type of that locality. Poonah is a somewhat disappointing place in its appearance, soil, and surroundings, and it is somewhat off the main lines of important political communication—therefore, the project has hung fire. A main object with me is to show that Poonah is not the only place available near Bombay, that the other line of Railway has disclosed a much better locality free from the objections which may attach to Poonah, and that there we may well establish a pleasant Head-quarters of the British power, surrounded by British surroundings. To such a locality the European and civilised native community of Bombay will, during a great part of the year, flock around the Members of the Government, and the leaders of social progress. The climate will also attract visitors from all parts of India to so central a point. Especially in the rains, when this climate is so much superior to that of the less accessible hill stations, and when so many European constitutions require change from the hotter localities, the converging Railways will bring great numbers of temporary residents. Every man who visits England from any place throughout, at least, three-fourths of India will necessarily pass through the Capital, and those who reach Bombay from the south or from Scinde, will be within a few hours of it. Native visitors would not have the least occasion to complain of a climate uncongenial to them. Thus, in such a site would be concentrated all the threads by which the different parts of India might be felt and influenced.

The course, then, which I would venture very humbly to suggest is this, that competent persons should be directed to examine the high country on the north-east or Jubbulpore line of Railway near Bombay—that is, the plain of the Upper Godavery and the hills immediately surrounding it; also, all the hills between this plain and the watershed of the Kistra to the south towards Poonah, and the British portion of the Sautpoora range in Kandeish about Tooran Mull; that they should select, and report upon the best site available for a Capital city and great European station, and also mark the

various Sanatoria in the neighbourhood and the ground in temperate climates available for residence and colonisation in the surrounding country.

By the time that this is done, it may possibly be found desirable (and I believe was at one time contemplated) to assemble the Governor General's Council at Poonah, where, with some arrangement, temporary accommodation might perhaps be found; and if that were so, the Governor General and the Members of the Government would have an opportunity of seeing that part of the country for themselves. If they should be satisfied with any new site selected by the Commission, there would be no difficulty in at once putting in hand so much building as would shelter so much of the Offices as is now taken to Simla and accommodate the Governor General as well as he is accommodated at Simla. So much might be undertaken in anticipation of the opening of the through lines of Railway. Meantime, accommodation for one season might be found at Ootacamund, where the Supreme Government would be brought into *rappor*t with the spirit of Madras. After that, one more cold weather residence in Calcutta, and then the Governor General might in state open the rail, which by Allahabad will connect Calcutta and all northern and eastern India with Bombay, and so proceed to his new residence. The Railways having, then, opened, abundant supplies of labor material and produce, and given every facility to tradesmen and others who wish to move from Calcutta, building would go on upon a larger scale; the first wing of the new Government House would be expanded into a Government House worthy of the Viceroy, the offices would gradually move up from Calcutta as accommodation is provided. European residences would spring up rapidly, and on the lines of a native city scientifically laid out, Bazaars and native residences would rise in clusters till they eventually run together into a city.

I shall not be suspected of really meaning presumptuously to propose to his Excellency the Viceroy, or any one else, that they should follow a programme thus sketched out. I merely mean, having propounded my scheme, to give a fancy instance and illustration of a mode in which I imagine that it might be carried out.

Since writing the first part of this paper I have heard that it has been contemplated to assemble the Legislative Council at Simla, and thus to leave the Governor General free to march in the cold weather. That will, no doubt, be a great improvement on the present state of things, and for one season will be very beneficial. But the question immediately follows—if the Government is in the hot weather in the hills, and

in the cold weather is marching about the country, where is the Capital? What, then, is Calcutta as a seat of Government, but an old and very inconveniently placed record room? Moreover, I apprehend that it would not be found desirable frequently to repeat Legislative Sessions at Simla so far from the seats of active enterprise and of public opinion. That would be to make Simla to all intents and purposes the seat of Government. On the other hand, to move the offices required for settled Government and Legislation, season after season, would be very expensive and inconvenient. Necessity would justify one or two moves till such time as fixed accommodation can be prepared, but a permanently peripatetic Government would hardly succeed. It must come at last to settling somewhere. Even the annual move from Calcutta to Simla and back again is cumbrous and difficult and attended with many inconveniences. It is necessary to stay in Calcutta till the weather is very hot in the plains, and to leave Simla before it is very cool; the best part of a hill residence is lost, and great extremes and sudden changes are endured. The carriage required when moving thus for a prolonged residence is ten times as much as would be necessary for a mere tour. I venture to think that if it be possible to fix a permanent hot weather residence at an early date, the advantage would be very great.

One more re-arrangement and expense may seem a consequence of the removal of the Capital, viz., the arrangement of troops for its Military defence. But my impression is that this really is not so; that, Capital or no Capital, the moment the Railways from Bombay are open, the whole of our Military arrangements (as of everything else) must be inverted, and that the European troops for the supply of the whole interior of India arriving and departing by Bombay, the Depôt Stations for their reception must be formed in the same high country in which I propose to place the Capital. We have acquired India by commencing at various distant points on, as it were, the outer rim, and thence we have worked inwards. The bases of our strength have always been at those distant and unconnected points—the different Presidencies. To this day the communication in the interior between the different Presidencies is very limited. The great Bengal Presidency, stretching up from Calcutta, we have ruled by a line of Military Stations along the grand route from Calcutta to Peshawar; the Bombay stations have been supplied from Bombay; the Madras stations from Madras. Now, all this will I imagine be changed. Excepting, perhaps, a few coast stations, all will be supplied from a common centre by way of Bombay, which is not only so much nearer to

England, but will also be nearer and more convenient to all the great stations of the north, the centre, and the interior of Peninsular India, to Agra and Lahore, as well as to Jubbulpore, Nagpore and Hyderabad. The Calcutta route will only be used by a Regiment proceeding to garrison Fort William. The great route will be from Bombay through Central India, and doubtless the tendency will be to post troops in the cool and elevated stations in the vicinity of that route rather than on the Calcutta line. It seems probable, then, that instead of commanding the low parts of India from several different bases, and by troops quartered in the hot and unhealthy low lands in widely separated systems round the outer rim of India, the tendency will be rather to mass the troops in the comparatively healthy and easily held centre, and thence to command the low-lying countries all round by the use of the railways converging to, or diverging from, the centre. The general result of a considerable experience of hill stations now seems to be this, that the practice of keeping Regiments for a series of years in low unhealthy stations and then sending them for a time to high stations in the Himmalayas is not altogether beneficial. It is very doubtful whether those very high climates are on the whole beneficial to a weakened Regiment; one class of disease is too often succeeded by another class of disease. And the soldier himself almost invariably dislikes those stations isolated on the tops of hills and finds his life insufferably dull. It appears that it would be better that a larger proportion of the Regiments should be in healthy Cantonments which, though for a certain season, warm, are never immoderately hot, and that when the Central Railways are open, the tendency will be to decrease such Cantonments as Chinsurah, Dinapore Allahabad, Cawnpore, Agra, Delhi, Deesa, Ahmedabad Barodah, Madras, and Trichinopoly, and even, perhaps, such as Kussowlee, Dagshai and Wellington; and to place a large Cantonment and Depôt near the source of the Godavery, and increase such stations as Mhow, Asseerghur, Saugor, a better drained and better placed as Jubbulpore, Poonah, Jaulnah, and Belgaum; perhaps, also, to make new stations nearer the edge of the high lands overlooking Hindoostan. All this may be, but as I have said, I think it will not be the consequence of the new Capital, but a result of the same inversion of the old order of things which seems to render a new Capital necessary.

It will be understood that, although I put my name to this paper, I claim all the freedom and irresponsibility of an entirely unofficial writer, that I write avowedly to make out the case which I put forward, and that I write freely

expressed opinions and projects put forth are not dogmas on the correctness and feasibility of which I take my stand or which I seek to impose on any one else, but simply my view of the case put forward for what it may be worth, and in the hope of provoking some inquiry and discussion.

As a projector I have thought it better to state my ideas roundly and enforce them by such arguments as I can command, rather than elaborately to qualify each statement and each argument with the admission that I may be wrong and that some one else may know much better. All that I fully and freely admit once for all as regards all and every part of my argument. I have stated the means which I have had of seeing and of hearing, and whether I be taken as a witness or as an advocate, as a sound projector, or as a wild schemer, I say again I merely submit the result of a good deal of inquiry and a good deal of thought for anything that it may be worth, much, little, or nothing. I have done what I can to make my vacations useful, and if I have failed, the power and not the will is wanting.

I add a Table giving in figures a sort of rough estimate of the comparative advantages of several different places, the maximum values being assumed to be for purposes of comparison somewhat thus :—

Central position	...	10
Climate, immediate and accessory.	..	30
Nearness to Sea	...	20
Safety from attack	...	10
Civilised public opinion	...	20
Amenities of situation	...	10
		—
Total	...	100

THE CAPITAL OF INDIA.

	Central Position, 10.	Climate, 30.	Nearness to Sea, 20.	Safely from attack, 10.	Public opinion, 20.	Amenities, 10.	TOTAL.
Calcutta.....	0	10	20	10	20	0	60
Bombay.....	7	15	20	0	20	0	62
Simla.....	0	30	0	10	5	10	55
Ootacamund.....	0	30	10	10	5	10	65
Bangalore.....	0	25	8	8	5	10	56
Jubbulpore.....	10	15	0	5	5	10	45
Belgaum.....	0	25	16	8	0	8	57
Poonah.....	6	20	20	8	18	0	70
Nassick.....	8	25	20	10	18	9	90

CALCUTTA, 8th January, 1864.